WATER FORUM AGREEMENT

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WATER FORUM AGREEMENT

INTRODUCTION

The Water Forum is a diverse group of business and agricultural leaders, citizens groups, environmentalists, water managers, and local governments in Sacramento county. In 1995 they were joined by water managers in Placer and El Dorado counties.

This group of community leaders and water experts has determined that unless we act now, our region will be facing water shortages, environmental degradation, groundwater contamination, threats to groundwater reliability, and limits to economic prosperity. Well intentioned but separate efforts by individual stakeholders had left everyone in gridlock.

Joining together over six years ago, these leaders have devoted tens of thousands of hours researching the causes of this gridlock, agreeing on principles to guide development of a regional solution and negotiating the *Water Forum Agreement*. This diverse group agrees that the only way to break this gridlock is to implement a comprehensive package of linked actions that will achieve two coequal objectives:

Provide a reliable and safe water supply for the region's economic health and planned development to the year 2030;

AND

Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.

During these six years, stakeholder representatives continually presented draft proposals to their boards to obtain their ongoing feedback. In addition, the Water Forum has conducted over one hundred meetings with community organizations, chambers of commerce, citizens advisory councils, civic groups, resources agencies, statewide environmental groups, and federal and state water users to solicit their input to the proposals under consideration.

The comprehensive *Water Forum Agreement* allows the region to meet its needs in a balanced way through implementation of seven elements. These elements include detailed understandings among stakeholder organizations on how this region will deal with key issues such as groundwater management, water diversions, dry year water supplies, water conservation, and protection of the Lower American River.

The *Agreement* also provides important provisions assuring each signatory that as it fulfills its responsibilities, other signatories will also be honoring their commitments. For example, all the stakeholder representatives are now working together on one of the key assurances — an updated standard for the Lower American River.

All of the hard-earned understandings that have been forged over the past six years are included in the Memorandum of Understanding for the *Water Forum Agreement*. Signed by each of the stakeholder organizations, this MOU creates the overall political and moral commitment to the *Agreement*. These assurances will be supplemented by other specific actions such as contracts, joint powers authorities, water rights actions, etc.

But the signing of the MOU will not be enough. The stakeholder organizations realized that this new culture of cooperation and collaboration created by the Water Forum will not last over time if it is not protected. They are concerned that changing conditions could threaten the foundations of the *Agreement*. They respect that consensus was possible only when they could understand the interests of others as well as their own.

To make the *Agreement* work over time, the stakeholders have created the Water Forum Successor Effort to maintain relationships, provide an early warning system for potential problems and creatively resolve issues as they arise.

That comes from the wisdom of the Water Forum. It is also a gift to the region. It's an example of how we can make our region a better place to live by hard work, mutual respect and innovative ideas.

WHY DO WE NEED AN AGREEMENT — WHAT IS BROKEN?

Water Shortages
Unless adequate water supplies are made available, many existing residents, businesses and agriculture will suffer shortages during California's periodic droughts. Inadequate water supplies would also limit our economic development.

The Sacramento area, the surrounding region, and the Lower American River all suffered some effects during the 1976 - 1977 drought. Since 1977 our population and water demands have increased significantly.

As the region continues to grow, it is important for us to plan for water needs, including what will happen in future droughts. If we don't face this challenge, the next drought will be much more serious.

Lower American River
The Lower American River is nationally recognized for its beauty, fisheries and recreation. Each year there are over five million visitor-days recorded for the American River Parkway. We need to find ways to protect the River for our enjoyment and for generations to come.

Groundwater Reliability Threatened
Over reliance on wells in some areas has lowered the water table as much as 90 feet. If nothing is done, the problem will get worse; pumping costs could double; some shallow wells could go dry. Also, past actions have contaminated parts of our groundwater basins. Unless we continue to contain and correct these problems, additional wells that provide our drinking water could become contaminated.

Water Reliability At Risk
Some suppliers obtain all of their water from surface sources; other suppliers get their water solely from wells. There are always some disadvantages to having only one source of supply. We will have a more reliable supply if most of the suppliers have multiple sources of water.

WHAT HAS HELD UP SOLUTIONS TO OUR PROBLEMS?

Here in the American River watershed, the biggest stumbling block to balanced water solutions is that individual groups — water suppliers, environmentalists, local governments, business groups, agriculturalists, and citizen groups — have been independently pursuing their own water objectives — without much success. In many cases, competition among groups has

generated protests, lawsuits and delay. Even though millions of dollars had been spent in the past decade pursuing single purpose solutions, there was little to show for these fragmented efforts.

HOW THE WATER FORUM IS USING INTEREST BASED NEGOTIATION TO "GET TO YES"

The stakeholder representatives chose to approach their long standing conflicts as a formal mediation, using an innovative process known as interest-based negotiation. This conflict resolution method requires negotiators to initially put aside their traditional demands ("positions") and instead focus on the underlying reasons ("interests") behind both their own and their adversaries' concerns. This creative approach resulted in a *Water Forum Agreement* that will meet the needs of all stakeholders.

WATER FORUM SUCCESSOR EFFORT

Signing the *Water Forum Agreement* does not mean that stakeholders can go back to doing business as usual. The *Water Forum Agreement* will be implemented over the next three decades. There will be many changed circumstances that we cannot now foresee. It is critical that all signatories participate in the Water Forum Successor Effort and maintain their commitment to interest-based bargaining. This will allow each stakeholder organization to get its needs met while respecting and working to meet the needs of others.

ENVIRONMENTAL REVIEW

An important part of this process was identifying the environmental impacts of the *Agreement*. Therefore, the Water Forum also completed an Environmental Impact Report (EIR) that identifies impacts and potential mitigation measures. The Water Forum EIR is a Programmatic level EIR that analyzes the cumulative impacts of all elements of the *Water Forum Agreement*. Individual water supply projects will still have their own compliance requirements for the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act (NEPA), the federal Endangered Species Act and the California Endangered Species Act.

Key Milestones for Implementing the *Water Forum Agreement*

1	First meeting of the Water Forum Successor Effort.	Schedule: Early 2000
2	Convening of Multi-Agency Lower American River Habitat Management Program.	Schedule: Early 2000
3	Purveyors begin negotiating Diversion Agreements with the United States Bureau of Reclamation.	Schedule: Early 2000
4	Construction of the Temperature Control Device for diversions from Folsom Reservoir. This is one of the actions that is essential for the overall *Water Forum Agreement.*	Schedule: Before December 31, 2001
5	Begin discussions to establish acceptable groundwater management programs in the South and Galt areas of Sacramento county.	Schedule: Mid 2000
6	Project-specific CEQA and where applicable, NEPA compliance.	Schedule: Timing dependent on when specific projects are ready to proceed.
7	Where applicable, federal Endangered Species Act and California Endangered Species Act consultation for projects including those within the *Water Forum Agreement.*	Schedule: Shortly before those projects are ready to proceed
8	Adoption of an updated Lower American River standard by the State Water Resources Control Board.	Schedule: See sidebar entitled "Schedule for Updating the Lower American River Flow Standard" on page 28.

SUMMARY OF THE *WATER FORUM AGREEMENT*

Representatives of the following organizations have negotiated recommendations for this *Water Forum Agreement*. Authority to approve the *Agreement* rests with the governing board of each stakeholder organization.

Water Suppliers

Carmichael Water District
Citizens Utilities Company of California
Citrus Heights Water District
City of Folsom
City of Galt
City of Roseville
City of Sacramento
Clay Water District
County of Sacramento County/Sacramento County Water Agency
Del Paso Manor Water District
Fair Oaks Water District
Florin County Water District
Galt Irrigation District
Natomas Central Mutual Water Company
Northridge Water District
Omochumne-Hartnell Water District
Orange Vale Water Company
Placer County Water Agency
Rio Linda/Elverta Community Water District
San Juan Water District

Other Water Interests

Sacramento County Farm Bureau
Sacramento Metropolitan Water Authority
Sacramento Municipal Utility District (SMUD)

Environmental Organizations

Environmental Council of Sacramento (ECOS)
Friends of the River (FOR)
Save the American River Association, Inc. (SARA)
Sierra Club - Mother Lode Chapter - Sacramento Group

Business Organizations

Associated General Contractors (AGC)
Building Industry Association of Superior California (BIA)
Sacramento Association of Realtors (SAR)
Sacramento Metropolitan Chamber of Commerce
Sacramento-Sierra Building & Construction Trades Council

Citizens Organizations

League of Women Voters of Sacramento
Sacramento County Alliance of Neighborhoods (SCAN)
Sacramento County Taxpayers League

There are four water suppliers that have issues that could not be resolved as of the time this initial *Water Forum Agreement* was developed. All stakeholder representatives commit to working in good faith with these organizations to negotiate mutually acceptable responses to these issues.

Arcade Water District
El Dorado Irrigation District
Georgetown Divide Public Utility District
Rancho Murieta Community Services District

Three water suppliers have decided not to participate in the Water Forum:

Arden Cordova Water Service
Elk Grove Water Works
Fruitridge Vista Water Company

THE SOLUTION MUST BE AN INTEGRATED PACKAGE OF ACTIONS

As we enter the twenty-first century, the challenges facing our water future are many. There is no single-purpose program that will secure our water future. The only way we can succeed is to implement a full range of complementary actions. This *Water Forum Agreement* contains seven elements, each of which is necessary for a solution to work:

1. Increased Surface Water Diversions
2. Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
3. An Improved Pattern of Fishery Flow Releases from Folsom Reservoir
4. Lower American River Habitat Management Element, which also addresses Recreation in the Lower American River
5. Water Conservation Element
6. Groundwater Management Element
7. Water Forum Successor Effort

1. Increased Surface Water Diversions

This element provides for increased surface water diversions. These increased diversions will be needed even with the active conservation programs and the recommended sustainable use of the groundwater which are also part of this *Water Forum Agreement.* Unless adequate water supplies are made available, many residents, businesses and farmers will continue to suffer shortages during California's periodic droughts.

As part of this *Water Forum Agreement,* all signatory organizations would support the diversions agreed to for each supplier as specified in each purveyor's Specific Agreement. Purveyors' diversion are summarized at the end of this Summary and are also shown in the chart "1995 and proposed Year 2030 Surface Water Diversions" on the next pages. All signatory organizations would also support the facilities needed to divert, treat and distribute this water. (See "Major Water Supply Projects That Will Receive Water Forum Support" on pages 14 and 15.) Support for increased diversions is linked to the suppliers' endorsement and, where appropriate, participation in each of the seven elements of the *Water Forum Agreement.*

1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS

Note: The diversions described below, combined with the dry year actions, will meet each supplier's customers' needs to the year 2030.

AMERICAN RIVER DIVERSIONS—UPSTREAM OF NIMBUS

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE (1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years)(2)
City of Folsom	20,000 AF (19)	34,000 AF (3)	Decreasing from 34,000 AF to 22,000 AF (4)	20,000 AF (5)
Northridge Water District (17)	0 AF	29,000 AF (9)	0 AF (10)	0 AF
Placer County Water Agency (6) (7) [Subject to resolution of remaining issues (21)]	8,500 AF	35,500 AF (3)	Continue to divert 35,500 AF, with a replacement to the river equivalent to their drier diversions above baseline. The drier the year, the more water would be replaced up to 27,000 AF (4) (20)	Continue to divert 35,500 AF, with a replacement of 27,000 AF to the river. (20)
City of Roseville (7)	19,800 AF	54,900 AF (3)	Decreasing from 54,900 AF to 39,800 AF with a replacement to the river equivalent to their drier diversions above baseline. The drier the year, the more water would be replaced up to 20,000 AF (4)	Continue to divert 39,800 AF, with a replacement of 20,000 AF to the river.

1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS (continued)

Note: The diversions described below, combined with the dry year actions, will meet each supplier's customers' needs to the year 2030.

AMERICAN RIVER DIVERSIONS—UPSTREAM OF NIMBUS

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE (1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years) (2)
San Juan WD & Consortium in Sacramento County (Citrus Heights WD, Fair Oaks WD, Orange Vale Water Co)	44,200 AF (8)	57,200 AF (3)	Decreasing from 57,200 to 44,200 AF (4)	44,200 AF
San Juan WD (Placer County)	10,000 AF	25,000 AF (3)	Decreasing from 25,000 to 10,000 AF (4)	10,000 AF
South Sacramento County Agriculture (includes Clay WD, Omochumne-Hartnell WD, Galt ID, & Sacramento County Farm Bureau)	0 AF	35,000 AF (9)	0 AF (10)	0 AF
SMUD	15,000 AF (11)	30,000 AF (3)	Decreasing from 30,000 to 15,000 AF (4)	15,000 AF

1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS (continued)

AMERICAN RIVER DIVERSIONS—BETWEEN NIMBUS & THE MOUTH

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE (1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years) (2)
Carmichael WD (18)	12,000 AF	12,000 AF	12,000 AF	12,000 AF
City of Sacramento	50,000 AF	310 CFS (12) (13)	90,000 AF (15)	50,000 AF

SACRAMENTO RIVER DIVERSIONS

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE	2030 DIVERSION (wet/ave years) (14)	2030 DIVERSION (drier years) (14)	2030 DIVERSION (driest years) (14)
City of Sacramento	45,000 AF	290 CFS (13)	290 CFS (13)	290 CFS (13)
County of Sacramento	0 AF	Up to 78,000 AF (16)	Up to 78,000 AF (16)	Up to 78,000 AF (16)
Placer County Water Agency (6) [Subject to resolution of remaining issues (21)]	0 AF	35,000 AF	35,000 AF	35,000 AF
Natomas Central Mutual Water Co. within Sacramento County	53,000 AF	45,600 AF	45,600 AF	45,600 AF

1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS — NOTES

1. Baseline: Baseline means the historic maximum amount of water that suppliers diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in a purveyor's specific agreement. Clarifications pertaining to the San Juan Water District, SMUD and the City of Folsom are noted in footnotes 8, 11, and 19.
2. Driest Years (i.e. Conference Years): Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet. Conference years are those years which require diverters and others to meet and confer on how best to meet demands and protect the American River.
3. Wet/Ave Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.
4. Drier Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet.
5. In the Conference Years the City of Folsom would reduce diversions by an additional 2,000 acre feet below its baseline to 18,000 AF through additional conservation to achieve recreational benefits to Folsom Reservoir and fishery benefits to the Lower American River.
6. PCWA would receive support for an American River diversion of 35,500 AF (8,500 AF existing and 27,000 AF additional) in wetter and average years and a new Sacramento/Feather Diversion of 35,000 AF. PCWA is willing to exchange 35,000 AF of its American River water for Sacramento and/or Feather River water provided the terms of such exchange do not result in any diminution of PCWA's water supply or an increased cost to PCWA.
7. For these suppliers, some or all of their water supply diverted from the American River or Folsom Reservoir in the drier and driest years could be replaced with water released from the Middle Fork Project Reservoirs by reoperating those reservoirs. Reoperation of the MFP reservoirs causes the reservoirs to be drawn down below historical operational minimum pool volumes.
8. The baseline for SJWD and their wholesale service area within Sacramento County is the full amount of their entitlements (CVP contract and water rights) which they exercised in 1995.
9. Wet/Ave Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 1,600,000 acre feet.
10. Drier Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 1,600,000 acre feet.
11. The baseline for SMUD is the 1995 diversion amount which reflects the shut down of Rancho Seco Power Plant.
12. Wet/Ave Years: As it applies to the City of Sacramento, time periods when the flows bypassing the E. A. Fairbairn Water Treatment Plant diversion exceed the "Hodge flows."
13. For modeling purposes, it is assumed that the City of Sacramento's total annual diversions from the American and Sacramento River in year 2030 would be 130,600 AF for use within the City limits.
14. As it applies to these diverters, there is no Water Forum limitation to diversions from the Sacramento River.

1995 AND PROPOSED YEAR 2030
SURFACE WATER DIVERSIONS — NOTES (continued)

15. Drier Years: As it applies to the City of Sacramento, time periods when the flows bypassing the City's E. A. Fairbairn Water Treatment Plant diversion do not exceed the "Hodge flows." Within its existing capacity, the City can divert from the American River 155 cfs in June, July and August, 120 cfs in January through May and September, and 100 cfs in October through December.

16. The total for the County of Sacramento (78,000 AF) represents 45,000 AF of firm entitlement and 33,000 AF of intermittent water. The intermittent supply is subject to reduction in the drier and driest years. To reduce reliance on intermittent surface water, the County of Sacramento intends to pursue additional firm supplies.

17. Northridge Water District (NWD) and other signatories have agreed that for an interim ten year period, NWD would be able to divert PCWA water in years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet. After the ten-year period, unless the State Water Resources Control Board issues a subsequent order, NWD will divert up to 29,000 acre feet of water from Folsom Reservoir under the NWD-PCWA contract only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 AF.

18. Carmichael Water District will divert and use up to their license amount of 14,000 acre feet. By the year 2030, it is most likely that the water demand for the District will be reduced to their historic baseline level of 12,000 acre feet by implementation of Urban Water Conservation Best Management Practices. Signatories to the *Water Forum Agreement* acknowledge and agree that CWD shall not relinquish control of or otherwise abandon the right to any quantity it has foregone delivery and/or diversion of under this *Agreement*, and shall retain the right (if any) to transfer that water for other beneficial uses, after that water has served its purpose of assisting in the implementation of the Improved Pattern of Fishery Flow Releases, for diversion or rediversion at, near, or downstream of the confluence of the Lower American River and the Sacramento River. The signatories also recognize that any such transfer of water by CWD must be in accordance with applicable provisions of federal and state law.

19. This is an agreed upon amount which is within the historic diversion data and is equivalent to Folsom's treatment capacity as of 1999.

20. Replacement of water to the river as a dry year action as provided in PCWA's specific agreement is contingent on PCWA's ability to sell this water to the Department of the Interior to meet Anadromous Fishery Restoration Program goals for the Lower American River or to other parties for their use after it flows down the Lower American River.

21. Remaining issues which are being negotiated are: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation Best Management Practice #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented, 3) environmentalists' support for conditions related to release of replacement water in drier and driest years.

DRAFT EIR MODELING ASSUMPTIONS FOR AMERICAN RIVER DIVERSIONS FOR PURVEYORS THAT HAVE NOT CONCLUDED THEIR NEGOTIATIONS

To meet requirements of the California Environmental Quality Act, the Water Forum Programmatic EIR assessed impacts of all reasonably foreseeable diversions that may occur in the watershed. For the Water Forum EIR, potential diversions of the purveyors shown in the chart below were modeled as part of the Water Forum Proposal based on preferences communicated by representatives of purveyors listed on this chart.

However, mutually acceptable agreements have not been reached on how Arcade Water District, Rancho Murieta CSD, El Dorado Irrigation District, and the Georgetown Divide PUD would participate in all elements of the *Water Forum Agreement*. These suppliers have entered into Procedural Agreements with the Water Forum to negotiate mutually acceptable agreements in the future. In addition, Arden Cordova Water Service has decided not to participate in the ***Water Forum Agreement***.

Modeling does not imply that there is agreement on diversions described below. Nor does it imply that all stakeholder representatives believe that all of these diversions will necessarily occur. Diversions shown on this chart will be included as part of the *Water Forum Agreement* only if there are mutually acceptable agreements.

WATER PURVEYOR	1995 BASELINE (1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years)(2)
Arcade WD	3,500 AF	11,200 AF	11,200 AF	3,500 AF
Arden Cordova Water Service	3,500 AF	5,000 AF (3)	5,000 AF (4)	5,000 AF
El Dorado ID	20,000 AF	48,400 AF (3)	Decreasing from 48,400 to 38,900 AF (4)	38,900 AF
Georgetown Divide PUD (5)	10,000 AF	18,700 AF (3)	Decreasing from 18,700 to 12,500 AF (4)	12,500 AF
Rancho Murieta CSD	0 AF	1,500 AF (6)	1,500 AF (6)	0 AF

Footnotes (Assumptions included in these footnotes are for EIR modeling purposes only. Modeling these diversions does not imply there is agreement on these assumptions):

1. Baseline: As it applies to these diversions, baseline means the historic maximum amount of water that suppliers diverted annually from the American River through the year 1995.
2. Driest Years (i.e. Conference Years): For purposes of the *Water Forum Agreement*, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet. Conference years are those years which require diverters and others to meet and confer on how best to meet demands and protect the American River.
3. Wet/Ave Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.
4. Drier Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet.
5. For this supplier, some or all of their water supply diverted from the American River or Folsom Reservoir in the drier and driest years could be replaced with water released from PCWA's Middle Fork Project Reservoirs by reoperating those reservoirs.
6. As it applies to this diversion, water in Wet/Ave and Drier Years is diverted at the mouth of the American River or from the Sacramento River.

MAJOR WATER SUPPLY PROJECTS THAT WILL RECEIVE WATER FORUM SUPPORT UPON SIGNING THE *WATER FORUM AGREEMENT* (a)

(Note: This is a partial list of projects which will be needed to accomplish the recommended diversions. Additional facilities may be needed and would be supported to the extent they are consistent with the *Water Forum Agreement*.)

CARMICHAEL WD	Treatment plant, diversion modifications, pump station and piping
CITIZENS UTILITIES	Approval of wholesale agreements w/City of Sacramento Change of Place of Use with PCWA
CITY OF FOLSOM	Relocate & replace raw water conveyance pipeline Diversion facility at Folsom Reservoir Approval of PL 101-514 contract and change in place of use Expansion of water treatment plant
CITY OF SACRAMENTO	Expansion/rehabilitation of the Sacramento River and E.A. Fairbairn Water Treatment Plants as well as rehabilitation (upgrade fish screens) of the diversion structures for both facilities.
CITY OF ROSEVILLE	Long-term wheeling agreement with USBR (PCWA water) Renegotiation of USBR contract Raw water supply project Water treatment plant expansion
COUNTY OF SACRAMENTO (includes a portion of the Elk Grove Water Works)	Expansion of Sacramento River diversion and treatment facilities; expansion of E. A. Fairbairn treatment facilities to treat water diverted from at or near the confluence or from the Sacramento River Approval of PL 101-514 contract and change in place of use and point of diversion Approval of SMUD entitlement transfers
NATOMAS CENTRAL MUTUAL WATER COMPANY	Approval of improvement of diversion facilities

MAJOR WATER SUPPLY PROJECTS THAT WILL RECEIVE WATER FORUM SUPPORT UPON SIGNING THE *WATER FORUM AGREEMENT* (a) (continued)

(Note: This is a partial list of projects which will be needed to accomplish the recommended diversions. Additional facilities may be needed and would be supported to the extent they are consistent with the *Water Forum Agreement*.)

NORTHRIDGE WD	Change of Place of Use with PCWA Warren Act contract with USBR
PLACER COUNTY WATER AGENCY - Support is subject to resolution of remaining issues. See footnote (b)	Permanent pumping plant at Auburn Canyon Change in point of delivery for USBR water
SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD)	Approval of transfers to other Agencies
SAN JUAN CONSORTIUM (includes CITRUS HEIGHTS WD, FAIR OAKS WD, ORANGE VALE WC)	Diversion facility at Folsom Reservoir Approval of PL 101-514 contract Water treatment plant expansion Change of Place of Use with PCWA
SO. COUNTY AGRICULTURE (includes GALT I. D., CLAY WD, OMOCHUMNE-HARTNELL WD, FARM BUREAU)	Approval of SMUD entitlement or other transfer and Folsom South Canal diversions

a. Note: All suppliers having contracts for Central Valley Project Water will be renegotiating those contracts when the CVP Improvement Act Programmatic Environmental Impact Statement is complete.

b. Support for Placer County Water Agency major water supply projects is subject to resolution of these remaining issues: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation Best Management Practice #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented, and 3) environmentalists' support for conditions related to release of replacement water in drier and driest years.

2. **Actions to Meet Customers' Needs while Reducing Diversion Impacts in Drier Years**
This element is to ensure that sufficient water supplies will be available to customers in dry years as well as wet years. The regional economy is dependent on sufficient water being available for our businesses and homes even in drought years. The intent of this element of the *Water Forum Agreement* is that suppliers continue to meet their customers' needs to the year 2030 while minimizing diversion impacts in the drier and driest years.

It is envisioned that American River diversions by purveyors in the region in average and wetter years will increase from the current level of 216,500 acre feet annually to about 481,000 acre feet annually above H Street. This represents a significant portion of the total annual flow of the American River which averages about 2.6 million acre feet, with a range of less than 400,000 acre feet to greater than 6.3 million acre feet.

With adequate mitigation, these diversions in average and wetter years can be accomplished while still preserving the fishery, wildlife, recreational, and aesthetic values of the Lower American River. However, in drier years the river is already stressed. The health of the fishery would degrade if diversions from the Lower American River were increased by these amounts in drier years.

To avoid these impacts suppliers will develop alternatives to meet their customers' needs in drier and driest years. Alternatives include: conjunctive use of groundwater basins consistent with the sustainable yield objectives; utilizing other surface water resources; reoperation of reservoirs on the Middle Fork of the American River; increased conservation during drier and driest years; and reclamation. Each supplier's dry year diversions are described in the "Summary of Recommendations for Specific Stakeholder Organizations" at the end of this document and are also summarized in the chart on the preceding pages, "1995 and Proposed Year 2030 Surface Water Diversions."

3. **An Improved Pattern of Fishery Flow Releases from Folsom Reservoir**
This element supports needed assurances for continued implementation of a pattern of water releases from Folsom Reservoir that more closely matches the needs of anadromous fish, in particular fall run chinook salmon, which need more cool water in the fall and are not present in the American River in the summer.

Since construction of Folsom Dam and Reservoir, the U. S. Bureau of Reclamation's (Bureau) releases were legally constrained only by the outdated fish flow requirements of State Water Resources Control Board Decision 893 which incorporates the existing flow standard for the Lower American River.

Until recently the Bureau released water from Folsom Reservoir on a pattern that did not match the life cycle needs of fall run chinook salmon. Since Decision 893 was adopted, the Lower American River fishery has significantly declined.

The Central Valley Project Improvement Act was passed in 1992. This law authorized fish and wildlife restoration as an additional purpose of the Central Valley Project. It also required the federal government to develop an Anadromous Fish Restoration Plan (AFRP) including implementation of an improved pattern of fishery flow releases from Folsom Reservoir to benefit anadromous fish.

Beginning in December 1994, the Water Forum convened a Fish Biologists' Working Session of fish experts with special knowledge of the Lower American River. Their charge was to develop recommendations for an improved pattern of releases from Folsom Reservoir. Participants included representatives from the U.S. Fish and Wildlife Service, California Department of Fish and Game, State Water Resources Control Board, U.S. Bureau of Reclamation, and representatives from the Water Forum.

After several months, participants in the Fish Biologists' Working Session came to general agreement regarding which fish species in the Lower American River should be given priority when there are constraints in water availability. They also developed an Improved Pattern by which available water can be released from Folsom Reservoir in a "fish friendly" manner consistent with the reservoir's flood control objectives.

Since 1996 the Bureau, in consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, has attempted to release water from Folsom Reservoir in a manner consistent with the flow objectives for the Lower American River to the extent Reclamation's available water supply has permitted it to do so. Their AFRP flow objectives for the Lower American River are set forth in the November 20, 1997 "Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water." They are essentially the same as the Improved Pattern of Fishery Flow Releases developed by the Fish Biologists' Working Session which was convened by the Water Forum. It is recognized that in the process of updating the Lower American River flow standard it will be necessary to make some corrections to the AFRP flow objectives for the Lower American River.

The Improved Pattern of Fishery Flow Releases is absolutely critical for achieving the Water Forum's coequal objective of preserving the fishery, wildlife, recreational, and aesthetic values of the Lower American River. The *Water Forum Agreement* is based on the expectation that the Improved Pattern of Fishery Flow Releases would be implemented consistent with the AFRP LAR flow objectives in the November 20, 1997 Final Administrative Proposal as they will be corrected. These corrections include some typographic corrections as well as inclusion of target carryover storage amounts for Folsom Reservoir.

Therefore, if the Department of the Interior substantially changes the AFRP flow objectives for the Lower American River, it would be considered a changed circumstance that would have to be considered by the Water Forum Successor Effort.

In addition, there needs to be flexibility in implementing an Improved Pattern to reflect real time ecological considerations. This is sometimes referred to as "adaptive management."

The increased diversions in this *Water Forum Agreement* would be permanent. Therefore it is essential that an Improved Pattern also be implemented by the Bureau on a permanent basis. Therefore one of the essential requirements of the *Water Forum Agreement* is that the State Water Resources Control Board update the Lower American River flow standard.

4. **Lower American River Habitat Management Element (HME) Which Also Addresses Recreation on the Lower American River**
This element, combined with support for an "Improved Pattern of Fishery Flow Releases from Folsom Reservoir" and "Actions to Meet Customers' Needs While Reducing Diversion Impacts in the Drier Years," is included to mitigate the impacts of the increased diversions on the Lower American River in a reasonable and feasible manner.

The Lower American River Habitat Management Element will contain five components that together will address the flow, temperature, physical habitat, and recreation issues for the Lower American River: Habitat Management Plan; Habitat Projects that Benefit the Lower American River Ecosystem; Monitoring and Evaluation; Project-Specific Mitigation; and Lower American River Recreation Projects.

A. **The Lower American River Habitat Management Plan** will include priorities, schedules and budgets for projects that will benefit the Lower American River fishery, riparian, and recreational resources. This plan will help guide activities of the Water Forum Successor Effort. Prepared in cooperation with other agencies, it will also be available to assist those agencies as they set their funding priorities.

B. **Projects that Benefit the Lower American River Ecosystem.** Currently 22 project/studies have been identified by the CALFED American River Technical Team. Additional projects may be identified in the future. *Water Forum Agreement* signatories will be co-funders of several of the projects.

C. **Monitoring and Evaluation** will establish baseline conditions for future reference and assess the health of the Lower American River as diversion increase. It will also assess the response of fish, wildlife, and the riparian communities to the management/restoration projects implemented under the Habitat Management Plan as well as the increased diversions.

D. **Project-Specific Mitigation** is required of each purveyor to mitigate any site-specific impacts associated with their diversions. An example of such site-specific mitigation would be installing new or upgraded fish screens at diversion facilities.

E. **Lower American River Recreation Projects** will be funded to mitigate effects of increased diversions by Water Forum purveyors on recreation along the Lower American River.

Potential projects include increased boating access to the American River, development of trails adjacent to waterways, and purchase of land adjacent to waterways for recreational and environmental values. This will be closely coordinated with the Sacramento County Parks and Recreation Commission.

Funding for the Water Forum's Lower American River Habitat Management Element projects will be provided by: the City of Sacramento; Sacramento County Water Agency (using Zone 13 funds) on behalf of suppliers serving the unincorporated areas of Sacramento County and the City of Citrus Heights: the City of Folsom; Placer County Water Agency; the City of Roseville: and San Juan Water District (for that portion of their district outside of Sacramento County).

Multi-Agency Lower American River Habitat Management Program

The Lower American River ecosystem is also affected by agencies outside the Water Forum. Many agencies have some type of jurisdiction over decisions that affect the ecosystem. Several outside agencies have responsibility and financial resources to benefit the Lower American River.

It is also recognized that the Water Forum will not by itself have sufficient funding to implement all the actions necessary to fully preserve the Lower American River ecosystem. Therefore it is intended that the Water Forum Habitat Management Element (HME) be coordinated with a Multi-Agency Lower American River Habitat Management Program (HMP).

Agencies expected to participate in the Multi-Agency Lower American River HMP include: the Water Forum Successor Effort (administered by the City of Sacramento under the auspices of the City-County Office of Metropolitan Water Planning); the Sacramento Area Flood Control Agency; CALFED (or its successor); U.S. Bureau of Reclamation (responsible for administering the Central Valley Project and the Central Valley Project Improvement Act); U.S. Fish and Wildlife Service; National Marine Fisheries Service, California Department of Fish and Game; and the Sacramento County Parks Department (which administers the Lower American River Parkway Plan).

The vehicle for this partnership will be the Lower American River Task Force which will include representatives of each agency. The Lower American River Task Force will oversee development of the detailed Habitat Management Program to identify priorities, time lines, budgets and funding sources for environmental restoration and enhancement.

Although each agency will retain autonomy over its own budget, the Lower American River Task Force will coordinate opportunities for cost sharing. Integration of ongoing and planned management/ restoration efforts will help the cooperating agencies develop the most effective program for the Lower American River, thereby providing maximum benefits to the river ecosystem. Moreover, through cooperation and cost sharing, the costs to each organization for developing, implementing and monitoring the Habitat Management Program will be minimized.

The Habitat Management Program will incorporate "adaptive management" which allows for flexibility in making resource management decisions as additional data become available. Monitoring and evaluation information will be fed back into the management decision making process on a real time basis.

The *Water Forum Agreement* assumes significant financial contributions from agencies in addition to those that sign the *Water Forum Agreement*. If that does not occur, it would be considered a changed circumstance requiring renegotiation.

5. Water Conservation

The Water Conservation Element of this *Water Forum Agreement* is essential to meeting both of the co-equal goals of the Water Forum. First, conserved water will be available to help supply the region's water needs. Second, conservation will minimize the need for increased groundwater pumping and increased use of surface water, including water diverted from the American River.

In some cases water conservation will allow suppliers to delay or reduce capital investments required for expansion of water and wastewater treatment facilities. Water conservation programs also reflect

public support for the conservation of limited natural resources.

It is also important that suppliers implement active water conservation programs to demonstrate that water they supply is being used efficiently. This is a requirement when they apply for state and federal approvals to increase surface water diversions.

Suppliers and their customers in this area have already implemented many water conservation efforts. However, stakeholder representatives have found that existing efforts will be insufficient to meet the region's needs for a reliable water supply. Major components of the Water Conservation Element are:

A. Residential Water Meters. This is a sensitive issue in our region. We are blessed with the waters of both the Sacramento and American rivers plus groundwater readily accessible with wells. Despite this apparent abundance, extensive research by stakeholder representatives has revealed real limits on our ability to meet water needs solely by diverting or pumping more water. Water meters and pricing based on the quantity used are essential for us to meet our goals of providing a safe, reliable water supply and preserving the Lower American River.

In unmetered areas, customers pay a flat rate regardless of how much water they use - they have no economic incentive to be efficient. Customers who conserve subsidize those who waste.

In metered areas, customers pay based on the amount of water they use. In this way they can control their own water costs. They also stop subsidizing those who waste. Many people, especially those on fixed or limited incomes, see water meters as a means to pay for only what they use, much like gas or electric meters.

It is also recognized that suppliers receiving water from the Central Valley Project are subject to the conservation provisions, including metering, included in the Central Valley Project Improvement Act. CVPIA conservation requirements, including meter retrofit, exist independent of the *Water Forum Agreement*.

Many of the regulatory approvals for needed water facilities will have to be provided by state and federal agencies. These agencies will review our requests in the context of statewide water shortages and virtually universal metering in the rest of the State.

Therefore, in order to improve the efficiency of our own water use and to avoid more severe requirements imposed by others, the *Water Forum Agreement* includes a gradually phased-in retrofit program starting in the fourth year after signing of the *Water Forum Agreement*. This will minimize disruptions to existing residents. Each supplier will determine the most fair, equitable and cost effective way to implement the mutually agreed upon program within its service area. Within a reasonable time suppliers will read all meters, include water usage on bills and base water use charges on the quantity used.

Recognizing that the City of Sacramento has a City Charter prohibiting mandatory meter retrofit, theirs will be an actively pursued voluntary program. It is also recognized

that environmental organizations participating in the Water Forum prefer and will continue to advocate that all connections be metered.

Those suppliers receiving relatively fewer benefits from the *Water Forum Agreement* will implement voluntary programs.

Water Forum signatories will not implement local retrofit on resale, or any other requirements that would impose escrow or disclosure responsibilities on realtors. This provision will not apply to the City of Sacramento since their City Charter prohibits mandatory metering. All suppliers will retain the ability to implement incentives for a voluntary meter retrofit program at time of resale that would not impose escrow or disclosure requirements.

In administrative proceedings related to statewide matters such as the Bay Delta Water Rights proceeding, signatories to this *Agreement* may need to advocate statewide meter retrofit schedules different than what is included in this *Agreement*.

B. Other Water Conservation Programs. If they had not already done so, suppliers will implement other agreed upon water conservation programs by the start of the fourth year after signing of the *Water Forum Agreement*. These conservation programs were adapted from the Statewide Memorandum of Understanding (MOU) Regarding Urban Water Conservation Best Management Practices and have been customized for use by the Water Forum.

The Water Conservation Element incorporates the criteria that have been negotiated for implementation of the Water Forum's Best Management Practices. Using these criteria as a reference, each supplier has negotiated with the other Water Forum stakeholder representatives the details of its water conservation program.

C. Public Involvement. In the implementation of Best Management Practices (especially meter retrofit and pricing based on quantity of water used), water suppliers will establish a citizens involvement program, such as citizens advisory committees to help design, implement and market water conservation programs. Each supplier will establish this program within three years of signing the *Water Forum Agreement* if they do not already have a program. Each supplier's citizens involvement program is described in its Water Conservation Plan.

D. Water Conservation Plans. Each supplier's water conservation plan is incorporated into the *Water Forum Agreement* as an appendix.

E. Agricultural Water Conservation. Agricultural water conservation is also projected to increase over the life of the *Water Forum Agreement*. Much of the surface water used by agriculture in the Sacramento region is from the Central Valley Project. That means that its use will be subject to the conservation requirements of the Central Valley Project Improvement Act. Specifics on the agricultural water conservation program will be negotiated by the Water Forum Successor Effort.

6. Groundwater Management

This element provides a framework by which the groundwater resource in the Sacramento county-wide area can be protected and used in a sustainable manner. It also provides a mechanism for coordination with those adjacent counties that share the groundwater basin.

Because it is out of sight, many people are surprised to find that groundwater supplies over half the water used in the region. The potential for continued over pumping and contamination caused stakeholder representatives to conclude that some type of groundwater management plan is needed to protect this vital resource.

The groundwater element includes monitoring the amount of water withdrawn from the groundwater basin and the planned use of surface water in conjunction with groundwater. This is known as "conjunctive use." Conjunctive use improves overall water supply reliability while at the same time providing for sustainable use of groundwater in a way that does not require restrictions on groundwater pumping.

A key provision of this element includes recommendations on "sustainable yield," which is the amount of water that can be safely pumped from the basin over a long period of time without damaging the aquifer. Given the hydrology of the region, separate estimated average annual sustainable yields have been formulated for each of the three sub-areas of the basin as follows:

North Area: 131,000 acre feet
South Area: 273,000 acre feet
Galt Area: 115,000 acre feet

A. Sacramento North Area Groundwater Management

The Sacramento North Area Groundwater Management Authority (SNAGMA) was established in August, 1998 through adoption of a joint powers authority using the existing authority of the City of Sacramento, the City of Folsom, the City of Citrus Heights, and the County of Sacramento.

The SNAGMA includes representatives of organized water suppliers in the North Area, as well as representatives of North Area agricultural interests and businesses which rely on their own wells.

In order to facilitate conjunctive use programs and maintain long-term sustainable yield, SNAGMA has the authority to establish regulatory fees based on level of benefit received. Only those who benefit could be subject to any regulatory fees. In the North Area, residential pumpers who irrigate less than two and-a-half acres are exempt from any regulatory fees. The Sacramento North Area Groundwater Management Authority may also decide to exempt or modify the conditions applying to other types of users. Approval of any regulatory fees will be subject to all requirements of the law including full public notice and hearings.

B. South Area and Galt Area

Discussions about groundwater management in the South Area and the Galt Area will be undertaken by the Water Forum Successor Effort. Because the South Area and the Galt Area each have their own unique circumstances, the Sacramento North Area

Groundwater Management Authority is not a template for programs appropriate to the needs in these two areas.

The Groundwater Element also contains: provisions to ensure adequate basin-wide coordination among the three sub-areas of the basin; provisions for alternative dispute resolution mechanisms to address problems which may arise; and provisions for collaboration with the Water Forum Successor Effort.

Finally, this element stresses the importance of having groundwater users in adjacent counties participate in the management and governance structure for shared groundwater basins. The *Water Forum Agreement* outlines specific ways in which such participation can be accomplished.

7. **Water Forum Successor Effort**
Signing of the *Water Forum Agreement* is an important milestone in the process. However, actual implementation of this complex *Agreement* over the next three decades will require an ongoing effort. In order to ensure implementation of the *Agreement*, a Water Forum Successor Effort is created with membership comprised of those organizations signatory to the *Water Forum Agreement*. Its responsibilities are to oversee, monitor, and report on implementation of the *Water Forum Agreement*. **The Water Forum Successor Effort does not have any authority to govern or regulate.**

While the *Water Forum Agreement* should not be amended for frivolous reasons, it must also be able to respond to changing conditions. It is recognized that in the future there will be significant changes in circumstances that cannot be foreseen today. For instance, laws, regulations, health standards, technologies, and even the health of the fishery will undoubtedly change over the next 30 years in ways we cannot now predict. For the *Agreement* to have "shelf life" there must be some mechanism to track and adapt to any changing conditions.

Any future proposals to amend the *Water Forum Agreement* will be considered in the context of both of the Water Forum's co-equal objectives. In considering any amendments to the *Water Forum Agreement*, the Successor Effort will use the same interest-based collaborative process used to develop the initial *Water Forum Agreement*. Amending the *Water Forum Agreement* will require approval of the boards of directors of organizations signatory to the *Agreement*.

Another ongoing need will be to resolve disputes in a way that preserves the integrity of the *Agreement*. All signatories to the *Agreement* commit to some form of dispute resolution before resorting to litigation. While not foregoing their rights, the signatories will first work in good faith to resolve the dispute among themselves.

Funding for the Water Forum Successor Effort will be provided by water suppliers signatory to the *Water Forum Agreement* based on the number of connections they serve. (Sacramento County Zone 13 contributions to the Successor Effort will cover the obligations of the water suppliers serving the unincorporated areas of Sacramento County and the City of Citrus Heights.) Stakeholder representatives to the Water Forum Successor Effort will approve the Successor Effort's annual budget. For administrative purposes only the Successor Effort will be housed in the City-County Office of Metropolitan Water Planning.

ASSURANCES AND CAVEATS

Assurances

The *Water Forum Agreement* will allow the region to meet its needs in a balanced way through implementation of all seven elements of the *Agreement*: Increased Surface Water Diversions; Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years; Support for Improved Pattern of Fishery Flow Releases; Lower American River Habitat Management; Water Conservation; Groundwater Management; and Water Forum Successor Effort.

Each signatory needs to be assured that as it fulfills its responsibilities under the *Agreement*, the other signatories will be also honoring their commitments. Adequate assurances allow each signatory to expend the energy and resources necessary for it to uphold its part of the *Agreement* with confidence that other signatories will be doing likewise.

For instance for environmentalists to support suppliers' increased water diversions, they need assurances that suppliers will support all seven elements of the *Water Forum Agreement* over the entire term of the *Agreement*. This will provide them assurances that agreed upon actions to preserve the Lower American River will be continued even after new water diversions are constructed.

Conversely for water suppliers to participate in all seven elements of the *Agreement*, including those which will preserve the Lower American River, they will need to have assurances that they will be able to develop the increased diversions and facilities over the term of the *Agreement*.

The *Water Forum Agreement* is based on the following nine assurances:

A. Signing the *Water Forum Agreement*.
The stakeholder representatives have concluded that the best form of the *Agreement* is a Memorandum of Understanding (MOU). This MOU creates the overall political and moral commitment to the *Agreement*.

While the MOU memorializes the substance of the overall *Agreement* with its multi-party understandings, assurances for some specific sub-elements within the overall *Agreement* will be provided through a combination of other mechanisms, including an updated Lower American River flow standard, binding contracts, and joint powers agreements.

B. Implementation of the Central Valley Project Improvement Act (CVPIA).
Under the CVPIA, the Department of the Interior is responsible for carrying out two programs that provide significant assurances that fishery, wildlife, recreational, and aesthetic values of the Lower American River will be protected. These programs are the Anadromous Fish Restoration Program (AFRP) and the habitat improvements financed through the CVPIA Restoration Fund.

C. An Updated Lower American River Flow Standard.
All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum*

Agreement also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

- *Water Forum Agreement* provisions on water diversions including dry year diversions, and

- Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

The State Water Resources Control Board has already declared the American River to be fully appropriated during certain times of the year. In recognition of the additional diversions and fishery flows agreed to in the *Water Forum Agreement* the Declaration of Full Appropriation needs to be amended. Because there are significant remaining issues including area of origin protections, this will require additional negotiation.

Signatories agree to negotiate with all affected stakeholders and the Water Forum Successor Effort will recommend an amendment to the Declaration of Full Appropriation for the American River consistent with the *Water Forum Agreement.*

An additional assurance will be contracts between suppliers that divert from upstream of Nimbus Dam and the Bureau of Reclamation. Every effort will be made to have these contracts be consistent with the diversion provisions in each supplier's Purveyor Specific Agreement.

D. Support for Increased Diversions and Related Facilities.
All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each supplier's Purveyor Specific Agreement. All signatories will endorse construction of facilities to divert, treat, and distribute water as specified in each Purveyor Specific Agreement including diversion structures, treatment plants, pumping stations, wells storage facilities, and major transmission piping.

Endorsement of the water entitlements and related facilities in the *Water Forum Agreement* means that organizations signatory to the *Water Forum Agreement* will: speak before stakeholder boards and regulatory bodies; provide letters of endorsement; provide supportive comments to the media; advocate the *Water Forum Agreement* to other organizations, including environmental organizations that are not signatory to the *Water Forum Agreement*; and otherwise respond to requests from other signatories to make public their endorsement of the seven elements of the *Water Forum Agreement.*

E. Assurances for the Lower American River Habitat Management Element.
Signatories who divert water from the American River commit in the signed *Water Forum Agreement* and in their project specific environmental documents to implement the Habitat Management Element. Signatories that commit to financially contributing to the Habitat Management Element will enter into a contract with the City of Sacramento which will provide administrative services to the Water Forum Successor Effort through the City-County Office of Metropolitan Water Planning.

F. Assurances for the Water Conservation Element.
In signing the *Water Forum Agreement*, each supplier agrees to implement its Water Forum negotiated water conservation plan which is included in the *Agreement* as an appendix. They will also commit to implement their Water Forum negotiated conservation plans in their project-specific environmental impact reports.

G. Assurances for the Groundwater Management Element.
Signatories who pump groundwater from the subarea of the basin in the North area of Sacramento County agree to participate in the Sacramento North Area Groundwater Management Authority established under a joint powers agreement. Affected signatories also agree to work with the Water Forum Successor Effort to negotiate arrangements for groundwater management for the Galt and the South areas within Sacramento County.

H. Assurances for the Water Forum Successor Element.
Upon signing the *Water Forum Agreement*, all signatories will immediately become members of the Water Forum Successor Effort. Signatory agencies that will be financially contributing to the Water Forum Successor Effort will enter into a contract with the City of Sacramento which will provide administrative services to the Water Forum Successor Effort.

I. Assurances for Response to Changed Conditions.
All signatories agree that if changed circumstances affect the ability to attain either of the two co-equal objectives, the Water Forum Successor Effort will recommend changes to relevant portions of the *Water Forum Agreement*.

Amending the *Water Forum Agreement* requires express approval by those signatories that would be affected by the amendment.

Caveats
The *Water Forum Agreement* includes linked actions based on many "quid pro quos" (i.e., something given for something received.) Some of the actions will require future approvals or implementation by local, state and federal agencies. It is also recognized that some actions will have to proceed before others are complete.

In addition some things cannot be known with certainty at this time. For instance, results of Endangered Species Act consultations for specific projects will not be available for some time.

Therefore, in order to have a durable *Agreement* it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

A. Each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

- If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart "Major Water Supply Projects That Will Receive Water Forum Support Upon Signing the *Water Forum Agreement*," and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- Support for the Improved Pattern of Fishery Flow Releases
- Water Forum Successor Effort
- Water Conservation Element
- Lower American River Habitat Management Element
- Support for the Updated Lower American River flow standard
- Diversion restrictions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

And

- If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart "Major Water Supply Projects That Will Receive Water Forum Support Upon Signing the *Water Forum Agreement*," that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

B. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

C. A stakeholder's support for water supply entitlements and facilities is contingent on adequate assurances including:

- Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

COORDINATION WITH FEDERAL AND STATE AGENCIES

Cooperation by federal and state agencies will be required to implement various parts of the *Water Forum Agreement*. For instance, the U.S. Bureau of Reclamation will be called upon to support an updated Lower American River flow standard consistent with the *Water Forum Agreement*. As part of this process the Bureau will also be called upon to enter into diversion agreements with Water Forum purveyors that divert upstream of Nimbus Dam. Water Forum stakeholders will work with the USBR to ensure that those agreements will have diversion conditions consistent with the *Water Forum Agreement*.

The State Water Resources Control Board will be asked to adopt an updated Lower American River flow standard consistent with the *Water Forum Agreement*. The *Water Forum Agreement* is also compatible with all of the alternatives CALFED is considering to solve the Bay-Delta water quality and water supply problems.

Recognizing this, the Water Forum has regular coordination meetings with top management from the key state and federal agencies including the U.S. Bureau of Reclamation, State Water Resources Control Board, California Department of Fish and Game, U.S. Fish and Wildlife Service, California Department of Water Resources, and CALFED. Their representatives reviewed draft proposals to determine if there were any fatal flaws or "red flags" that could be of major concern to their agencies. Through this early coordination, the Water Forum maximized the prospects that its agreements will be acceptable to those agencies. However each agency will have to meet its own legal and policy requirements to implement or permit any action.

As the process continues there will be additional meetings with the highest level administrators at state and federal agencies. Included will be representatives from the California Public Utility Commission which will need to approve investor-owned utilities' recovery through rates of costs for their conservation programs, including meter retrofit. The emphasis will be on the confirming that those agencies will be able to implement the actions and approvals required to make the *Water Forum Agreement* work.

SCHEDULE FOR UPDATING THE LOWER AMERICAN RIVER FLOW STANDARD

The following schedule reflects the Water Forum's need to have the Lower American River flow standard updated as soon as possible. Signatories to the *Water Forum Agreement* will do everything they can to expedite approval by the State Water Resources Control Board. This includes the City of Sacramento providing supplemental financial assistance to the SWRCB for priority processing if that is agreed to by the SWRCB.

October, 1999 City of Sacramento, with support from the Water Forum, requests the State Water Resources Control Board to update the Lower American River flow standard consistent with:

- *Water Forum Agreement* provisions on water diversions including dry year diversions, and
- Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for fisheries.

November, 1999 State Water Resources Control Board holds a workshop and hearing on the City Of Sacramento's request to expedite processing of the updated Lower American River flow standard.

Spring, 2000 After consultation with other American River water rights holders, Water Forum stakeholders agree on detailed recommendations for the updated Lower American River flow standard.

Spring, 2000 After Water Forum stakeholders agree on detailed recommendations for the updated Lower American River flow standard, the City of Sacramento will present it to the State Water Resources Control Board.

Spring, 2000 Initiate State Water Resources Control Board review including environmental review for the proposed updated LAR flow standard.

As soon as all requirements have been met, the State Water Resources Control Board will hold a hearing on the proposed updated LAR flow standard. Thereafter the State Water Resources Control Board will issue its decision.

- Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

- Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if the Bureau of Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

- Adequate progress on the updated Lower American River standard.

- Adequate progress in construction of the Temperature Control Device.

- Adequate progress in addressing the Sacramento River and Bay Delta conditions associated with implementation of the *Water Forum Agreement*.

D. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR.

If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

WATER RIGHTS

Surface Water Rights

It is recognized that some suppliers that sign the *Water Forum Agreement* have long term surface water entitlements in excess of demands projected for the term of the *Water Forum Agreement*. Nothing in the *Agreement* is intended to call for the reduction or forfeiture of existing surface water entitlements. Signatories to the *Agreement* will honor this principle in state and federal entitlement proceedings directly related to the *Water Forum Agreement* as shown in the previous chart, "Major Water Supply Projects That Will Receive Water Forum Support" on page 14.

It is also recognized that there may be broader state and federal entitlement proceedings where signatories may have different interests, such as the State Water Resources Control Board water rights proceeding for the Bay Delta.

Signatories agree to work in good faith through the Water Forum Successor Effort with the objective being to develop a consensus recommendation for how state and federal entitlement proceedings should affect those agencies that store and divert American River water. All signatories will make good faith efforts so that recommendations will be consistent with both coequal objectives of the *Water Forum Agreement*:

Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030;

and

Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.

Groundwater Rights

It is recognized that groundwater rights holders have valuable rights that must be protected. Groundwater rights holders must not have their rights threatened either by their participation in the Water Forum process or by the groundwater management arrangements called for in the *Water Forum Agreement*. Consistent with the Groundwater Management Element, nothing in this *Agreement* is intended to call for the reduction or diminution of any exercised or unexercised groundwater rights. Accordingly, the signatories agree that the *Water Forum Agreement* shall not impair the

vested groundwater rights of any person or entity regardless of whether those rights are currently exercised or unexercised.

Signatories retain their ability to assert their groundwater rights by participating in the public process of creating rules, regulations, policies and procedures associated with the North Area Groundwater Management Authority and other groundwater management arrangements called for by the *Water Forum Agreement*.

SACRAMENTO RIVER SUPPLY FOR NORTH SACRAMENTO COUNTY AND PLACER COUNTY

All signatories to the *Water Forum Agreement* agree there will be benefits from a Sacramento River diversion to serve the north area of Sacramento County and Placer County. This could be an additional source of water for conjunctive use in the north area groundwater sub-basin. It could also provide a surface water supply to help meet a portion of some suppliers' needs in all years. This will contribute to a reliable supply for the area. It will also reduce the need for some suppliers to divert from the American River in drier years.

All signatories to the *Water Forum Agreement* agree to work in good faith to develop a project consistent with their interests that would: consolidate several of Natomas Central Mutual Water Company's diversions; upgrade fish screens at the consolidated diversion; accommodate the diversion of 35,000 AF of water by Placer County Water Agency consistent with its Purveyor Specific Agreement; accommodate the diversion of 29,000 AF of water for delivery to Northridge Water District consistent with its Purveyor Specific Agreement, interconnect that consolidated diversion with the north area pipeline which delivers water from the American River. Also, subject to additional negotiations among Water Forum signatories, the project could potentially accommodate other diversions (e.g. City of Sacramento diversions).

Support for this diversion is also subject to all elements of the *Water Forum Agreement* including the Caveats in Section Four, I, including compliance with environmental laws and adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

RELATIONSHIP OF *WATER FORUM AGREEMENT* TO LAND USE DECISION-MAKING

The Water Forum is developing ways to provide a safe and reliable water supply to the year 2030 - that means water for the people who live and work here right now, as well as for our children and others in the future.

Only local governments have the authority to make land-use decisions about growth - the Water Forum does not and cannot. The Water Forum has developed a regional water agreement that will meet our current and future needs.

The *Water Forum Agreement* contains estimated average annual yields for each of the three sub-areas of the groundwater basin in Sacramento county and limits to diversions from the American River. Beyond these agreements, limits on water from other sources have not been negotiated as part of the *Water Forum Agreement*. Signatories retain the right to support or oppose water projects that would use water from sources that have not been negotiated as part of the *Water Forum Agreement*.

It is the intent of signatories to the *Water Forum Agreement* that land use decisions dependent on water supply from the American River or the three groundwater subbasins in Sacramento county be consistent with the limits on water supply from the American River and the estimated average annual sustainable yields for those three groundwater subbasins as negotiated for the *Water Forum Agreement*.

The *Water Forum Agreement* describes how information on water supply availability will be integrated into the land use decision-making process. This information exchange is to better inform both the water and land use planning efforts. Nothing in this *Agreement* provides water suppliers, the Water Forum, or the Water Forum Successor Effort with any land use authority.

In Sacramento County only, signatories retain the ability to support or oppose water facilities that would serve new development outside the Urban Services Boundary that was defined in the Sacramento County General Plan, December, 1993. All parties also retain the right to support or oppose the sizing of water distribution facilities that would allow service to new development outside of the Urban Services Boundary.

It is recognized that the *Water Forum Agreement* focuses on providing a reliable and safe water supply and protecting the Lower American River. As such it is not an agreement on land use planning. Therefore all signatories retain the ability to support or oppose land use decisions on any basis except water supply availability insofar as these decisions are consistent with the *Water Forum Agreement*.

WATER FORUM AND THE QUESTION OF AUBURN DAM

The Water Forum as a group does not take a position on Auburn Dam. Individual members of the Water Forum and stakeholders they represent have strong and divergent positions on Auburn. Therefore as a group they would never be able to come to consensus on Auburn.

The Water Forum does not address flood control issues, which are being addressed by local, state and federal agencies as a part of a process that has been underway since 1986. However, the *Water Forum Agreement* is fully consistent with continued operation of Folsom Dam for flood control.

Members of the Water Forum recognize that Auburn Dam is debated in other regional, state and federal venues. While the Auburn debate continues, there are pressing issues concerning regional water supply, water quality, and Lower American River fisheries which the Water Forum is committed to addressing now.

The Water Forum is focusing on important and prudent solutions acceptable to every major constituency. Most of these solutions are necessary with or without Auburn. With or without Auburn Dam, the region needs facilities to divert, treat and distribute water supplies. We also need measures to protect the Lower American River fishery.

FOLSOM RESERVOIR RECREATION

In the future, Folsom Reservoir levels will be influenced by many factors including U.S. Bureau of Reclamation operations, flood control operations and water diversions. Even with implementation of the Water Conservation Element and the Actions to Reduce Diversion Impacts in Drier Years, there will be times when Folsom Reservoir will be lower, thereby affecting the opportunities for reservoir recreation.

Therefore, Water Forum signatories will work with their elected officials, California Department of Park and Recreation (CDPR) and other agencies that have an interest in reservoir levels, such as Congress, USBR, California Dept. of Boating and Waterways and the Sacramento Area Flood Control Agency, to obtain at least $3,000,000 of new funding for improvements to Folsom Reservoir recreation facilities.[1]

Although previous cooperative efforts between Water Forum stakeholders and other agencies have been successful (such as the securing federal authorization and appropriation for the Temperature Control Device), it is not certain that the $3 million in funding for Folsom Reservoir recreation improvements will be secured.

Therefore, purveyors signing the *Water Forum Agreement* that plan to increase their diversions of American River water commit that if less than $3,000,000 of new funds is secured by the year 2008, they would provide a lump sum payment of any amount of the $3 million not obtained up to a maximum of $1,000,000 to California Department of Parks and Recreation no later than June 30, 2009 for projects to improve Folsom Reservoir recreation. This is to provide certainty that some projects can be implemented.

[1] New funding means funding that Water Forum signatories are instrumental in obtaining that was not authorized, appropriated or required as of January 1, 2000.

COSTS RELATED TO THE *WATER FORUM AGREEMENT*

With or without the *Water Forum Agreement*, over the next three decades this region will have to spend somewhere over a billion dollars to maintain a reliable and safe water supply and preserve the Lower American River.

Water suppliers will need to replace, upgrade and construct new water supply facilities. They will also have costs for complying with changing regulatory requirements for water quality, public health and safety, and the environment. Because it is based on cooperation, the *Water Forum Agreement* is the most effective way to manage and control costs.

For instance, ratepayers in the north area of Sacramento County and the south area of Placer County can save millions by sharing the costs of a pipeline connecting the American and Sacramento Rivers. A joint diversion facility on the Sacramento River shared by Natomas Central Mutual Water Company, Placer County Water Agency and possibly the City of Sacramento would be far less expensive than separate diversions.

Another example is the Lower American River Habitat Management Element. It is far less costly to have one cooperative program than to have each diverter implement its own program. The Sacramento North Area Groundwater Management Authority is yet another opportunity to save money. A cooperative program that protects our groundwater is much cheaper than doing nothing and having our groundwater levels decline to unacceptable levels.

The *Water Forum Agreement* will also avoid the costly lawsuits that result when stakeholders compete rather than cooperate. In our region millions of dollars have been spent

on lawsuits that could have been better used for needed water supply facilities and Lower American River preservation.

There are costs related to implementation of the *Water Forum Agreement*:

1. **Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years**
   Suppliers will develop actions to meet their customers' needs in drier and driest years. Alternatives include: conjunctive use of groundwater basins consistent with the sustainable yield objectives; utilizing other surface water resources; reoperation of Placer County Water Agency's reservoirs on the Middle Fork of the American River; increased conservation during drier and driest years; and reclamation.

   Each supplier's dry year actions are specific to its circumstances. Each supplier will determine the most affordable and cost-effective method for implementing its dry year actions.

2. **Lower American River Habitat Management Element, Which Also Addresses Recreation on the Lower American River**
   With or without a *Water Forum Agreement*, suppliers are responsible for mitigating the impacts of their increased diversions. One advantage of the *Water Forum Agreement* is that it provides an excellent opportunity for sharing costs for meeting this requirement. Stakeholder representatives are exploring every opportunity to share costs with the Central Valley Project Improvement Act, CALFED and the Sacramento Area Flood Control Agency, which all have their own mitigation programs.

   The following signatories to the *Water Forum Agreement* will provide funding for the Habitat Management Element (HME):

   Upon signing the *Water Forum Agreement*, the City of Sacramento will provide $125,000 annually and the Sacramento County Water Agency (through Zone 13) will provide $250,000 annually to the Habitat Management Element (HME). The Zone 13 payments will be on behalf of the water suppliers serving the unincorporated areas of Sacramento County and the City of Citrus Heights.

   As the City of Folsom, Placer County Water Agency, City of Roseville, and San Juan Water District (for that portion of their district outside of Sacramento County) increase their diversions of non-Central Valley Project (CVP) water from the American River, they will pay into the HME $3 per acre foot for the increased amounts they actually divert that year. This averages about 15 cents per month per residential connection. These suppliers will not pay on existing and increased diversions of CVP water because it is recognized they will be paying into the CVP Improvement Act Restoration Fund for that water.

3. **Water Conservation Programs, Including Water Meters**
   Although we are blessed with two major rivers and a groundwater supply, those sources do have limits. We will have to be more efficient in our water use if we are to continue meeting the needs of our residents, businesses and agriculture.

   That is why the *Water Forum Agreement* will include implementation of all the urban water conservation Best Management Practices as adapted by the

Water Forum. One of the most important practices to improve efficiency is water meters combined with pricing based on the quantity of water used. In unmetered areas customers pay a flat rate regardless of how much water they use - they have no economic incentive to be efficient. Customers who conserve subsidize those who waste.

State law already requires meters for all new services. In addition, the Central Valley Project Improvement Act requires suppliers receiving water from the CVP to retrofit meters. These requirements exist independent of the *Water Forum Agreement*.

Many of the regulatory approvals for needed water facilities will have to be provided by state and federal agencies. These agencies will review our requests in the context of statewide water shortages and virtually universal metering in the rest of the state.

Therefore, in order to improve the efficiency of our own water use and to avoid more severe requirements imposed by others, the *Water Forum Agreement* includes a gradual meter retrofit program starting by the beginning of the fourth year following signing of the *Water Forum Agreement.*

Each supplier will determine the most cost-effective way to implement the mutually agreed upon conservation programs within its service area.

4. Groundwater Management

Groundwater provides over half the water used in our region. It is essential that we protect it as a sustainable resource for now and the future. In several areas within our region over-reliance on this source is causing groundwater elevations to decline. In some areas we will need to implement conjunctive use programs that use surface water in wetter years and groundwater in drier years in order to stop this decline.

Representatives of suppliers, businesses and agriculture who use their own wells in the North Sacramento county area were appointed to the Sacramento North Area Groundwater Management Authority. To the extent that conjunctive use programs need to be funded, the Authority has the authority to establish regulatory fees and will apportion these regulatory fees based on the level of benefit received.

In the North Area, residential pumpers who irrigate less than two and a half acres are exempt from any regulatory fees. The Sacramento North Area Groundwater Management Authority may also decide to exempt or modify the conditions applying to other types of users.

Approval of any regulatory fees will be subject to all requirements of the law including full public notice and hearings.

Discussions about groundwater management in the South Area and the Galt Area will be undertaken by the Water Forum Successor Effort. Because the South Area and the Galt Area each have their own unique circumstances, the Sacramento North Area Groundwater Management Authority, including its financing arrangements, is not a template for programs appropriate to the needs in these two areas.

5. Water Forum Successor Effort

A Water Forum Successor Effort is critical to ensure that stakeholder cooperation continues as the *Agreement* is implemented over time.

The projected annual cost for the tasks set out in the work plan for the Successor Effort is $675,000 for the first year.

Beginning July 1, 2000, each supplier's annual contributions to support the cost of Successor Effort work will be based on the number of connections it serves. For most suppliers, their first year share translates into a residential rate impact of 16 cents per month. Contributions for water suppliers serving the unincorporated area of Sacramento County and the City of Citrus Heights will be provided by the Sacramento County Water Agency using Zone 13 funds. This means that those suppliers will have no additional costs for the Successor Effort.

Annually the Water Forum Successor Effort shall prepare a work plan and budget for the next year. Changes to the budget after the first year would require a consensus among the signatories to the *Water Forum Agreement* and agreement by those signatories providing Successor Effort funding.

6. **Folsom Reservoir Improvements.** Water Forum signatories will work with their elected officials, California Department of Park and Recreation (CDPR) and other agencies that have an interest in reservoir levels, such as Congress, USBR, California Dept. of Boating and Waterways and the Sacramento Area Flood Control Agency, to obtain at least $3,000,000 of new funding for improvements to Folsom Reservoir recreation facilities.

   Although previous cooperative efforts between Water Forum stakeholders and other agencies have been successful (such as the securing federal authorization and appropriation for the Temperature Control Device) it is not certain that the $3 million in funding for Folsom Reservoir recreation improvements will be secured.

   Therefore, purveyors signing the *Water Forum Agreement* that plan to increase their diversions of American River water commit that if less than $3,000,000 of new funds are secured by the year 2008, they would provide a lump sum payment of any amount of the $3 million not obtained up to a maximum of $1,000,000 to California Department of Parks and Recreation no later than June 30, 2009 for projects to improve Folsom Reservoir recreation. This is to provide certainty that some projects can be implemented.

SUMMARY OF COSTS RELATED TO THE *WATER FORUM AGREEMENT*

Even without a *Water Forum Agreement*, water suppliers would still have increasing costs to provide a reliable water supply and meet environmental and health requirements. Without a *Water Forum Agreement* they would have to independently develop and implement programs to meet these needs. The *Water Forum Agreement* provides the least costly way to meet these requirements.

It is expected that most purveyors will be implementing Water Forum-related programs in the first four years following signing of the *Water Forum Agreement*. This could increase rates between one and four percent per year over the first four years. The average increase across the region would be less than three percent per year over the first four years. Without the cost sharing opportunities in the *Water Forum Agreement*, costs for providing a reliable water supply and preserving the Lower American River would be higher.

Some water suppliers may not have to raise their rates for costs related to the *Water Forum Agreement*.

Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental

mitigation will be needed. This *Agreement* identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This *Agreement* recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the *Water Forum Agreement* agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

Setting of rates and connection fees will continue to be done by suppliers subject to all requirements of the law including provisions for full public notice and hearings. Neither the Water Forum nor the Successor Effort will have any responsibility or authority to set rates.

The Water Forum representatives, including representatives from the Sacramento County Taxpayers League and the Sacramento County Alliance of Neighborhoods, have spent six years working on a solution to the region's water crisis. ***These representatives believe that participating in the Water Forum Agreement is the least costly method for providing a safe and reliable water supply and preserving the Lower American River.***

Summary of Specific Agreements for Stakeholder Organizations

The *Water Forum Agreement* includes Specific Agreements which detail what benefits each Stakeholder Organization will receive and what it will do to receive those benefits. Summarized here are the agreements specific to each Stakeholder Organization.

WATER SUPPLIERS

It should be noted that although each purveyor's Specific Agreement includes commitments to the entire *Water Forum Agreement*, summarized here are just those water supply details specific to each purveyor.

Carmichael Water District (CWD) will divert and use up to their license amount of 14,000 acre feet. By the year 2030, it is most likely that the water demand for the District will be reduced to their historic baseline level of 12,000 acre feet by implementation of Urban Water Conservation Best Management Practices. Signatories to the *Water Forum Agreement* acknowledge and agree that CWD shall not relinquish control of or otherwise abandon the right to any quantity it has foregone delivery and/or diversion of under this *Agreement*, and shall retain the right (if any) to transfer that water for other beneficial uses, after that water has served its purpose of assisting in the implementation of the Improved Pattern of Fishery Flow Releases, for diversion or rediversion at, near, or downstream of the confluence of the Lower American River and the Sacramento River. The signatories also recognize that any such transfer of water by CWD must be in accordance with applicable provisions of federal and state law.

Citizens Utilities Company of California (CUCC) has six service areas within the metropolitan area of Sacramento County, located within the North Central area, the South County Municipal and Industrial (M&I) area, and the City of Sacramento's American River water rights place of use (POU) area. CUCC also provides water service in Placer County for the Sabre City Mobile Home Park and is the exclusive franchisee for water service in western Placer County.

CUCC has contracted with the City of Sacramento to use 2,580 acre feet annually from the City's E. A. Fairbairn Water Treatment Plant and the Sacramento River Plant for use in their Southgate service area, which is also within the City's POU.

For other CUCC service areas within the POU which include the Arden area, a portion of the Rosemont area, and a portion of the Parkway area, when a contract with the City of Sacramento for delivery of surface water beyond the existing contract for the Southgate area is proposed, signatories to the *Water Forum Agreement* will meet in good faith with the objective to develop mutually acceptable provisions consistent with the two coequal objectives of the *Water Forum Agreement*.

CUCC will also contract for use of a portion of the surface water provided from the Placer County Water Agency (PCWA) for use in the north central area of Sacramento County.

CUCC will contract for use of a portion of the surface water provided through the County of Sacramento/Sacramento County Water Agency for its service area in the south portion of Sacramento County.

CUCC will also continue to use groundwater to meet needs in each of its service areas.

City of Folsom (Folsom) will increase its average and wet year American River diversions from an agreed upon baseline amount of 20,000 acre feet to a year 2030 level of 34,000 acre feet. In drier years, Folsom will divert and use a decreasing amount of surface water from 34,000 AF to 22,000 AF (or the equivalent, see example below) in a three stage stepped and ramped reduction in proportion to the decrease in the March through November unimpaired inflow to Folsom Reservoir, from 950,000 to 400,000 AF.

Under stage 1, Folsom will divert a decreasing amount from 34,000 AF to 30,000 AF in proportion to the decrease in March through November when the unimpaired inflow to Folsom Reservoir is greater than 870,000 AF but less than 950,000 AF.

Under stage 2, Folsom will divert 27,000 AF when the March through November unimpaired inflow to Folsom Reservoir is greater than 650,000 AF but less than or equal to 870,000.

Under stage 3, Folsom will divert 22,000 AF when the March through November unimpaired inflow to Folsom Reservoir is equal to or greater than 400,000 AF but less than or equal to 650,000 AF.

In the driest years, when the March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF, Folsom will reduce diversions (or the equivalency, see example below) to 20,000 AF. Also, Folsom will reduce diversions in the driest years by encouraging additional, extra-ordinary conservation to effectively achieve a reduction to 18,000 AF.

As an example of how Folsom will meet its needs during the drier and driest years, Folsom will reduce diversions by imposing additional conservation levels, and will continue to divert water from Folsom Reservoir for the balance of their needs. However, Folsom will enter into agreements with other suppliers that have access to both surface water and groundwater for an equivalent exchange of the amount of reduction needed by Folsom as outlined above in the three stages of reduction. Under these arrangements, those suppliers will use groundwater in lieu of surface water equivalent to the amount that Folsom will continue to divert.

City of Galt (Galt) will use groundwater to meet its projected year 2030 demands. The sustainable yield of the Galt Area groundwater basin will be enhanced by South Sacramento County agriculture's use of surface water diverted from the Folsom South Canal in years when the March through November unimpaired flow into the Folsom Reservoir is greater than 1,600,000 acre feet.

Galt has also agreed to participate in the development of a groundwater management arrangement for the Galt Area.

City of Roseville (Roseville) will increase its average and wet year American River diversions from a baseline level of 19,800 acre feet to a year 2030 level of 54,900 acre feet. In drier years, Roseville will divert and use a decreasing amount of surface water from 54,900 acre feet to 39,800 acre feet by additional conservation, using groundwater, and using reclaimed water. Additionally, Roseville will enter into an agreement with the Placer County Water Agency (PCWA) for replacing up to 20,000 AF of water to the river in drier and driest years, from reoperation of PCWA's Middle fork Project reservoirs.

City of Sacramento (City) Currently the 310 cubic feet per second diversion capacity at the Fairbairn Water Treatment Plant (FWTP) is constrained to 155 cubic feet per second by the City's ability to treat the water.

The City may rehabilitate its FWTP diversion facility and expand its FWTP treatment capacity by another 100 million gallons per day. This will allow the City to divert and treat an additional 155 cubic feet per second consistent with the terms described below. Concurrent with the expansion of the FWTP the City will also construct other facilities such as expansion/rehabilitation of Sacramento River Water Treatment Plant and river intake to assure that a reliable alternative supply (groundwater, pumpback and/or diversion from the Sacramento River) is available whenever it is needed.

During periods when the LAR flows are sufficient (i.e. above the "Hodge" standard), the City could fully use its increased diversion capacity at FWTP. In drier periods when the LAR flows were not sufficient (i.e. below the "Hodge" standard), the City could divert from a new diversion site near the mouth of the American River and pump the water back to the FWTP for treatment, use groundwater or divert and use water from the Sacramento River.

Additional diversions from the Sacramento River and groundwater in the north area will also be used by the City to meet year 2030 demands.

County of Sacramento/Sacramento County Water Agency (County/SCWA) supplies water in seven separate retail service areas within the unincorporated area. County retail service areas vary in size from as few as 30 connections in the smallest area to more than 17,000 connections in the Laguna/Vineyard service area.

SCWA is responsible for providing wholesale water to an area of the Laguna, Vineyard, and Elk Grove communities commonly referred to as "Zone 40." The long term Master water Plan for Zone 40 is based on meeting present and future water needs through a program of conjunctive use of groundwater and surface water.

The County/SCWA will divert surface water, both firm (45,000 acre feet) and intermittent water, up to 78,000 acre feet in total from near the mouth of the American River or from the Sacramento River. The County/SCWA will also use groundwater on a conjunctive basis to meet the balance of its need. SCWA's water demand is projected to be 87,000 acre feet by the year 2030.

The County/SCWA has also agreed to participate in the development of a groundwater management arrangement for the South Area.

Del Paso Manor Water District (DPMWD) will use groundwater to meet their year 2030 demands until such time as DPMWD and the City of Sacramento enter into an agreement for delivery of surface water from the City's system to DPMWD. DPMWD has a contract with the City for 2,460 acre feet of the City's American River entitlement. Water supply facilities need to be constructed for delivery of City water to DPMWD.

Negotiations on specific conditions for delivery of surface water under this contract will be undertaken by the Successor Effort and DPMWD.

Florin County Water District (FCWD) will use groundwater to meet their year 2030 demands until such time as FCWD and the City of Sacramento enter into an agreement for delivery of surface water from the City's system to FCWD. FCWD is located within the place of use for the City of Sacramento's American River entitlement.

Negotiations on specific conditions for delivery of surface water under this contract will be undertaken by the Successor Effort and FCWD.

Natomas Central Mutual Water Company (Natomas) will meet demands to the year 2030 for the Sacramento County portion of Natomas with surface water from the

Sacramento River and from groundwater pumping. Groundwater pumping will only be implemented as part of a conjunctive use program which would preserve the groundwater table.

Natomas will consolidate several of its Sacramento River diversions into an upgraded diversion with a new fish screen which meets the Fish and Wildlife Service's screening criteria. Natomas will form a partnership with other parties to interconnect the Sacramento River with the San Juan/Northridge pipeline from Folsom Reservoir. Signatories' support for this water connection is subject to the provisions of Section Four, III of the *Water Forum Agreement*, Sacramento River Supply for North Sacramento County and Placer County.

Northridge Water District (Northridge) will divert up to 29,000 acre feet of Placer County Water Agency (PCWA) water, for an interim ten year period, in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet. The amount diverted will also be consistent with the water delivery schedule provided for in the Northridge-PCWA Contract, which allows annually increasing diversions up to 24,000 acre feet per year during the interim ten year period.

At any time during this ten-year period, if Northridge is able to take delivery of Sacramento River water through a Sacramento River pipeline, Northridge will thereafter divert water from the Sacramento River (and not from the Folsom Reservoir) in those years when the projected March through November unimpaired inflow into Folsom Reservoir is less than 1,600,000 acre feet.

After the ten year period, unless the State Water Resources Control Board issues a subsequent order, Northridge will divert water up to 29,000 acre feet annually from Folsom Reservoir under the Northridge-PCWA contract only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet.

Placer County Water Agency (PCWA) Note: The following surface water provisions are operative contingent on the resolution of the remaining issues described in the last paragraph of this summary of the PCWA Specific Agreement.

PCWA would increase its average and wet year American River diversions from a baseline level of 8,500 acre feet to a year 2030 level of 35,500 acre feet.

During drier years, PCWA would divert and use 35,500 AF from the American River. In these drier years, PCWA would also replace water to the River from reoperation of its Middle Fork Project (MFP) reservoirs in the following amounts:

When Unimpaired inflow to Folsom Reservoir is:	PCWA Will Release This Amount (reoperation):
950,000 AF	0 AF
400,000 AF	27,000 AF

The amount of water released to the River from reoperation of the MFP reservoirs between 950,000 AF and 400,000 AF would be in linear proportion to the amounts shown above.

PCWA would make the releases contingent on: 1) its ability to be reimbursed for its release of water on terms acceptable to PCWA; 2) PG&E's agreement to such reoperation until the present power purchase contract with PG&E expires (presently anticipated by year 2013); and 3) PCWA's determination that it has sufficient water in its reservoirs to make the additional releases to mitigate conditions in dry years without jeopardizing the supply for PCWA's customers. (Note: Operational

modeling for PCWA based on historical hydrology and projected 2030 requirements as set forth in the *Water Forum Agreement* has shown that reoperation water should be available for such release and sale without drawing MFP reservoirs below 50,000 acre-feet.)

The source of this replacement water in drier years would be water not normally released in those years from the PCWA Middle Fork Project.

PCWA would also divert and use 35,000 AF from the Sacramento and/or Feather Rivers if exchanges of equal amounts can be made with others under terms acceptable to PCWA.

Remaining issues which are being negotiated are: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation Best Management Practice #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented, 3) environmentalists' support for conditions related to release of replacement water in drier and driest years.

Rio Linda/Elverta Community Water District (RLECWD) The 2030 projected water demand within the present geographical boundary of RLECWD is 17,035 acre feet. This projected demand is included in the North Central Group of Municipal and Industrial Purveyors which also includes a portion of the Citizens Utilities Company, a portion of the Arcade Water District, McClellan AFB and Northridge Water District.

The RLECWD acknowledges that decisions on how to maintain the long-term sustainable yield of the North area groundwater basin will be made by the Sacramento North Area Groundwater Management Authority (SNAGMA) with representation of the RLECWD on the SNAGMA's governing board consistent with the joint powers agreement establishing SNAGMA.

As the purveyor of municipal and industrial water within its current and future expanded boundaries, RLECWD will construct appropriate facilities to meet its 2030 projected peak period water demand.

If SNAGMA determines that it is necessary to acquire surface water for use within SNAGMA's boundaries, the District will cooperate with the Water Forum Successor Effort, SNAGMA, and other affected agencies to obtain the surface water to be used as part of SNAGMA's groundwater management program.

The District acknowledges that the *Water Forum Agreement* does not provide for a baseline quantity of groundwater. The District also acknowledges its responsibility for sharing in the cost to acquire surface water supplies if SNAGMA determines such supplies are necessary to maintain the long-term sustainable yield of the Sacramento North area groundwater basin.

Sacramento Municipal Utility District (SMUD) will increase its average and wet year American River diversion from a baseline level of 15,000 acre feet to a year 2030 level of 30,000 acre feet. In drier years, SMUD will reduce diversions by up to 15,000 acre feet by reducing their demand and by using groundwater.

SMUD and the County of Sacramento have begun negotiations for purchase by the County and transfer from SMUD of a 15,000 acre foot block of SMUD's U.S. Bureau of Reclamation contract. A portion of the payments to SMUD from the County would be used to construct groundwater facilities that would be operated and maintained by the County. Groundwater from these wells would be available as an alternative supply for SMUD to meet increased demands in the drier and driest years.

SMUD is also planning on constructing additional co-generation facilities at locations

within the City of Sacramento's American River Place of Use (POU). SMUD will negotiate with the City of Sacramento for delivery of up to 15,000 AF of water for their planned co-generation facilities within the POU.

San Juan Water District Consortium (SJWD), comprised of the San Juan Water District located in both Sacramento and Placer Counties, Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water Company and a portion of the City of Folsom, will increase its average and wet year American River diversions from a baseline level of 54,200 acre feet to a year 2030 level of 82,200 acre feet. In drier years SJWD will reduce diversions by up to 28,000 acre feet by relying more on groundwater and increased conservation.

South Sacramento County Agriculture (including Clay Water District, Galt Irrigation District, Omochumne-Hartnell Water District, and Sacramento County Farm Bureau) will divert and use up to 35,000 acre feet from the Folsom South Canal in years when the March through November unimpaired flow into Folsom Reservoir is greater than 1,600,000 acre feet. The balance of the agricultural users' need will be met by groundwater pumping.

Support for this diversion is linked to successful negotiation of an agricultural water conservation program. This negotiation will be done through the Water Forum Successor Effort. Agricultural users in South Sacramento County will also participate in the development of groundwater management arrangements for the South Area and the Galt Area.

ENVIRONMENTAL INTERESTS

Environmental Council of Sacramento (ECOS)

Friends of the River (FOR)

Save the American River Association (SARA)

Sierra Club - Mother Lode Chapter - Sacramento Group

The Lower American River's fishery, wildlife, recreational and aesthetic values resulted in it being designated as a state and federal Wild and Scenic River. With over five million visitor days annually, the Lower American River Parkway is already one of the most heavily used parks west of the Mississippi.

One major way that the *Agreement* will benefit the Lower American River is through continued implementation of an Improved Pattern of Fishery Flow Releases from Folsom Reservoir. This pattern more closely matches the life cycle needs of fall run chinook salmon. The Lower American River Habitat Management Element will address impacts to the riparian and fishery habitat of the Lower American River including habitat for steelhead. It will also address impacts on recreation in the Lower American River.

The Water Conservation Element of the *Agreement* will benefit the environment by reducing the amount of water that will have to be diverted from the region's rivers, including the American River. Actions to Meet Customer's Needs While Reducing Diversion Impacts in Drier Years will also be effective in minimizing diversions in the drier years when water is critical to the Lower American River.

The Groundwater Management Element will ensure that the groundwater supply is sustained for future generations.

Good water quality is another benefit of the *Agreement*. Protecting surface and groundwater will ensure that drinking water continues to meet increasingly stringent federal and state standards.

Another benefit is the ability of environmental stakeholders to participate in the implementation of the *Water Forum Agreement*. Their participation in the Water Forum Successor Effort will continue the opportunity to incorporate environmental objectives in regional water planning and ensure achievement of the coequal objective of preserving the Lower American River.

CITIZENS ORGANIZATIONS INTERESTS

League of Women Voters of Sacramento

Sacramento County Alliance of Neighborhoods (SCAN)

Sacramento County Taxpayers League

Both existing and new residents will benefit from the *Water Forum Agreement*. The public will benefit by a more reliable, safe water supply especially during the inevitable drought periods. They will avoid the losses and inconvenience resulting from severe rationing. The local economy will also have a reliable water supply so that our local jobs can be preserved and new jobs can be created.

Good water quality is another benefit of the *Agreement*. Protection of surface and groundwater will ensure that our drinking water continues to meet increasingly stringent federal and state standards.

The public will also benefit from maintaining the fishery, wildlife, recreational and aesthetic values of the Lower American River. With over five million visitor days annually, the Lower American River Parkway is already one of the most appreciated parks west of the Mississippi. The *Water Forum Agreement* will preserve the values that make the Parkway so popular.

Another benefit to the public is the participation of citizens organizations in the implementation of the *Water Forum Agreement*. Their participation in the Water Forum Successor Effort will continue the communication and education of citizen organizations in regional water planning.

Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This *Agreement* identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This *Agreement* recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the *Water Forum Agreement* agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

BUSINESS INTERESTS

Associated General Contractors (AGC)

Building Industry Association of Superior California (BIA)

Sacramento Association of Realtors (SAR)

Sacramento Metropolitan Chamber of Commerce

Sacramento-Sierra Building and Construction Trades Council

Both existing and new businesses will benefit from the *Water Forum Agreement*. A reliable and affordable water supply is important for all businesses and crucial for the health of the regional economy. For instance, major employers such as Campbell Soup and Hewlett-Packard as well as developers need to know that they will have a reliable water supply. Some of these businesses receive water from their own wells.

A reliable water supply for the region is needed to support the planned development and to attract the new jobs needed by residents. The types of clean industries favored by the region are not going to locate here if there is a belief that water supplies will have to be reduced or curtailed during periodic droughts. The reliable water supply provided by the *Agreement* will provide for the region's economic development and planned growth.

Summary of Procedural Agreements for Purveyors not in the Initial *Water Forum Agreement*

The initial *Water Forum Agreement* records those agreements among stakeholder organizations that could be entered into as of the effective date of the initial *Agreement*. However it is recognized that there are some stakeholder organizations whose issues could not be resolved by that time.

The *Water Forum Agreement* includes procedural agreements committing all stakeholders to work in good faith to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.

The following stakeholder organizations have issues that could not be totally resolved for the initial *Water Forum Agreement*:

- Arcade Water District
- El Dorado Irrigation District
- Georgetown Public Utility District
- Rancho Murieta Community Services District

SCWA-10

ACKNOWLEDGEMENTS

City-County Office of Metropolitan Water Planning which Coordinates and Staffs the work of the Water Forum

Position	Staff	Dates
Executive Director	Jonas Minton	3/98 - present
	Melvin Johnson	1/96 – 2/98
	Bob Thomas	3/93 – 12/95
	Bill Edgar	10/91 – 3/93
Deputy Director – City of Sacramento	Jim Sequeira	9/93 - present
	Don Dodge	10/91 – 8/93
Deputy Director - County of Sacramento	Keith DeVore	10/93 - present
	F. I. "Butch" Hodgkins	10/91 – 9/93
Supervising Engineer	Don Jacobs	10/91 – 11/93
Senior Administrative Officer	Susan Davidson	10/91 – present
Engineering Consultant	Jim McCormack	10/91 – present
Public Outreach Consultant	Grant Werschkull	8/94 - present
Administrative Assistant	Russell Haynes	3/99 - present
	Wesley Lujan	2/98 -9/98
	Julie Canter	9/96 - 2/98
	Reggie Hernandez	8/95 -8/96
	Melissa Gamer	8/94 – 8/95
Secretary	Eme Iturralde	4/96 - present
	Aline Soto	12/94 – 3/96
	Barry Broadway	10/91 – 11/94

Staff from other City of Sacramento and County of Sacramento offices who provided support to the City-County Office of Metropolitan Water Planning

City Manager's Office
Bob Thomas
Bill Edgar
Walter Slipe

City Environmental Review
Fred Buderi
Carol Brannan

City Utilities
Calvin Yee
Elizabeth Brenner

County Executive's Office
Terry Schutten
Bob Ryan
Bob Thomas
Bob Smith

County Environmental Review
Bob Caikoski
Dennis Yeast

County Water Resources
John Goetz
Ray Onga

County Planning & Community Development
Robert Sherry
Darryl Goehring
Tim Imai

County Geographic Info Systems
Dennis Chavez
Roger Exline

County Regional Parks, Recreation & Open Space
Ron Suter

California Center for Public Dispute Resolution

The California Center for Public Dispute Resolution has provided invaluable mediation and facilitation services to the Water Forum since its inception. The Center, a joint program of California State University, Sacramento and McGeorge School of Law, University of the Pacific, worked closely with stakeholder representatives and Water Forum staff to assure that each step of this complex process built understanding and trust while moving the group toward substantive and durable agreements.

For more information contact:
Susan Sherry, Executive Director & Mediator
Jean McClain, or Amy Hall

They can be reached at:
The California Center for Public Dispute Resolution
1303 J Street, Suite 250
Sacramento, CA 95814
916/445-2079 • 916/445-2087 fax
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Consulting Firms/Consultants

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Paul Bratovich, David Christophel
Bill Dendy & Associates
Bill Dendy
Bookman-Edmonston
Herb Greydanus, Dan Steiner, Marshall Davert
Walter M. Bourez, Jr
Walter Bourez, Jr.
Bolye Engineering
Joe Alessandri, Gary Meyer
Deen & Black
Christi Black, Janet Barbieri
EDAW
Curtis Alling, Sydney Coatsworth,
Amanda Olekszulin, Joan McHale
Larry Farwell
Larry Farwell
Montgomery Watson
Ali Taghavi, Mike Cornelius, Eric Cartwright
Gary Meyerhofer, Karen Johnson, Don Spiegel
Sacramento Metropolitan Water Authority
Ed Schnabel, Sandra Thomas
Shute, Mihaly & Weinberger
Christy Taylor, Richard Taylor, Joe Jaramillo
Daniel Steiner
Dan Steiner
Surface Water Resources, Inc.
Paul Bratovich, Buzz Link, Walter Bourez
Rob Shibatani, Mike Bryan, Carol Brown
Ali Taghavi
Ali Taghavi
David Taussig & Associates
Susan Goodwin, David Freudenberger
the marketing store!
Carsen Anthonisen, Lisa Scovel
Tony's Deli & Mart
Antoine Mouhasseb
Water Resources Mgt. Inc.
Harold Meyer, Jeff Meyer

Water Forum Stakeholder Attorneys

Firm	Representing	Attorney
Bartkiewicz, Kronick & Shanahan	City of Folsom Northridge Water District San Juan Water District	Paul Bartkiewicz
DeCuir and Somach	County of Sacramento	Stuart Somach Paul Simmons Andy Hitchings
Hunter, Richey, DiBenedetto & Brewer	Aerojet	Jeffrey Harris
Jennifer Jennings	Environmental Caucus	Jennifer Jennings
Kronick, Moskovitz, Tiedemann & Girard	Placer County Water Agency	Ed Tiedemann Jan Goldsmith
Martha H. Lennihan	City of Sacramento	Martha Lennihan
McDonough, Holland & Allen	Rio Linda/Elverta Community WD	Virginia Cahill
Roseville City Attorney	City of Roseville	Mark Doane
Sacramento City Attorney	City of Sacramento	Joe Robinson
Sacramento County Counsel	County of Sacramento	Robert Ryan John Whisenhunt

The Water Forum stakeholder representatives wish to acknowledge and thank the staff of the following federal and state agencies for their review and comment on numerous aspects of the *Water Forum Agreement*. Cooperation by federal and state agencies will be required to implement various parts of the *Water Forum Agreement*. Recognizing this, the Water Forum had regular coordination meetings with top management from the key state and federal agencies with responsibilities related to the implementation of parts of the *Water Forum Agreement* in order to determine if there were any fatal flaws or "red flags" that could be of major concern to their agencies. However, even with this "pre-review" process, each agency will have to meet its own legal and policy requirements to implement or permit any action.

CALFED
Lester Snow
Dick Daniel
Cindy Chadwick-Darling

National Marine Fisheries Service
Gary Stern
Chris Mobley

US Bureau of Reclamation
Roger Patterson
Kirk Rodgers
Tom Aiken
Lowell Ploss
Rod Hall
Rob Schroeder
Susan Hoffman
Frank Michney
Chet Bowling
Robert Reiter
Jane LaBoa
John Johannis
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Joel Medlin
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Roger Guinee
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Michael Thabault
Derek Hilts
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Jill Wright
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CA Department of Fish & Game
Ryan Broddrick
Banky Curtis
Jim White
Bill Snider
Chris Vyverberg
Dennis McKuen

CA Department of Parks & Recreation
Bruce Kranz
Richard LeFlore

CA Department of Water Resources
David Kennedy
Ray Hart
William Bennett
Tariq Kadir

State Water Resources Control Board
Walt Pettit
Ed Anton
Harry Schueller
Gerald Johns

SECTION ONE: MEMORANDUM OF UNDERSTANDING FOR THE *WATER FORUM AGREEMENT*

The stakeholder representatives have concluded that the best form of the *Water Forum Agreement* is a Memorandum of Understanding (MOU) among all signatories to the *Agreement*. By memorializing the substance of the *Agreement,* this MOU creates the overall political and moral commitment to the *Water Forum Agreement.*

All signatories agree that by signing the MOU, they agree to carry out all the actions specified for them in the *Water Forum Agreement*

A. Preamble

A diverse group of business and agricultural leaders, environmentalists, citizen groups, water managers, and local governments has carefully reviewed the region's water future. They found that unless we act now, our region is looking at a future with water shortages, environmental degradation, contamination, threats to groundwater reliability and limits to economic prosperity. Well intentioned but separate efforts by individual stakeholders have left everyone in gridlock.

Joining together as the Water Forum, these community leaders from Sacramento along with water managers from Placer and El Dorado counties have spent thousands of hours researching the causes for this gridlock, agreeing on principles to guide development of a regional solution, and negotiating the *Water Forum Agreement*.

This diverse group agrees that the only way to break the gridlock is to implement a comprehensive package of linked actions that will achieve two coequal objectives:

Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030;

and

Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.

B. Recitals

1. ***Whereas***, a reliable water supply is needed by current and future residents, businesses and agriculture; and

2. ***Whereas***, the Lower American River is recognized as an important natural resource which should be protected and preserved for future generations by all Water Forum stakeholders; and

3. ***Whereas***, the Sacramento region has groundwater contamination in some areas and groundwater decline in other parts of the region, both of which could have an impact on future water supply; and

4. ***Whereas***, water purveyors and others have for years sought to develop additional safe, reliable water supplies with little success; and

5. ***Whereas***, the environmental community and others in the region have for years sought to restore the fishery, wildlife, recreational and aesthetic values of the Lower American River; and

6. ***Whereas***, all signatories now recognize the potential benefits of mutually supporting each other's goals and working together, as well as the collective risk of pursuing independent objectives; and

7. ***Whereas***, within the framework of an interest-based negotiation process which cannot provide exactly equivalent benefits for all but in most cases does make it possible for stakeholders to get what they really need in a *Water Forum Agreement*; and

8. ***Whereas,*** the City of Sacramento and the County of Sacramento have prepared and certified an Environmental Impact Report analyzing the impacts of the *Water Forum Agreement*;

Now, Therefore Be It Resolved That:

1. All signatories to this Memorandum of Understanding agree that participation in the *Water Forum Agreement* is in the best interest of water consumers and the region as a whole. Participation in the *Water Forum Agreement* is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases, Lower American River habitat management, and a reliable dry year supply are in the public interest and represent reasonable and beneficial use of the water resource.

2. All signatories will endorse and, where indicated, participate in implementing the attached *Water Forum Agreement*, including the seven linked elements:

Increased Surface Water Diversions
Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
Lower American River Habitat Management Element
Water Conservation
Groundwater Management
Water Forum Successor Effort

3. All signatories agree that, based on existing analyses, successful implementation of the *Water Forum Agreement* will meet the Water Forum's two coequal objectives:

Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030;

and

Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.

4. All signatories will endorse the diversions and facilities agreed to for each purveyor as specified in the Purveyor Specific Agreements and subject to the caveats in Section Four, I, "Assurances and Caveats," of the attached *Water Forum Agreement*. The diversions are also summarized in the chart entitled "*1995 and Proposed Year 2030 Surface Water Diversions*" in Section Three, I of the attached *Water Forum Agreement*.

5. Purveyors will implement actions in the drier and driest years to meet their customers' water needs in order to reduce impacts of diversions. These are fully described in the Purveyor Specific Agreements (Section Five, of the attached *Water Forum Agreement*) and are summarized in the chart entitled "*1995 and Proposed Year 2030 Surface Water Diversions*" in Section Three, I of the attached *Water Forum Agreement*.

6. All signatories will endorse implementation of an Improved Pattern of Fishery Flow Releases from Folsom Reservoir while recognizing over time that this Improved Pattern will be refined to reflect updated understandings of the fishery. This is fully described in Section Three, III of the attached *Water Forum Agreement*.

7. All signatories will endorse, and where appropriate, financially participate in the Lower American River Habitat Management Element. This is fully described in Section Three, IV of the attached *Water Forum Agreement*.

8. All signatories will endorse and, where appropriate, implement the Water Conservation Element. This is fully described in Section Three, V of the attached *Water Forum Agreement*.

9. All signatories will endorse, and where appropriate, participate in the Groundwater Management Element. This is fully described in Section Three, VI of the attached *Water Forum Agreement*.

10. All signatories will continue their support for the *Water Forum Agreement* through participation in the Water Forum Successor Effort to maintain communication among stakeholders, facilitate implementation of this *Agreement*, and allow it to adapt to changing conditions. This is fully described in Section Three, VII of the attached *Water Forum Agreement*.

11. All signatories to the *Water Forum Agreement* agree that an environmentally upgraded Sacramento River diversion to serve the north Sacramento county area and Placer County would provide important benefits to the region. All signatories to the *Water Forum Agreement* agree to work in good faith to develop a project consistent with the provisions and conditions described in Section Four, III of the *Water Forum Agreement*.

12. All signatories intend that land use decisions dependent on water supply from the American River or the three groundwater sub-basins in Sacramento county be consistent with the limits on water supply from the American River and the estimated average annual sustainable yields for those three groundwater sub-basins as negotiated for the *Water Forum Agreement.* Beyond these agreements, limits on water from other sources have not been negotiated as part of the *Water Forum Agreement*. Signatories retain the right to support or oppose water projects that would use water from sources that have not been negotiated as part of the *Water Forum Agreement.*

In Sacramento County only, signatories retain the ability to support or oppose water facilities that would serve new development outside the Urban Services Boundary that was defined in the Sacramento County General Plan, December 1993. All parties also retain the right to support or oppose the sizing of water distribution facilities that would allow service to new development outside of the Urban Services Boundary.

It is recognized that the *Water Forum Agreement* focuses on providing a reliable and safe water supply and protecting the Lower American River. As such it is not an agreement on land use planning. Therefore all signatories retain the ability to support or oppose land use decisions on any basis except water supply availability insofar as these decisions are consistent with the *Water Forum Agreement*.

These agreements are fully described in Section Four, IV of the attached *Water Forum Agreement*.

13. All signatories agree to support, and where appropriate, financially participate in the Folsom Reservoir Recreation Program. This is fully described in Section Four, V of the attached *Water Forum Agreement*.

14. All signatories agree that any solution that provides for our future needs will have costs. New diversion, treatment and distribution facilities, wells, conservation programs, required environmental mitigations, and continuation of the Water Forum will be needed to ensure successful implementation of the *Water Forum Agreement*.

15. All signatories agree that the *Water Forum Agreement* is the least costly method for providing a safe and reliable water supply and preserving the Lower American River.

16. All signatories agree to work in good faith with those organizations whose issues were not fully resolved by the effective date of this initial *Water Forum Agreement* to

negotiate mutually acceptable agreements to resolve remaining issues. As soon as there is agreement on these remaining issues, the *Water Forum Agreement* will be amended to include them. This is fully described in Section Four, VI of the attached *Water Forum Agreement.*

17. All signatories will participate in education efforts and advocate the *Water Forum Agreement* to regulatory agencies, other state and federal agencies, and where appropriate, to the stakeholders' boards.

18. All signatories to the *Water Forum Agreement* agree to assign any of their rights and/or obligations pursuant to the *Agreement* to any future successor or assignee.

C. Assurances and Caveats

Section Four, I of the *Water Forum Agreement* describes assurances needed to ensure that future actions will occur. Some of the assurances will require approvals or implementation by local, state or federal agencies.

One of the most important assurances is an updated Lower American River flow standard. All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions,
and
Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The *Water Forum Agreement* also includes caveats describing actions or conditions that must exist for the *Agreement* to be operative. Major caveats include:

1. Each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

   a. If a purveyor receives support from the other signatories to the *Water Forum Agreement* for all of its facilities and entitlements as shown on the chart "*Major Water Supply Projects That Will Receive Water Forum Support Upon Signing the Water Forum Agreement,*" (Section Three, I) and if it receives all

necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Diversion restrictions or other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement;

and,

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart "*Major Water Supply Projects That Will Receive Water Forum Support Upon Signing the Water Forum Agreement*," that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the agreement that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on adequate assurances, including:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement;* support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of the Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation

fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in the Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

D. Term of the Memorandum of Understanding

This Memorandum of Understanding shall remain in force and effect until December 31, 2030.

E. Legal Authority

Nothing in this Memorandum of Understanding or attached *Water Forum Agreement* is intended to give any signatory, agency, entity or organization expansion of any existing authority.

F. Non-Contractual Agreement

This Memorandum of Understanding and attached *Water Forum Agreement* are intended to embody general principles agreed upon between and among the signatories but they are not intended to, and do not, create contractual relationships, rights, obligations, duties or remedies enforceable in a court of law by, between, or among the signatories or any third parties.

As described in the attached *Water Forum Agreement*, additional assurances will be provided through an updated Lower American River flow standard, legally enforceable contracts, joint powers authorities, and commitments in project-specific environmental documentation.

G. Changed Conditions and Amendments to this Memorandum of Understanding and the Attached *Water Forum Agreement*

Given the complexity of issues, level of detail, number of signatories, duration of the *Water Forum Agreement*, and changed circumstances that will undoubtedly occur between now and the year 2030, some changes may call for renegotiation of some terms of the *Water Forum Agreement*. However, a request for renegotiation does not necessarily mean the *Water Forum Agreement* will be revised. The *Water Forum Agreement*, including Specific Agreements, can be changed or modified only with the expressed approval and consent of the signatories to the *Water Forum Agreement*.

Any proposal to amend this Memorandum of Understanding or the attached *Water Forum Agreement* would be considered in the context of both of the Water Forum's coequal objectives. Specific procedures for amending the *Water Forum Agreement* consistent with the collaborative decision-making process will be developed by the Water Forum Successor Effort within the first year of its operation.

H. In witness thereof the undersigned parties have executed this Memorandum of Understanding this _____ day of _____, 2000.

_____	_____
Name	Stakeholder Organization
_____	_____
Name	Stakeholder Organization
_____	_____
Name	Stakeholder Organization
_____	_____
Name	Stakeholder Organization
_____	_____
Name	Stakeholder Organization

PROCEDURAL AGREEMENTS FOR THOSE NOT IN THE INITIAL *WATER FORUM AGREEMENT*

A. Background

The initial *Water Forum Agreement* records those agreements among stakeholder organizations that could be entered into as the effective date of this initial *Water Forum Agreement*. However, it is recognized that there are some stakeholder organizations that have remaining issues that could not be resolved by that time.

Therefore this section of the *Water Forum Agreement* describes the process by which those remaining issues will be addressed and how the *Water Forum Agreement* will be amended to include those agreements as soon as they are complete.

B. Specific Agreements

1. All signatories to the *Water Forum Agreement* commit to work in good faith with organizations whose issues were not fully resolved by the effective date of this initial *Water Forum Agreement*. Their goal will be to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.

2. Mutually agreed upon Water Forum Successor Effort expenses related solely to converting that purveyor's procedural agreement into a Specific Agreement will be reimbursed by that purveyor. As soon as the purveyor has negotiated a Specific Agreement and it signs the *Water Forum Agreement*, it will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have Specific Agreements.

3. Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:

   a. Amending the *Water Forum Agreement*;

   b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum EIR; and

   c. Decisions regarding expenditures of Habitat Management Funds.

4. Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement* they will first attempt to resolve the dispute through mediation in the Successor Effort.

5. Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.

Name	Stakeholder Organization	Date
Name	Stakeholder Organization	Date
Name	Stakeholder Organization	Date
Name	Stakeholder Organization	Date

SECTION TWO: SUPPORT FOR INTEGRATED PACKAGE OF AGREEMENTS

A. Intent

In order to achieve the Water Forum's two coequal objectives -- providing reliable and safe water supply and preserving the values of the Lower American River -- all signatories need to support and, where appropriate, participate in each of the seven complementary elements of the *Water Forum Agreement*.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to support all seven elements. For instance, in order for environmentalists to get purveyors' support for an Improved Pattern of Fishery Flow Releases, Actions to Meet Customers' Needs in Drier Years While Reducing Diversion Impacts, the Lower American River Habitat Management Element, and the Water Conservation Element, the environmentalists need to support the purveyors' Increased Surface Water Diversions.

Conversely, in order for purveyors to obtain environmentalists' support for their Increased Surface Water Diversions, the purveyors need to support an Improved Pattern of Fishery Flow Releases, develop Actions to Meet Customers' Needs in Drier Years While Reducing Diversion Impacts, participate in the Lower American River Habitat Management Element, and the Water Conservation Element.

The business and citizen interests need both the reliable water supply and preservation of the Lower American River. Therefore, just as is the case for the purveyors and environmentalists, business and citizen groups need implementation of all seven elements for their needs to be met.

B. Specific Agreement to Support the Integrated Package of Agreements

As part of the *Water Forum Agreement* all stakeholder organizations will endorse, and where appropriate, participate in all seven elements of the *Water Forum Agreement*.

SECTION THREE: SEVEN MAJOR ELEMENTS OF THE *WATER FORUM AGREEMENT*

I. INCREASED SURFACE WATER DIVERSIONS

A. Intent

One of the Water Forum's two coequal objectives is to:

> ***"Provide a reliable and safe water supply for the region's economic health and planned development through the year 2030."***

This element provides for increased surface water diversions that will be needed even with active conservation programs and sustainable use of the groundwater resource.

Population is projected to increase by one million in the Sacramento area over the next 30 years. Unless adequate water supplies are made available, many residents, businesses and farmers will continue to suffer shortages during California's periodic droughts. This would limit our economic development and planned growth.

In this region the biggest stumbling block to balanced water solutions has been that individual groups -- water purveyors, environmentalists, business groups, local governments, and citizens groups -- have been independently pursuing their own water objectives - without much success. Even though millions of dollars had been spent in the past decade pursuing single purpose solutions, there was little to show for these fragmented efforts. In response to this gridlock, the Water Forum has developed a balanced program which includes increased surface water diversions.

The intent of the *Water Forum Agreement* is to have all signatories endorse the agreed upon diversions. Active endorsement from signatories will include endorsement for all entitlements, and facilities needed to divert, treat and distribute the water. In this way the region's need for a reliable water supply will be achieved. Section Five, I, Purveyor Specific Agreements, includes the details of entitlements and major diversion and treatment facilities needed for each purveyor to meet its customers' needs through the year 2030.

The chart entitled, "*Major Water Supply Projects That will Receive Water Forum Support Upon Signing The Water Forum Agreement*," on the following pages lists projects that Water Forum signatories will support.

B. Summary of Surface Water Diversions

Each purveyor has its own water supply needs and opportunities. Stakeholder representatives have spent thousands of hours reviewing the needs and opportunities of each purveyor.

The chart, "*1995 and Proposed Year 2030 Surface Water Diversions*," on the following pages summarizes the agreed upon diversions for each purveyor to meet its customers' needs to the year 2030. The column, "1995 Baseline," reflects the historic maximum amount of water that purveyors diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in its Specific Agreement.

The column, "2030 Diversion,(wet/ave years)" reflects the agreed upon amount of surface water that purveyors will need to divert in most years to meet their projected needs in the year 2030. This column specifies how much water will be diverted in average and wetter years.

The last two columns, "2030 Diversion (Drier Years)" and "2030 Diversions (Driest Years)," describe the amount of diversions in drier and driest years. How purveyors would continue to meet their customers' needs in the drier and driest years is described Section Three, II, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years.

C. Wholesaling of Water

Some purveyors signatory to the *Water Forum Agreement* plan to wholesale water to other purveyors within the region. Environmental signatories' support for those wholesale water deliveries is contingent on the purveyors that receive the water signing and implementing their commitments under the *Water Forum Agreement*.

D. Federal or State Legislation for Funding for Water Supply Projects

All signatories to the *Water Forum Agreement* retain the right to support or oppose federal or state legislation for funding of water supply facilities. If requested by an organization signatory to the *Water Forum Agreement*, the Water Forum Successor Effort will expeditiously meet in good faith to determine if that legislation will receive support from organizations signatory to the *Water Forum Agreement*.

E. Specific Surface Water Diversion Agreement

As part of the *Water Forum Agreement*, all signatories will support the diversions agreed to for each purveyor as specified in Section Five, I, Purveyor Specific Agreements and summarized in the chart on the following pages, "*1995 and Proposed Year 2030 Surface Water Diversions*." They would also support all facilities as specified in each purveyor's Specific Agreement needed to divert, treat and distribute this water. Additionally, signatories' support for diversions and facilities is subject to the caveats in Section Four, I (Assurances and Caveats) of the *Water Forum Agreement.* This support is linked to the purveyors' support and, where appropriate, participation in each of the seven elements of the *Water Forum Agreement*.

MAJOR WATER SUPPLY PROJECTS THAT WILL RECEIVE WATER FORUM SUPPORT UPON SIGNING THE *WATER FORUM AGREEMENT* (a)

(Note: This is a partial list of projects which will be needed to accomplish the recommended diversions. Additional facilities may be needed and would be supported to the extent they are consistent with the *Water Forum Agreement*.)

CARMICHAEL WD	Treatment plant, diversion modifications, pump station and piping
CITIZENS UTILITIES	Approval of wholesale agreements w/City of Sacramento Change of Place of Use with PCWA
CITY OF FOLSOM	Relocate & replace raw water conveyance pipeline Diversion facility at Folsom Reservoir Approval of PL 101-514 contract and change in place of use Expansion of water treatment plant
CITY OF SACRAMENTO	Expansion/rehabilitation of the Sacramento River and E.A. Fairbairn Water Treatment Plants as well as rehabilitation (upgrade fish screens) of the diversion structures for both facilities.
CITY OF ROSEVILLE	Long term wheeling agreement with USBR (PCWA water) Renegotiation of USBR contract Raw water supply project Water treatment plant expansion
COUNTY OF SACRAMENTO (includes a portion of the ELK GROVE WATER WORKS)	Expansion of Sacramento River diversion and treatment facilities; expansion of E. A. Fairbairn treatment facilities to treat water diverted from at or near the confluence or from the Sacramento River Approval of PL 101-514 contract and change in place of use and point of diversion Approval of SMUD entitlement transfers
NATOMAS CENTRAL MUTUAL WATER COMPANY	Approval of improvement of diversion facilities
NORTHRIDGE WD	Change of Place of Use with PCWA Warren Act contract with USBR

PLACER COUNTY WATER AGENCY - Support is subject to resolution of remaining issues. See footnote (b)	Permanent pumping plant at Auburn Canyon Change in point of delivery for USBR water
SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD)	Approval of transfers to other Agencies
SAN JUAN FAMILY (includes CITRUS HEIGHTS WD, FAIR OAKS WD, ORANGE VALE WC)	Diversion facility at Folsom Reservoir Approval of PL 101-514 contract Water Treatment Plant expansion Change of Place of Use with PCWA
SO. COUNTY AGRICULTURE (includes GALT I. D., CLAY WD, OMOCHUMNE-HARTNELL WD, FARM BUREAU)	Approval of SMUD entitlement or other transfer and Folsom South Canal diversions

a. Note: All suppliers having contracts for Central Valley Project water will be renegotiating those contracts when the CVP Improvement Act Programmatic Environmental Impact Statement is complete.

b. Support for Placer County Water Agency major water supply projects is subject to resolution of these remaining issues: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation Best Management Practice #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented, and 3) environmentalists' support for conditions related to release of replacement water in drier and driest years.

1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS

Note: The diversions described below, combined with the dry year actions, will meet each supplier's customers' needs to the year 2030.

AMERICAN RIVER DIVERSIONS--UPSTREAM OF NIMBUS

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE (1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years)(2)
City of Folsom	20,000 AF (19)	34,000 AF(3)	Decreasing from 34,000 AF to 22,000 AF(4)	20,000 AF (5)
Northridge Water District (17)	0 AF	29,000 AF(9)	0 AF (10)	0 AF
Placer County Water Agency (6) (7) [Subject to resolution of remaining issues (21)]	8,500 AF	35,500 AF(3)	Continue to divert 35,500 AF, with a replacement to the river equivalent to their drier diversions above baseline. The drier the year, the more water would be replaced up to 27,000 AF (4) (20)	Continue to divert 35,500 AF, with a replacement of 27,000 AF to the river. (20)
City of Roseville (7)	19,800 AF	54,900 AF(3)	Decreasing from 54,900 AF to 39,800 AF with a replacement to the river equivalent to their drier diversions above baseline. The drier the year, the more water would be replaced up to 20,000 AF (4)	Continue to divert 39,800 AF, with a replacement of 20,000 AF to the river.
San Juan WD & Consortium in Sacramento County (Citrus Heights WD, Fair Oaks WD, Orange Vale Water Co)	44,200 AF(8)	57,200 AF(3)	Decreasing from 57,200 to 44,200 AF(4)	44,200 AF

1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS

Note: The diversions described below, combined with the dry year actions, will meet each supplier's customers' needs to the year 2030.

AMERICAN RIVER DIVERSIONS--UPSTREAM OF NIMBUS

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE (1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years)(2)
San Juan WD (Placer County)	10,000 AF	25,000 AF(3)	Decreasing from 25,000 to 10,000 AF(4)	10,000 AF
South Sacramento County Agriculture (includes Clay WD, Omochumne-Hartnell WD, Galt ID, & Sacramento County Farm Bureau)	0 AF	35,000 AF(9)	0 AF(10)	0 AF
SMUD	15,000 AF(11)	30,000 AF(3)	Decreasing from 30,000 to 15,000 AF(4)	15,000 AF

1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS - *Continued*

AMERICAN RIVER DIVERSIONS--BETWEEN NIMBUS & THE MOUTH

WATER SUPPLIER/ ORGANIZATION	1995 BASELINE(1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years) (2)
Carmichael WD (18)	12,000 AF	12,000 AF	12,000 AF	12,000 AF
City of Sacramento	50,000 AF	310 CFS (12) (13)	90,000 AF(15)	50,000 AF

SACRAMENTO RIVER DIVERSIONS

WATER SUPPLIER/ ORGANIZATION	1995 DIVERSIONS	2030 DIVERSION (wet/ave years) (14)	2030 DIVERSION (drier years)(14)	2030 DIVERSION (driest years)(14)
City of Sacramento	45,000 AF	290 CFS (13)	290 CFS (13)	290 CFS (13)
County of Sacramento	0 AF	up to 78,000 AF (16)	up to 78,000 AF(16)	up to 78,000 AF(16)
Placer County Water Agency (6) [Subject to resolution of remaining issues (21)]	0 AF	35,000 AF	35,000 AF	35,000 AF
Natomas Central Mutual Water Co. within Sacramento County	53,000 AF	45,600 AF	45,600 AF	45,600 AF

1995 AND PROPOSED YEAR 2030 SURFACE WATER DIVERSIONS - NOTES

1. Baseline: Baseline means the historic maximum amount of water that suppliers diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in a purveyor's specific agreement . Clarifications pertaining to the San Juan Water District, SMUD and the City of Folsom are noted in footnotes 8, 11, and 19.
2. Driest Years (i.e. Conference Years): Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet. Conference years are those years which require diverters and others to meet and confer on how best to meet demands and protect the American River.
3. Wet/Ave Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.
4. Drier Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet.
5. In the Conference Years the City of Folsom would reduce diversions by an additional 2,000 acre feet below its baseline to 18,000 AF through additional conservation to achieve recreational benefits to Folsom Reservoir and fishery benefits to the Lower American River.
6. PCWA would receive support for an American River diversion of 35,500 AF (8,500 AF existing and 27,000 AF additional) in wetter and average years and a new Sacramento/Feather Diversion of 35,000 AF. PCWA is willing to exchange 35,000 AF of its American River water for Sacramento and/or Feather River water provided the terms of such exchange do not result in any diminution of PCWA's water supply or an increased cost to PCWA.
7. For these suppliers, some or all of their water supply diverted from the American River or Folsom Reservoir in the drier and driest years could be replaced with water released from the Middle Fork Project Reservoirs by reoperating those reservoirs. Reoperation of the MFP reservoirs causes the reservoirs to be drawn down below historical operational minimum pool volumes.
8. The baseline for SJWD and their wholesale service area within Sacramento County is the full amount of their entitlements (CVP contract and water rights) which they exercised in 1995.
9. Wet/Ave Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 1,600,000 acre feet.
10. Drier Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 1,600,000 acre feet.
11. The baseline for SMUD is the 1995 diversion amount which reflects the shut down of Rancho Seco Power Plant.
12. Wet/Ave Years: As it applies to the City of Sacramento, time periods when the flows bypassing the E. A. Fairbairn Water Treatment Plant diversion exceed the "Hodge flows."
13. For modeling purposes, it is assumed that the City of Sacramento's total annual diversions from the American and Sacramento River in year 2030 would be 130,600 AF for use within the City limits.
14. As it applies to these diverters, there is no Water Forum limitation to diversions from the Sacramento River.

15. Drier Years: As it applies to the City of Sacramento, time periods when the flows bypassing the City's E. A. Fairbairn Water Treatment Plant diversion do not exceed the "Hodge flows." Within its existing capacity, the City can divert from the American River 155 cfs in June, July and August, 120 cfs in January through May and September, and 100 cfs in October through December.
16. The total for the County of Sacramento (78,000 AF) represents 45,000 AF of firm entitlement and 33,000 AF of intermittent water. The intermittent supply is subject to reduction in the drier and driest years. To reduce reliance on intermittent surface water, the County of Sacramento intends to pursue additional firm supplies.
17. Northridge Water District (NWD) and other signatories have agreed that for an interim ten year period, NWD would be able to divert PCWA water in years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet. After the ten-year period, unless the State Water Resources Control Board issues a subsequent order, NWD will divert up to 29,000 acre feet of water from Folsom Reservoir under the NWD-PCWA contract only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 AF.
18. Carmichael Water District will divert and use up to their license amount 14,000 acre feet . By the year 2030, it is most likely that the water demand for the District will be reduced to their historic baseline level of 12,000 acre feet by implementation of Urban Water Conservation Best Management Practices. Signatories to the *Water Forum Agreement* acknowledge and agree that CWD shall not relinquish control of or otherwise abandon the right to any quantity it has foregone delivery and/or diversion of under this *Agreement*, and shall retain the right (if any) to transfer that water for other beneficial uses, after that water has served its purpose of assisting in the implementation of the Improved Pattern of Fishery Flow Releases, for diversion or rediversion at, near, or downstream of the confluence of the Lower American River and the Sacramento River. The signatories also recognize that any such transfer of water by CWD must be in accordance with applicable provisions of federal and state law.
19. This is an agreed upon amount which is within the historic diversion data and is equivalent to Folsom's treatment capacity as of 1999.
20. Replacement of water to the river as a dry year action as provided in PCWA's specific agreement is contingent on PCWA's ability to sell this water to the Department of the Interior to meet Anadromous Fishery Restoration Program goals for the Lower American River or to other parties for their use after it flows down the Lower American River.
21. Remaining issues which are being negotiated are: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation Best Management Practice #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented, 3) environmentalists' support for conditions related to release of replacement water in drier and driest years.

DRAFT EIR MODELING ASSUMPTIONS FOR AMERICAN RIVER DIVERSIONS
FOR PURVEYOR THAT HAVE NOT CONCLUDED THEIR NEGOTIATIONS

To meet requirements of the California Environmental Quality Act, the Water Forum Programmatic EIR assessed impacts of all reasonably foreseeable diversions that may occur in the watershed. For the Water Forum EIR, potential diversions of the purveyors shown in the chart below were modeled as part of the Water Forum Proposal based on preferences communicated by representatives of purveyor's listed on this chart.

However, mutually acceptable agreements have not been reached on how Arcade Water District, Rancho Murieta CSD, El Dorado Irrigation District, and the Georgetown Divide PUD would participate in all elements of the *Water Forum Agreement*. These suppliers have entered into Procedural Agreements with the Water Forum to negotiate mutually acceptable agreements in the future. In addition, Arden Cordova Water Service has decided not to participate in the *Water Forum Agreement*.

Modeling does not imply that there is agreement on diversions described below. Nor does it imply that all stakeholder representatives believe that all of these diversions will necessarily occur. Diversions shown on this chart will be included as part of the *Water Forum Agreement* only if there are mutually acceptable agreements.

WATER PURVEYOR	1995 BASELINE(1)	2030 DIVERSION (wet/ave years)	2030 DIVERSION (drier years)	2030 DIVERSION (driest years) (2)
Arcade WD	3,500 AF	11,200 AF	11,200 AF	3,500 AF
Arden Cordova Water Service	3,500 AF	5,000 AF (3)	5,000 AF(4)	5,000 AF
El Dorado ID	20,000 AF	48,400 AF (3)	Decreasing from 48,400 to 38,900 AF(4)	38,900 AF
Georgetown Divide PUD (5)	10,000 AF	18,700 AF (3)	Decreasing from 18,700 to 12,500 AF(4)	12,500 AF
Rancho Murieta CSD	0 AF	1,500 AF (6)	1,500 AF (6)	0 AF

Footnotes (Assumptions included in these footnotes are for EIR modeling purposes only. Modeling these diversions does not imply there is agreement on these assumptions):

1. Baseline: As it applies to these diversions, Baseline means the historic maximum amount of water that suppliers diverted annually from the American River through the year 1995.
2. Driest Years (i.e. Conference Years): For purposes of the *Water Forum Agreement,* years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet. Conference years are those years which require diverters and others to meet and confer on how best to meet demands and protect the American River.
3. Wet/Ave Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.
4. Drier Years: As it applies to these diverters, years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet.
5. For this supplier, some or all of their water supply diverted from the American River or Folsom Reservoir in the drier and driest years could be replaced with water released from PCWA's Middle Fork Project Reservoirs by reoperating those reservoirs.
6. As it applies to this diversion, water in Wet/Ave and Drier Years is diverted at the mouth of the American River or from the Sacramento River.

II. ACTIONS TO MEET CUSTOMERS' NEEDS WHILE REDUCING DIVERSION IMPACTS IN DRIER YEARS

A. Intent

This element is to ensure that sufficient water supplies will be available to customers in drier years as well as wetter years. The regional economy is dependent on a reliable water supply being available for our businesses and homes in all years. The intent of this element of the agreement is that purveyors continue to meet their customers' needs to the year 2030 while minimizing diversion impacts in drier and driest years.

It is envisioned that American River diversions by purveyors in the region in average and wetter years above H street would increase from the current level of 216,500 acre feet annually to about 481,000 acre feet annually by the year 2030.

With adequate mitigation, these diversions in average and wetter years can be accomplished while still preserving the fishery, wildlife, recreational and aesthetic values of the Lower American River.

However, the river is already stressed in drier years. The health of the fishery would degrade if Lower American River flows were decreased by these amounts in drier years.

Considerable effort has been taken to identify how purveyors diverting from the American River can implement specific actions to meet their customers' needs in drier and driest years with reduced diversions. Actions include: conjunctive use of groundwater basins consistent with the sustainable yield objectives; utilizing other surface water resources; reservoir reoperation; increased conservation during drier and driest years; and reclamation.

It is recognized that over time changes might be appropriate in the mix of dry year actions selected.

B. Dry Year Actions

In addition to extraordinary conservation in drier and driest years, the *Water Forum Agreement* includes three alternative ways for purveyors to accomplish this objective.

The first is by purveyors limiting their additional American River diversions in drier and driest years. The drier the year, the more the purveyors would limit their American River diversions. By the driest years, purveyors would limit their American River diversions to baseline amounts. "Baseline amount" means the historic maximum amount of water that a purveyor diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in a Purveyor's Specific Agreement. Purveyors would continue to meet their customers' needs in drier and driest years through supply alternatives such as increased use of groundwater.

There is a second method by which some purveyors who currently divert upstream from Folsom Reservoir could meet their customers' needs and minimize impacts on Folsom Reservoir inflows and Lower American River fisheries. The signatories to the *Water Forum Agreement* would provide their support to a purveyor that chooses to continue its increased American River diversions in drier or driest years, if in the drier years there was a release of replacement water upstream of Folsom Reservoir. The drier the year, the greater the amount of water that would be replaced. By the driest years the amount of water replaced would be equivalent to the purveyor's increased diversions over baseline or, in certain appropriate instances, other amounts specified in the Purveyor's Specific Agreement.

One source of this replacement water in drier or driest years would be water not normally released in those years from the Placer County Water Agency's (PCWA) Middle Fork Project. [1] Adequate assurances that the replacement water will be released are specific to each purveyor and are included in the Specific Agreements for any purveyors intending to use this method. Any other method of replacing water consistent with the two coequal goals of the Water Forum would be considered.

The third way that purveyors could meet at least a portion of their needs is by diversions from the Sacramento River. Any Sacramento River diversion would avoid direct impacts on the American River.

The chart in Section Three, I entitled, "*1995 and Proposed Year 2030 Surface Water Diversions*" summarizes the proposed drier and driest year diversions for each purveyor. Specific information for each purveyor is found in Section Five, I, Purveyor Specific Agreements.

C. Specific Agreement on Actions to Meet Customers' Need While Reducing Diversion Impacts in Drier Years

Purveyors will implement actions in drier and driest years to meet their customers' water needs while at the same time reducing diversion impacts. Specific diversion amounts for each purveyor are found in Section Five, I, Purveyor Specific Agreements and are summarized in the chart in Section Three, I entitled, "*1995 and Proposed Year 2030 Surface Water Diversions*."

[1] For the initial *Water Forum Agreement,* this dry year action applies to the City of Roseville and the Placer County Water Agency. A mutually agreed upon assurance related to this dry year action for the City of Roseville is contained in its Purveyor Specific Agreement. The assurance for this dry year action as it applies to Placer County Water Agency is a remaining issue.

III. SUPPORT FOR IMPROVED PATTERN OF FISHERY FLOW RELEASES FROM FOLSOM RESERVOIR

A. Intent

This element supports needed assurances for continued implementation of a pattern of water releases from Folsom Reservoir that more closely matches the needs of anadromous fish, in particular fall-run chinook salmon.

Since construction of Folsom Dam and Reservoir, the U. S. Bureau of Reclamation (Bureau) has made releases legally constrained only by the outdated fish flow requirements of State Water Resources Control Board Decision 893. It allows flows in the river during dry years to be as low as 250 cubic feet per second, although the Bureau releases greater amounts. Since the standard was adopted and Folsom and Nimbus dams were constructed, the fishery has significantly declined.

Until recently the Bureau made relatively higher releases in the summer and reduced releases in the fall. This does not match the life cycle needs of fall-run chinook salmon which need more cool water in the fall and are not present in the summer.

An extensive hydrological and biological analysis found that with the historic pattern of releases from Folsom Reservoir, increased diversions envisioned by the Water Forum would have unacceptable impacts on the Lower American River fishery.

Beginning in December 1994, the Water Forum convened a Fish Biologists' Working Session of fish experts with special knowledge of the Lower American River. Their charge was to develop recommendations on an improved pattern of releases. Participants included representatives from the U.S. Fish and Wildlife Service, California Department of Fish and Game, State Water Resources Control Board, U.S. Bureau of Reclamation, and representatives from the Water Forum.

After several months, participants in the Fish Biologists' Working Session came to general agreement regarding which fish species should be given priority when there are constraints in water availability. They also developed an Improved Pattern by which available water can be released from Folsom Reservoir in a "fish friendly" manner consistent with the reservoir's flood control objectives.

This Improved Pattern of Fishery Flow Releases from Folsom Reservoir will somewhat reduce summer flows to conserve water to allow increased releases in the fall. Their conclusion is that this Improved Pattern will maximize instream flows and temperature conditions for fall-run chinook salmon in the Lower American River.

In 1998, steelhead were listed under the Endangered Species Act as threatened. Therefore the Bureau is required to operate Folsom Dam in a way that does not jeopardize the continued existence of these fish.

It is recognized that as additional information becomes available in the future it could be beneficial to further refine this Improved Pattern. In addition there needs to be flexibility in implementing an Improved Pattern to reflect real time ecological considerations. This is sometimes referred to as "adaptive management."

It is the intent of the signatories to the *Water Forum Agreement* that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir be permanently implemented recognizing that over time this Improved Pattern may be refined to reflect updated understanding of the fishery. One way this will be implemented will be an updated State Water Resources Control Board flow standard for the Lower American River. It is also the intent that there be flexibility ("adaptive management") in the implementation of an Improved Pattern to reflect real time ecological considerations.

In the future there will also be transfers of water among signatories to the *Water Forum Agreement* and conceivably to other organizations that are not signatories. It is the intent that any transfers of American River water be delivered in a manner consistent with an Improved Pattern of Fish Flow Releases. The Water Forum Successor Effort will develop guidelines for determining consistency.

B. Improved Pattern of Fishery Flow Releases From Folsom Reservoir

The Central Valley Project Improvement Act was passed in 1992. This law authorized fish and wildlife restoration as an additional purpose of the Central Valley Project. It also required the federal government to develop an Anadromous Fish Restoration Program (AFRP) plan including implementation of an improved pattern of fishery flow releases from Folsom Reservoir to benefit anadromous fish.

Since 1996 the Bureau, in consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, has attempted to release water from Folsom Reservoir in a manner consistent with the flow objectives for the Lower American River to the extent Reclamation's available water supply has permitted it to do so. Their AFRP flow objectives for the Lower American River are set forth in the November 20, 1997 “Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water.” They are essentially the same as the Improved Pattern of Fishery Flow Releases developed by the Fish Biologists’ Working Session which was convened by the Water Forum. It is recognized that in the process of updating the Lower American River standard it will be necessary to make some corrections to the AFRP flow objectives for the Lower American River. These corrections include some typographic corrections as well as inclusion of target carryover storage amounts for Folsom Reservoir.

For purposes of the *Water Forum Agreement*, the Improved Pattern of Fishery Flow Releases is defined as a release pattern consistent with the corrected version of the AFRP flow objective for the Lower American River as set forth in the November 20, 1997 “Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water” (see Appendix I of this *Water Forum Agreement*).

The Bureau is working to formalize this improved pattern of fishery flow releases through both the Operational Criteria and Plan for the Central Valley Project (OCAP) and the AFRP of the Central Valley Project Improvement Act. OCAP and AFRP are the federal government's rules for how the Central Valley Project will be operated.

The increased diversions in the *Water Forum Agreement* would be permanent. Therefore it is essential that an Improved Pattern also be implemented by the Bureau on a permanent basis. Therefore one of the essential requirements of the *Water Forum Agreement* is that the State Water Resources Control Board update the Lower American River flow standard.

C. Specific Agreement on Support for Improved Pattern of Fishery Flow Releases from Folsom Reservoir

As part of the *Water Forum Agreement* all stakeholders will actively endorse permanent implementation of an Improved Pattern of Fishery Flow Releases from Folsom Reservoir while recognizing that over time this Improved Pattern may be refined to reflect updated understandings of the fishery. It is also agreed that there will be flexibility ("adaptive management") in the implementation of an Improved Pattern to reflect real time ecological considerations.

The *Water Forum Agreement* is based on the expectation that the Improved Pattern of Fishery Flow Releases would be implemented consistent with the AFRP Lower American River flow objectives in the November 20, 1997 Final Administrative Proposal with some corrections. Therefore, if the Department of the Interior substantially changes the AFRP flow objectives for the Lower American River, it would be considered a changed circumstance that would have to be considered by the Water Forum Successor Effort.

The signatories' support for the increased diversions is dependent on adequate assurances of the Bureau's permanent implementation of an Improved Pattern as described above. One form of assurance will be an updated State Water Resources Control Board flow standard for the Lower American River. Other assurances will be in the form of participation in the Operational Criteria and Plan (OCAP) process; and participation in the Central Valley Project Improvement Act Environmental Impact Statement (PEIS). Adequate forms of assurance are more fully described in the Assurances and Caveats Section of the *Water Forum Agreement* (Section Four, I).

It is further agreed that any transfers of American River water by signatories be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as described above.

One of the functions of the Water Forum Successor Effort will be to ensure that an Improved Pattern as described above is permanently implemented recognizing that over time that this Improved Pattern may be refined to reflect updated understanding of the fishery.

IV. LOWER AMERICAN RIVER HABITAT MANAGEMENT ELEMENT

A. Intent

The Habitat Management Element (HME) for the Lower American River, combined with other elements of the *Water Forum Agreement*, is intended to fulfill one of the Water Forum's two coequal objectives:

> ***Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.***

The HME is necessary to comply with the California Environmental Quality Act's (CEQA) requirement to avoid or lessen, to the extent reasonable and feasible, all significant impacts to the Lower American River resulting from future increased surface water diversions identified in the *Water Forum Agreement*. The HME has been incorporated into the Water Forum Environmental Impact Report.

The HME is also an important issue for another reason. In 1998, steelhead on many rivers, including the American, were listed as threatened under the federal Endangered Species Act. As purveyors proceed with their diversion projects, they will have to consult with resource agencies. Under the Endangered Species Act, projects can move forward only if the resources agencies find that they will not jeopardize the continued existence of the species.

The Habitat Management Element will be implemented for the term of the *Water Forum Agreement* - to the year 2030.

B. Lower American River Habitat Management Element

The Lower American River HME will contain five programmatic components that together will address flow, temperature, physical habitat, and recreation issues for the Lower American River: Habitat Management Plan; Habitat Projects that Benefit the Lower American River Ecosystem; Monitoring and Evaluation; Project-Specific Mitigation; and Lower American River Recreation.

1. The <u>Lower American River Habitat Management Plan</u> will include detailed descriptions of all reasonable and feasible projects that could be implemented to avoid and/or offset potential impacts to Lower American River fishery and riparian resources due to the increased surface water diversions defined under the *Water Forum Agreement*.

   The Plan will also identify and define:

   a. Performance standards to be used as indicators of the health of the Lower American River (e.g. flows, temperatures, etc.)

   b. The conceptual (e.g., mitigation banking or other) and technical framework for the Habitat Management Program;

c. Schedule and technical assistance required for development, implementation, and monitoring of the Habitat Management Program;

d. How the Habitat Management Program will be coordinated with other programs, plans, initiatives, and/or mandates that affect the Lower American River ecosystem;

e. Logistics and responsibilities associated with administering the Habitat Management Program;

f. Implementation priorities, strategies, and schedules for the proposed projects;

g. Lead organizations for implementation of each project;

h. How the Habitat Management Program could serve as the framework for addressing any Endangered Species Act requirements; and

i. Cost-sharing obligations and specific funding commitments.

Moreover, the Habitat Management Plan will outline protocols for Plan updating, and will clearly identify the type, amount, and costs for all technical assistance that will be required to develop/update, administer, implement, and monitor the Habitat Management Program.

Consultant services and other technical assistance will be acquired to: 1) effectively develop, implement, administer, and monitor the success of the Habitat Management Program; and 2) provide input to federal and state agencies for actions that will contribute to the preservation of the values of the Lower American River. This will ensure that there is effective advocacy to achieve a "fair share" of CVPIA Restoration Funds allocated to Lower American River improvements, real-time implementation of the Improved Fishery Flow Pattern Releases (focusing on the volume, temperature, and timing of flows), and preservation of riparian habitat.

Within the first 12 months after the *Water Forum Agreement* is signed, the Habitat Management Plan will be completed and adopted.

2. Projects that Benefit the Lower American River Ecosystem have been identified by the CALFED American River Technical Team. Currently, 22 potential projects/studies have been identified for the Lower American River. Those that could be appropriately supported through the Water Forum Successor Effort are identified in Table 1. Additional projects that could be supported by other agencies are identified in Table 2. The projects/studies identified in Table 1 are strictly potential candidates for inclusion, and should not be considered as a final array of management elements to be adopted by the Water Forum.

3. Monitoring and Evaluation will: 1) establish baseline conditions for future reference and assess the health of the Lower American River as diversions increase; and

2) assess the response of fish, wildlife, and riparian communities to the management/restoration projects implemented under the Habitat Management Plan as well as the increased diversions. Monitoring and Evaluation will also meet the CEQA requirement to have a mitigation monitoring plan.

Real time monitoring and regular evaluation are also necessary components of the adaptive management approach for the ongoing implementation of the *Water Forum Agreement*. Real time monitoring will be particularly useful to the Folsom Reservoir Operations Group as it makes monthly flow and temperature decisions.

Every five years the Water Forum Successor Effort will review the comprehensive evaluation of the health of the Lower American River ecosystem.

Regular evaluations conducted every five years will allow the Water Forum Successor Effort to comprehensively review the overall impacts of the *Agreement* on the health of Lower American River.

Specifics on the monitoring and evaluation program will be included in the Water Forum EIR.

4. Project-Specific Mitigation will be required of each purveyor to mitigate any site-specific impacts associated with their diversion. An example of such site-specific mitigation would be installing fish screens for new diversions or, potentially, improving existing diversion screens.

5. Lower American River Recreation: This component is intended to address effects on recreation along the Lower American River. Two components of the *Water Forum Agreement* have an effect on the recreational flows for the Lower American River. First, the Improved Pattern of Fishery Flow Releases results in lower summer time releases so that cold water can be conserved in Folsom Reservoir to benefit the fall-run chinook salmon. Second, the increased surface water diversions result in less water being available to flow down the entire length of the Lower American River.

In order to reduce the impacts of reduced recreational flows on the Lower American River an initial list of projects has been developed. These are summarized in Table 3 below. This list of projects will be refined over time.

Consideration will be given to locating projects in the service areas of purveyors contributing to the Lower American River Habitat Management Element. Preference will be given to those projects having the greatest nexus to the recreational impacts on the Lower American River resulting from implementation of the *Water Forum Agreement*.

Funding for recreation projects is included in the Habitat Management Element Cost Allocation Principles. Contributions to the HME would be for both Habitat and

Recreational projects, with the Water Forum Successor Effort deciding on annual expenditures.

TABLE 1. Water Forum Cost-Sharing for Lower American River Habitat Projects. Proposed projects and studies for which the Water Forum could be a cost-share partner. Table 1 contains preliminary, rough cost estimates for years 2-4 and annual costs thereafter for the life of the *Water Forum Agreement*. Estimated costs can be expected to change and are provided here for discussion purposes only. In the first year up to $340,000 of Water Forum funding will be used to: prepare the Habitat Management Plan; provide technical assistance; and develop and begin implementing the monitoring program. Amounts shown for contributions by other agencies represent the Water Forum's preliminary estimate of the funding that will be requested from those agencies. No commitments have yet been made by those external agencies.

PROJECT/STUDY	AGENCY	ANNUAL COST	
		Years 2-4	Ongoing
Wetland/Slough Complex	SAFCA CALFED Water Forum	Unknown Unknown $25,000	To be determined
Shaded Riverine Aquatic Habitat	SAFCA CALFED Water Forum	Unknown Unknown $25,000	To be determined
Tailrace Habitat Utilization Study	CALFED Water Forum	$15,000 $15,000	Study complete
Thermal Refugia Utilization Study	CALFED Water Forum	$25,000 $25,000	Study complete
Off-site Mitigation (if required)	Water Forum	Unknown	Unknown
Monitoring and Evaluation	SAFCA Water Forum CVPIA	$100,000 $100,000 $100,000	$100,000 $100,000 $100,000
Plan Development, Updating & Technical Assistance	SAFCA Water Forum CVPIA	$150,000 $150,000 $150,000	$70,000 $70,000 $70,000

TABLE 2. Additional Lower American River Habitat Projects. These are additional projects and studies that would be carried out by other organizations.

Habitat Projects that Benefit the Lower American River Ecosystem				
Priority	**Actions**	**Study or Project**	**Possible Funding Source(s)**	**Lead Organization**
High	New Flow Standards	Project	City of Sacramento	City of Sacramento
High	Flow Fluctuation Criteria	Project	CVPIA	USBR
High	Dry Year Flow Augmentation	Project	CVPIA	PCWA USBR/USFWS
High	Folsom Temperature Control Device (TCD)	Project	USBR	USBR
High	Folsom Reservoir Cold Water Pool Management	Project	SCWA Folsom SJWD USBR	USBR
High	Instream Cover (Woody Debris)	Project	ACOE SAFCA	ACOE SAFCA
High	Flood Control Channel Improvement	Project	SAFCA ACOE	SAFCA
High	Spawning Habitat Management/ Maintenance	Study, Project	CVPIA CALFED	CDFG USFWS
High	Hatchery Temperature Control	Project	USBR	USBR
High	Hatchery Management Practices	Project	USBR CDFG	CDFG
Moderate	Fire Management	Project	Sacramento County	Sacramento County
Low	Increase Artificial Production of Salmonids	Project	USBR CDFG	CDFG
Low	Angling Regulations	Project	CDFG	CDFG

Table 2. - continued

Project-specific Mitigation				
Priority	**Actions**	**Study or Project**	**Possible Funding Source(s)**	**Lead Organization**
	Fish Screen Improvement	Project	Water Forum purveyors with fish screens CVPIA	Water Forum purveyors

It is also recognized that the State Steelhead Restoration Plan includes a study of the feasibility of reintroduction of steelhead above Folsom Dam. Water Forum water purveyors are concerned that reintroduction not impose Endangered Species Act requirements on diversions upstream of Folsom Dam.

After the technical team prepared this list, an additional potential project was identified by the Department of Fish and Game. It would be beneficial to tag steelhead to determine the extent of natural spawning in the Lower American River.

LEGEND:

ACOE - Army Corps of Engineers
CVPIA - Central Valley Project Improvement Act
Folsom - City of Folsom
PCWA - Placer County Water Agency
SAFCA - Sacramento Area Flood Control Agency
SCWA - Sacramento County Water Agency
SJWD - San Juan Water District
USBR - United States Bureau of Reclamation
USFWS - United States Fish and Wildlife Service

TABLE 3. Initial Listing of Potential Projects to Address Effects on Lower American River Recreation

Project	Potential Funding Source(s)	Lead Organization(s)
Update Recreation Element of the Lower American River Parkway Plan	Water Forum HME and Sacramento County	Water Forum Successor Effort, Sacramento County
Increase access to American River	Water Forum HME, Sacramento County, City of Sacramento	Water Forum Successor Effort, Sacramento County
Trails adjacent to waterways	Water Forum HME, Sacramento County, City of Sacramento	Water Forum Successor Effort, Sacramento County
Purchase and develop Uruttia property for recreational and environmental values	Sacramento County, Sacramento City, and Water Forum HME	Sacramento County and Sacramento City

C. Relationship to a Coordinated Multi-Agency Lower American River Ecosystem Habitat Management Program (HMP)

The Lower American River ecosystem is also affected by agencies outside the Water Forum. Many agencies have some type of jurisdiction over decisions that affect the ecosystem. Several outside agencies have responsibility and financial resources to benefit the Lower American River.

It is also recognized that the Water Forum Successor Effort will not by itself have sufficient funding to implement all the actions necessary to fully preserve the Lower American River ecosystem. Therefore it is intended that the Water Forum Habitat Management Element (HME) be undertaken as part of a coordinated Multi-Agency Lower American River Habitat Management Program (HMP) through the currently established Lower American River Task Force. It is proposed that this partnership be formalized by a Letter of Intent among:

- The Water Forum Successor Effort (administered by the Sacramento City-County Office of Metropolitan Water Planning);
- Sacramento Area Flood Control Agency (SAFCA);
- CALFED (or its successor);
- U.S. Bureau of Reclamation (CVP and CVPIA);

- U.S. Fish and Wildlife Service;
- National Marine Fisheries Service
- California Department of Fish and Game;
- Sacramento County Parks Department.

The Lower American River Task force will provide a forum through which the partnering agencies can pursue key objectives from other ongoing or planned state and federal initiatives involving the agencies identified above, including:

- The Water Forum Habitat Management Element
- the American River component of CALFED's Ecological Restoration Program Plan (ERPP);
- SAFCA's emerging floodway management plan (FMP);
- Sacramento County's American River Parkway Plan (ARPP); and
- The federal Anadromous Fish Restoration Program (AFRP) of the Central Valley Project Improvement Act (CVPIA).

The Lower American River Task Force will also draw upon the expertise of groups such as the Folsom Reservoir Operations Work Group.

Membership on the Lower American River Task Force will be expanded to include a Water Forum environmental representative and a representative from the Sacramento County Water Agency representing purveyors who contribute to the Water Forum HME.

The Lower American River Task Force will oversee development of the detailed Lower American River Habitat Management Plan which will identify priorities for environmental restoration and enhancement.

Although each agency/organization represented on the Lower American River Task Force will retain autonomy over its own budget, the Lower American River Task Force will coordinate opportunities for costs sharing. Through the integration of ongoing and planned management/restoration efforts, the most effective program for the Lower American River will be developed, thereby providing maximum benefits to the river ecosystem. Moreover, through cooperation and cost-sharing, the costs to each organization for developing, implementing, and monitoring the Program will be minimized.

The Water Forum Successor Effort will informally evaluate this arrangement in six months with a formal evaluation at the end of one year to determine if the Water Forum should continue using the Lower American River Task Force as the vehicle to develop and implement the Lower American River Habitat Management Program.

D. Water Forum Cost Allocation Principles

1. Proposed Lower American River habitat projects and studies that could be supported by the Water Forum Habitat Management Element are shown in Table 1. The initial listing of potential projects to address effects on Lower American River recreation that could be supported by the Water Forum Habitat Management Element is shown in Table 3.

2. Cost-Sharing among Water Forum Purveyors

a. The City of Sacramento and the Sacramento County Water Agency (through Zone 13) will commit to a combined total of $375,000 annually to the Habitat Management Element (including an estimated, but not earmarked, $35,000 annually for recreational projects.).

The City of Sacramento and Sacramento County Water Agency (SCWA) will commit to funding their share of the Habitat Element starting when they sign the *Water Forum Agreement*. Their contributions will fund the majority of the Water Forum's share of the core program, especially real time monitoring, evaluation, and planning. The City of Sacramento will contribute $125,000 annually and SCWA will contribute $250,000 annually using Zone 13 funds.

b. Sacramento County Water Agency Zone 13 funds will be used to meet the HME obligations for the purveyors serving the unincorporated areas of Sacramento County and in the City of Citrus Heights.

Property owners in the unincorporated areas of Sacramento county and in the City of Citrus Heights are assessed in their property taxes for county-wide water management expenses that could include many of the real time monitoring, evaluation and planning activities in the Habitat Management Program.

Therefore SCWA's Zone 13 contribution to the Habitat Management Element will cover the financial obligations of these water users serving the unincorporated area of Sacramento County and the City of Citrus Heights: Carmichael Water District, Citrus Heights Water District, Citizens Utilities in Sacramento county, Clay Water District, Del Paso Manor County Water District, Fair Oaks Water District, Florin County Water District, Galt Irrigation District, Natomas Mutual Water District, Northridge Water District, Omochumne-Hartnell Water District, Orange Vale Water Company, Rio Linda/Elverta Community Water District, Sacramento Municipal Utility District, and San Juan Water District in Sacramento County.

c. Contributions from Other Purveyors.

Other purveyors signatory to the *Water Forum Agreement* that divert from the American River are the City of Folsom, Placer County Water Agency[2], City of Roseville, and San Juan Water District in Placer County.

(1) Central Valley Project water. A portion of their increased diversions will be Central Valley Project water for which these purveyors contribute into the Central Valley Project Restoration Fund. The Water Forum Successor Effort will work to ensure that a fair share of those Restoration Funds will be spent on improvements to the Lower American River.

Therefore, these purveyors will not be contributing to the Water Forum Habitat Element for increased diversions of CVP water. If for any reason, the purveyors do not contribute to the CVP Restoration fund for increased diversions of CVP water over their baseline amounts (i.e. historic maximum amount of water diverted in any one year through the year 1995 or, in certain appropriate instances, other amounts identified in a purveyor's specific agreement), they would contribute to the Habitat Management Element as set forth below.

(2) Non-Central Valley Project water. Some purveyors will also be increasing their diversions of non-CVP water. For increased diversions of non-CVP water from the American River, purveyors would pay $3 per acre foot when they divert the water. Increases are defined as amounts above their baseline (i.e. historic maximum amount of water diverted in any one year through the year 1995 or, in certain appropriate instances, other amounts identified in a purveyor's specific agreement). If a purveyor exchanges current CVP water deliveries with non-CVP water they will pay $3 per acre foot for the water they exchange.

It is specifically recognized that Placer County Water Agency would only contribute to the HME for increased American River diversions of non-CVP water used by PCWA. Contributions to the HME for PCWA water used by San Juan Water District, City of Roseville, Northridge Water District and any other purveyors are not the responsibility of PCWA.

[2] Placer County Water Agency's contribution to the Habitat Management Element is subject to resolution of the remaining issues identified in its Purveyor Specific Agreement.

3. Cost Cap

The City of Sacramento, Sacramento County Water Agency and other Water Forum signatories' commitments to financially contribute to the HME are capped at the dollar amounts shown in sections a, b, and c above, adjusted only for inflation as set by the January issue of the "*Engineering News Record*" published Construction Cost Indexes for U.S. - 20 Cities Average and for the San Francisco Bay Area. The annual adjustment index would be calculated using the average of the cost indexes for these two areas.

If the Water Forum balance in the Habitat Management Element fund exceeds $1 million of unearmarked funds, annual contributions would be reduced or deferred until the unearmarked balance went below $1 million.

Every five years the Water Forum Successor Effort will review the evaluation of the health of the Lower American River ecosystem. At those times, any signatory to the *Water Forum Agreement* can request that the Water Forum Successor Effort renegotiate the Cost Cap to increase or decrease the amount based on the needs at that time. Any increase or decrease would have to be approved by the signatories to the *Water Forum Agreement*.

4. Through the Multi-Agency Effort, agencies in addition to the Water Forum Successor Effort and its signatory agencies will be requested to contribute to the Lower American River Habitat Management Program budget. Total costs shared by all partners, (including Water Forum and requested cost-sharing from SAFCA, U.S. Bureau of Reclamation and CALFED) for each of the two years after development of the Habitat Management Program are estimated to be approximately $915,000. Annual costs thereafter for monitoring, evaluation, plan updating and technical assistance are estimated to be approximately $510,000. Additional funding will be needed for projects identified in the Habitat Management Plan and recreational projects.

This program assumes significant financial contributions from other members of the Multi-Agency Lower American River Habitat Management Program. If that does not occur, it would be considered a changed circumstance requiring renegotiation.

5. Project Specific Mitigation.

Any project-specific habitat mitigation, (e.g. fish screens at diversion facilities) or recreation mitigation is the responsibility of individual purveyors. Costs for project specific mitigation are not eligible for funding under the Habitat Management Element.

E. Adaptive Management

The Habitat Management Program is based on the principal of "adaptive management," which allows for flexibility in making future resource-management decisions as additional data become

available. Information collected under the on-going Monitoring and Evaluation will be fed back into the management decision making process on a real-time basis.

It is recognized that monitoring and evaluation may identify adverse impacts not currently anticipated. If the unanticipated impacts are significant, this would be considered a changed condition. The Water Forum Successor Effort would meet and confer on options for mitigating these unanticipated impacts.

Options include additional habitat measures to reduce or eliminate the adverse impacts. Funding could come from the purveyors signatory to the *Water Forum Agreement* or other partners in the Multi-Agency Lower American River Habitat Management Program. If unanticipated significant adverse impacts cannot be mitigated, this would be considered a changed circumstance requiring renegotiation of the relevant portions of the *Water Forum Agreement*.

If the Lower American River is designated as critical habitat for an endangered or threatened species, the Endangered Species Act may require a higher level of mitigation than that anticipated to be paid from the Habitat Management Element. Thus, if the Lower American River is designated as critical habitat, it may be considered a changed condition to be addressed by the Water Forum Successor Effort.

F. Specific Agreement for the Lower American River Habitat Management Element.

All signatories will support and where appropriate, participate in the Lower American River Habitat Management Element as set forth above.

V. WATER CONSERVATION ELEMENT

Introduction

This Water Conservation Element is essential to meeting both of the coequal goals of the Water Forum. First, conserved water will be available to help supply increased demand. Secondly, conservation will minimize the need for increased groundwater pumping and increased use of surface water, including water diverted from the American River.

Continued commitment to water conservation will benefit water purveyors, customers, and the environment because it:

> Reflects growing public support for the conservation of limited natural resources and adequate water supplies.
>
> Allows water districts to optimize the use of existing facilities.
>
> Delays or reduces the capital investments required for capacity expansion of water and wastewater treatment facilities even though the service area may grow.
>
> Is essential for the state and federal agency approvals which will be required for specific projects.

MUNICIPAL AND INDUSTRIAL WATER CONSERVATION

A. Intent

Water purveyors in the region have been working hard to conserve water through implementation of a number of water conservation Best Management Practices (BMP's). The Water Conservation Element of the *Water Forum Agreement* is intended to set forth the water purveyors' programs for implementing all of the BMP's. They were adapted from the Statewide Memorandum of Understanding (MOU) Regarding Urban Water Conservation Best Management Practices and have been customized for use by the Water Forum.

This Water Conservation Element contains the basic components of Water Conservation Plans that will be implemented by the purveyors. Conservation Plans for each purveyor are incorporated as Appendix J to this *Water Forum Agreement* (separately bound and on file at the Water Forum office).

B. Purveyors Receiving Central Valley Project Water Supplies

San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water District, Sacramento County, City of Roseville, City of Folsom, El Dorado Irrigation District, Georgetown Divide Public Utility District, and Placer County Water Agency are, or will become, users of Central Valley Project water supplies. As such they are

subject to the water conservation provisions of the Central Valley Project Improvement Act (CVPIA). CVPIA conservation requirements and related costs are independent of the *Water Forum Agreement*.

C. Basic Elements of Water Conservation Plan for Municipal and Industrial Uses

1. RESIDENTIAL[3] METER RETROFIT (BMP # 4) and CONSERVATION PRICING (BMP #11) Volumetric measurement and conservation pricing are essential elements of a water conservation program. Water users need to be able to know how much they are using in order to be efficient. Users need accurate economic signals -- which require volumetric measurement and conservation pricing -- in order to encourage the use of water in the most efficient manner possible.

a. **El Dorado Irrigation District, Georgetown Divide Public Utility District, Placer County Water Agency, Rancho Murieta Community Services District, and Rio Linda/Elverta Community Water District.** These five purveyors are already fully metered and use volumetric billing.

b. **San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water District, Sacramento County, City of Roseville, and City of Folsom.** It is recognized that CVPIA meter retrofit provisions are outside the scope of the *Water Forum Agreement* and that they require faster implementation than what is included in the *Water Forum Agreement*. Purveyors signing the *Water Forum Agreement* who receive CVP water agree that if for any reason any or all of their service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed they would annually retrofit at least 3.3% - 5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement*.

c. In the first two years after the *Water Forum Agreement* is signed, the **Northridge Water District, the Carmichael Water District, and Citizens Utilities** would plan for, budget, and prepare the public for a residential meter retrofit program. Beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed these purveyors would retrofit at least 3.3% - 5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement*.

d. **City of Galt, Florin County Water District, Del Paso Manor County Water District.** It is recognized that residential water meter retrofit along with quantity based pricing are important tools for improving the efficiency of water use. This helps extend the supply while also reducing the need for increased groundwater pumping or diversions from the American River.

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[3] "Residential" for purposes of defining the scope of this BMP is defined as single family or duplex customers.

It is also recognized that these three relatively smaller water purveyors currently rely totally on groundwater and will not realize immediate water supply benefits from participating in the *Water Forum Agreement*. Therefore until such time as these three purveyors need discretionary approvals for new or expanded surface water supplies, an active voluntary meter retrofit with incentives is acceptable. Nothing in the *Water Forum Agreement* prevents purveyors from deciding to undertake a more rapid meter retrofit program.

At such time as any of these purveyors needs discretionary approvals for new or expanded surface water supplies they agree to annually retrofit at least 3.3% - 5% of the total number of unmetered residential connections and read and bill as set forth below.

If in the future any of these purveyors receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

e. **City of Sacramento**: The City of Sacramento has a provision in its Charter prohibiting mandatory residential meters. It is recognized that it would be very difficult to amend the Charter. Going as far as possible within the limitations of its Charter, the City of Sacramento would implement a voluntary meter retrofit program. It is also recognized that environmental signatory organizations prefer and will continue to advocate that all connections be metered.

f. Water Forum signatories would not implement local retrofit on resale, or any other requirements that would impose escrow or disclosure responsibilities on realtors. This provision would not apply to the City of Sacramento since their Charter prohibits mandatory residential metering. All purveyors would retain the ability to implement incentives for a voluntary meter retrofit at time of resale that would not impose escrow or disclosure requirements.

g. In administrative proceedings related to statewide matters such as the Bay-Delta water rights proceeding, signatories to this *Agreement* may need to advocate statewide meter retrofit schedules different than what is included in this *Agreement*.

h. All signatories to the *Water Forum Agreement* will actively support the California Public Utilities Commission (CPUC) allowing investor-owned utilities to recover all costs of meter retrofit through rates.

i. As soon as practical, purveyors signatory to the *Water Forum Agreement* will begin reading all meters and including the usage on the customers' bills. This includes meters required in new construction since 1992 and meters retrofit onto existing connections. It is recognized that circumstances vary purveyor by purveyor. However the general guideline used for negotiating each purveyor's water conservation plan was that purveyors would read the meters and provide usage information within three years of signing of the

Water Forum Agreement. Each purveyor's schedule for implementing this provision is included as part of its Water Conservation Plan.

j. As soon as practical, purveyors will implement conservation pricing which bases customer charges on the quantity of water used. With conservation pricing, the unit rate is constant regardless of quantity used (uniform rate) or the rate increases as the quantity of water used increases (increasing block rate). It is recognized that circumstances vary purveyor by purveyor. However the general guideline used for negotiating each purveyor's water conservation plan was that purveyors would base customer charges on the quantity of water used within six years of signing of the *Water Forum Agreement*. Each purveyor's schedule for implementing this provision is included as part of its Water Conservation Plan.

2. NON- RESIDENTIAL METER RETROFIT (BMP #4) Purveyors will retrofit at least 85% - 90% of non-residential customers within ten years. Complete non-residential retrofit is not a requirement. This is in recognition of the fact that there could be some smaller non-residential customers whose service locations could be very difficult and expensive to retrofit.

3. RESIDENTIAL ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM (BMP #16) California Plumbing Codes require the installation of Ultra-low Flush (ULF) (1.6 gallon) toilets in new construction which saves approximately 3.5 gallons per flush over older models. ULF toilet retrofitting programs have shown that the water savings average 44 gallons per day for toilets replaced in a multiple family complex and 28 gallons per day saved in single family retrofits.

Purveyors are encouraged, but not required, to establish residential toilet replacement programs. This could be done in conjunction with any toilet replacement programs implemented by sanitation districts. It could also be implemented in cooperative programs with community organizations.

4. NON-RESIDENTIAL TOILET PROGRAM (BMP #16) Purveyors will provide incentives for replacement of non-residential toilets with ULF toilets. This could also be done in conjunction with any toilet replacement program implemented by sanitation districts.

5. BEST MANAGEMENT PRACTICES OTHER THAN METERS, CONSERVATION PRICING, AND TOILETS If they have not already done so, purveyors will start implementing the remaining Best Management Practices (BMP's) within three years of signing the *Water Forum Agreement* in a manner consistent with the Water Forum BMP Implementation Criteria (see Appendix D). These criteria were adopted on July 28, 1997 by the Water Forum. They were adapted from the Statewide Memorandum of Understanding (MOU) Regarding Urban Water Conservation Best Management Practices (BMPs) developed by the California Urban Water Conservation Council (CUWCC) and have been customized for use by the Water Forum. These criteria include a Functional Equivalency Provision which in some cases allowed purveyors to negotiate alternative implementation methods that will be as effective as the standard criteria.

The Water Forum Successor Effort will facilitate "changed conditions" negotiations to determine how BMP's adopted or amended by CUWCC after July, 1997 will be incorporated into the Water Forum purveyors' Water Conservation Plans.

If Water Forum signatories are unable to agree on how BMP's adopted or amended by CUWCC after July, 1997 will be incorporated into the Water Forum purveyors' Water Conservation Plans, individual signatory organizations can advocate how they believe those new BMP's should be implemented. This can be done as part of the review of environmental documentation or in legislative, administrative, regulatory and other venues.

6. CITIZEN INVOLVEMENT PROGRAM In the implementation of BMP's (especially meter retrofit and pricing programs) the water purveyors will establish a citizen involvement program, such as citizen advisory committees, to help design, implement and market water conservation programs. Each purveyor will establish this program within three years of signing the *Water Forum Agreement*, if they do not already have a program established. Each purveyor's citizen involvement program is described in its Water Conservation Plan.

7. WATER CONSERVATION PLANS INCLUDED AS AN APPENDIX TO THE *WATER FORUM AGREEMENT* The Water Conservation Plans provide the way for water purveyors to identify and then report their progress toward the implementation of the BMP's and for all parties to confirm that the Conservation Element of the *Agreement* is being implemented. Water Forum's stakeholder representatives negotiated with each purveyor the specifics of that purveyor's Water Conservation Plan.

Components of the Water Conservation Plans are:

a. Description of how the purveyor will implement each BMP;

b. Annual targets, staffing, and budgets for each of the initial four years;

c. Description of how the purveyor will implement its citizen involvement program;

d. Past (at least from 1975 on) and projected total water use to the year 2030 - demonstrating consistency with assumptions used in *Water Forum Agreement* (see Appendix D for format); and

e. Past (at least from 1975 on) and projected per capita water use to the year 2030 (see Appendix D for format.).

8. IMPLEMENTATION OF WATER FORUM BMP'S FOR NEW OR EXPANDED SERVICE AREA A purveyor's agreed upon Water Forum Water Conservation Plan shall be implemented for its entire service area including future changed boundaries.[4]

[4] See City of Folsom Purveyor Specific Agreement (Section D) for further information on this item.

9. ANNUAL REPORTS Water purveyors will prepare annual reports on the implementation of water conservation activities as outlined in their Water Conservation Plans. These reports will be shared with the Water Forum Successor Effort.

a. Purveyors will annually report their conservation activities for prior year and compare total and per capita water use with their original projections. (i.e., updating the charts originally prepared for item 7 d and e above.)

b. If there were any significant differences from what water conservation activities or results were planned, an explanation of the differences will be included. If water conservation results were significantly less than anticipated, an indication of how the results will be achieved in the future will be described.

c. Each purveyor's progress toward BMP implementation will be annually reviewed and reported by the Water Forum Successor Effort.

10. UPDATING WATER CONSERVATION PLANS Purveyors will update their Water Conservation Plans every five years.

D. Specific Agreement on the Water Conservation Element for Municipal and Industrial Uses

All signatories will support, and where appropriate, participate in the Water Conservation Element as set forth above and as described in their Water Conservation Plans negotiated for the *Water Forum Agreement.* Purveyors' Water Conservation Plans are incorporated as Appendix J to this *Water Forum Agreement* and are on file at the Water Forum office.

AGRICULTURAL WATER CONSERVATION

In 1990, agriculture in Sacramento County contributed to nearly 48% of the water demand for the area. It is projected that the future water demand for agriculture will drop to approximately 29% by 2030. This is due to a number of reasons including the conversion of agricultural land to urban uses as anticipated by the adopted General Plans. Another reason for water use reduction is that agriculture in Sacramento County is projected to become more water efficient. By the year 2030 irrigation efficiencies are expected to increase by 5%.

The amount of water used by agriculture is determined by the crops grown, the type of irrigation system, and the incentives or regulations in place to increase irrigation efficiencies.

In the northwest section of Sacramento County the principal crop is rice. Water is supplied by the Natomas Central Mutual Water Company (NCMWC) which is a Central Valley Project (CVP) contractor. NCMWC has been conserving water since 1986 through the installation of recirculation systems which reduce water diversions while growing the same amount of crops. These systems have reduced water use in rice fields by 26%. In the future, NCMWC will continue to conserve surface water by conjunctive use. By pursuing this additional method, it is expected that another 5% could be saved. Other efforts, such as lined canals in sandy soil, tiered pricing, and other controls are expected to gain additional efficiencies.

In the southern section of Sacramento County, water is supplied principally through the pumping of groundwater. One incentive to reduce agricultural water use in this area has been the cost of electricity to pump groundwater. Since the early 1950's the south County agricultural irrigation districts (Galt, Clay, Omochumne-Hartnell) have been practicing water conservation by installing recirculating systems so water would not be lost at the end of the fields and drip irrigation systems for certain row crops. It is estimated that these methods have reduced water use by up to 50% compared to field irrigation. By implementing additional conservation measures it is expected that another 5% could be saved by 2030.

Much of the surface water currently used by agriculture in the Sacramento region is from the Central Valley Project (CVP). In addition, as provided for in the Purveyor Specific Agreement for South Sacramento County Agriculture, the agricultural irrigation districts (Galt, Clay, Omochumne-Hartnell) in the southern section of Sacramento County plan to divert and use up to 35,000 acre feet from Folsom-South Canal in years when the projected March to November unimpaired inflow to Folsom Reservoir is greater than 1,600,000 acre feet. This will augment their groundwater supplies. This surface water most likely will come from the CVP. Surface water from the CVP for agricultural use is subject to the conservation requirements of the CVP Improvement Act of 1992 including criteria for Best Management Practices (BMPs) for Agricultural Contractors.

Support for this diversion is linked to successful negotiation of an agricultural water conservation program. Specifics on the Water Forum's agricultural water conservation program will be negotiated by the Water Forum Successor Effort.

VI. GROUNDWATER MANAGEMENT ELEMENT

Developed jointly by the Sacramento Metropolitan Water Authority Groundwater Committee and the Sacramento Water Forum Groundwater Negotiation Team.

A. Intent

Our vital groundwater resource supplies over half the water used in the region. The purpose of a groundwater management plan is to protect the viability of that resource for both current and future users. To do so requires monitoring the amount of water withdrawn from the groundwater basin and promoting the use of groundwater in conjunction with surface water supplies to maximize the availability of both. This must be accomplished by creating publicly accountable governance structures which respect the rights of all groundwater users. Ideally, these structures should be established using existing authority and institutions.

This document contains recommendations by which to monitor the amount of groundwater which can be pumped from the basin over a long period without damaging the aquifer (sustainable yield). The Sacramento North Area Groundwater Management Authority was established in August 1998 using the existing authority of the City of Sacramento, the City of Folsom, City of Citrus Heights, and County of Sacramento through adoption of a Joint Powers Agreement. In the South Area and the Galt Areas of the County, negotiations for specific groundwater management arrangements will continue employing the principles of interest-based negotiation to provide all community interests the opportunity to participate in tailoring a groundwater management plan to fit each area's unique needs.

B. Recommendations Concerning Sustainable Yield

1. BACKGROUND ON SUSTAINABLE YIELD AND CONJUNCTIVE USE

Our vital groundwater resource must be protected. In addition, if managed in conjunction with the surface water available during wet years, the groundwater basin can provide storage capacity to bank water which can be used to meet demand in dry years. To achieve these objectives, recommendations must address two important factors, sustainable yield and conjunctive use.

Within the context of these recommendations, sustainable yield is defined as the amount of groundwater which can be safely pumped from the groundwater basin over a long period of time while maintaining acceptable groundwater elevations and avoiding undesirable effects which might include increased pumping costs, accelerated movement of underground pollutants, etc. Sustainable yield requires a balance between pumping and basin recharge and is expressed as the number of acre feet of water per year which can be pumped from the basin on a long-term average annual basis.

Conjunctive use is the planned management and use of both groundwater and surface water in order to improve the overall reliability of a region's total water supply. For example, in wet years when surface water is plentiful, groundwater pumping may be reduced or eliminated and only

surface water is used. The groundwater basin would be replenished in these wet years. In dry years when surface water is in short supply, the water that has been accumulating in the basin would be pumped for use and surface water diversions reduced or eliminated. Additional surface water diversions will be required to implement a conjunctive use program. Conjunctive use is expressed in acre feet per year.

The following purveyors utilize the groundwater basin for some or all of their water supply. There are also residents, businesses and agriculturalists who pump groundwater from the basin.

NORTH AREA: Arcade Water District, Arden Cordova Water Service (Arden area), Carmichael Water District, Citizens Utilities Company of California (portion), Citrus Heights Water District, City of Sacramento, Del Paso Manor Water District, Fair Oaks Water District, McClellan Air Force Base, Sacramento International Airport, Northridge Water District, Orange Vale Water Company, Rio Linda/Elverta Community Water District, Sacramento County WMD (portion).

SOUTH AREA: Arden Cordova Water Service (Cordova area), Citizens Utilities Company of California (portion), City of Sacramento, Elk Grove Water Works, Florin County Water District, Fruitridge Vista Water Company, Mather Air Force Base, Omochumne-Hartnell Water District (portion), Sacramento County WMD (portion), Tokay Park Water Company, Sacramento County Water Agency, Zone 40.

GALT AREA: City of Galt, Clay Water District, Galt Irrigation District, Omochumne-Hartnell Water District (portion).

2. RECOMMENDATION ON SUSTAINABLE YIELD: NORTH AREA

The recommended estimated average annual sustainable yield is 131,000 acre feet. This represents the year 1990 pumping amount. To help meet year 2030 demands, a program would be implemented to use the groundwater basin conjunctively with surface water supplies.

3. RECOMMENDATION ON SUSTAINABLE YIELD: SOUTH AREA

The recommended estimated average annual sustainable yield is 273,000 acre feet. This represents the year 2005 projected pumping amount and is 23,000 acre feet more than the 1990 pumping amount. The projected 2005 pumping amount for the South Area took into consideration the cost of delivery of surface water and the impacts which occur due to the lower stabilized groundwater levels. To meet year 2030 demands, a program would be implemented to use the groundwater basin conjunctively with surface water diversions.

4. RECOMMENDATION ON SUSTAINABLE YIELD: GALT AREA

The recommended estimated average annual sustainable yield is 115,000 acre feet.[5] This represents the year 1990 pumping amount. Conjunctive use would be implemented, dependent upon the availability of surface water, to enhance groundwater levels.

C. Recommendations Concerning a Groundwater Management Governance Structure

1. BACKGROUND ON GROUNDWATER RIGHTS

There are fundamental differences between surface water rights and groundwater rights that require any groundwater management plan to be tailored to reflect those differences. For example, most appropriative surface water rights are governed by a complex, statewide statutory system. Since 1914, surface water appropriators have been required to obtain a permit from the State Water Resources Control Board and abide by the permit conditions to use water. Surface water rights may be forfeited by disuse, i.e., the failure to exercise those rights. Surface water users must also be able to demonstrate reasonable and beneficial use of water, as these terms are defined in California water law, or run the risk of losing some or all of their water rights.

In contrast, there is no statewide statutory scheme for groundwater and no permit system. While groundwater must also be put to beneficial use, groundwater rights are not per se lost by disuse. The regulation of groundwater use is primarily a local government responsibility. In Southern California, statutory and judicially mandated or authorized groundwater management is, in fact, the rule rather than the exception. In recent years, encouraged by state legislation and recent judicial decisions, areas of Northern California have increasingly viewed groundwater management as an appropriate means by which local areas can protect their groundwater resources. Under current legislation, the County of Sacramento as well as the cities of Sacramento, Folsom and Citrus Heights have groundwater management authority.

Groundwater rights fall into one of three general categories. The first category of groundwater rights are "overlying rights." An overlying right is the right of a land owner to take water from the basin underneath the land for reasonable, beneficial purposes on the land, thus the term overlying rights. Overlying rights exist by virtue of land ownership and are correlative to the overlying rights of other land owners. "Unexercised overlying rights" are those overlying water rights that are not currently being utilized. Because both exercised and unexercised overlying rights are held as part of the ownership of land, they are "vested" rights in the sense that they pass from owner to owner with the sale of the land; however, such rights are subject to reduction by prescription when no surplus water is available, as discussed below.

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[5] In the Galt Area, the development of surface water for conjunctive use and reduction in groundwater pumping due to conservation and modified agricultural practices may take several years to accomplish. During this interim period, the average annual usage may exceed the recommended sustainable yield. It should be recognized that this recommendation for the Galt Area is a *long-term* goal.

The second type of right to groundwater is an "appropriative right." This right is gained through the extraction and utilization of water for reasonable, beneficial purposes. Because appropriative rights are not held as part of the ownership of the overlying land, the rights of an appropriator depend on the actual taking of water for reasonable, beneficial use. As between two appropriators, the relative priority system of "first in time, first in right" applies. Because California law favors the greatest number of beneficial uses of water, public entities may gain appropriative rights by pumping groundwater for "municipal" purposes without actually owning a substantial portion of the overlying land. So long as there is a surplus in the groundwater basin, appropriative rights are not adverse to overlying rights.

The third type of right to groundwater, known as a "prescriptive right," comes into existence only if the groundwater basin has no "surplus" water available. Prescriptive rights in groundwater law are rights gained by appropriating non-surplus water for the statutorily prescribed period. A basin is in a state of "surplus" when the amount of water being extracted from it is less than the maximum amount that could be drawn without adverse effects on the basin's long-term supply. An appropriative right can ripen into a prescriptive right if the appropriator takes non-surplus water for the statutorily prescribed period. While private individuals and entities may lose their groundwater rights to others who gain a prescriptive right against them, California law states that public entities cannot lose their water rights through prescription.

In determining whether a basin has surplus water, the courts have looked to the basin's "sustainable yield." Sustainable yield is the maximum amount of water which can be withdrawn annually from a groundwater supply under a given set of circumstances without causing an undesirable effect. Under the best case scenario, when overlying rights holders are ready to exercise their unexercised rights, or when the city, county, or other entity seeks to appropriate more groundwater for municipal purposes, the pumping in the basin will not exceed the basin's sustainable yield. As long as surplus water exists and the basin maintains sustainable yield, all groundwater rights are protected: overlying rights are not lost by prescription; appropriative rights may be fully exercised; and no user gains a prescriptive right against another.

Under the "worst case scenario," when overlying rights holders are ready to exercise their unexercised rights, or when the city, county, or other entity seeks to appropriate more groundwater for municipal purposes, basin-wide pumping will exceed sustainable yield. The lack of surplus water serves as a signal that overlying rights may be lost through prescription and that appropriative rights may begin to ripen into prescriptive rights. In short, the inability to maintain a sustainable yield creates the conditions that have historically given rise to litigation and groundwater basin adjudication. Under this worst case scenario, the "train wreck" that the Water Forum was established to prevent -- divisive, expensive, and protracted litigation and adjudication -- will have occurred.

As discussed in detail below, this Groundwater Element seeks to avoid the train wreck by calling for arrangements to manage the basin so as to prevent basin-wide pumping in excess of sustainable yield. Indeed, the primary purpose of these arrangements is to manage the limited groundwater resources such that the basin is never threatened by the inability to maintain sustainable yield.

Recognizing the unique and varied nature of groundwater rights, the surface water priority system of "first in time, first in right" does not apply to the policies and procedures effecting groundwater management. Instead, in establishing a groundwater management plan, the challenge is to create a framework that: (1) allows current users to continue to exercise their rights; (2) recognizes both exercised and unexercised overlying rights are vested rights in the sense that they pass from owner to owner with the sale of the land, as discussed above; (3) provides that similarly situated present and future groundwater users will be treated the same; and (4) creates certainty for all current and future users by ensuring that the basin is maintained at its sustainable yield. Ultimately, current groundwater users, future groundwater users, and those who rely on groundwater for conjunctive use must recognize that they all share a common interest -- the protection, preservation, and enhancement of the groundwater basin.

2. FUNDAMENTAL ASSUMPTIONS

The recommendations contained in this document are based on the following thirteen assumptions:

a. The purpose of groundwater management is to maintain access to a safe and reliable supply of water, either through continued use of groundwater, a conjunctive use program or access to an alternative satisfactory source of supply.

b. For groundwater users in Sacramento County and adjacent areas, alternative satisfactory sources of supply should be developed which are both fully accessible and economically feasible.

c. In accordance with existing law, a groundwater management program must:

* respect the existing rights of any person, association, corporation, municipality or public district;

* recognize the vested nature of both exercised and unexercised overlying rights (as discussed in the background section of this Element);

* recognize that given the vested nature of all overlying rights, the surface water priority system of "first in right" does not apply to groundwater pumping; and

* ensure that the groundwater basin is managed in such a way as to promote the continued health and stability of that resource for the benefit of all current and future users.

d. The hydrology of the Sacramento region suggests three groundwater sub-areas within the basin, each with different problems and conditions. The groundwater management governance structure should recognize these differences and provide for local control in each sub-area of the basin so as to address these varying problems and conditions most effectively.

e. At the same time, adequate provisions must be made to insure over-all coordination of policies and activities among the three sub-areas of the basin.

f. It is impossible to foresee the future or to predict each circumstance which might arise in management of the groundwater basin. Therefore, it is the goal of these principles and recommendations to outline a basic framework for groundwater management and to discuss options to insure basin-wide coordination. In the North Area of Sacramento County, the Sacramento North Area Groundwater Management Authority will have to exercise professional competence and good judgement in addressing specific problems and issues. In the South Area and the Galt Area, those entities which assume groundwater management responsibilities will have to do likewise. It is not the purpose of this document to anticipate these specific problems and dictate solutions. To do so would weaken the authority of the various groundwater management entities and undermine the flexibility which they must have in order to discharge their responsibilities.

g. In discharging their planning and management responsibilities, the groundwater management entities must consider the fact that there are unexercised rights holders who may begin to exercise their rights at some future date, either before or after the term of the *Water Forum Agreement* (year 2030). Consistent with the *Water Forum Agreement*, these entities must manage the groundwater basin with such eventualities in mind, taking into account both current and future water needs.

All groundwater rights holders, whether their rights are exercised or unexercised, share the common goal of maintaining the long-term viability of the basin. To insure that all current and future users are treated equitably, including both those currently exercising groundwater rights and those with unexercised rights, the groundwater management plans must neither (a) reward or penalize exercised rights holders for electing to exercise their rights nor (b) reward or penalize unexercised rights holders for electing not to exercise their rights immediately. Accordingly, when previously unexercised rights are exercised in the future, the same conditions and burdens, financial and otherwise, will apply equally to similarly situated groundwater rights holders within the same sub-area who receive the same level of benefit, regardless of the date when their rights were first exercised.

h. Effective groundwater management will require the use of surface water. Therefore, the groundwater management governance structure must address relationships with those agencies which can deliver such surface water and specify how the interests of these agencies will be represented in the governance structure.

i. The groundwater management governance structure should facilitate participation by water agencies with specific and relevant interest in the groundwater governance structure outside of Sacramento County and encourage cooperation and collaboration with such agencies.

j. Groundwater makes up a portion of the total water resource identified to meet projected water demands in 2030. These water demands are based primarily on the

General Plans approved by the respective city councils and the county boards of supervisors as of June, 1996.

k. The authority to make land use decisions is vested in county boards of supervisors and city councils. This document recognizes that fact and assumes that these entities will continue to exercise this authority.

l. This document assumes that, as a part of the Water Forum discussions, a program will be negotiated to insure the on-going monitoring and implementation of the *Water Forum Agreement*. This program is currently referred to as the "Water Forum Successor Effort." The Successor Effort will be based on the principles of collaboration and consensus and will not entail formalized legal authority to mandate or regulate actions by the signatories to the *Water Forum Agreement*. The Successor Effort may or may not include some permanent entity through which monitoring functions are carried out.

3. GOVERNANCE OPTIONS

Taking these assumptions into account, the Sacramento Metropolitan Water Authority (SMWA) Groundwater Committee (Committee) and the Water Forum Groundwater Negotiation Team (Team) reviewed options to implement a groundwater management governance structure including:

* a voluntary plan under AB 3030

* existing options provided for in the Sacramento County Water Agency (SCWA) Act but never implemented;

* modification of these existing options which would require no action by the legislature or only a limited amendment of the groundwater provisions of the Act;

* options based upon joint powers agreements as provided for in state statutes; and

* special legislation in the State Assembly and Senate.

In considering each of these alternatives, the Committee and the Team applied three standards: what is simplest, what is most efficient and, given political realities, what can be implemented most expeditiously. The Committee and the Team also sought the advice of legal counsel to be sure that recommendations concerning a groundwater management governance structure would meet all requirements of law and regulation (as of September, 1996).

After exhaustive review and discussion, the Committee and the Team determined that the Joint Powers Agreement which established the Sacramento North Area Groundwater Management Authority is the option which best meets the three standards previously identified. Recognizing the differences in circumstances and conditions in other areas of the County, the Committee and the Team also determined that the Sacramento North Area arrangements should not serve as a

template for the South and Galt Areas and negotiations concerning groundwater arrangements in the South Area and the Galt Area should continue, as discussed below.

Concerning the Joint Powers Agreement which established the Sacramento North Area Groundwater Management Authority, it is important to note the law requires that all of the participating public agencies must have independent authority to exercise whatever powers are to be jointly exercised. For purposes of groundwater governance, the two essential powers are authority to manage groundwater and authority to establish a regulatory fee. The public agencies in Sacramento County which hold these powers are Sacramento County, the City of Sacramento, the City of Folsom, and City of Citrus Heights.

The Sacramento North Area Groundwater Management Authority was established in August 1998 using the existing authority of the City of Sacramento, the City of Folsom, City of Citrus Heights, and County of Sacramento through adoption of a Joint Powers Agreement.

4. SCHEDULE FOR IMPLEMENTATION

The SMWA Groundwater Committee and the Water Forum's Groundwater Negotiation Team noted the fact that:

a. Current conditions affecting the importation of surface water and use of groundwater in the North Area of the County differ significantly from those in the South Area and the Galt Area: (NOTE: For purposes of this document, these areas are defined as follows: North Area - north of the American River; South Area - between the American and the Cosumnes Rivers; Galt Area - south of the Cosumnes.)

(1) The North Area is closer to build-out.

(2) Delivery systems for surface water are already being expanded and utilized to a greater extent in the North Area.

(3) Almost all of the North Area, including agriculture, is served by organized purveyors. Thus, the institutional infrastructure necessary to implement groundwater management is further developed in the North Area.

(4) The Sacramento Metropolitan Water Authority which includes eight of the 12 water purveyors in the North Area wishes to implement a ground water management plan as soon as possible and has already taken action to do so.

b. Given these and other significant differences in the opportunities and constraints in the North Area compared to the rest of Sacramento County:

(1) The schedule for implementation of groundwater management arrangements in each Area will differ.

(2) The Sacramento North Area Groundwater Management Authority was established in August 1998.

c. It is important to note that discussions, involving all parties interested in the negotiation of groundwater management arrangements in the South Area and the Galt Area will continue. These discussions, employing the principles of interest-based negotiation, are part of a public process designed to provide all community interests the opportunity to participate in tailoring a groundwater management plan to fit each area's unique circumstances. The goal of these discussions is to reach agreement on satisfactory groundwater management arrangements in the South Area and the Galt Area as soon as feasible.

d. Again, it should also be noted that recommendations contained in this document for groundwater management in the North Area are not a "template" to be imposed on the South or Galt Areas. While some North Area recommendations may be useful in other areas of the county, groundwater management plans, including an appropriate governance structure and financial arrangements, must be developed and crafted to meet the unique conditions of the South and the Galt Areas.

e. Assuming that, at a future date, satisfactory joint powers agreements and/or memoranda of understanding are negotiated which provide for the participation in a groundwater management program by purveyors outside of Sacramento County, those purveyors may be represented in the groundwater management program and any related governance structure as specified in those joint powers agreements or memoranda of understanding.

5. RECOMMENDATIONS ON THE GROUNDWATER MANAGEMENT GOVERNANCE STRUCTURE: GENERAL

Based upon careful consideration of the fundamental assumptions, review of the available options for a groundwater management governance structure, discussion with engineering and other technical consultants and guidance provided by legal counsel, the Sacramento Metropolitan Water Authority Groundwater Committee and the Sacramento Water Forum Groundwater Negotiation Team make the following recommendations.

a. The Sacramento North Area Groundwater Management Authority ("Authority") and responsible groundwater management entities in the South Area and the Galt Area will exercise the right to manage groundwater for the benefit of current and future users, including overlying users with unexercised rights. In order to do so, the Authority and other responsible entities will use economic measures (incentives and disincentives) to encourage conservation and raise revenues necessary to purchase surface water for implementation of conjunctive use programs. For example, groundwater users may pay a per acre foot fee for water consumptively used. Such a fee encourages water management, rewards water conservation, protects overlying rights, and does not penalize those who have not yet fully exercised their overlying water rights. Of course, a per acre foot fee on

water consumptively used is just one option that the Authority or other groundwater management entity may elect to implement.

It will be up to each Authority or other entity to decide what mechanisms work best in their particular area to raise revenues and encourage conservation.

b. Provisions must be made to insure coordination of management policies and activities among all three areas of the groundwater basin and to facilitate cooperation among the North, South and Galt Areas in all matters of mutual interest. (See Section 8 later in this Groundwater Management Element.)

c. The Sacramento North Area Groundwater Management Authority and other groundwater management entities should be provided with sufficient technical support and/or staff to enable them to discharge their groundwater management responsibilities.

d. All meetings of the Sacramento North Area Groundwater Management Authority and other groundwater management entities shall be open to the public, subject to the provisions of the Brown Act.

e. The purpose of the Sacramento North Area Groundwater Management Authority and other groundwater management entities shall be to:

(1) maintain the long-term sustainable yield of the area of the groundwater basin under its delegated jurisdiction

(2) manage the use of groundwater in the area of the basin under its delegated jurisdiction and facilitate implementation of an appropriate conjunctive use program by the area purveyors

(3) coordinate efforts among all participants in the local groundwater management plan to devise and implement strategies to safeguard groundwater quality

(4) work collaboratively with the responsible groundwater management entities in other Areas to promote coordination of policies and activities throughout the basin.

f. In order to fulfill these purposes within their respective areas, the Sacramento North Area Groundwater Management Authority and groundwater management entities in other areas of the basin should have the authority to:

(1) collect and monitor data on annual pumping amounts

(2) recommend annual extraction goal based on the availability of surface water

(3) monitor implementation of annual "puts" and "takes"

(4) monitor the migration of toxic plumes

(5) facilitate collaboration among purveyors to identify the area's needs and develop a plan to meet those needs

(6) determine allocation of administrative costs

(7) determine allocation of water costs on a project by project basis

(8) based upon determinations of benefit, establish regulatory fees to cover water costs and administrative costs.

g. Each of the three areas of the groundwater basin is served by different water purveyors. The responsible groundwater management entity in each area of the basin must reflect this fact. Therefore, the composition of each entity will vary.

h. Commercial/industrial self-supplied groundwater users (i.e., major industrial users which pump their own groundwater) and agricultural pumpers shall be represented on the responsible groundwater management entity in each of the three areas of the basin.

i. Sec. 10910 of the Water Code, as amended by Senate Bill 901, requires cities and counties to ask a public water purveyor to provide an assessment of whether its total projected water supplies can meet the anticipated increase in water demand which would be created as the result of a proposed development project. (The size of projects subject to this requirement is set forth in the code.)

Nothing in these recommendations is intended to modify or impair the existing authority of county boards of supervisors or city councils to make land use decisions. At the same time, in order to discharge its responsibility to manage the area of the basin under its delegated jurisdiction, the Sacramento North Area Groundwater Management Authority and other groundwater management entities must be informed of proposed development projects which may affect water demand in its area. Therefore, at the same time that a public water purveyor responds to a city's or a county's request for an assessment, it shall send a copy of its assessment report to the Authority or the groundwater management entity in whose jurisdiction the proposed development would take place.

As indicated above, the Sacramento North Area Groundwater Management Authority was established in August 1998. The Joint Powers Agreement creating the Authority was based upon the recommendations set forth in the following two sections of this document. The provisions in these two sections have already been implemented but they are included here for reference.

6. RECOMMENDATIONS ON THE GROUNDWATER MANAGEMENT GOVERNANCE STRUCTURE: NORTH AREA --- GENERAL

a. The Sacramento North Area Groundwater Management Authority should be created as soon as possible by a Joint Powers Agreement among public agencies which have the authority to manage groundwater and to establish a regulatory fee: i.e., the City of Sacramento, the City of Folsom, the City of Citrus Heights and Sacramento County.

b. The Joint Powers Agreement shall remain in effect until terminated by one of the signatory agencies. To do so, the signatory agency intending to terminate the agreement must give ninety days written notice to all other signatories. Upon termination, the assets and liabilities of the joint powers authority become the responsibility of the signatory agencies in whatever proportion is set forth in the joint powers agreement.

c. The Sacramento North Area Groundwater Management Authority shall have the authority, in conformance with existing water rights and consistent with the *Water Forum Agreement*, to exercise the delegated right to manage groundwater in the area of the basin under its jurisdiction so as to protect the future viability of the basin as a water resource.

d. In order to meet legal requirement, all members serving on the Sacramento North Area Groundwater Management Authority must be appointed by the public agencies which are signatories to the joint powers agreement: i.e., the City of Sacramento, the City of Folsom, the City of Citrus Heights and Sacramento County.

e. In the North Area, each organized purveyor shall be represented on the Authority. Representatives shall be selected from among the elected members of the purveyor's board of directors. In the case of an investor-owned utility, the representative shall be a member of the board of directors or the designee thereof.

f. Prior to the appointment of the representative of each purveyor, the purveyor shall submit a recommended appointment for their representative to the appointing agency. The appointing agency shall give consideration to such recommendations but shall retain the absolute discretion to appoint any person satisfying the criteria set forth in Paragraphs h (1), (3) and (4) below.

g. In order to meet legal requirements, all members serving on the Sacramento North Area Groundwater Management Authority do so at the pleasure of the appointing public agency.

h. The joint powers agreement creating the Sacramento North Area Groundwater Management Authority shall specify membership on the Authority as follows:

(1) One representative from each of the following organized water purveyors (selected from among the elected members of the purveyor's board of directors or,

in the case of an investor owned utility, a member of the board of directors or designee thereof):

Arcade Water District
Arden Cordova Water Service
Carmichael Water District
Citizens Utilities Company of California
Citrus Heights Water District
City of Folsom
City of Sacramento
Del Paso Manor Water District
Fair Oaks Water District
Natomas Central Mutual Water Company
Northridge Water District
Orange Vale Water Company
Rio Linda/Elverta Community Water District
Sacramento County Water Maintenance District
San Juan Water District

(2) In order to meet the legal requirement that all members serving on the Sacramento North Area Groundwater Management Authority be appointed by the public agencies which are signatories to the joint powers agreement:

(a) The City Council of the City of Citrus Heights shall appoint the representative of the Citrus Heights Water District.
(b) The City Council of the City of Folsom shall appoint its own representative.
(c) The City Council of the City of Sacramento shall appoint the representatives of:

- Arcade Water District
- Arden Cordova Water Service
- Citizens Utilities Company of California
- City of Sacramento
- Del Paso Manor Water District
- Natomas Central Mutual Water Company

(d) The Sacramento County Board of Supervisors shall appoint the representatives of :

- Carmichael Water District
- Fair Oaks Water District
- Northridge Water District
- Orange Vale Water Company
- Rio Linda/Elverta Community Water District

- Sacramento County Water Maintenance District
- San Juan Water District

(3) One representative of North Area agriculture to be appointed by the Sacramento County Board of Supervisors.

(4) One representative of commercial/industrial self-supplied groundwater users to be appointed by the City Council of the City of Sacramento.

(5) At such time as satisfactory joint powers agreement*s* and/or memoranda of understanding are negotiated which provide for the participation in the groundwater management program by purveyors outside of Sacramento County, a representative(s)of those purveyors (the City of Roseville, Placer County Water Agency, South Sutter Water District, etc.) may be appointed to the Sacramento North Area Groundwater Management Authority under any arrangement specified in the Joint Powers Agreement(s) or memoranda of understanding.

i. In addition, the Joint Powers Agreement creating the Sacramento North Area Groundwater Management Authority should specify:

(1) voting on the Authority be structured as follows:

(a) Each representative shall have one vote

(b) All items pertaining to finances must be approved by a double majority: i.e., a majority of all of the members of the Authority (voting on the basis of one person/one vote)

And a majority of votes weighted on the basis of total water production.

(NOTE: For purposes of determining regulatory fees or charges to support the administrative costs, total water production means the combined surface water and groundwater delivered by retail providers, together with that water produced by agricultural and self-supplied users for use within the boundaries of the joint powers authority. For purposes of determining regulatory fees or charges to support water costs, total water production means the groundwater portion only of the total amount of water delivered by retail providers, together with that groundwater produced by agricultural and self-supplied users for use within the boundaries of the joint powers authority.)

(NOTE: The weighted vote of the representative for commercial/industrial self-supplied groundwater users shall be weighted on the basis of total water production by <u>all</u> such users combined. The weighted vote for the representative for agriculture shall be weighted on the same basis.)

(NOTE: To the extent that a classification of water producers/pumpers [e.g. agriculture] pays a differential rate [see Section 7, b, (1) and 7, c, later in this Element], the weighted vote of that representative shall be adjusted accordingly. For example, each acre foot pumped equals one vote. Agriculture pumps a total of 100,000 acre feet but pays only 20% of the regulatory fees established for other pumpers. The vote of the representative for agriculture would be calculated at 20,000 votes, one fifth of that of other representatives. It is important to note that in this example the figure of 20% is used for illustrative purposes only. No determination on whether agriculture pays a differential rate or what that rate might be has been made.)

Approval of all other items requires only a majority of all the representatives on the Authority.

j. The Authority should have the discretion to invoke alternative dispute resolution procedures in any circumstances which it deems appropriate. (See also Item 9, later in this Element.) Such procedures might include review of any dispute or disagreement by an ad hoc subcommittee of the Authority, use of an outside neutral third party, etc.

7. RECOMMENDATIONS ON THE GROUNDWATER MANAGEMENT GOVERNANCE STRUCTURE: NORTH AREA - FINANCE

It is probable that in the North Area, the implementation of a groundwater management plan will require the importation of surface water. The importation of surface water will generate attendant costs. In addition, there will be costs related to administering the groundwater management program. Therefore, the following recommendations are made:

a. The Sacramento North Area Groundwater Management Authority shall establish a rate structure, having determined:

(1) The basis on which the rate is calculated (e.g., total water production, number of connections, etc.) and

(2) Whether the rate is to be applied under a tiered benefit system to take into account a groundwater user who receives a greater benefit than a user who receives a lesser benefit (e.g., maximum benefit, intermediate benefit, basic benefit.) If the Authority chooses to implement a tiered benefit system, it shall define tier or level of benefit as it deems appropriate, given the circumstances in the area of the basin under its jurisdiction.

b. The Sacramento North Area Groundwater Management Authority shall be responsible for determining the allocation of and the rate for regulatory fees or charges to cover water costs and administrative costs.

(1) Administrative costs (e.g., staffing, data collection, monitoring, studies, etc.)

There may be a differential rate applied to groundwater as opposed to surface water use. However, the rate for each type of non-agricultural water shall be applied consistently within that category of water.

(2) Water costs (e.g., the cost of water, pumping and treatment costs and other costs related to a conjunctive use program)

During the first five years of operation, the Sacramento North Area Groundwater Management Authority shall be prohibited from establishing regulatory fees to fund water cost payments that exceed an annual average of $5.00 per acre foot (minimum $0.00 - maximum $10.00) of groundwater pumped spread against approximately 100,000 acre feet of pumping per year.

c. In the North Area, agricultural pumpers may pay a percentage of the regulatory fee established for non-agricultural pumpers for administrative and water costs. This percentage shall be determined by the Sacramento North Area Groundwater Management Authority. (NOTE: In other areas of the state, agricultural pumpers generally pay a lower rate. This differential rate is based on such factors as: agriculture pays less for contract water; agriculture could use untreated water and thus avoid treatment related costs, etc.)

d. In discharging its planning and management responsibilities, the Authority must consider the fact that there are unexercised rights holders who may begin to exercise their rights at some future date, either before or after the term of the *Water Forum Agreement* (year 2030). Consistent with the *Water Forum Agreement*, the Authority must manage the groundwater basin with such eventualities in mind, taking into account both current and future water needs.

When overlying rights holders with unexercised rights begin to exercise those rights, they will be treated exactly the same as similarly situated users in the North Area who are currently exercising their rights; that is, when previously unexercised rights are exercised in the future, the same conditions and burdens, financial or otherwise, will apply equally to similarly situated groundwater rights holders within the North Area who receive the same level of benefit, regardless of date when their rights were first exercised. For example, those with unexercised rights will pay the then-existing regulatory fees when they elect to exercise their rights as their contribution to the groundwater management program -- just like other similarly situated users in the North Area who receive the same level of benefit.

e. In the North Area, a groundwater extraction facility that is used to provide water for domestic purposes to a single-unit residence or for irrigation of less than 2.5 acres shall be exempt from any regulatory fee for water or administrative costs.

f. The Authority shall decide whether other exemptions from participation in a groundwater management plan (based on some minimum amount of groundwater pumped for consumptive use) shall be allowed.

g. Any action (past and/or future) taken by a groundwater purveyor or pumper which provides a benefit to the basin should be reviewed by the Authority on an annual basis and taken into account by the Authority (as appropriate) when determining regulatory fees.

h. Any pumping of groundwater for remediation of hazardous substances under a regulatory agreement or governmental order is not a consumptive use subject to a regulatory fee or other financing mechanism discussed in this agreement, unless subsequently used for direct consumptive use or returned to the river for sale downstream.

i. Any individual, business or other entity which has been assessed a regulatory fee and believes the regulatory fee to be unwarranted or unfair, may seek reconsideration by the Authority in accordance with procedures to be developed by the Authority (and similar to those used by other public agencies).

8. RECOMMENDATIONS TO INSURE BASIN-WIDE COORDINATION AMONG THE LOCAL GROUNDWATER MANAGEMENT ENTITIES

The groundwater management entity in each area of the basin (North, South and Galt) will be independent of one another. But, while the hydrology of the Sacramento region suggests that there are three groundwater sub-areas within the basin, each sub-area overlies the **same** basin. Therefore, there must be a mechanism to:

* Safeguard the viability of the total basin through coordination of policies and activities across the three sub-areas of the basin

* Facilitate cooperation among the three sub-areas on projects or programs of mutual benefit

* Promote efficient operation through cost-sharing arrangements, shared staff, equipment, facilities, etc. if possible and appropriate

* Facilitate resolution of any inter-area disagreement in conformance with an agreed upon model for dispute resolution. (See Section 9 later in this Element.)

A variety of measures or combinations of measures which might be used to accomplish these four objectives have been considered by the Committee and the Team including but not limited to:

* No formal mechanism for coordination: each situation to be addressed on an ad hoc basis by the appropriate groundwater management entities in each sub-area of the basin

* A standing inter-area coordinating committee composed of representatives of the appropriate groundwater management entities who meet regularly (or only as necessary)

* Mandatory joint meetings of area representatives

* Informal or formal coordination as needed through the Water Forum successor effort

Based upon review and discussion of all available options, the following recommendation is made.

* Within one year of the initiation of the Sacramento North Area Groundwater Management Authority, representatives of the Authority shall meet with representatives of other entities which have groundwater management responsibilities in the South Area and the Galt Area to develop and adopt appropriate measures to ensure ongoing coordination of policies and activities in the three sub-areas of the basin.

9. RECOMMENDATIONS CONCERNING ALTERNATIVE DISPUTE RESOLUTION

The *Water Forum Agreement* is a complex document negotiated by the representatives of the many stakeholder organizations over a five year period. No agreement, however, no matter how complex, can anticipate every possible changing condition which might arise in the future or how these changed conditions may impact the terms of the *Agreement*. Concerns or disagreements among the stakeholders may arise and these must be addressed in a direct and timely manner. At the same time, it is important to safeguard the integrity of the *Agreement* and the delicate balance of interests which it represents. Therefore, the following recommendations on alternative dispute resolution are made concerning:

* disputes between parties represented on the Sacramento North Area Groundwater Management Authority

* disputes between groundwater management entities in different sub-areas of the basin.

Nothing in these recommendations shall preclude any party from exercising their legal rights by filing an action in a court of competent jurisdiction concerning any item at issue. However, before doing so, all persons, associations, corporations, districts, municipalities or public agencies represented on the various groundwater management entities throughout the basin agree to participate in good faith in these alternative dispute resolution procedures.

DISPUTES AMONG PARTIES REPRESENTED ON THE SACRAMENTO NORTH AREA GROUNDWATER MANAGEMENT AUTHORITY

a. Within six months of its inception, the Sacramento North Area Groundwater Management Authority shall discuss, develop and adopt an alternative dispute resolution program and procedures.

b. Participation in such a program shall be mandatory for all persons, associations, corporations, districts, municipalities or public agencies represented on the North Area Authority.

c. These alternative dispute resolution procedures shall provide for:

(1) If the disagreement pertains to the substance of the *Water Forum Agreement*, timely consultation with the Water Forum successor effort on the cause and current status of the disagreement as well as strategies which may lead to a resolution of the problem;

(2) Prompt response by the Authority when any party invokes alternative dispute resolution procedures;

(3) If the disagreement cannot be resolved by the Authority itself, use of an outside neutral third party (i.e., a mediator) to assist the parties in working toward a satisfactory resolution;

(4) Completion of all procedures within sixty to ninety days, unless the parties to the dispute agree to extend this timeline; and

(5) Timely notice to the Water Forum Successor Effort that alternative dispute resolution procedures have been initiated and the reasons therefor.

DISPUTES BETWEEN GROUNDWATER MANAGEMENT ENTITIES IN DIFFERENT SUB-AREAS OF THE BASIN

a. Within six months of initiation of agreed-upon groundwater management plans in the South Area or in the Galt Area, the appropriate groundwater management entities shall meet together and establish a process to discuss, develop and adopt alternative dispute resolution procedures which will be implemented in any dispute or disagreement which might arise between or among these groundwater management entities.

b. Implementation of these procedures by these entities in any dispute or disagreement shall be mandatory.

c. These procedures shall provide for:

(1) If the disagreement pertains to the substance of the *Water Forum Agreement*, timely consultation with the Water Forum Successor Effort on the

cause and current status of the disagreement as well as strategies which may lead to a resolution of the problem;

(2) If the disagreement cannot be resolved by the groundwater management entities themselves, use of outside neutral third party (i.e., a mediator) to assist the entities in working toward a satisfactory resolution;

(3) Completion of all procedures within sixty to ninety days, unless the entities themselves agree to extend this timeline; and

(4) Timely notice to the Water Forum Successor Effort that alternative dispute resolution procedures have been initiated and the reasons therefor.

d. These procedures shall be adopted by the groundwater management entities not later than one year after the initiation of agree-upon groundwater management plans in the South Area and/or the Galt Area.

10. RECOMMENDATIONS TO INSURE ON-GOING COLLABORATION BETWEEN THE LOCAL GROUNDWATER MANAGEMENT ENTITIES AND THE WATER FORUM SUCCESSOR EFFORT

As noted above, this document assumes that a permanent Successor Effort will be created and charged with the responsibility of overseeing, monitoring and reporting on implementation of the *Water Forum Agreement*. In order to discharge this responsibility, the Successor Effort must work closely with the local groundwater management entities throughout the basin. This will require a full sharing of all information pertaining to the groundwater basin and consultation, as appropriate. Therefore, the following recommendations are made.

a. Representatives of the Sacramento North Area Groundwater Management Authority and the Successor Effort shall meet together to discuss and adopt appropriate measures to insure an on-going exchange of information and collaboration on all matters of mutual interest and concern.

b. When a groundwater management plan becomes operational in the South Area and/or the Galt Area, a similar meeting between the Successor Effort and the appropriate groundwater management entities shall be convened within three months of the inception of the new groundwater management plan.

11. SPECIFIC AGREEMENT ON THE GROUNDWATER ELEMENT

All signatories to the *Water Forum Agreement* will support and, where appropriate, participate in the Groundwater Management Element as set forth above.

VII. WATER FORUM SUCCESSOR EFFORT ELEMENT

A. Intent

Given the complexity of the issues, level of detail, number of signatories, the duration of the *Water Forum Agreement* and the changes that will inevitably occur between now and the year 2030, stakeholder representatives have concluded that a mechanism must be created to ensure actual implementation of the *Agreement* over the next three decades.

B. Purpose

The Water Forum Successor Effort is responsible for overseeing, monitoring and reporting on the implementation of the *Water Forum Agreement*. It will continue the interest-based collaborative process successfully used to develop the *Water Forum Agreement*. Consistent with that process, **the Water Forum Successor Effort will have no independent governing or regulatory authority.**

C. Modification of the *Water Forum Agreement*

The Water Forum Successor Effort has no independent authority to alter the *Water Forum Agreement*. At the same time, the Successor Effort must be able to respond to the changing conditions or other unforeseen circumstances which will arise over the next thirty years. The *Agreement* may be changed only by the signatories employing the same interest-based collaborative process used to negotiate the original A*greement*. The Water Forum Successor Effort will facilitate and coordinate such negotiations, should they prove necessary.

It should be noted that Specific Agreements found in Section Five of the *Water Forum Agreement* cannot be changed or modified without the expressed approval and consent of the entity whose interests would be affected by the change.

D. Membership

Membership in the Successor Effort will be composed of representatives of those entities which are signatories to the *Water Forum Agreement* including business, agricultural and environmental organizations, citizen groups, water purveyors and local governments.

E. Characteristics and Responsibilities of Representatives

As noted, the Successor Effort will continue the interest-based process used successfully in developing the *Water Forum Agreement*. Therefore, it is important that individuals selected as representatives evidence the following characteristics:

- Commitment to the discipline of interest-based problem solving;
- Willingness to make the necessary time available; and
- Willingness to work collaboratively with others.

Because the effectiveness of the Successor Effort will depend upon cooperation and collaboration among all participants, representatives will observe the following guidelines:

- Listen carefully and openly discuss issues with others who hold different opinions;
- View a disagreement as a problem to be solved, not a battle to be won;
- Avoid stereotyping and personal attacks on any other representative;
- Avoid questioning or impugning the motivations or intentions of any other representative;
- Respect the integrity and values of other representatives; and
- Honor commitments once made.

F. Administrative Structure and Policy Direction

The Water Forum Successor Effort will be administered under the auspices of the Sacramento City-County Office of Metropolitan Water Planning. As with the Water Forum, Successor Effort staff will be employees or contractors of the City of Sacramento and all administrative responsibilities with respect to such employees or contractors will continue to be handled by the City. This arrangement will:

- Ensure continuity between the Water Forum and the Water Forum Successor Effort;
- Preserve existing technical expertise;
- Avoid the costs, confusion and delays inherent in transferring the Successor Effort to a different organization; and
- Avoid creating another redundant government entity.

The *Water Forum Agreement* will be a Memorandum of Understanding. It will contain provisions creating the Successor Effort organization. All parties which sign the Memorandum of Understanding will become full participants in the Successor Effort. In addition, there will be a supplementary funding agreement which will include the City of Sacramento, the County of Sacramento and the other agencies (including agencies outside of Sacramento County) which, consistent with the funding principles set forth in Section J below, are actually making payments to support the work of the Successor Effort.

It is important to note that:

- All signatories to the *Water Forum Agreement* will have equal standing in the Successor Effort whether they are a public agency, investor-owned utility or citizen interest/advocacy organization;

- Though Water Forum Successor Effort staff will be employees or contractors of the City of Sacramento, the Successor Effort representatives will provide over-all policy direction for work by staff.

G. Decision-making Process

Members of the Successor Effort will continue to use the same collaborative form of decision-making used in the Water Forum negotiations. This collaborative process respects both the diversity and the legitimacy of the interests of all participants. The following principles, based on the interest-based decision-making model used in the Water Forum, will guide the Successor Effort decision-making process.

1. The Successor Effort will strive for consensus (agreement among all participants) in its decision-making.

2. The Successor Effort will not limit itself to strict consensus if a one hundred percent agreement cannot be reached after all interests and options have been thoroughly identified, discussed and considered. Less-than-consensus decision-making will not be undertaken lightly.

3. Less-than-consensus decision-making will use an interest-based approach. This means that all Successor Effort decisions must have a preponderance of support from each of the major "interest groupings" participating in the Successor Effort. Although "interest groupings" have not yet been identified for the Successor Effort, interest groupings used in the Water Forum will likely serve as a reference point.

4. Specific Agreements found in Section Five of the *Water Forum Agreement* cannot be changed or modified without the expressed approval and consent of the signatories whose interests would be affected by the change.

It should be noted, however, that within the principles enumerated above, the Successor Effort itself must take the lead responsibility in working out the details of its own decision-making model. Therefore, by July 1, 2000, signatory representatives shall meet together to determine how the Successor Effort's collaborative decision-making will work.

H. Dispute Resolution

A major function of a collaborative process is to prevent disagreements from escalating into full fledged disputes. With proper facilitation and communication, most potential disputes can be resolved. However, no matter how sophisticated a collaborative process exists, there will inevitably be disputes. Some may arise out of interpretation of specific provisions of the *Agreement*. Others may result from concerns about non-compliance or differing interpretations of the terms of the A*greement*.

It is essential that stakeholders not revert to litigation as a first response to every perceived problem or transgression. Lawsuits can quickly destabilize the collaborative process and return all Successor Effort participants to gridlock. Therefore, while not waiving any of their legal rights, all organizations represented in the Successor Effort agree to initiate alternative dispute resolution procedures, including mediation, before pursuing litigation.

I. Specific Tasks Which must Be Completed by the Successor Effort for the *Water Forum Agreement* to Be Fully Implemented

See Attachment A: Water Forum Successor Effort - Preliminary Work Plan.

J. Budget and Allocation of Budget Costs

The projected budget for the Successor Effort as well as the allocation of costs is based on the following ten principles.

1. In order to estimate the actual cost of the Successor Effort, a Preliminary Work Plan which identifies the tasks for the first four years has been developed and is included in this document as Attachment A. The projected annual cost for the tasks set out in this work plan is $675,000 for the first year of operation. (A sample budget for the first year of operation is set forth in Attachment B.) All signatories have reviewed this Preliminary Work Plan and agree that $675,000 for the first year will be provided as set forth below.

2. Prior to completion of the first year following the signing of the *Water Forum Agreement*, the Successor Effort shall undertake a careful review of progress to date and shall revise the Work Plan in light of the then existing circumstances. The annual budget and contributions may be revised at that time.

Any increase or decrease to the first year budget would require a consensus among all interest groups and agreement by those agencies providing Successor Effort funding.

3. On an annual basis, the Successor Effort budget will be approved by the stakeholder representatives to the Water Forum Successor Effort in accordance with the updated Work Plan for that year.

4. Consultants shall be used only as needed and the identification and approval of actual expenditures for specific consultant contracts shall be part of the Successor Effort budget process. If consultant contract funds or funds allocated for consultant contracts in a given fiscal year are not spent prior to the end of that year or earmarked for future expenditure, the Successor Effort shall modify the next year's budget in an appropriate manner.

5. A purveyor's annual contribution to support the estimated cost of the Successor Effort shall be based upon the number of connections served by the purveyor. There are other possible bases for determining contributions; e.g. the number of acre feet per year diverted from the American River. Some purveyors, however, will use only groundwater. Some will divert only from the Sacramento River. Others will use a combination of both surface water and groundwater in amounts which will vary from year to year. Yet all will benefit from implementation of the *Water Forum Agreement* and the work of the Successor Effort. In general, then, purveyor contributions related to number of connections served offers the most equitable and stable basis for sharing Successor Effort costs.

Allocation of first year costs for the Successor Effort on a purveyor-by-purveyor basis is contained in Attachment C. It should be noted that this cost allocation assumes that all the purveyors identified in Attachment C will sign the initial *Water Forum Agreement.* If fewer purveyors sign the initial *Water Forum Agreement*, the first year costs allocated to the purveyors that do sign will increase.

6. Zone 13 was formed by the Sacramento County Water Agency (SCWA) to fund drainage and water supply studies and related costs. As a result, property owners in the unincorporated areas of Sacramento County and the City of Citrus Heights are already assessed through their property taxes for the planning and evaluation activities that will be carried out by the Successor Effort. Therefore, SCWA's Zone 13 contribution to the Successor Effort shall cover the financial obligations of water purveyors serving the unincorporated areas of the County and the City of Citrus Heights. This will include the Carmichael Water District, Citrus Heights Water District (in Sacramento County), Citizens Utilities (in Sacramento County), Clay Water District, Del Paso Manor Water District, Fair Oaks Water District, Florin County Water District, Galt Irrigation District, Natomas Central Mutual Water Company, Northridge Water District, Omochumne-Hartnell Water District, Orange Vale Water Company, Rio Linda/Elverta Community water District, and San Juan Water District (in Sacramento County).

7. The annual contribution of other purveyors in Sacramento County not included in Zone 13 shall be based upon the number of connections served by that purveyor (as set forth in Principle #5 above). This would include the City of Folsom, the City of Galt[6], and the City of Sacramento.

8. The annual contribution of purveyors outside of Sacramento County shall be based upon the number of connections served by that purveyor (as set forth in Principle #5 above). This will include Citizens Utilities (in Placer County), City of Roseville, El Dorado Irrigation District, Georgetown Divide Public Utility District, the Placer County Water Agency and the San Juan Water District (in Placer County).

9. Each purveyor's share shall be adjusted annually based on the then current number of connections of each purveyor signatory to the *Agreement*.

10. Sacramento Municipal Utility shall make an annual contribution of $10,000.

11. El Dorado Irrigation District and Georgetown Divide Public Utility District: Mutually agreed upon Water Forum Successor Effort expenses related solely to converting these purveyors' procedural agreement into Specific Agreements will be reimbursed by these purveyors. As soon as the purveyors have negotiated Specific Agreements and they sign the

[6]The City of Galt City Manager has informed Water Forum staff that when the Water Forum Successor Effort begins, the City of Galt will evaluate whether to financially participate in the Water Forum Successor Effort. The City of Galt's participation in the *Water Forum Agreement* is also subject to agreement with other signatories regarding Galt's financial contribution to the Water Forum Successor Effort.

Water Forum Agreement, they will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have Specific Agreements.

K. Five Year Review

Every five years the Water Forum Successor Effort will comprehensively review progress made in achieving both of the coequal objectives.

L. Changed Conditions and Amendments to the *Water Forum Agreement*

Given the complexity of issues, level of detail, number of signatories, duration of the *Water Forum Agreement*, and changed circumstances that will undoubtedly occur between now and the year 2030. Some changes may call for renegotiation of some terms of the *Water Forum Agreement*. However, a request for renegotiation does not necessarily mean the *Water Forum Agreement* will be revised. The *Water Forum Agreement*, including Specific Agreements, can be changed or modified only with the expressed approval and consent of the signatories to the *Water Forum Agreement*.

Any proposal to amend this Memorandum of Understanding or the attached *Water Forum Agreement* would be considered in the context of both of the Water Forum's coequal objectives. Specific procedures for amending the *Water Forum Agreement* consistent with the collaborative decision making process will be developed by the Water Forum Successor Effort within the first year of its operation.

M. Specific Agreement on the Water Forum Successor Effort.

All signatories to the *Water Forum Agreement* will participate as members of the Water Forum Successor Effort and, where specified, will financially contribute as indicated above.

ATTACHMENT A: WATER FORUM SUCCESSOR EFFORT

PRELIMINARY WORK PLAN

FULL TIME EQUIVALENT STAFF TIME (INCLUDING SECRETARY) FOR EACH ACTIVITY AREA SHOWN AS " *(FTE ___)* " : TOTAL FTE , 4.

ESTIMATED TIMELINE FOR IMPLEMENTATION

CATEGORY **1**	---	First year
CATEGORY **2**	---	Second year
CATEGORY **3**	---	Third year
CATEGORY **4**	---	Fourth year and thereafter

WATER DIVERSIONS (FT 1.5) :

- Provide leadership in securing implementation of the Updated Lower American River Flow Standard **(1,2)**
- Oversee drafting of the Updated Flow Standard **(1,2)**
- Negotiate with USBR mutually acceptable flexibility in implementation of the Flow Standard **(1,2)**
- Negotiate recommended amendment to the existing Declaration of Full Appropriation for the American River **(1,2)**
- Monitor completion of the upstream diversion agreements **(1,2)**
- Negotiate future updates to the Lower American River flow standard based on future agreements with any purveyor whose diversions may not be in the first phase of the *Water Forum Agreement* **(2,3,4)**
- Prepare testimony for the SWRCB **(2)**
- Coordinate with external water users including
  - --- State Water Project Contractors Association
  - --- CVP Water Users Association
  - --- Delta water users **(1,2)**
- Coordinate with state-wide environmental organizations **(1,2)**
  - --- Environmental Defense Fund
  - --- Natural Resources Defense Council
  - --- Bay Institute
  - --- Natural Heritage Institute **(1,2)**
- Coordinate with government agencies including
  - --- U.S. Bureau of Reclamation
  - --- Department of Water Resources
  - --- Environmental Protection Agency
  - --- U.S. Fish and Wildlife Service
  - --- National Marine Fisheries Service

--- Department of Fish and Game
--- California Resources Agency
--- State Lands Commission
--- CALFED **(1,2)**

- Mediate and complete negotiations with any purveyors not included in the first phase of the *Water Forum Agreement* **(1,2)**
- Negotiate criteria for transfers among Water Forum participants that would result in Water Forum signatories support for those transfers **(2)**
- Establish data base, schedule and methodology for determining annual projected water diversions including which water forecasts to use, timely notice to diverters, etc. **(2)**
- Develop reporting system to insure accurate information on actual diversions **(1,2)**
- Implement the system including secure the cooperation of all diverters, collect, analyze and disseminate data, monitor results on an on-going basis, etc. **(2,3,4)**
- Assist implementation of dry year alternatives (as needed) **(4)**
- Organize stakeholder support for modifications necessary to implement the *Water Forum Agreement* such as changes in points of diversion, places of use, water exchanges, etc. **(2,3,4)**
- Ensure that necessary assurances concerning future actions are achieved and specific caveats are met. **(1,2,3,4)**

CRITICALLY DRY YEAR RESPONSE (FT .1) :

- Work with water purveyors and the Sacramento Area Water Works Association to develop a coordinated approach to water reductions in drought years **(2)**
- Develop a detailed response plan for critically dry years including schedule and criteria for determining extent of water shortage, membership on the Dry Year Conference Committee, range of response options, methodology for determining "equitable" water use reductions, decision-making process within the Committee, etc. **(1,2)**
- Convene the Dry Year Conference Committee (as needed) **(4)**
- Provide staff support for all aspects of the Committee's work **(4)**
- Coordinate implementation of Committee decisions among all water users including purveyors, self-supplied industry and agriculture **(4)**
- Communicate the work of the Committee to outside agencies, organizations, the media and the public **(4)**

COORDINATION WITH HABITAT MANAGEMENT PROGRAM AND FISHERY ASSURANCES (FT .1)

FISHERY ASSURANCES --- [FUNDED AS PART OF THE HABITAT MANAGEMENT ELEMENT, NOT THE SUCCESSOR EFFORT]

C Identify and prioritize actions to insure protection for the fishery, wildlife, recreational and aesthetic values of the Lower American River. These may include:
  --- Participating in the development of the Operational Criteria and Plan for releases from the Central Valley Project reservoirs
  --- Participating in the development of the CVP Programmatic Environmental Impact Statement to insure conformity with the *Water Forum Agreement* **(1,2,3,4)**

C Coordinate Water Forum participation in the Lower American River Operation Group which will make real-time flow release decisions based on adaptive management **(1,2,3,4)**

C Participate in the adoption of the of the Anadromous Fish Restoration Program for the Lower American River **(1,2,3)**

C Provide technical collaboration and assistance to USBR, F&WS and F&G **(1,2,3,4)**

HABITAT MANAGEMENT PROGRAM --- [FUNDED AS PART OF THE HABITAT MANAGEMENT ELEMENT, NOT THE SUCCESSOR EFFORT]

C Coordinate all activities related to habitat management undertaken by *Water Forum Agreement* signatories **(2,3,4)**

C Coordinate creation of and participate in the multi-agency Lower American River Habitat Management Program **(2,3,4)**

C Participate in the Restoration Roundtable to insure that a fair share of CVP restoration funds are spent for improvements on the Lower American River **(1,2,3,4)**

C Coordinate Water Forum's response to the existing petition for endangered species listing for steelhead **(1,2,3,4)**

C If desired, coordinate development of a Habitat Conservation Plan that would respond to endangered species listing for steelhead **(1,2,3,4)**

C Provide technical collaboration and assistance to USBR, F&WS and F&G **(1,2,3,4)**

C Review effectiveness of partnership with the Lower American River Task Force in implementing the Lower American River Habitat management program **(1)**

GROUNDWATER (FT .3) :

C Monitor on-going implementation of the *Water Forum Agreement* Sustainable Yield Recommendations **(1,2,3,4)**

- Maintain liaison with the Sacramento North Area Groundwater Management Authority **(1,2,3,4)**
- Convene and facilitate negotiations to establish an acceptable groundwater management program in the South Area of the County. Activities will include:
  - --- Identifying all key participants
  - --- Assisting participants to define and present their issues and interests
  - --- Coordinating logistical arrangements for all meetings
  - --- Providing "technical support" on interest-based negotiation
  - --- Staffing all aspects of the negotiation process
  - --- Maintaining contact with all key constituencies
  - --- Communicating the work of the negotiators to outside agencies, organizations, the media and the public
  - --- Coordinating implementation of the groundwater management program as negotiated **(1,2,3)**
- Work with signatories to the existing agricultural district joint powers agreement to establish an acceptable groundwater management program in the Galt Area which includes all interested parties including the City of Galt. **(1,2,3)**
- Insure adequate consistency and coordination among the groundwater management programs/entities across the three sub-areas of the groundwater basins **(2,3,4)**
- Oversee the alternative dispute resolution procedures concerning groundwater set forth in the *Water Forum Agreement* (as needed) **(4)**

WATER CONSERVATION (FT .2) :

- Review all water purveyors' Water Forum annual water conservation reports as outlined in the Water Conservation Element **(2,3,4)**
- Make annual report to the Plenary Session of all stakeholders concerning the status of implementation of Best Management Practices (BMP) **(2,3,4)**
- Advise purveyors whose conservation results are below expectations or sources of assistance **(2,3,4)**
- Facilitate "changed conditions" negotiations to determine how BMP's adopted or amended by the California Urban Water Conservation Council after July 1997 will be incorporated into the Water Forum purveyors' Water Conservation Plans. **(1,2,3,4)**
- Monitor all other federal, state and CPUC regulations which effect conservation programs and advise purveyors and other stakeholders of the impact of any changes which may indicate a "changed condition" for the Water Forum **(2,3,4)**
- Facilitate "changed conditions" negotiations among stakeholders to modify conservation elements of the *Water Forum Agreement* if required by new federal or state regulations **(2,3,4)**
- Implement Water Forum Procedural Agreement concerning agricultural water conservation **(2,3)**
- Annually review all water purveyors Citizen Involvement Programs for Water Conservation and advise any purveyors whose efforts are below expectations of sources of assistance **(2,3,4,)**

- Monitor and support regional efforts to collaborate on the implementation of BMPs, particularly ways to include energy and wastewater utilities **(2,3,4)**

COORDINATION OF PARTICIPATION IN OTHER PROCESSES (FT .2) :

- Coordinate Water Forum signatories participation in other processes including
  - --- CVPIA implementation
  - --- State Water Resources Control Board Bay-Delta Water Rights Proceedings
  - --- CALFED process
  - --- Department of the Interior Anadromous Fish Restoration Program **(1,2,3,4)**
  - --- Endangered Species Act consultation **(1,2,3,4)**
- Provide technical analysis and support to those processes **(1,2,3,4)**
- Participate in the development of U. S. Bureau of Reclamation's Operational Criteria and Plan for the Central Valley Project **(1,2,3,4)**
- Negotiate criteria for land use agencies to use in assessing consistency of land use decisions with the diversions from the American River and the estimated average annual sustainable yields of the three sub-basins negotiated as part of the *Water Forum Agreement* **(1,2,3)**
- Coordinate support for external funding of Folsom Reservoir Recreation Improvements **(1,2,3,4)**

RESPONDING TO CHANGED CONDITIONS (FT .3) :

- Monitor legal developments including legislation, rules, regulations, and court decisions which may impact implementation of the *Water Forum Agreement* (e.g., drinking water standard, additions to the Endangered Species List, etc.) **(2,3,4)**
- Monitor other developments at the local, regional, state and federal levels which may impact implementation of the *Water Forum Agreement* (e.g., land use decisions, changes in the health of the American River fishery, migration of toxic plumes in the groundwater basin, etc.) **(2,3,4)**
- Analyze the impact of such external factors on the implementation of the *Agreement* and provide timely notice to all stakeholders **(2,3,4)**
- Identify those external factors which are of such import that they will require re-negotiation of some elements of the A*greement* **(4)**
- Work with stakeholders to develop a re-negotiation agenda and schedule **(4)**
- Provide staff support for all aspects of the re-negotiation process **(4)**
- Coordinate implementation of re-negotiated elements of the *Agreement* by all stakeholders **(4)**

ENVIRONMENTAL COMPLIANCE (FT .2) :

- Assist U.S. Bureau of Reclamation to complete National Environmental Policy Act (NEPA) compliance **(1,2)**
- Prepare any/all subsequent environmental documentation which may be required to support actions taken in response to changed conditions **(4)**

- Implement mitigation monitoring and reporting plan **(1,2,3,4)**

EVALUATION AND REPORTING (FT .1) :

- Evaluate progress on all aspects of implementation of the *Water Forum Agreement* **(2,3,4)**
- Comply with all reporting requirements of the Environmental Impact Report **(2,3,4)**
- Research, draft and issue to the stakeholders, the media and the public an annual report documenting all important developments pertaining to implementation of the A*greement* including but not limited to
  - --- actual diversion amounts
  - --- progress on water conservation / BMP implementation
  - --- actions to implement the fishery flow pattern
  - --- health of the Lower American River eco-system
  - --- progress on integrating the use of surface water and groundwater to achieve sustainable yield **(2,3,4)**
- Research, draft and issue to the stakeholders, the media and the public a comprehensive five-year evaluation on progress toward achieving the two coequal goals of the *Water Forum Agreement*: a safe and reliable water supply and protection of the public trust values of the Lower American River **(4)**
- Prepare for, convene and staff the annual Plenary Session of the Water Forum stakeholders **(2,3,4)**

MAINTAIN RELATIONSHIPS/ PREVENT-RESOLVE DISPUTES (FT .3) :

- Facilitate on-going dialogue among stakeholders on all items of mutual interest **(1,2,3,4**
- Coordinate interpretation of the *Water Forum Agreement* **(2,3,4)**
- Assist *Water Forum Agreement* signatories to resolve misunderstandings and maintain positive inter-personal relationships **(1,2,3,4)**
- Preserve and enhance the good-faith interest-based process which has made the *Agreement* possible **(1,2,3,4)**
- Educate all new stakeholder representatives on the principles of interest-based negotiation, the interests of all other *Water Forum Agreement* signatories, the history of the *Agreement* (especially the essential integration of the seven key elements of the *Agreement*), progress to date and current status **(2,3,4)**
- Provide updates, as necessary, to stakeholder organizations and to individual stakeholder representatives on the principles on interest-based negotiation **(2,3,4)**
- Respond promptly to identified stakeholder concerns **(2,3,4)**
- Identify timely actions which can prevent/lessen problems related to “deal-creep” or non-compliance **(2,3,4)**
- Work with stakeholders to develop mutually acceptable administrative procedures to address and resolve disputes internally before seeking other legal remedies including but not limited to designated responsible individuals, specific timelines, response options, etc. **(2,3)**

- Secure explicit stakeholder approval of these procedures and reaffirmation of commitment to implement them **(2,3,)**

PUBLIC OUTREACH (FT .2) :

- Develop and implement a comprehensive communication strategy concerning the purpose and progress of the *Water Forum Agreement* which reaches
  - --- stakeholder organizations
  - --- opinion leaders in the Sacramento region
  - --- other interested parties in the American River watershed
  - --- community groups and organizations
  - --- interested parties outside of the American River watershed
  - --- the media
  - --- the public **(1,2,3,4)**
- Maintain public outreach and education activities designed to promote continued public support for the *Water Forum Agreement* **(1,2,3,4)**

INTERNAL ADMINISTRATION (FT .5) :

- Staff all meetings of the Successor Effort including
  - --- Plenary Meetings of all stakeholders
  - --- Steering Committee and all sub-committees
  - --- Technical teams, ad hoc groups, etc. **(1,2,3,4)**
- Provide for adequate office space, equipment, supplies, etc. **(2,3,4)**
- Develop annual budget **(1,2,3,4)**
- Provide staff and consultants as needed **(1,2,3,4)**
- Administer contracts **(1,2,3,4)**
- Maintain all appropriate records **(1,2,3,4)**
- Etc., etc., etc.

ATTACHMENT B: WATER FORUM SUCCESSOR EFFORT

SAMPLE BUDGET

FIRST YEAR OPERATION

- **STAFF: $326,000 per year**

  Assumes three professional full-time equivalent employees or contractors and one secretary. After the first three years, when a significant portion of the initial work of the Water Forum Successor Effort has been completed, professional staff may be reduced from 3 to 2.

- **RENTAL OF OFFICE SPACE AND EQUIPMENT: $53,400 per year**

  Assumes office space of 2500 sq. ft. @ $1.50 per square foot. Copier @ $700 per month. Does not reflect economies of scale resulting from shared facilities.

- **TELECOMMUNICATIONS: $5,600 per year**

- **OFFICE SUPPLIES AND MATERIALS: $40,000 per year**

  Includes postage, printing, publications, meal and travel expenses, temporary clerical service, computer supplies, seminar registrations, etc.

- **CONSULTANT CONTRACTS: $250,000 per year**

  Contracts needed for hydrology, fishery, engineering, mediation services, etc. Consultants used only as needed.

- **TOTAL OF ABOVE: $675,000 per year**

ATTACHMENT C: POTENTIAL FIRST YEAR COST ALLOCATION ON A PURVEYOR-BY-PURVEYOR BASIS

Purveyors / Organizations	Total Connections	Successor Effort			
		% connections	# connections	Successor Effort	monthly
		included	included	Total	rate impact
Zone 13, Sacto Co unincorporated area	173,641	100%	173,641	$333,359	0.160
City of Folsom	9,942	100%	9,942	$19,087	0.160
City of Galt[7]	5,170	50%	2,585	$4,963	0.080
City of Roseville	23,859	100%	23,859	$45,805	0.160
City of Sacramento	121,300	100%	121,300	$232,874	0.160
Placer County Water Agency	9,480	See note below	9,480	$18,200	0.160
Sacramento Municipal Utility District	NA	NA	NA	$10,000	NA
San Juan Water District (Placer Co.)	5,580	100%	5,580	$10,713	0.160
Totals	348,972		346,387	$675,000	

NOTES:

An estimate of $675,000 was used as the first year cost for the Successor Effort.

Zone 13 funds will be used to cover the financial contributions for water purveyors serving the unincorporated areas of Sacramento County and the City of Citrus Heights.

For Placer County Water Agency, it is assumed that 67% of their 28,440 connections are regularly served by the Yuba/Bear Rivers. Therefore, the remaining 9,480 connections are included in this calculation. As PCWA continues to develop the American River and develops the Sacramento River diversion included in the *Water Forum Agreement,* connections served by these supplies will be included in the allocation procedure.

El Dorado Irrigation District and Georgetown Divide Public Utility District: Mutually agreed upon Water Forum Successor Effort expenses related solely to converting these purveyors' procedural agreement into Specific Agreements will be reimbursed by these purveyors. As soon

[7]The City of Galt City Manager has informed Water Forum staff that when the Water Forum Successor Effort begins, the City of Galt will evaluate whether to financially participate in the Water Forum Successor Effort. The City of Galt's participation in the *Water Forum Agreement* is also subject to agreement with other signatories regarding Galt's financial contribution to the Water Forum Successor Effort.

as the purveyors have negotiated Specific Agreements and they sign the *Water Forum Agreement*, they will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have Specific Agreements.

In the future as Citizens Utilities Company of California serves customers in Placer County, it will contribute to the Water Forum Successor Effort based on the number of those connections.

SECTION FOUR: OTHER IMPORTANT AGREEMENTS

I. ASSURANCES AND CAVEATS

A. Intent

The *Water Forum Agreement* will allow the region to meet its needs in a balanced way through implementation of all seven elements of the *Agreement*: Increased Surface Water Diversions; Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years; Support for Improved Pattern of Fishery Flow Releases; Lower American River Habitat Management; Water Conservation; Groundwater Management; and Water Forum Successor Effort.

Each signatory needs to be assured that as it fulfills its responsibilities under the *Agreement*, the other signatories will be also honoring their commitments. Adequate assurances allow each signatory to expend the energy and resources necessary for it to uphold its part of the A*greement* with confidence that others signatories will be doing likewise.

For instance for environmentalists to support purveyors' increased water diversions, they need assurances that purveyors will support all seven elements of the *Water Forum Agreement* over the entire term of the A*greement*. This will provide them assurances that agreed upon actions to preserve the Lower American River will be continued.

Conversely for water purveyors to participate in all seven elements of the A*greement*, including those which will preserve the Lower American River, they will need to have assurances that the other signatories will support the purveyor's increased diversions over the term of the *Agreement*.

B. Assurances

The *Water Forum Agreement* is based on nine assurances:

- Signing the *Water Forum Agreement*;
- Implementation of the Central Valley Project Improvement Act;
- An Updated Lower American River flow standard and related assurances;
- Assurances of support for increased diversions;
- Assurances for the Lower American River Habitat Management Element;
- Assurances for the Water Conservation Element;
- Assurances for the Groundwater Management Element;
- Assurances for the Water Forum Successor Element; and
- Assurances for response to changed conditions.

1. <u>Signing the *Water Forum Agreement*.</u>

All signatories agree that by signing the *Water Forum Agreement*, which is a Memorandum of Understanding (MOU) among all signatories, they commit to carrying out all the actions specified for them in the *Agreement*. This MOU is supplemented by additional assurances which are described below.

Timing of this assurance: The *Water Forum Agreement* will be effective upon signing.

2. Implementation of the Central Valley Project Improvement Act

Under the Central Valley Project Improvement Act (CVPIA), the Department of Interior is responsible for carrying out two programs that provide significant assurances that fishery, wildlife, recreational, and aesthetic values of the Lower American River will be protected.

a. The Anadromous Fish Restoration Program (AFRP) provisions of the CVPIA require the U.S. Bureau of Reclamation (Bureau) to release water from Central Valley Project (CVP) facilities including Folsom Dam on a schedule that better matches the lifecycles of anadromous fish. The draft AFRP flow objectives for the American River as set forth in the November 20, 1997 "Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water" are essentially the same as the *Water Forum Agreement's* Improved Pattern of Fishery Flow Releases.

b. In addition, the CVPIA Restoration Fund collects money from CVP contractors to finance improvements to habitat affected by the CVP, including the ecosystem of the Lower American River. These funds are expected to provide cost-sharing for the Multi-Agency Lower American River Habitat Management Program.

Timing of this assurance: The CVPIA was enacted as federal law in 1992. Since 1996 the Bureau, in conjunction with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, has attempted to release water from project facilities in a manner consistent with the flow objectives for the Lower American River set forth in the draft Anadromous Fish Restoration Plan to the extent Bureau's available water supply has permitted it to do so. The AFRP flow objectives will not become final until after the CVPIA Programmatic Environmental Impact Statement is complete.

3. Updated Lower American River Flow Standard and Related Assurances.

The Anadromous Fish Restoration Plan (AFRP) flow targets for the Lower American River are an important assurance. However they have not been finalized as of the signing of the *Water Forum Agreement*. In addition they do not address how much water will be diverted from the American River under various hydrologic conditions. In the process of updating the Lower American River standard, it will be necessary to make some corrections to the AFRP flow objectives for the Lower American River. These include some typographic corrections as well as inclusion of target carryover storage amounts for Folsom Reservoir.

An additional assurance will be in the form of an updated Lower American River flow standard. All signatories agree they will recommend to the State Water Resources Control Board an updated Lower American River flow standard and updated Declaration of Full Appropriation. This recommended standard will incorporate the *Water Forum Agreement* provisions on water diversions under varying hydrologic conditions, optimize the release of available water for the fisheries and include other provisions as follows:

a. Updated Lower American River Flow Standard for Folsom and Nimbus Dams. All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions,
and
Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

Timing of this assurance: The City of Sacramento, with support from other signatories to the Water Forum Agreement, has already requested the State Water Resources Control Board to expedite updating of the Lower American River flow standard. In the spring of 2000, after consultation with other American River water rights holders, the City of Sacramento will present a recommended flow standard to the State Water Resources Control Board on behalf of the Water Forum.

b. Upstream Diversion Agreements. The recommended updated Lower American River flow standard will incorporate rules on how much water purveyors would divert upstream of Nimbus Dam under varying hydrologic conditions. Therefore the Bureau and Water Forum signatories need some form of assurance as to how much those purveyors would divert under those conditions.

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contracts with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for diversion reductions in dry year and/or other equivalent actions. (See "Model Diversion Agreement with USBR" included as Appendix F.)

Timing of this assurance: These contracts need to be entered into before the updated Lower American River flow standard becomes effective.

c. City of Sacramento Diversion Conditions. There needs to be some form of assurance that the City of Sacramento's diversions from the American River will be consistent with the *Water Forum Agreement*. Because it diverts from downstream of Nimbus Dam it would be inappropriate of the City to enter into a diversion agreement with the Bureau.

Therefore the City of Sacramento agrees to include the provisions of its purveyor specific agreement concerning its diversion conditions in its request for State Water Resources Control Board approval needed to expand the E.A. Fairbairn Water Treatment Plant diversion.

Timing of this assurance: These diversion conditions will be included when the SWRCB grants the City its needed approval.

d. Flexibility in the Standard with Regard to Implementation of the Improved Pattern of Fishery Flow Releases. The updated Lower American River flow standard recommended by signatories will also address the tension between certainty and flexibility in how water is released from Folsom Reservoir. A flow standard that incorporated the Improved Pattern of Fishery Flow Releases with no flexibility in its implementation would make it impossible to use Adaptive Management to respond to real time conditions. Conversely, absolute flexibility would not provide parties the assurance that releases from Folsom Reservoir will be timed to meet the objectives of the Improved Pattern of Fishery Flow Releases. In addition implementation of the standard must recognize that the Bureau operates Folsom Dam as an integrated part of the CVP.

A technical group of parties with operations expertise including members of the Water Forum Successor Effort, the U.S. Bureau of Reclamation, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the California Department of Fish and Game will prepare recommendations on how to reconcile these issues. Provisions they will consider recommending in the updated flow standard include:

(1) Acceptable tolerance for variation in flow releases. The pattern of releases would be based on the November 20, 1997 "Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water." However there is also a need to allow some variation to respond to real time conditions. The tolerance could vary by type of water year. It could be an absolute number or a percentage.

(2) Formalization of the existing ad hoc Lower American River Operations Group that would meet as needed. This is an existing group of resource experts that provides input to the Bureau on its operations under real time conditions. The operations group would agree on actual flow releases within the previously approved range. It will have to be coordinated with other operations groups. This group should also take advantage of the experience of the CALFED Operations Group.

(3) A provision to allow greater variations in flows in response to significant, unforeseeable events. For instance if a gate at Folsom Reservoir were to fail in July, there might not be enough water remaining to meet fall flow standards. Or there could be a never before experienced pattern of inflow or flood release.

Another example of the need for variation could be to allow repairs to be made on the fish diversion structure at Nimbus Fish Hatchery.

(4) A recognition of the State Water Resources Control Board's continuing authority to amend the standard to protect instream resources of the Lower American River.

(5) The approach to flexibility will also be coordinated with the Bureau's new Operations Criteria and Plan (OCAP).

Timing of this assurance: The recommendation for appropriate flexibility will be developed in time for inclusion in the updated Lower American River flow standard.

e. Conference Year Principles. The recommended flow standard for the Lower American River incorporates agreement on water diversions and optimizes the release of available water for the fisheries for all types of water years through implementation of the Improved Pattern of Fishery Flow Releases. This recognizes the wide variation in runoff which has ranged from over 6 million acre feet in one year to less than 400,000 acre feet in the driest year on record. It is during times of low runoff that pressures on the available water supply are greatest. Therefore signatories agree that the updated Lower American River flow standard that they recommend will have the following provisions for the extremely dry years:

(1) Diversions and River Flows. The amount each purveyor could divert is set forth in its Purveyor Specific Agreement and is reflected in the recommended Lower American River flow standard.

(Note that the annual quantity of water diverted from the American River and the amount available to flow all the way down the River from March to November may total more than 400,000 acre feet. That is because the amount available may include releases from storage of water carried over from previous years.)

The recommended updated flow standard will also include a provision for adaptive management. This will allow resource managers to allocate the total quantity of water available to the fishery for maximum benefit to the fishery.

(2) Conferencing. During years when the projected March to November inflow to Folsom Reservoir is less than 400,000 acre feet (referred to as "Conference Years") there is insufficient water to meet Lower American River instream needs and provide the quantities of diversions specified in Purveyor Specific Agreements. Special provisions are necessary to deal with water management in those extremely dry years. Therefore all stakeholders agree to meet in those years to confer on how the available water supply should be managed to preserve as much as possible both of the Water Forum's two coequal

objectives. The guiding principle will be to "share the pain" so that both instream and consumptive users bear an equitable burden.

(3) Minimum Flow Standard. The updated flow standard recommended by the Water Forum for inclusion in the Bureau's water rights permits for operation of Folsom and Nimbus dams will include a minimum flow requirement of 190 cubic feet per second at the mouth of the American River.[8] The Water Forum will also recommend that the City of Sacramento's water rights require the E. A. Fairbairn Water Treatment Plant diversion to bypass the flow that the U.S. Bureau of Reclamation releases or maintains below Nimbus dam to meet that minimum flow requirement at the mouth of the American River. Nothing in this *Water Forum Agreement* is intended to affect the Bureau's obligation to make water available to the City of Sacramento under the City's 1957 Bureau contract.

This does not however imply signatories agree that 190 cubic feet per second is adequate for fish screen bypass flows for the expanded Fairbairn diversion or a new diversion near the mouth of the American River. Those fish screen bypass flows will be identified in project specific EIR's for those diversions.

In extraordinary circumstances, the 190 cubic feet per second minimum could be relaxed if reallocating that volume of water to another time in the year would be more beneficial for the fishery.

(4) Extraordinary Conservation Efforts. In conference years water purveyors agree to implement the highest level of conservation/rationing in their drought contingency plans.

(5) Conferencing in Other Years. The Lower American River Operations Group (the group that recommends real time adaptive management operations for the Lower American River) can recommend that the Water Forum Successor Effort meet and confer on operations in any year if called for by extraordinary circumstances.

These Conference Year Principles will be included in the diversion agreements between the Bureau and purveyors signatory to the *Water Forum Agreement* that divert upstream of Nimbus Dam.

Timing of this assurance: The concept of conferencing in the years with a projected March to November unimpaired inflow of less than 400,000 acre feet will be included in

[8] Decision 893 established a variable minimum requirement for flows at the mouth of the American River. Under D-893 in 1977, the driest year on record, the minimum flow requirement was presumed to be between 185 and 190 cubic feet per second. D-893 also conditioned the City of Sacramento's water rights to require the City of Sacramento's E. A. Fairbairn Water Treatment Plant diversions to bypass the flow that the Bureau releases or maintains below Nimbus dam to meet D-893's minimum flow requirement.

the recommendation for the updated Lower American River flow standard when it is presented to the State Water Resources Control Board.

f. Declaration of Full Appropriation. The State Water Resources Control Board has already declared the American River to be fully appropriated during certain times of the year. In recognition of the additional diversions and fishery flows agreed to in the *Water Forum Agreement,* the Declaration of Full Appropriation needs to be amended. Because there are significant remaining issues including area of origin protections, this will require additional negotiation.

Signatories agree to negotiate with all affected stakeholders and the Water Forum Successor Effort will recommend an amendment to the Declaration of Full Appropriation for the American River consistent with the *Water Forum Agreement*.

Timing of this assurance: A recommended amendment to the Declaration of Full Appropriation for the Lower American River will be developed so that the amended Declaration can be recommended as soon as the Lower American River flow standard is updated.

g. How To Develop an Updated Lower American River Flow Standard If All Upstream Diverters Are Not in the Initial *Water Forum Agreement*. Not all purveyors that divert upstream of Nimbus Dam are in the initial *Water Forum Agreement*. This section describes how an updated flow standard for the Bureau's operation of Folsom and Nimbus Dams can be adopted when there is uncertainty as to increased diversions by some upstream purveyors.

The updated flow standard will reflect those increased diversions, including dry year reductions and/or other equivalent actions, upon which there is agreement as reflected in the initial *Water Forum Agreement*.

Signatories agree that the recommended updated flow standard will also contain a reserved jurisdiction clause specifying that whatever the SWRCB decides in the future regarding diversions upstream of Nimbus Dam will automatically result in a corresponding revision to the Bureau's water rights permit for the operation of Folsom and Nimbus dams.

That will preserve the opportunity for those not yet in the *Agreement* to come to agreement with other Water Forum stakeholders when the issues are ripe for decision. It will also preserve the option for parties to support or oppose those increased diversions if an agreement with the Water Forum signatories cannot be reached in the future.

Timing of this assurance: This provision will be included in the updated Lower American River flow standard when it is presented to the State Water Resources Control Board for its approval.

4. Assurances of Support for Increased Diversions

a. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

b. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the *Water Forum Agreement* including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the five points described below.

(1) All signatories agree that implementation of the *Water Forum Agreement* including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the *Water Forum Agreement*.

(2) Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.

(3) To the extent that the water facilities are consistent with the *Water Forum Agreement*, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the *Water Forum Agreement* based on the planned growth to be served by those water facilities. (See Section Four, IV, Relationship of the *Water Forum Agreement* to Land Use Decision making).

(4) In the planning for new water diversion, treatment, and distribution facilities identified in the *Water Forum Agreement*, water purveyors signatory to the *Agreement* will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

(5) All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

c. Endorsement of the water entitlements and related facilities in the *Water Forum Agreement* means that organizations signatory to the *Water Forum Agreement* will expend reasonable efforts to:

(1) Speak before stakeholder boards and regulatory bodies,

(2) Provide letters of endorsement,

(3) Provide supportive comments to the media,

(4) Advocate the *Water Forum Agreement* to other organizations, including environmental organizations that are not signatory to the *Water Forum Agreement*, and

(5) Otherwise respond to requests from other signatories to make public their endorsement of the *Water Forum Agreement*.

Timing of this assurance: Support for increased diversions will be provided whenever requested by the water purveyors signatory to the *Water Forum Agreement*.

5. Assurances for the Lower American River Habitat Management Element

a. Signatories commit in the signed Water Forum MOU to implement the Habitat Management Element as specified in the *Water Forum Agreement*.

b. In certifying the Water Forum Programmatic EIR and approving findings, the City of Sacramento and the County of Sacramento agree to include the commitments of purveyors participating in the Habitat Management Element in the adopted Mitigation Monitoring and Reporting Plan.

c. In approving project specific EIR's and EIS's, purveyors agree to include language in their adopted environmental documentation which commits them to participate in the Habitat Management Element as specified in the *Water Forum Agreement*.

d. The City of Sacramento, the County of Sacramento and those other purveyors outside of Sacramento County's Zone 13 that divert American River water agree to enter into a contract with the City of Sacramento (as fiscal agent for the Water Forum) to provide funding for the Habitat Management Element as specified in this *Agreement*. Parties entering into the contract agree to include a provision whereby other signatories to the *Water Forum Agreement* will be designated as third party beneficiaries. That will enable those other signatories to have standing to enforce the contractual commitments.

Timing of assurance: Habitat assurances are included in the Water Forum EIR. They will also be included in purveyors' project-specific EIR's when they are adopted. The contract for funding and implementing the Habitat Management Element will be entered into within one hundred twenty days of the effective date of the *Water Forum Agreement*.

6. Assurances for the Water Conservation Element

a. Each purveyor agrees as part of the Water Forum MOU to implement its water conservation plan which is included in the *Water Forum Agreement* as Appendix J a separately bound appendix.

b. In certifying the Water Forum Programmatic EIR and approving findings, the City of Sacramento and the County of Sacramento agree to include in the adopted Mitigation Monitoring and Reporting Plan all purveyors' commitments to their Water Forum conservation plans.

c. In approving project specific EIR's and EIS's, purveyors agree to include language in their adopted environmental documentation which commits them to carry out their water conservation plans as included in the *Water Forum Agreement* as Appendix J, a separately bound appendix.

d. All signatories recognize that the Central Valley Project Improvement Act includes water conservation requirements to be implemented by CVP contractors.

e. All signatories agree to actively support the California Public Utilities Commission allowing investor owned utilities to recover all costs of meter retrofit through rates.

f. All signatories agree to work in the Water Forum Successor Effort to negotiate a conservation program for agricultural water use. Water Forum signatories' support for new or increased surface water diversions to serve agricultural uses is dependent on acceptable assurances that those diverters will implement mutually agreed upon agricultural water conservation programs.

Timing of this assurance: Water conservation assurances are included in the Water Forum EIR. They will also be included in purveyors' project-specific EIR's when they are adopted. Central Valley Project Improvement Act water conservation requirements are already enacted.

7. Assurances for the Groundwater Management Element

a. Signatories who pump groundwater from the subarea of the basin in the North area of Sacramento County agree to participate in the Sacramento North Area Groundwater Management Authority established under the Joint Powers Agreement in August 1998.

b. The Sacramento North Area Groundwater Management Authority may enter into a MOU with entities in adjacent counties to coordinate the management of the groundwater basin that is shared by those counties.

c. In Sacramento county, land use agencies' determination of groundwater available for new development will be consistent with the estimated average annual sustainable yields identified in the *Water Forum Agreement*.

d. Signatories to the *Water Forum Agreement* agree to negotiate arrangements for groundwater management for the Galt Area and the South Area within Sacramento county appropriate to their individual needs. Signatories agree that the North Area groundwater management program is not a template for programs in the South Area or the Galt Area within Sacramento county.

Water Forum signatories' support for new or increased surface water diversions for use in the South Area or the Galt Areas within Sacramento county is linked to those signatories' participation in the development of groundwater management programs for the South Area and the Galt Area.

Timing of this assurance: In July 2000, the Water Forum Successor Effort will review progress in implementing groundwater management programs in the South Area and Galt Area to confirm that sufficient progress has been made to allow continued Water Forum support for new or increased surface water diversions.

8. <u>Assurances for the Water Forum Successor Effort</u>

a. Upon signing the *Water Forum Agreement*, all signatories will immediately become members of the Water Forum Successor Effort.

b. In certifying the Water Forum Programmatic EIR and approving findings, the City of Sacramento and the County of Sacramento agree to include in the adopted Mitigation Monitoring and Reporting Plan all purveyors' commitments to the Water Forum Successor Effort.

c. In approving project specific EIR's and EIS's, purveyors agree to include language in their adopted environmental documentation which commits them to participate in the Water Forum Successor Effort as included in the *Water Forum Agreement*.

d. The City of Sacramento, the County of Sacramento and those other purveyors outside of Sacramento County's Zone 13 agree to enter into a contract with the City of Sacramento (as fiscal agent for the Water Forum) to provide funding for the Water Forum Successor Element as specified in this *Agreement*. Parties entering into the contract agree to include a provision whereby other signatories to the *Water Forum Agreement* will be designated as third party beneficiaries. That will enable those other signatories to have standing to enforce the contractual commitments.

Timing of the assurance: The contract for funding and implementing the Water Forum Successor Effort will be entered into within one hundred twenty days of the effective date of the *Water Forum Agreement*.

9. Assurances for Response to Changed Conditions.

It is recognized that over time there will be changed circumstances that are not currently foreseen. The changed conditions could significantly affect attainment of either or both of the Water Forum's two coequal objectives.

For instance groundwater contamination could affect water purveyors' ability to rely on conjunctive use in drier years. Conversely, the fishery might not do as well as was projected when the *Water Forum Agreement* was signed.

Therefore all signatories agree that if changed circumstances affect the ability to attain either of the two coequal objectives, the Water Forum Successor Effort will recommend changes to relevant portions of the *Water Forum Agreement*. Amending the *Water Forum Agreement* requires express approval by those signatories that would be affected by the amendment.

Timing of the assurance: This will be an ongoing activity over the life of the *Water Forum Agreement*.

C. Caveats

The *Water Forum Agreement* includes linked actions based on many "quid pro quos" (i.e., something given for something received.) Some of the actions will require future approvals or implementation by local, state and federal agencies.

In addition some things cannot be known with certainty at this time. For instance, results of Endangered Species Act consultations for specific projects will not be available for some time.

Therefore, in order to have a durable A*greement* it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. Each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

   a. If a purveyor receives support from the other signatories to the *Water Forum Agreement* for all of its facilities and entitlements as shown on the chart "*Major Water Supply Projects That Will Receive Water Forum Support Upon Signing the Water Forum Agreement,*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

      (1) Support for the Improved Pattern of Fishery Flow Releases
      (2) Water Forum Successor Effort
      (3) Water Conservation Element
      (4) Lower American River Habitat Management Element

(5) Support for the Updated Lower American River flow standard
(6) Diversion restrictions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and,

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart "*Major Water Supply Projects That Will Receive Water Forum Support Upon Signing the Water Forum Agreement*," that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on adequate assurances, including:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIR's and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. (See the "Schedule for Updating the Lower American River Flow Standard" at the end of this section.)

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in the Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

D. Specific Agreement on Assurances and Caveats.

All signatories agree that the assurances described in this section are needed to ensure that specified future actions will occur. All signatories also acknowledge the caveats included in this section that describe actions or conditions that must exist for the *Agreement* to be operative.

SCHEDULE FOR UPDATING THE LOWER AMERICAN RIVER FLOW STANDARD

The following schedule reflects the Water Forum's need to have the Lower American River flow standard updated as soon as possible. Signatories to the *Water Forum Agreement* will do everything they can to expedite approval by the State Water Resources Control Board. This includes the City of Sacramento providing supplemental financial assistance to the SWRCB for priority processing if that is agreed to by the SWRCB.

October, 1999 City of Sacramento, with support from the Water Forum, requests the State Water Resources Control Board to update the Lower American River flow standard consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases with optimizes the release of water for fisheries.

November, 1999 State Water Resources Control Board holds a workshop and hearing on the City Of Sacramento's request to expedite processing of the updated Lower American River flow standard.

Spring, 2000 After consultation with other American River water rights holders, Water Forum stakeholders agree on detailed recommendations for the updated Lower American River flow standard.

Spring, 2000 After Water Forum stakeholders agree on detailed recommendations for the updated Lower American River flow standard, the City of Sacramento will present it to the State Water Resources Control Board.

Spring, 2000 Initiate State Water Resources Control Board review including environmental review for the proposed updated LAR flow standard.

As soon as all requirements have been met, the State Water Resources Control Board will hold a hearing on the proposed updated LAR flow standard. Thereafter the State Water Resources Control Board will issue its decision.

II. WATER RIGHTS

A. Surface Water Rights

It is recognized that some purveyors that will sign the *Water Forum Agreement* have long-term surface water entitlements in excess of demands projected for the term of the *Water Forum Agreement*. Nothing in the *Agreement* is intended to call for the reduction or forfeiture of existing surface water entitlements. Signatories to the *Agreement* will honor this principle in state and federal entitlement proceedings directly related to the *Water Forum Agreement* as shown in the chart in Section Three, I, "*Major Water Supply Projects That Will Receive Water Forum Support.*"

It is also recognized that there may be broader state and federal entitlement proceedings where signatories may have different interests, such as the State Water Resources Control Board water rights proceeding for the Bay-Delta.

Signatories agree to work in good faith through the Water Forum Successor Effort with the objective being to develop a consensus recommendation for how state and federal entitlement proceedings should affect those agencies that store and divert American River water. All signatories will make good faith efforts so that recommendations will be consistent with both coequal objectives of the *Water Forum Agreement*:

> Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030;
>
> and
>
> Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.

B. Groundwater Rights.

It is recognized that groundwater rights holders have valuable rights that must be protected. Groundwater rights holders must not have their rights threatened either by their participation in the Water Forum process or by the groundwater management arrangements called for in the *Water Forum Agreement*. Consistent with the Groundwater Management Element, nothing in this *Agreement* is intended to call for the reduction or diminution of any exercised or unexercised groundwater rights. Accordingly, the signatories agree that the *Water Forum Agreement* shall not impair the vested groundwater rights of any person or entity regardless of whether those rights are currently exercised or unexercised.

Signatories retain their ability to assert their groundwater rights by participating in the public process of creating rules, regulations, policies and procedures associated with the Sacramento North Area Groundwater Management Authority and other groundwater management arrangements called for by the *Water Forum Agreement.*

III. SACRAMENTO RIVER SUPPLY FOR NORTH SACRAMENTO COUNTY AND PLACER COUNTY

A. Intent

All signatories recognize there would be benefits from a Sacramento River diversion to serve the north area of Sacramento County and Placer County. This could be an additional source of water for conjunctive use in the North Area groundwater subarea of the basin. It could also provide a surface water supply to help meet a portion of some purveyors' needs in all years. This would contribute to a reliable supply for the area. It would also reduce the need for some purveyors to divert from the American River in drier years.

B. Sacramento River Supply for North Sacramento County and Placer County

Several purveyors in the north Sacramento county area have already taken the lead in constructing a pipeline to take American River water from Folsom Reservoir west across the north part of Sacramento County. This major pipeline could provide surface water for the North Area conjunctive use program.

In addition, the *Water Forum Agreement* includes support for an upgrade to Natomas Central Mutual Water Company's diversion structure on the Sacramento River. This upgrade would provide state-of-the-art fish screening. This could be a joint facility to also serve water to Placer County.

In the future it would be beneficial to interconnect the north area pipeline with a Sacramento River diversion. The north area pipeline was constructed large enough to deliver water from either the American or Sacramento Rivers.

Such an interconnection would have several benefits. First, it would provide purveyors with an alternative source of water should there be any problem with their American River supply. Second, it would allow purveyors access to water transfers from the Sacramento or Feather Rivers.

The Lower American River could also benefit because a Sacramento River diversion would reduce the need for diversions from the American River in driest years. This could be an option for purveyors needing alternative water supplies to meet customers' needs in drier years while reducing impacts of diversions from the American River.

This option would be available to purveyors with direct access to the Sacramento River. It could also be an option for purveyors further upstream that could participate through an exchange. They could continue to make diversions from the American River in drier and driest years if other purveyors switched from their American River supplies to the Sacramento River supply.

It is also recognized that winter-run salmon have been listed as endangered under the Endangered Species Act, and steelhead have been listed as threatened. Any diversion would have to fully comply with the Endangered Species Act.

C. Specific Agreements on Sacramento River Water Supply for North Sacramento County and Placer County

1. All signatories to the *Water Forum Agreement* agree that an environmentally upgraded Sacramento River diversion to serve the north Sacramento county area and Placer County as described above would provide important benefits to the region.

2. All signatories to the *Water Forum Agreement* agree to work in good faith to develop a project consistent with their interests that would:

a. Consolidate several of Natomas Central Mutual Water Company's diversions;

b. Upgrade fish screens at the consolidated diversion;

c. Accommodate the diversion of 35,000 AF of water by Placer County Water Agency consistent with its Purveyor Specific Agreement;

d. Accommodate the diversion of 29,000 AF of water for delivery to Northridge Water District consistent with its Purveyor Specific Agreement;

e. Subject to additional negotiations among Water Forum signatories, potentially accommodate other diversions (e.g. City of Sacramento diversions);

f. Interconnect that consolidated diversion with the north area pipeline which delivers water from the American River. This interconnection will help meet water needs in northern Sacramento County and Placer County.

g. Support for this diversion is also subject to all elements of the *Water Forum Agreement* including the Caveats in Section Four, I, including:

1. Caveat 3.a., Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

2. Caveat 3.f., Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

IV. RELATIONSHIP OF *WATER FORUM AGREEMENT* TO LAND USE DECISION-MAKING

A. Background

Water Forum signatories include cities and counties that have land use planning responsibility and purveyors that have water supply planning responsibility. Water Forum signatories recognize there needs to be coordination among land use decision-making and water planning. Land use decisions should be based on reliable information on water supply availability. Conversely, water planning should be informed by land use decisions.

This section describes the agreement among Water Forum signatories on how information on water supply availability will be coordinated with the land use decision-making process in the context of Chapter 881 of the Statutes of 1995, also referred to as SB 901. This information exchange is to better inform both the water and land use planning efforts.

SB 901 applies to city or county approval of significant development projects (specified in the law as residential development of over 500 units, business development with over 500,000 square feet of office space, commercial building having more than 250,000 square feet, etc.) that would require amendments to general or specific plans, or the adoption of a specific plan.

Under SB 901 cities and counties are required to identify water systems that would provide water supplies for the proposed project. The law requires the city or county to request the identified public water systems to make an assessment regarding water supplies, as prescribed. The law requires the public water system to approve its assessment and submit the assessment to the city or county not later than 30 days after the date on which the request was received, with a provision for a time extension, if necessary and requested by the water system. Public water systems include investor-owned utilities.

Under SB 901 the land use agency then determines, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the proposed project, in addition to existing and planned future uses. If the land use agency determines that water supplies will not be sufficient, it can still approve the project but must include a statement of overriding considerations in its findings.

This section of the agreement does not provide water purveyors, the Water Forum or the Water Forum Successor Effort with any land use authority.

B. Intent

It is the intent of signatories to the *Water Forum Agreement* that land use decisions dependent on water supply from the American River or the three groundwater sub-basins in Sacramento county be consistent with the limits on water supply from the American River and the estimated average annual sustainable yields for those three groundwater sub-basins as negotiated for the *Water Forum Agreement*.

C. Specific Agreements

1. All signatories recognize that land use decision making remains the responsibility of land use agencies and neither the Water Forum nor the Water Forum Successor Effort has any authority to make land use decisions.

2. Signatories agree to use Chapter 881 of the Statutes of 1995 (SB 901) to coordinate land and water use decision-making. If that law is substantially amended, the Water Forum Successor will revisit this issue.

3. Signatories to the *Water Forum Agreement* will reference the *Water Forum Agreement*, including agreed upon estimated average annual sustainable yields of each of the three sub-areas of the groundwater basin in Sacramento County[9] and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

4. The *Water Forum Agreement* includes surface water and groundwater to meet the region's projected water needs for growth planned to the year 2030. Included in Appendix B is a description of the methodology and assumptions used by the Water Forum for assessing the demand to the year 2030. Also included in Appendix B is a map that delineates geographic boundaries that were used in projecting demand in Sacramento County.

5. In Sacramento County only, signatories retain the ability to support or oppose water facilities that would serve new development outside the Urban Services Boundary that was defined in the Sacramento County General Plan, December 1993. All parties also retain the right to support or oppose the sizing of water distribution facilities that would allow service to new development outside of the Urban Services Boundary. (See Map in Appendix B.)

6. In assessing the availability of water for new uses and development in Sacramento County, land use agencies shall take into account reasonable estimates of water demand for the following:

   a. Existing uses;
   b. Anticipated use of currently unexercised water rights;
   c. Unmet water demand within the Urban Policy Area; and
   d. Water demand for new uses between the Urban Policy Area and the Urban Services Boundary.

7. Procedures will be developed by the Water Forum Successor Effort to advise land use agencies as they assess the consistency of proposed land use decisions with the estimated average

[9] North Area: 131,000 acre feet; South Area: 273,000 acre feet; Galt Area: 115,000 acre feet.

annual sustainable yields of the three sub-basins in Sacramento county and the diversions from the American River negotiated as part of the *Water Forum Agreement*.

8. The *Water Forum Agreement* contains estimated average annual yields for each of the three sub-areas of the groundwater basin in Sacramento county and limits to diversions from the American River. Beyond these agreements, limits on water from other sources have not been negotiated as part of the *Water Forum Agreement*. Signatories retain the right to support or oppose water projects that would use water from sources that have not been negotiated as part of the *Water Forum Agreement*.

9. There is a need for greater information exchange than just having water purveyors provide project-by-project assessments of water supply availability. Therefore, purveyors agree to participate in a proactive program to educate all land use authorities in the region about the provisions of the *Water Forum Agreement*.

10. It is recognized that the *Water Forum Agreement* focuses on providing a reliable and safe water supply and protecting the Lower American River. As such it is not an agreement on land use planning. Therefore all signatories retain the ability to support or oppose land use decisions on any basis except water supply availability insofar as these water supply decisions are consistent with the *Water Forum Agreement*.

V. FOLSOM RESERVOIR RECREATION

A. Intent

In the future, Folsom Reservoir levels will be influenced by many factors including U.S. Bureau of Reclamation operations, flood control operations and water diversions. Even with implementation of the Water Conservation Element and the Actions to Reduce Diversion Impacts in Drier Years, there will be times when Folsom Reservoir will be lower, thereby affecting the opportunities for reservoir recreation. [10]

Because Folsom Reservoir is recognized as an important resource, the Water Forum has consulted closely with the California Department of Parks and Recreation (CDPR) which manages recreation at the reservoir. After extensive discussions and negotiations among Water Forum purveyors and with CDPR, a program to improve recreation facilities at Folsom Reservoir has been developed.

B. Specific Agreement on Folsom Reservoir Recreation

Water Forum signatories will work with their elected officials, California Department of Park and Recreation (CDPR) and other agencies that have an interest in reservoir levels, such as Congress, USBR, California Department of Boating and Waterways and the Sacramento Area Flood Control Agency, to obtain at least $3,000,000 of new funding for improvements to Folsom Reservoir recreation facilities.[11]

The CDPR will develop a list of potential recreation improvement projects as part of the funding request. One type of project could be “mini-dikes" i.e., sculpted embankments within the lake bed to impound water for swimming use when reservoir levels are low. Design of the improvements in the lake would also include consideration of features for improving warm water fishery habitat, such as structural complexity for fish on the lake side of the mini-dike embankment, which would also support recreation fishing. Other projects could include but are not limited to those identified in the Water Forum EIR. The improvements are intended to help mitigate the anticipated loss of visitor days.

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[10] Historically, many Water Forum purveyors secured water rights prior to the construction of the Folsom Reservoir. After construction of the reservoir, U.S. Bureau of Reclamation assumed responsibility for operating the reservoir to store and manage water for the operation of the Central Valley Project (CVP), among other purposes. The reservoir has historically held and released to CVP customers water that Water Forum purveyors were entitled to but had not diverted. Some purveyors signatory to the *Water Forum Agreement* believe that reservoir declines are properly viewed as being caused by the lack of replacement water supplies for the Central Valley Project as senior water rights are exercised and CVP yield is required to be used for environmental purposes. Accordingly, these purveyors believe that CEQA mitigation for reservoir impacts is not a legally required purveyor responsibility. Nonetheless they have agreed to measures that will tend to lessen the effect of the reduction in Folsom Reservoir levels that will occur in the future.

[11] New funding means funding that Water Forum signatories are instrumental in obtaining that was not authorized, appropriated or required as of January 1, 2000.

The CDPR is the agency responsible for managing the recreational resources at Folsom Reservoir. Therefore it is the appropriate agency to receive these funds and manage the recreation improvement projects.

Although previous cooperative efforts between Water Forum stakeholders and other agencies have been successful (such as the securing federal authorization and appropriation for the Temperature Control Device) it is not certain that the $3 million in funding for Folsom Reservoir recreation improvements will be secured.

It is also recognized that it will take purveyors several years to obtain all necessary approvals for the facilities needed to divert the additional water projected in the *Water Forum Agreement*. It will take additional time for them to construct the facilities necessary to increase their diversions. Later, after their facilities are actually constructed, the diversions will increase gradually over the thirty-year period of the *Agreement.*

Therefore, purveyors signing the *Water Forum Agreement* that plan to increase their diversions of American River water commit that if less than $3,000,000 of new funds are secured by the year 2008, they would provide a lump sum payment of any amount of the $3 million not obtained up to a maximum of $1,000,000 to California Department of Parks and Recreation no later than June 30, 2009 for projects to improve Folsom Reservoir recreation. This is to provide certainty that some projects can be implemented.

Purveyors in the *Water Forum Agreement* will enter into a contract among themselves committing to share the cost of the $1 million payment to CDPR if additional new funds are not secured. Costs would be apportioned among purveyors based on their anticipated share of total year 2030 increased diversions of American River water.

VI. PROCEDURAL AGREEMENTS FOR THOSE NOT IN THE INITIAL *WATER FORUM AGREEMENT*

A. Background

The initial *Water Forum Agreement* records those agreements among stakeholder organizations that could be entered into as the effective date of this initial *Water Forum Agreement*. However, it is recognized that there are some stakeholder organizations that have remaining issues that could not be resolved by that time.

Therefore this section of the *Water Forum Agreement* describes the process by which those remaining issues will be addressed and how the *Water Forum Agreement* will be amended to include those agreements as soon as they are complete.

B. Specific Agreements

1. All signatories to the *Water Forum Agreement* commit to work in good faith with organizations whose issues were not fully resolved by the effective date of this initial *Water Forum Agreement*. Their goal will be to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.

2. Mutually agreed upon Water Forum Successor Effort expenses related solely to converting that purveyor's procedural agreement into a Specific Agreement will be reimbursed by that purveyor. As soon as the purveyor has negotiated a Specific Agreement and it signs the *Water Forum Agreement*, it will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have Specific Agreements.

3. Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:

   a. Amending the *Water Forum Agreement*;

   b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum EIR; and

   c. Decisions regarding expenditures of Habitat Management Funds.

4. Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement* they will first attempt to resolve the dispute through mediation in the Successor Effort.

5. Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.

SECTION FIVE: SPECIFIC AGREEMENTS AND MUTUAL COMMITMENTS

I. PURVEYOR SPECIFIC AGREEMENTS

CARMICHAEL WATER DISTRICT

A. INTRODUCTION

Carmichael Water District (CWD) serves the community of Carmichael and currently has 10,850 connections, 10,189 of which are residential.

CWD has American River water rights for 32,600 AF, of which 14,000 AF is licensed. CWD has a "Ranney Collector" diversion facility on the American River. CWD also uses groundwater to meet a portion of their demands as well as for meeting peaking needs.

Because of the Surface Water Treatment Rule, the California Department of Health Services is requiring CWD to provide filtration to their water supply from the American River. CWD is constructing a Water Treatment Plant (WTP) at the site of their existing corporation yard on Bajamont Way. CWD will be constructing the plant in two phases, the initial phase includes a 17 million gallons per day (mgd) membrane filter facility which has expansion capacity to 22 mgd. The plant construction will include modification to CWD Ranney collectors which will make them less obtrusive to the environment of the Lower American River.

After completion of the WTP, CWD will continue to use groundwater as necessary for peaking.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for the CWD's American River diversion is 12,000 AF.

D. AGREEMENT FOR MEETING CARMICHAEL WATER DISTRICT'S WATER SUPPLY NEEDS TO THE YEAR 2030

1. MOST YEARS: As it applies to the CWD portion of the agreement, Most Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.

In most years, CWD will divert and use up to their license amount, 14,000 AF. By the year 2030, it is most likely that the water demand for the District will be reduced to their historic baseline level of 12,000 AF by implementation of urban water conservation Best Management Practices.

2. DRIER YEARS: As it applies to the CWD portion of the agreement, Drier Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet and equal to or greater than 400,000 acre feet.

In drier years, CWD will divert and use up to their license amount, 14,000 AF. By the year 2030, it is most likely that the water demand for the District will be reduced to their historic baseline level of 12,000 AF by implementation of urban water conservation Best Management Practices. There is no reduction in diversion for CWD in drier years, since the 12,000 AF is equivalent to their baseline diversion.

3. DRIEST YEARS (i.e. CONFERENCE YEARS): Defined for purposes of the *Water Forum Agreement* as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet.

In the driest years, CWD will divert and use up to their license amount, 14,000 AF. By the year 2030, it is most likely that the water demand for the District will be reduced to their historic baseline level of 12,000 AF by implementation of urban water conservation Best Management Practices. This agreement specifies no reduction in diversion for CWD in conference years, since the 12,000 AF is equivalent to their baseline diversion.
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However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre feet there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years CWD will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Section Four, I. of the *Water Forum Agreement*.

4. Signatories to the *Water Forum Agreement* acknowledge and agree that CWD shall not relinquish control of or otherwise abandon the right to any quantity of water that it has foregone delivery and/or diversion of under this agreement, and shall retain the right (if any) to transfer that water for other beneficial uses, after that water has served its purpose of assisting in the implementation of the Improved Pattern of Fish Flow Releases, for diversion or rediversion at, near, or downstream of the confluence of the Lower American River and the Sacramento River. The signatories also recognize that any such transfer of water by CWD must be in accordance with applicable provisions of federal and state law.

Signatories to the *Water Forum Agreement* also acknowledge that CWD has the right to use groundwater instead of the surface water diversions (12,000 acre feet) which have been agreed to. Any reduction of this 12,000 acre foot diversion could be transferred for other beneficial uses for diversion upstream or downstream of the mouth of the American River, provided that such transfer by CWD must be in accordance with applicable provisions of federal and state law.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may*

provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for

investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV., Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the agreement to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

> a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some

or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the agreement that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any

other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

None

CITIZENS UTILITIES COMPANY OF CALIFORNIA

A. INTRODUCTION

Citizens Utilities Company of California (CUCC) is an investor owned utility operating under the rules and regulations of the California Public Utilities Commission (CPUC). CUCC has six service areas within the metropolitan area of Sacramento County; (1) Antelope, which serves the communities of Antelope and Elverta; (2) Lincoln Oaks/Royal Oaks which serves portions of Citrus Heights and North Highlands; (3) Parkway which is located in the Florin area, (4) Rosemont/Suburban which serves Rosemont and the western portion of Rancho Cordova; (5) Arden in the Arden Arcade area; and (6) Security Park in the Sunrise Douglas area. CUCC also provides water service in Placer County for the Sabre City Mobile Home Park and is the exclusive franchisee for water service in western Placer County. In addition CUCC serves water to the City of Isleton and the community of Walnut Grove.

The Arden, Rosemont and a portion of the Parkway service areas are within the City of Sacramento's Place of Use (POU) for their American River water rights. The Placer County Service area is within the Placer County Water Agency POU. All of CUCC's service areas utilize groundwater. In addition, surface water supplied by the City of Sacramento is used in the Southgate service area.

CUCC has 54,164 active connections, 48,610 of which are residential (46,441 are unmetered).

Projected demands for CUCC are included in several areas: the North Central Group, City's POU North, City's POU South, and the South County M&I Group.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Because they do not divert from the American River, no American River diversion was included in the baseline for CUCC.

D. AGREEMENT FOR MEETING CITIZENS UTILITIES COMPANY OF CALIFORNIA'S WATER SUPPLY NEEDS TO THE YEAR 2030

CUCC is governed by the CPUC; any and all agreements proposed must be reviewed and approved by the CPUC prior to adoption.

CUCC has six service areas within the metropolitan area of Sacramento County; (1) Antelope, which serves the communities of Antelope and Elverta; (2) Lincoln Oaks/Royal Oaks which serves portions of Citrus Heights and North Highlands; (3) Parkway which is located in the Florin and Southgate areas, (4) Rosemont/Suburban which serves Rosemont and the western portion of Rancho Cordova; (5) Arden in the Arden Arcade area; and (6) Security Park in the Sunrise Douglas area. The projected water demand for CUCC at year 2030 totals 58,600 acre feet, applying demand reduction through full implementation of BMP's.

1. The projected water demand for CUCC service areas within the City of Sacramento's place of use (POU) including the Arden area, a portion of the Rosemont/Suburban area and a portion of the Parkway area is approximately 24,600 acre feet.

a. CUCC has contracted with the City of Sacramento for delivery of surface water for their Southgate service area, through the City's E. A. Fairbairn and Sacramento River Water Treatment Plants, with the following conditions:

(1) During off-peak periods (October 15th through May 14th) deliveries shall not exceed a maximum of 5.76 million gallons per day (mgd).

2) During on-peak periods (May 15th through October 14th) deliveries shall not exceed 1.13 mgd.

3) Water delivered shall not exceed 2,580 acre-feet annually.

CUCC will use groundwater to meet the balance of their demand for the Southgate service area.

b. For other CUCC service areas within the POU which include the Arden area, a portion of the Rosemont area, and a portion of the Parkway area, when a contract with the City of Sacramento for delivery of surface water beyond the existing contract for the

Southgate area is proposed, signatories to the *Water Forum Agreement* will meet in good faith with the objective to develop mutually acceptable provisions consistent with the two coequal objectives of the *Water Forum Agreement.*.

CUCC will also use groundwater to meet the balance of their demand for these service areas.

c. It is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre feet there may not be sufficient water available to provide the purveyors with the driest year quantities specified in their agreements and provide the expected driest year flows to the mouth of the American River. In those years CUCC will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Section Four, I. of the Water Forum Agreement.

2. The projected water demand for CUCC service areas within the North Central Purveyor Group which includes the Antelope, and Lincoln Oaks/Royal Oaks service areas is approximately 20,000 acre feet.

Surface water delivered to these CUCC service areas will likely come from diversions pursuant to the Northridge-PCWA transfer Agreement. The conditions included in Northridge Water District's Purveyor Specific Agreement will apply to surface water delivery to these CUCC service areas.

CUCC will use groundwater to meet the balance of their demand for these service areas.

3. The projected water demand for CUCC service areas within the South County M&I Users Group which includes a portion of the Rosemont/Suburban area, a portion of the Parkway area and Security Park is approximately 14,000 AF.

Surface water delivered to these CUCC service areas will likely come from a future contract with the Sacramento County Water Agency (SCWA) consistent with the Sacramento County/SCWA Purveyor Specific Agreement.

CUCC will use groundwater to meet the balance of their demand for these service areas.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS
(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major

transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV., Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This

purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. CUCC is required to obtain prior CPUC approval for all contracts, Agreements, MOUs, expenditures, etc.

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

1. Development of a groundwater management arrangement for the South Area.

2. CUCC is governed by the CPUC; any and all agreements proposed must be reviewed and approved by the CPUC prior to adoption.

CITY OF FOLSOM

A. INTRODUCTION

The City of Folsom (Folsom) is located in the northeastern corner of Sacramento County adjacent to both Placer and El Dorado Counties. A small portion of Folsom on the north side of the American River is served by the San Juan Water District.

Within the portion of Folsom south of the American River, Folsom currently has 9,900 connections, of which 8,500 are Residential. All commercial services are metered and billed based on meter readings.

Folsom has a Pre-1914 water right to 22,000 acre feet (AF) of American River water. This right and 10,000 AF of water right owned by the Arden Cordova Water Service (ACWS) totaling 32,000 AF are held under a Co-Tenancy agreement between the two agencies. On March 8, 1994, Folsom and ACWS entered into an agreement wherein "ACWS agrees to sell and Folsom agrees to purchase and pay for up to five thousand acre feet of water (Reallocated Water) each fiscal year."

Folsom is in the process of contracting with the USBR (through the Sacramento County Water Agency) for 7,000 AF of American River water for delivery from Folsom Reservoir, as authorized by Public Law 101-514.

All of its surface water is diverted from the Folsom Reservoir.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements

C. BASELINE DIVERSIONS FROM AMERICAN RIVER

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995, or a negotiated amount.

In the Driest Years, the baseline for Folsom's diversion is an agreed upon amount of 20,000 AF. This amount is within the range of uncertainty in the historic diversion data and is equivalent to Folsom's current diversion and treatment plant capacity. Additionally, in Conference Years, Folsom would encourage conserving an additional 2,000 AF through extra-ordinary conservation for Folsom Reservoir recreational benefits and for release to the Lower American River for fishery benefits.

D. AGREEMENT FOR MEETING FOLSOM'S WATER SUPPLY NEEDS TO THE YEAR 2030

The Water Forum recognizes that the City of Folsom has applied to include the area south of Highway 50 into its sphere of influence. It is agreed that if the Local Agency Formation Commission (LAFCO) grants Folsom's application, the Water Forum Successor Effort will consider the question of whether there can be agreement on a mutually acceptable water supply for development in that area.

Water Forum signatories retain their ability to support or oppose Folsom's LAFCO application on any grounds including water supply. Nothing in the *Water Forum Agreement* provides support for an expanded water service area for that area south of Highway 50. Regardless of support or opposition by other Water Forum signatories, if the City of Folsom were to serve the south of Highway 50 area with any of the surface or groundwater resources covered under the *Water Forum Agreement* then all of the City's obligations under the *Water Forum Agreement* will apply to that area.

1. MOST YEARS: As it applies to the Folsom's portion of the Agreement, Most Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.

In most years, Folsom will divert and use 34,000 AF.

2. DRIER YEARS: As it applies to the Folsom's portion of the Agreement, Drier Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet and equal to or greater than 400,000 acre feet.

In drier years, Folsom will divert and use a decreasing amount of surface water from 34,000 AF to 22,000 AF (or the equivalent, see example below) in a 3 stage stepped and ramped reduction in proportion to the decrease in the March through November when unimpaired inflow to Folsom Reservoir, from 950,000 to 400,000 AF. Stage 1, a decreasing amount from 34,000 AF to 30,000 AF in proportion to the decrease in March through November unimpaired inflow to Folsom Reservoir greater than 870,000 AF but less than 950,000 AF. Stage 2, fixed at 27,000 AF when

the March through November unimpaired inflow to Folsom Reservoir is greater than 650,000 AF but less than or equal to 870,000. Stage 3, fixed at 22,000 AF when the March through November unimpaired inflow to Folsom Reservoir is equal to or greater than 400,000 AF but less than or equal to 650,000 AF.

As an example of how Folsom will meet its needs during drier years, Folsom will reduce diversions by imposing additional conservation levels, and will continue to divert water from Folsom Reservoir for the balance of their needs. However, Folsom will enter into agreements with other purveyors that have access to both surface water and groundwater for an equivalent exchange of the amount of reduction needed by Folsom as outlined above in the 3 stages of reduction. Under these arrangements, other purveyors will use groundwater in lieu of surface water equivalent to the amount that Folsom would continue to divert.

3. DRIEST YEARS (i.e. CONFERENCE YEARS): Defined for purposes of the *Water Forum Agreement* as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet.

In the driest years, when the March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF, Folsom will reduce diversions (or the equivalency, see example below) to 20,000 AF.

Also, Folsom will reduce diversions in the driest years by encouraging additional extra-ordinary conservation to effectively achieve a reduction to 18,000 AF.

However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre feet there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years Folsom will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Section Four, I. of the *Water Forum Agreement*.

As an example of how Folsom will meet its needs during the driest years, Folsom will reduce diversions by imposing additional conservation levels, and will continue to divert water from Folsom Reservoir for the balance of their needs. However, Folsom will enter into agreements with other purveyors that have access to both surface water and groundwater for an equivalent exchange of the amount of reduction needed by Folsom as outlined above in the 3 stages of reduction. Under these arrangements, other purveyors will use groundwater in lieu of surface water equivalent to the amount that Folsom would continue to divert.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III).

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII.,

Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to

53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories to the *Agreement* will endorse completion of the PL 101-514 water contract for Folsom.

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of

Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
>
> and
>
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable Agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the agreement to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the*

Water Forum Agreement," that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the

Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

None

CITY OF GALT

A. INTRODUCTION

The City of Galt (Galt) serves an area in the southern part of Sacramento County on both sides of State Highway 99.

Galt currently has 5,132 connections, 4,975 of which are residential.

The current water supply for Galt is entirely groundwater.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Because they do not divert from the American River, no American River diversion was included in the baseline for Galt.

D. AGREEMENT FOR MEETING GALT'S WATER SUPPLY NEEDS TO THE YEAR 2030

Galt will use groundwater to meet all of their projected demands.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII.,

Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

At such time the City of Galt needs discretionary approvals for new or expanded surface water supplies, they agree to annually retrofit at least 3.3% - 5% of the total number of unmetered residential connections and read and bill as set forth in the Water Forum Conservation Element.

If in the future the City of Galt receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower

American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions,

and

Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental

conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

Development of a groundwater management arrangement for the Galt Area.

CITY OF ROSEVILLE

A. INTRODUCTION

The City of Roseville (Roseville) is located in the southern part of Placer County adjacent to Sacramento County.

Roseville currently has about 24,500 connections, of which about 22,000 are residential.

Roseville has a contract with the United States Bureau of Reclamation (USBR) for 32,000 AF and a contract with PCWA for 30,000 AF of American River water. All surface water is diverted from the Folsom Reservoir.

Roseville also has groundwater wells for emergency backup.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS FROM AMERICAN RIVER

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for Roseville's American River diversion is 19,800 AF.

D. AGREEMENT FOR MEETING ROSEVILLE'S WATER SUPPLY NEEDS TO THE YEAR 2030

1. MOST YEARS: As it applies to the Roseville's portion of the Agreement, Most Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.

In most years, Roseville will divert and use 54,900 AF.

2. DRIER YEARS: As it applies to the Roseville's portion of the Agreement, Drier Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet and greater than or equal to 400,000 acre feet.

In drier years, Roseville will divert and use a decreasing amount of surface water from 54,900 AF to 39,800 AF in proportion to the decrease in unimpaired inflow, from 950,000 to 400,000 AF, to Folsom Reservoir. During drier years Roseville will continue to meet their customers' needs while reducing diversions by additional conservation, using groundwater, and using reclaimed water. Additionally, Roseville will enter into an agreement with the Placer County Water Agency (PCWA) for replacing water to the River, up to 20,000 AF, from reoperation of PCWA's Middle Fork Project (MFP) reservoirs.

3. DRIEST YEARS (i.e. CONFERENCE YEARS): Defined for purposes of the *Water Forum Agreement* as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet.

In the driest years, Roseville will divert and use up to 39,800 AF. In the driest years, Roseville will continue to meet their customers' needs while reducing diversions by additional conservation, using groundwater, and using reclaimed water. Additionally, Roseville will enter into an agreement with PCWA for replacing 20,000 AF of water to the River from reoperation of PCWA's MFP reservoirs.

However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre feet there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years Roseville will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Section Four, I. of the *Water Forum Agreement*.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities.(See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII.,

Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to

53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions,

and

Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum*

Agreement, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

None

CITY OF SACRAMENTO

A. INTRODUCTION

The City of Sacramento (City) purveys water within the City limits and a small area outside the City limits in the Fruitridge area. The City serves approximately 121,000 connections of which about 110,000 are residential customers.

The City of Sacramento has surface water entitlements on both the American and Sacramento Rivers and also uses groundwater. The City has a permanent agreement with the United States Bureau of Reclamation guaranteeing the accessibility of their entitlements. The authorized place of use under the City's water rights do not encompass the entire metropolitan area. The Sacramento River rights apply to the City limits; the American River rights cover an area of approximately 96,000 acres within and adjacent to the City.

The City has existing diversion, treatment, storage and pumping facilities on both of the rivers. The Sacramento River plant is located just downstream of the confluence with the American River. The American River plant known as the E. A. Fairbairn Water Treatment Plant (FWTP) is located near Howe Avenue approximately 16 miles downstream from Nimbus Dam.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Although the City has the physical capacity to divert up to 112,000 AF, the baseline for the City's American River diversion is 50,000 AF. The rest of the City's surface water demand is met by Sacramento River diversion.

D. AGREEMENT FOR MEETING THE CITY OF SACRAMENTO'S WATER SUPPLY NEEDS TO THE YEAR 2030

TEXT OF CITY AGREEMENT:

1. Use of E. A. Fairbairn Water Treatment Plant (FWTP) Diversion Capacity

a. In extremely dry years (i.e., years in which the State of California Department of Water Resources [DWR] annual projected unimpaired inflow into Folsom Reservoir would be 550,000 Acre-Feet Annually (AFA) or less, also referenced as the March through November projected unimpaired flow into Folsom Reservoir being less than 400,000 acre feet) the City would limit its diversions of City Water[12] at the FWTP to not greater than 155 cubic feet per second (cfs) and not greater than 50,000 AFA. Any additional water needs would be met by diversions at other locations and/or other sources.

City water diverted at the FWTP in extremely dry years in accordance with the foregoing limitations could be used anywhere within the City's authorized Place of Use (POU) as it exists now and in the future[13].

b. In all other years, (i.e. when the DWR annual projected unimpaired runoff into Folsom Reservoir is greater than 550,000 AF, or the March through November projected unimpaired inflow into Folsom Reservoir is greater than 400,000 AF) the City may divert City Water at the FWTP in accordance with the following criteria.

(1) Diversion up to 310 cfs (200 mgd) so long as the flow bypassing the diversion at the FWTP is greater than the Hodge Flow Criteria[14].

(2) Whenever flow bypassing the diversion at the FWTP is less than the Hodge Flow Criteria, City diversions may not be greater than the following:

January through May	120 cfs
June through August	155 cfs
September	120 cfs
October through December	100 cfs

c. **Retail Water Service**. City Water diverted at FWTP in accordance with Article (b) of this section may be delivered anywhere: (1) within the City limits as they exist now

[12]The term "City Water" refers to water diverted pursuant to the City's water rights and entitlements.
[13]The City's POU, as it existed on January 1, 1997, is shown on Attachment I.
[14] The "Hodge Flow Criteria" is defined in Appendix C.

and in the future, and (2) within the City Retail Service Area[15] as it exists now and in the future but not including the area designated on Attachment II expected to be served by agencies other than the City.

d. **Wholesale Water Service - Above Hodge**. Whenever the flow bypassing the diversion at the FWTP is greater than the Hodge Flow Criteria the City may deliver City Water diverted or treated at the FWTP to public or private water purveyors on a wholesale basis, pursuant to wholesale agreements, anywhere within the POU as it existed on January 1, 1997. If it is proposed in the future to expand the POU this provision will be revisited by the Water Forum Successor Effort.

e. **Wholesale and Wheeling Water Service - Below Hodge.** Whenever flow bypassing the diversion at the FWTP is less than the Hodge Flow Criteria, any water diverted or treated at the FWTP may be delivered on a wholesale (City Water) or wheeling (non-City water) basis to any public or private water purveyors provided the rate of pumpback[16] is equal to or exceeds the rate of delivery for these purposes on a daily basis.

f. **Wholesale Delivery to Arcade and Citizens Utilities - Interim Period.** During the interim period prior to expansion of the FWTP and construction of a pumpback facility, delivery of City water may be provided to Arcade Water District and Citizens Utilities service areas within the City's POU whenever the flow bypassing the diversion at the FWTP is greater than the Hodge Flow Criteria. Such wholesale deliveries may also be made if it can be demonstrated[17] that such delivery does not originate from diversion at the FWTP. Citizens Utilities Southgate Service Area is exempt from this specific restriction.

g. **Environmental Signatories Support.** Environmental signatories' support for wholesale water deliveries from the City under articles d, e, and f of this section is contingent on those purveyors signing and implementing the *Water Forum Agreement*. Citizens Utilities Southgate Service Area is exempt from this contingency.

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[15] The "City Retail Service Area" refers to the area where the City provides retail water service.

[16] This Agreement uses the term "pumpback" which assumes the existence of a metered raw water conveyance facility delivering water from near the confluence of the Sacramento and American rivers to the FWTP.

[17] Demonstration would consist of either the FWTP being out of service and/or the water quality of the water delivered having characteristics (i.e. electrical conductivity, total dissolved solids, hardness, etc..) of Sacramento River water.

2. Divert and Treat an Additional 155 cubic feet per second at the Fairbairn Water Treatment Plant.

a. Currently the 310 cubic feet per second diversion capacity at the Fairbairn Water Treatment Plant is constrained to 155 cubic feet per second by the City's ability to treat the water.

The City may rehabilitate its FWTP diversion facility and expand its FWTP treatment capacity by another 100 million gallons per day. This will allow the City to divert and treat an additional 155 cubic feet per second consistent with the terms of Section 1 above.

b. Concurrent with the expansion of the FWTP the City will also construct other facilities such as expansion/rehabilitation of the Sacramento River Water Treatment Plant and river intake to assure that a reliable alternative supply (groundwater, pumpback and/or diversion from the Sacramento River) is available whenever it is needed.

3. Continuing studies of the Lower American River

a. Upon receipt by the City of all necessary regulatory approvals to construct the additional capacity referred to in Section 2(a), above, completion of the City's environmental review for the project, and construction of said additional capacity, the City will commence a study program to monitor and evaluate the impacts of using the additional diversion capacity, in accordance with the diversion limits described in Section 1, upon the public trust values of the American River below the FWTP.

b. Not later than five years after the study program has commenced the results will be evaluated as follows:

(1) If the City and the Water Forum Successor Effort agree that results show that use of the additional diversion capacity pursuant to Section 1 above would have a significant adverse impact not considered in the City's prior environmental review, the City will reduce its use of the additional diversion capacity to levels that will not have such significant adverse impact.

(2) If at some time in the future, the City determines that it needs additional capacity and the Water Forum Successor Effort agrees that results demonstrate that increased diversions will not have significant adverse impacts, the City will have the support of all signatories if it chooses to pursue regulatory approvals for appropriate higher diversion limits and for the construction of more diversion and treatment capacity at FWTP for use within the POU.

(3) If the City and the Water Forum Successor Effort cannot agree on the results of (1) above, the limits will remain as specified in Section 1, the studies will continue and the evaluation of results will be repeated, as above, at intervals not exceeding three years.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

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19. All signatories to the *Agreement* will endorse County/SCWA agreements with the City of Sacramento for wheeling and wholesaling of surface water prior to and after completion of the City's capacity expansion.

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions, and

Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

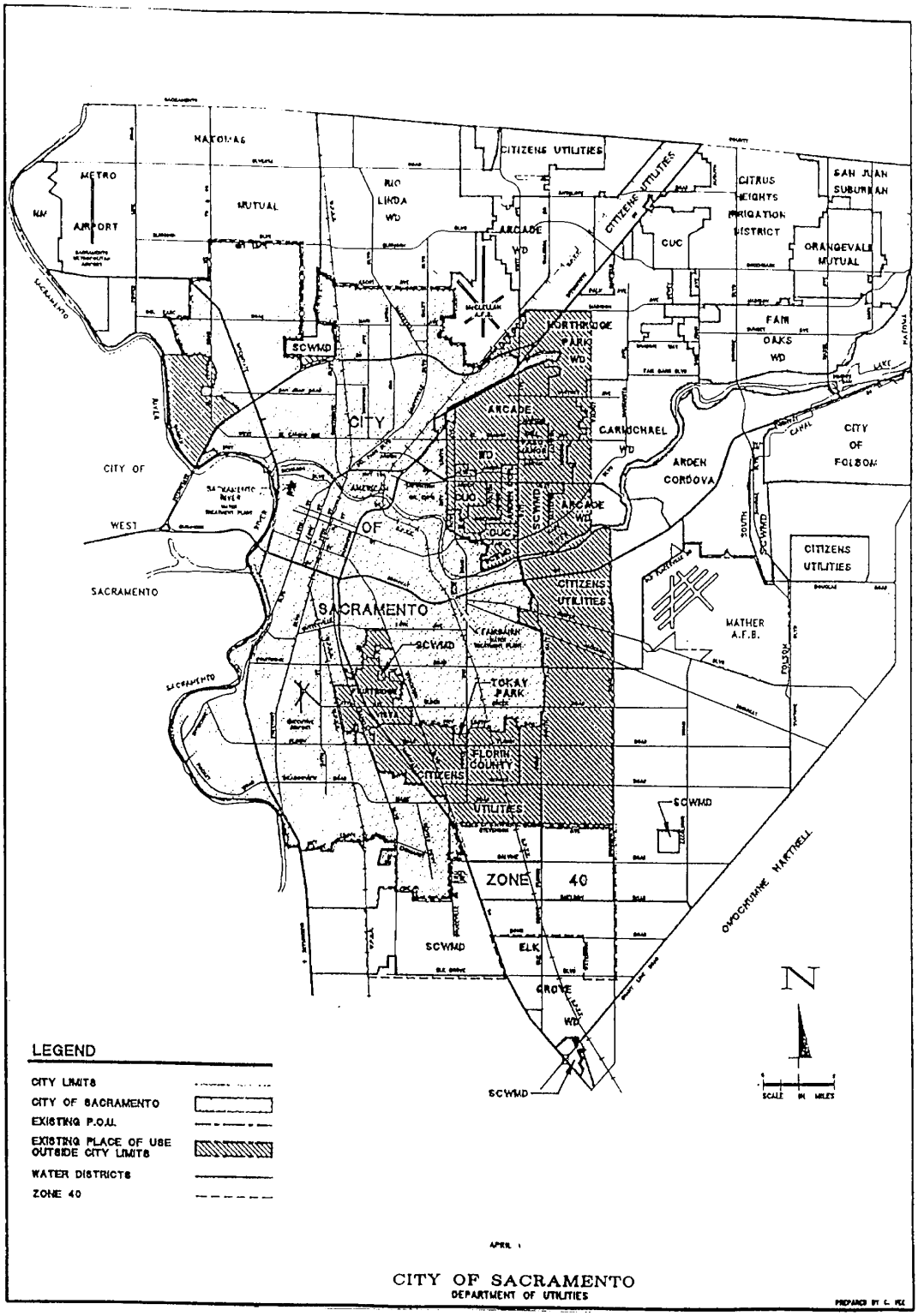
f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

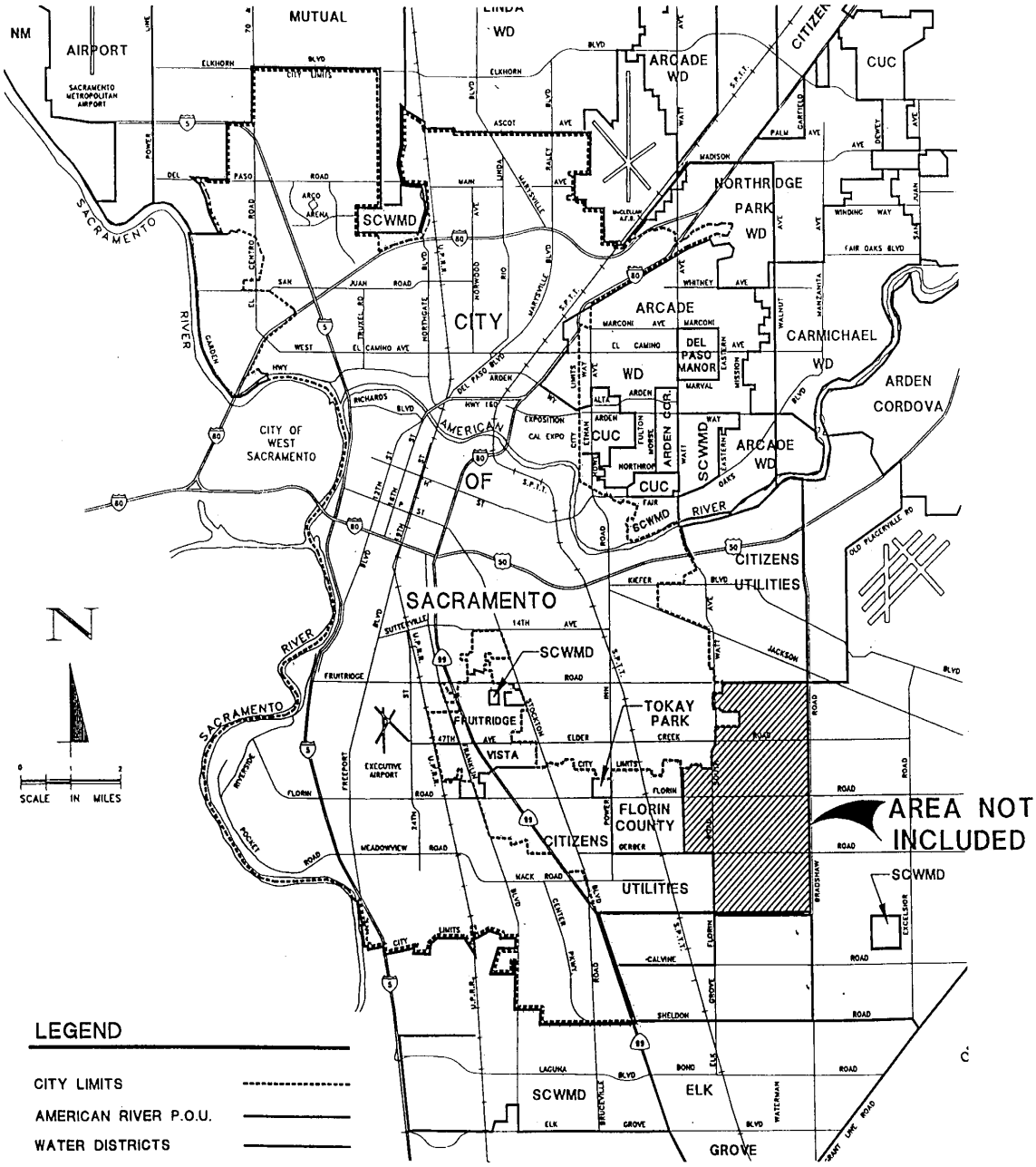
G. REMAINING ISSUES

Development of a groundwater management arrangement for the South Area.

Attachment I
Map of City POU as of 1/1/97



Attachment II
Retail Service Area Exception



COUNTY OF SACRAMENTO\SACRAMENTO COUNTY WATER AGENCY

A. INTRODUCTION

The County of Sacramento (County) purveys water in seven separate retail service areas within the unincorporated area. County retail service areas vary in size from as few as 30 connections in the smallest service area to more than 17,000 connections in the Laguna/Vineyard service area. There is a total of approximately 20,000 connections in the County retail service areas, of which about 19,000 are residential customers.

The Sacramento County Water Agency (SCWA) is responsible for providing wholesale water supply to an area of the Laguna, Vineyard, and Elk Grove communities commonly referred to as "Zone 40". The long-term Master Water Plan for Zone 40 is based on meeting present and future water needs through a program of conjunctive use of groundwater and surface water.

It is anticipated that Zone 40 will be expanded to include large areas in the southern part of Sacramento county which may be developed that are presently unorganized as far as water supply. Both supply and demands for these new growth areas are included in this County/SCWA Purveyor Specific Agreement.

Neither the County nor SCWA presently has long-term surface water entitlements. However, SCWA has entered into a contract with USBR for 22,000 AF of American River water, authorized by Public Law 101-514. Seven thousand AF of the 22,000 AF of water will be subcontracted to the City of Folsom. The remaining 15,000 AF of the PL 101-514 water for SCWA use will be diverted at or near the mouth of the American River or from the Sacramento River. SCWA has also entered into a three party agreement-in-principle with SMUD and the City of Sacramento for the assignment to SCWA of 15,000 AF of SMUD's existing contract with the USBR, to be diverted at or near the mouth of the American River or from the Sacramento River. SCWA and SMUD have also begun negotiations for purchase by the SCWA and assignment from SMUD of a second 15,000 AF block of SMUD's USBR contract. A portion of the payments to SMUD from the County would be used to construct groundwater facilities which may be operated and maintained by the County. Groundwater from these wells would be available as an alternative supply for SMUD to meet increased demands in the drier and conference years as defined in the Purveyor Specific Agreement for SMUD.

In addition to the 15,000 AF of PL 101-514 contract and pursuing 30,000 AF of SMUD surface water, SCWA has applied to the SWRCB for excess flows on the American and Sacramento Rivers. That application is pending and is subject to negotiated terms through the Water Forum for delivery. To reduce reliance on intermittent surface water, SCWA intends to pursue upstream water transfers which would be diverted at or near the mouth of the American River or from the Sacramento River.

Delivery of surface water to Zone 40 requires wholesale and wheeling contracts between the City of Sacramento and SCWA. This includes construction of facilities, including treatment plant capacity within the City of Sacramento.

A portion of the expanded Zone 40 area is situated within the Place of Use for the City of Sacramento's American River water entitlements. It is assumed that these entitlements would be used to serve this expanded Zone 40 area. Conditions for use of this entitlement would be consistent with the conditions outlined in the City of Sacramento's Purveyor Specific Agreement.

All of the County's retail service areas are supplied groundwater with the exception of the Laguna/Vineyard service area (Zone 40), which is supplied groundwater in combination with interim surface water. County/SCWA has an agreement with the City of Sacramento for treatment and delivery of interim surface water to Zone 40.

A portion of the Elk Grove Water Works (EGWW) retail service area is located within the boundary of Zone 40. Water used in this area is made up of groundwater pumped by EGWW and groundwater and surface water served to EGWW through a wholesale water purchase agreement with SCWA. The contract between the SCWA and the USBR for water available through PL 101-514 requires that EGWW meet the terms and conditions of the PL 101-514 contract including a comprehensive water conservation plan and meter retrofit program to receive CVP contract surface water.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

No American River diversions were included in the baseline for County/SCWA.

D. AGREEMENT FOR MEETING THE COUNTY OF SACRAMENTO'S AND THE SACRAMENTO COUNTY WATER AGENCY'S WATER SUPPLY NEEDS TO THE YEAR 2030

The County/SCWA surface water needs are included in the South County M&I users group. The County/SCWA portion of the demand, 87,000 AF, includes both existing and expanded Zone 40 areas. It is anticipated that Zone 40 will be expanded to include large areas in the southern part of Sacramento County which may be developed that are presently unorganized.

To meet these demands, the firm surface water supply of 45,000 AF (15,000 AF of USBR contract water under PL 101-514 and 30,000 AF of SMUD entitlement transfer), an intermittent surface water supply of 33,000 AF, and groundwater will be necessary. The PL 101-514 and SMUD water will be subject to shortages imposed on all CVP M&I contractors. Intermittent surface water is available only when the water is surplus to the needs of the San Joaquin-Sacramento River and Delta. Upstream water transfers will be pursued to reduce reliance on intermittent surface water. All of the surface water for the County/SCWA is assumed to be diverted at or near the mouth of the American River or from the Sacramento River.

Groundwater will be used in a conjunctive use basis by the South County M&I users group with a total 2030 demand of 117,600 AF. The South County M&I users group also includes a portion of Citizens Utilities Company and the Elk Grove Water Works. The amount of groundwater used will vary from approximately 95,100 AF in the driest years decreasing to approximately 34,000 AF in the wet years.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse water entitlements needed in this Purveyor Specific Agreement as follows:

   a. All signatories to the *Water Forum Agreement* agree to continue their support for SCWA's contract for 22,000 acre feet of water authorized by Public Law 101-514.

   b. All signatories to the *Water Forum Agreement* will support transfers of 30,000 acre feet of Sacramento Municipal Utility District's Central Valley Project entitlement to be used for planned growth within the Urban Service Boundary.

   c. All signatories agree to support a conjunctive use program to meet SCWA's water needs for planned growth within the Urban Service boundary.

d. All signatories to the *Water Forum Agreement* agree to support additional transfers of existing entitlements or new entitlements needed to support such a conjunctive use program. However environmental signatory organizations' support for specific additional transfers or new entitlements is subject to: their review of the specifics of the additional transfers or entitlements; their concurrence on the adequacy of conditions that will be included as part of such additional transfers or new entitlements; and full compliance with all applicable environmental laws and requirements.

e. All signatories anticipate that SCWA's water conservation program, contributions to the Successor Effort and contributions to the Lower American River Habitat Management Element would not have to be renegotiated in the context of additional transfers or new entitlements diverted from the Sacramento River.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the seven elements of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum, and any successor effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum agree that

operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories to the *Agreement* will endorse County/SCWA for completion of PL 101-514 water contracts.

20. All signatories to the *Agreement* will endorse County/SCWA for completion of the assignments of portions of SMUD's Central Valley Project water contract.

21. All signatories to the *Agreement* will endorse construction of County/SCWA's water supply facilities (this may include joint facilities constructed by the City of Sacramento) which include diversion at or near the mouth of the American River or from the Sacramento River, treatment plants, pumping stations, wells, storage facilities, and transmission piping. Endorsement is also needed for right of ways, permits, environmental documentation, and other endorsement which may be identified for County/SCWA to meet needs to the year 2030.

22. All signatories to the *Agreement* will endorse County/SCWA agreements with the City of Sacramento for wheeling and wholesaling of surface water prior to and after completion of the City's capacity expansion.

23. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

24. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

25. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

26. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

27. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions,
and
Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some

or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any

other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

Development of a groundwater management arrangement for the South Area.

DEL PASO MANOR WATER DISTRICT

A. INTRODUCTION

Del Paso Manor Water District (DPMWD) serves an area approximately 1 mile square in the Arden area.

DPMWD currently has 1,793 connections, of which 1,690 are residential.

All of the service area of DPMWD is within the City of Sacramento's place of use for their American River water rights. DPMWD has a contract with the City for an assignment of 2,460 acre feet (AF) of this entitlement. DPMWD has been a supporter of the Arden-Arcade Conjunctive Use Plan and has envisioned using surface water provided by the City of Sacramento when that Plan became a reality.

The current water supply for DPMWD is entirely groundwater.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Because they do not divert from the American River, no American River diversion was included in the baseline for DPMWD.

D. AGREEMENT FOR MEETING DEL PASO MANOR WATER DISTRICT'S WATER SUPPLY NEEDS TO THE YEAR 2030

DPMWD currently uses groundwater to meet their demands. When a contract between the City of Sacramento and DPMWD for delivery of surface water is proposed, signatories to the *Water Forum Agreement* will meet in good faith with the objective to develop mutually acceptable provisions consistent with the two coequal objectives of the *Water Forum Agreement*.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

At such time the Del Paso Manor Water District needs discretionary approvals for new or expanded surface water supplies, they agree to annually retrofit at least 3.3% - 5% of the total number of unmetered residential connections and read and bill as set forth in the Water Forum Conservation Element.

If in the future the Del Paso Manor Water District receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The Water Forum Agreement also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

   a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon*

Signing the Water Forum Agreement" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the

purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

None

FLORIN COUNTY WATER DISTRICT

A. INTRODUCTION

Florin County Water District (FCWD) serves an area adjacent to the Sacramento City limits in the Florin area.

FCWD currently has 2,177 connections, of which 2,005 are residential.

All of the service area of FCWD is within the City of Sacramento's place of use for their American River water rights.

The current water supply for FCWD is entirely groundwater.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Because they do not divert from the American River, no American River diversion was included in the baseline for FCWD.

D. AGREEMENT FOR MEETING FLORIN COUNTY WATER DISTRICT'S WATER SUPPLY NEEDS TO THE YEAR 2030

FCWD currently uses groundwater to meet their demands. When a contract between the City of Sacramento and FCWD for delivery of surface water is proposed, signatories to the *Water Forum Agreement* will meet in good faith with the objective to develop mutually acceptable provisions consistent with the two coequal objectives of the *Water Forum Agreement*.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

At such time the Florin County Water District needs discretionary approvals for new or expanded surface water supplies, they agree to annually retrofit at least 3.3% - 5% of the total number of unmetered residential connections and read and bill as set forth in the Water Forum Conservation Element.

If in the future the Florin County Water District receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

   a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon*

Signing the Water Forum Agreement" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the

purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

Development of a groundwater management arrangement for the South Area.

NATOMAS CENTRAL MUTUAL WATER COMPANY

A. INTRODUCTION

Natomas Central Mutual Water Company (Natomas) has surface water rights from the Sacramento River for use on 55,000 acres within "Natomas", an area just north of the City of Sacramento and extending into Sutter County. Natomas provides only surface water for agricultural use to just those land owners within its service area. Natomas' water supply is founded on Water Rights Settlement Contract that includes six water right licenses and one permit. Five of those licenses allow for Irrigation, Industrial, Municipal, and Domestic use. The sixth is an irrigation-only license which actually refers to the use of recirculated water in the drains. Finally, Natomas has a permit for winter diversions (during the months of November through March) from the Sacramento River up to 10,000 acre feet for all purposes. The permit may be converted to a license in 1999.

Natomas has a contract with the United States Bureau of Reclamation (USBR) for an annual total of 120,200 AF; the 120,200 AF entitlement is comprised of 98,200 AF of base supply and 22,000 AF of CVP supply. The 98,200 AF is diverted from the Sacramento River each year without payment to the USBR, however, there are monthly limitations which Natomas can divert during the 7-month period. Also, during critical year reductions, Natomas is required to reduce both its base and CVP diversions from the Sacramento River by 25 percent. The reductions required during critical years are based on Shasta inflow criteria. Natomas' present use of water is exclusively for agricultural purposes. Although Natomas has the right to provide M&I supply, it has no present plans to fulfill that role.

Although Natomas provides agricultural water to its landowners, land use changes over the next 30 years will require municipal and industrial water service to landowners. In the past two decades the Natomas agricultural area has experienced the expansion of two major freeways, the construction of the Sacramento County International Airport, the construction of Arco Arena, and the development of South Natomas. In the foreseeable future, another 2,000 acres will be developed adjacent to the Airport (Metro Air Park). In addition, Natomas is presently providing landscaping water service to the Sacramento County International Airport and Teal Bend Golf Course. In the next decade, Natomas' water will be used to fill the County of Sacramento's service to Metro Air Park as development proceeds. Another land use commitment will be the Natomas Basin Habitat Plan which will permanently set aside acreage to mitigate impacts of new development. This mitigation will require changes in Natomas' water management techniques.

The long term Master Plan of Natomas envisions a number of water management changes in order to adapt to the Natomas landowners change of land use. These changes may include agreements with municipal purveyors to provide treated water service to Natomas landowners, a conjunctive use program with the State of California, and a joint diversion with the Placer County Water Agency.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water*

Forum Agreement need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995. Natomas has no American River diversions. Consequently, no baseline figures were applicable to Natomas. The surface water they use is diverted entirely from the Sacramento River.

Natomas plans no increase in its historic maximum diversions annually from the Sacramento River and consequently is not expected to impact American River flows. Natomas has reduced diversions in a conservation effort since 1986 and has contributed to the net supply south of the mouth of the American River.

D. AGREEMENT FOR MEETING NATOMAS' WATER SUPPLY NEEDS TO THE YEAR 2030

Demands to the year 2030 for the Sacramento County portion of Natomas will be met with surface water from the Sacramento River and from groundwater pumping.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories to the *Agreement* will endorse consolidation of several of Natomas' Sacramento River diversions into an upgraded diversion with a new fish screen which meets the Fish and Wildlife Service's screening criteria.

20. All signatories to the *Agreement* will endorse Natomas' partnership with other parties to interconnect the Sacramento River with the San Juan/Northridge pipeline from Folsom Reservoir which presently terminates at Walerga Road. Support for this water connection is subject to the

provisions of Section Four, III, Sacramento River Supply for North Sacramento County and Placer County. It is recognized that signatories' support for such a pipeline does not include support for water service from that pipeline to areas outside the Urban Services Boundary.

21. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

22. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

23. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

24. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

25. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an *Agreement* that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions,

and

Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum*

Agreement, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

Natomas will continue to negotiate an Agricultural Water Conservation program with the Successor Effort.

NORTHRIDGE WATER DISTRICT

A. INTRODUCTION

Northridge Water District (NWD) is located in the north central part of Sacramento County; a portion of their District is contiguous with Placer County.

NWD currently has 19,145 customers of which 17,238 are residential.

NWD uses groundwater to meet its demands and has used surface water on an intermittent basis supplied by San Juan Water District through an interconnection with the Citrus Heights Water District.

NWD and the Placer County Water Agency (PCWA) have entered into an agreement for delivery of up to 29,000 acre feet (AF) of PCWA's water right, per year.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS FROM AMERICAN RIVER

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

No American River diversion was included in the baseline for NWD.

D. AGREEMENT FOR MEETING NWD's WATER SUPPLY NEEDS TO THE YEAR 2030

TEXT OF NORTHRIDGE WATER DISTRICT AGREEMENT:

INTRODUCTION

Some signatories to the *Water Forum Agreement* have differing perspectives on the conditions under which Northridge Water District ("Northridge") should divert water from Folsom Reservoir. These differing perspectives are important for understanding the context in which the following agreement has been entered into. The perspectives of Northridge and the environmental organizations signatory to the *Water Forum Agreement* are also set forth below.

In the interest of coming to an agreement, signatories to the *Water Forum Agreement* agree to the compromise set forth in the agreement below.

Agreement

All signatories will support a project to divert, treat and convey Sacramento River water in a pipeline that would connect to the Northridge pipeline ("Sacramento River Pipeline"). They will support a Warren Act contract with the U.S. Bureau of Reclamation for diversion of 29,000 acre feet of Placer County Water Agency ("PCWA") water from Folsom Reservoir. They will also support the PCWA petition to the SWRCB for change in its place of use for water to be used in north central Sacramento County ("Expanded POU"), with the following conditions included in the SWRCB order:

1. For the first ten years that water is available for diversion by Northridge from Folsom Reservoir under the Northridge-PCWA agreement, but not more than twelve years from the effective date of the *Water Forum Agreement*, whichever occurs first,[18] Northridge's diversions under the Northridge - PCWA agreement, for its own use or delivery to other purveyors, will be subject to the following restrictions:

   a. Northridge will be able to divert PCWA water only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet.

   b. In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre feet, Northridge will not divert PCWA water until such time as or after water is being released from Folsom Reservoir for flood protection.

[18] This time period is hereafter referred to as the "ten-year period," and it may be extended for a period of up to two additional years by agreement of the parties to this agreement.

c. In addition to the foregoing, Northridge's diversions of PCWA water will be limited during the ten year period pursuant to the water use schedule in the Northridge-PCWA agreement, which allows annually-increasing diversions of up to 24,000 acre feet per year during the first ten years of water deliveries under that agreement.

d. Nothing in this agreement is intended to restrict Northridge's ability to take delivery of Section 215 water from Folsom Reservoir from the U.S. Bureau of Reclamation whenever it may be available.

2. If Northridge is able to take delivery of Sacramento River water through the Sacramento River pipeline, Northridge will thereafter divert water from Folsom Reservoir under the Northridge-PCWA agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above-Hodge").

3. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, the SWRCB would hold a hearing ("SWRCB Hearing") if requested by Northridge, the City of Sacramento, County of Sacramento, Friends of the River, Sierra Club or Save the American River Association. The purpose of the SWRCB Hearing will be to determine whether to add or revise conditions to PCWA's water rights for diversion of water from Folsom Reservoir under the Northridge-PCWA agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under Carmichael Water District and the City of Sacramento's prior water rights. Nothing in this agreement determines the relative priority of the water rights of the City of Sacramento, Carmichael Water District and PCWA. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, Northridge would thereafter divert water from Folsom Reservoir under the Northridge-PCWA agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 acre feet (i.e., "above-Hodge") and under the conditions referred to in Section 1.b. of this agreement unless these conditions are revised by a SWRCB order issued following the SWRCB Hearing. In addition, Northridge could divert water under the conditions referred to in section 1.d. of this agreement.

The diversion restrictions set forth in this agreement reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB Hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate diversion conditions after the conclusion of the ten-year period. It is the intention of the parties that the SWRCB's determination following the SWRCB Hearing be based upon the best available scientific and other evidence available at the time of the SWRCB Hearing. Nothing in this agreement shall affect the right of PCWA to terminate the Northridge-PCWA agreement if PCWA reasonably determines that any term of the SWRCB order resulting from the SWRCB Hearing is unacceptable.

4. Northridge will neither divert nor accept diversions of PCWA water from Folsom Reservoir or the American River under the Northridge-PCWA agreement, for its own use or delivery to other purveyors, whenever such diversions alone or in conjunction with other diversions would limit or impair diversions from the American River by Carmichael Water District or the City of Sacramento under their prior water rights.

Northridge's delivery to other purveyors of water diverted from the American River under the Northridge-PCWA agreement is subject to those purveyors signing and implementing their commitments under the *Water Forum Agreement*.

[End of provisions to be included in SWRCB order.]

In addition, the *Water Forum Agreement* specifies that:

a. With the support of all Water Forum signatories, Northridge will continue to work with other interested parties to pursue a project involving a diversion on the Sacramento River, a new water treatment plant and water conveyance facilities that connect to the Northridge pipeline for use of Sacramento River water within the area served by the Northridge pipeline.

b. In determining the amount of surface water available for growth in the north part of Sacramento County within the ten-year period referred to in this agreement, the parties agree that the long-term annual average yield of water diverted from Folsom Reservoir under the Northridge-PCWA agreement would be not more than 17,400 acre feet, which is the projected average annual water supply that would be available if diversions were restricted to above-Hodge conditions.

PERSPECTIVES OF THE PARTIES REGARDING DIVERSIONS BY NORTHRIDGE WATER DISTRICT OF AMERICAN RIVER WATER UNDER THE NORTHRIDGE-PCWA AGREEMENT

Some signatories to the *Water Forum Agreement* have differing perspectives on the conditions under which Northridge Water District should divert water from Folsom Reservoir. These differing perspectives are important for understanding the context in which the attached agreement has been entered. The perspectives of Northridge Water District and the environmental organizations signatory to the *Water Forum Agreement* are set forth below.

It is the position of the environmental organizations signatory to the *Water Forum Agreement* that:

1. For purposes of a settlement, diversions by Northridge Water District of American River water under the Northridge-PCWA agreement in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet are acceptable to members of the Environmental Caucus during the ten-year period following the effective date of the *Water Forum Agreement*. This is acceptable because other purveyors that divert upstream of the Lower American River who have fewer alternatives will not be

substantially increasing their diversions under the *Water Forum Agreement* during the ten-year period.

2. After the ten-year period following the signing of the *Water Forum Agreement*, Northridge Water District should divert American River water under the Northridge-PCWA agreement only when the unimpaired March through November inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above Hodge"). This reflects the Environmental Caucus' belief that the north Sacramento County area groundwater basin could be stabilized at an acceptable level with Northridge diverting American River water under the Northridge-PCWA agreement in only above Hodge years.

3. Diversions of American River water under the Northridge-PCWA agreement below the Hodge threshold after the initial ten-year period would unreasonably affect the instream, wildlife, recreational and aesthetic values of the Lower American River. Such diversion below the Hodge threshold would also unreasonably affect the availability of water for instream uses downstream of the mouth of the American River.

It is the position of the Northridge Water District that:

1. Northridge believes that its dry year diversion restrictions under the *Water Forum Agreement* should be comparable to the requirements of other purveyors who divert water from Folsom Reservoir.

2. Northridge believes that diversions of PCWA water from Folsom Reservoir in below-Hodge years after the conclusion of the ten-year period referred to in the agreement need not be prohibited to avoid significant impacts to instream uses of the lower American River and downstream.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

> *a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative*

impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir,*

habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fish Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River.

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

   a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon*

Signing the Water Forum Agreement" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the

purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

None

PLACER COUNTY WATER AGENCY

A. INTRODUCTION

The Placer County Water Agency (PCWA) serves areas within Placer County on the west slope of the Sierra. These areas include the communities of Auburn, Loomis, Newcastle, Penryn, Rocklin and Lincoln. PCWA also wholesales water to Roseville and San Juan Water District.

PCWA currently has about 29,000 connections, all of which are metered.

In the 1960's, PCWA constructed its Middle Fork American River Project (MFP) which includes several reservoirs on the Middle Fork American River and its tributaries. These Reservoirs provide both electrical energy generation and a consumptive water supply. The water afforded through the MFP provides PCWA a water right to 120,000 acre feet (AF) of American River water. PCWA also has a contract with the United States Bureau of Reclamation (USBR) for 117,000 AF of Central Valley Project (CVP) water. There is a difference of opinion between the USBR and PCWA as to whether the USBR has an obligation to deliver more than 35,000 acre-feet of CVP water in the absence of an Auburn Dam. The place of use for the PCWA water entitlements is within Placer County.

PCWA has contracts with San Juan Water District for delivery of 25,000 AF, the City of Roseville for delivery of 30,000 AF, and Northridge Water District for delivery of 29,000 AF.

PCWA also contracts and receives 100,400 acre-feet annually from PG&E for water imported into Western Placer County from the Yuba and Bear Rivers. PG&E uses this water for power generation and then sells it to PCWA for consumptive use.

PCWA is negotiating with the USBR for the right to take its 35,000 AF of CVP entitlement from the Sacramento River and/or Feather River.

A. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element

C Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS FROM AMERICAN RIVER

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for PCWA's American River diversion is 8,500 AF, which represents PCWA's own usage. Water that PCWA sells to purveyors is discussed in their Purveyor Specific Agreements (see San Juan Consortium, City of Roseville, and Northridge WD Specific Agreements).

D. AGREEMENT FOR MEETING PLACER COUNTY WATER AGENCY'S WATER SUPPLY NEEDS TO THE YEAR 2030

1. MOST YEARS: As it applies to the PCWA portion of the agreement, Most Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.

In most years, PCWA will divert and use 35,500 AF from the American River.

PCWA will also divert and use 35,000 AF from the Sacramento and/or Feather Rivers if exchanges of equal amounts can be made with others under terms acceptable to PCWA.

If circumstances prevent PCWA from developing the diversion from the Sacramento and/or Feather Rivers referred to above, PCWA and the other members of the Water Forum Successor Effort will enter into negotiations with the objective of finding a mutually agreeable alternative.

2. DRIER YEARS: As it applies to the PCWA portion of the agreement, Drier Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet and greater than or equal to 400,000 acre-feet.

During drier years PCWA will divert and use 35,500 AF from the American River and will replace water to the River from reoperation of its MFP reservoirs in the following amounts, with

the amount of water released to the River for unimpaired inflow quantities between 950,000 AF and 400,000 AF linearly proportional to the amounts shown below:

Unimpaired inflow to Folsom Reservoir	Amount of Reoperation Water
950,000 AF	0 AF
400,000 AF	27,000 AF

PCWA would make the releases contingent upon the following conditions:

a. its ability to sell the released water for use below the Lower American River on terms acceptable to PCWA,

b. PG&E's agreement to such reoperation until the present power purchase contract with PG&E expires (presently anticipated by year 2013), and

c. PCWA's determination that it has sufficient water in its reservoirs to make the additional releases to mitigate conditions in dry years without jeopardizing the supply for PCWA's customers. (Note: operational modeling for PCWA based on historical hydrology and projected 2030 requirements as set forth in the *Water Forum Agreement* has shown that reoperation water should be available for such release and sale without drawing MFP reservoirs below 50,000 acre-feet.).

The source of this replacement water in drier years would be water not normally released in those years from the PCWA Middle Fork Project.

PCWA will also divert and use 35,000 AF from the Sacramento and/or Feather River if the exchanges referred to in 1 above are perfected.

3. DRIEST YEARS (i.e. CONFERENCE YEARS): Defined for purposes of the *Water Forum Agreement* as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet.

In the driest years, PCWA will continue to divert and use 35,500 AF from the American River. Subject to the conditions set forth in 2 above, during the driest years PCWA will replace 27,000 AF of water to the River from reoperation of their MFP reservoirs.

However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre feet there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years PCWA will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Section Four, I. of the *Water Forum Agreement*.

PCWA will also divert and use up to 35,000 AF from the Sacramento and/or Feather River if the exchanges referred to in 1 above are perfected.

4. CONCURRENT REQUIREMENTS.

If circumstances prevent PCWA from selling water to the Northridge Water District for groundwater stabilization, PCWA and the other members of the Water Forum Successor Effort will enter into negotiations with the objective of finding a mutual agreeable use of that water in Placer County by diversion at either Auburn or Folsom Reservoir or by an exchange or sale providing for delivery of it below the mouth of the American River.

During drier years, PCWA will make available for purchase, water from its Middle Fork Project (MFP) reservoirs as replacement water for the City of Roseville and possibly for the City of Folsom and Georgetown Divide PUD diversions if the conditions in Section D, 2 above are met.

All signatories will advocate that the SWRCB, FERC, the courts or all other entities taking action under their authority, not affect PCWA's water rights or operation of its Middle Fork Project in a way that would prevent PCWA from meeting its commitments under either the *Water Forum Agreement* or its Diversion Agreement with the United States Bureau of Reclamation (USBR) or prevent the USBR's implementation of the AFRP flow releases for the Lower American River. However, if in any year PCWA's supplies are reduced as a result of any action by the SWRCB, FERC, courts, or other entity, the amount by which PCWA's supplies are reduced shall be credited to PCWA and the City of Roseville as reoperation water under Section D, 2 and 3 above, to the extent it flows into Folsom Reservoir.

This agreement is entered into with recognition that PCWA has water rights for 120,000 acre feet, receives 100,400 acre feet annually from the Yuba/Bear Rivers pursuant to a contract with PG&E, and 35,000 acre feet pursuant to a contract for CVP water. If for any reason those supplies are significantly reduced in amount or duration, other than normal deficiencies imposed by the USBR on CVP contractors, it will be considered a changed condition and all Water Forum signatories will work in good faith to renegotiate relevant portions of the *Water Forum Agreement*.

PCWA's entitlements to water not used before 2030 will remain available for PCWA's use after 2030.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS
(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major

transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum, and any successor effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This

purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories to the *Agreement* will endorse construction of PCWA's water supply facilities which include diversion, treatment, pumping stations, storage facilities, and transmission piping. They will also provide any endorsements needed for rights-of-way, permits, environmental documentation, and other requirements necessary to enable PCWA to meet its needs to the year 2030. This specifically includes support to divert water from the American River near Auburn with the following conditions:

a. A wet well including screens and piping to the wet well sized at 225 cfs.

b. A permanent pumping plant and pipe to the tunnel sized at 100 cfs for PCWA.

20. All signatories to the *Agreement* will endorse construction of PCWA's water supply facilities from the Sacramento and/or Feather River which include diversion, treatment, pumping stations, storage facilities, and transmission piping rights of way, etc.

21. All signatories to the *Agreement* will endorse the point of delivery change for PCWA's water from the American River to the Sacramento and/or Feather River.

22. All signatories to the *Agreement* will endorse PCWA's changes of POU, points of diversion, and sale of MFP water consistent with the *Water Forum Agreement*.

23. All signatories to the *Agreement* endorse the release of reoperation water from PCWA's MFP reservoirs as acceptable dry year alternative replacement water.

24. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

25. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

26. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

27. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

28. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

> a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some

or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any

other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

The remaining issues are: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation Best Management Practice #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented, and 3) environmentalists' support for conditions related to release of replacement water in drier and driest years (see Sections D, 2 and D, 3 above).

RIO LINDA/ELVERTA COMMUNITY WATER DISTRICT

A. INTRODUCTION

Rio Linda/Elverta Community Water District (RLECWD) serves an area in the north central part of Sacramento County adjacent to the City of Sacramento and Placer County.

RLECWD currently has 4,060 connections all of which are metered. Within the District, over 1000 individual parcels are served by domestic and/or agricultural wells.

The current water supply for RLECWD is entirely groundwater.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS FROM AMERICAN RIVER

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Because RLECWD does not divert from the American River, no American River diversion is included in the baseline for RLECWD.

D. AGREEMENT FOR MEETING RLECWD'S WATER SUPPLY NEEDS TO THE YEAR 2030

The 2030 projected water demand within the present geographical boundary of RLECWD is 17,035 acre feet. This projected demand is included in the North Central Group of M&I Purveyors which also includes a portion of the Citizens Utilities Company, a portion of the Arcade Water District, McClellan AFB and Northridge Water District.

The RLECWD acknowledges that decisions on how to maintain the long-term sustainable yield of the North area groundwater basin will be made by the Sacramento North Area Groundwater Management Authority (SNAGMA) with representation of the RLECWD on the SNAGMA's governing board consistent with the joint powers agreement establishing SNAGMA.

As the purveyor of municipal and industrial water within its current and future expanded boundaries, RLECWD will construct appropriate facilities to meet its 2030 projected peak period water demand.

If SNAGMA determines that it is necessary to acquire surface water for use within SNAGMA's boundaries, the District will cooperate with the Water Forum Successor Effort, SNAGMA, and other affected agencies to obtain the surface water to be used as part of SNAGMA's groundwater management program.

The District acknowledges that the *Water Forum Agreement* does not provide for a baseline quantity of groundwater. The District also acknowledges its responsibility for sharing in the cost to acquire surface water supplies if SNAGMA determines such supplies are necessary to maintain the long-term sustainable yield of the Sacramento North area groundwater basin.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(agreements in italics are common in all agreements)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

> *a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative*

impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir,*

habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV., Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. *All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).*

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce

any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES.

None

SACRAMENTO MUNICIPAL UTILITY DISTRICT

A. INTRODUCTION

The Sacramento Municipal Utility District (SMUD) serves electricity to all electricity users in Sacramento County and a small portion of Placer County.

In the 1950s and 60s SMUD developed the Upper American River system of reservoirs on the south fork of the American River which are used for power generation. They also developed and built the Rancho Seco nuclear generation station in the southeastern part of Sacramento County. The Rancho Seco facility still requires water for cooling and dilution and diverts 15,000 AF of American River water from the Folsom South Canal for these purposes.

SMUD has an assignment of City of Sacramento water rights for 15,000 AF and a contract with the United States Bureau of Reclamation (USBR) for 60,000 AF. The point of diversion for their entitlement is the Folsom South Canal.

Because of the capital investment in electrical transmission capacity at the Rancho Seco site and the water supply, it is expected that SMUD will construct other energy producing facilities there in the future. The estimated water need for these units is an additional 15,000 AF.

SMUD also has began a program of constructing co-generation facilities at sites throughout the Sacramento area. Some of these units are already in place and SMUD, the City of Sacramento and the County of Sacramento have proposed a three party arrangement for SMUD to receive a water supply from the City while transferring 15,000 AF of their USBR contract to the County. SMUD anticipates the need for an additional 15,000 AF of water supply within the City of Sacramento's American River Place of Use (POU) and has began negotiations with the City and County for a similar three party arrangement.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for the SMUD's American River diversion is 15,000 AF which reflects the shut down of the Rancho Seco Power Plant.

D. AGREEMENT FOR MEETING SMUD'S WATER SUPPLY NEEDS TO THE YEAR 2030

1. MOST YEARS: As it applies to the SMUD portion of the agreement, Most Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.

In most years, SMUD will divert and use 30,000 AF from the Folsom South Canal. SMUD will also use a water supply of 15,000 AF provided from the City of Sacramento used within the City's POU for other generation facilities.

2. DRIER YEARS: As it applies to the SMUD portion of the agreement, Drier Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet and greater than or equal to 400,000 acre feet.

In drier years, SMUD will divert and use a decreasing amount of surface water from 30,000 AF to 15,000 AF in proportion to the decrease in unimpaired inflow to Folsom Reservoir from 950,000 AF to 400,000 AF. During drier years SMUD will reduce their demand proportionally by up to 5,000 AF and use groundwater to meet their additional demands. SMUD will also use a water supply provided from the City of Sacramento used within the City's POU for other generation facilities.

3. DRIEST YEARS (i.e. CONFERENCE YEARS): Defined for purposes of the *Water Forum Agreement* as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet.

In the driest years, SMUD will reduce their diversion to 15,000 AF, equivalent to their baseline amount. During driest years, SMUD will accomplish this reduction to baseline by reducing their demand by 5,000 AF and use groundwater to meet their additional demands.

SMUD will also use a water supply provided from the City of Sacramento within the City's POU for other co-generation facilities.

However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre feet there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreement*s* and provide the expected driest years flows to the mouth of the American River. In those years SMUD will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Section Four, I. of the *Water Forum Agreement*.

4. CONCURRENT REQUIREMENTS:

SMUD utilizes 15,000 AF of City of Sacramento water rights and has a contract with the United States Bureau of Reclamation (USBR) for 60,000 AF. SMUD, the City of Sacramento and the County of Sacramento have executed a set of principles for a three party agreement which includes a purchase by the County and a transfer from SMUD of a 15,000 AF block of SMUD's USBR contract. SMUD and the County of Sacramento have also begun negotiations for purchase by the County and transfer from SMUD of a second 15,000 AF block of SMUD's USBR contract. A portion of the payments to SMUD from the County would be used to construct groundwater facilities which would be operated and maintained by the County. Groundwater from these wells would be available as an alternative supply for SMUD to meet increased demands in the drier and conference years as defined above.

SMUD also is planning on constructing additional co-generation facilities at locations within the City of Sacramento's POU. SMUD will negotiate with the City of Sacramento for delivery of up to 15,000 AF of water for their planned co-generation facilities within the POU at a rate less than the full retail rate.

SMUD and South Sacramento County Agricultural Interests have begun negotiations for a transfer of 13,500 AF of a third 15,000 AF block of SMUD's USBR contract. Water available from this proposed transfer would be subject to diversion restrictions negotiated as part of the Purveyor Specific Agreement for South Sacramento County Agricultural Users.

SMUD and the Rancho Murieta CSD have also begun negotiations for 1,500 AF of this third 15,000 AF block of SMUD's USBR's contract. Rancho Murieta and the other Water Forum stakeholders have not come to agreement on a mutually acceptable diversion point.

As conditions precedent to the diversion restrictions identified, SMUD requires: a) approval by USBR of assignments of SMUD contract water for a second 15,000 AF increment to Sacramento County, and support for a transfer of a third 15,000 AF increment to Galt ID (South Sacramento County Agricultural water users) and possibly Rancho Murieta CSD; b) collection of fees for the contract assignments; c) a groundwater supply commitment from Sacramento County facilities paid for by SMUD at a capped cost, and d) delivery to SMUD by the City of Sacramento of up to

15,000 AF of water for SMUD's planned co-generation facilities within the City's POU at a rate less than the full retail rate.

If these conditions are not achieved, all signatories to the Water Forum Agreement will meet in good faith with the objective of identifying alternative means to meet SMUD's needs consistent with the two coequal objectives of the Water Forum Agreement. If agreement cannot be reached after those good faith negotiations, signatories retain the right to pursue, support or oppose SMUD's diversions above the baseline amount.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already

established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water

acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water*

Forum Agreement also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
>
> and
>
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the*

Water Forum Agreement," that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the

Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

None

SAN JUAN WATER DISTRICT CONSORTIUM

(Includes Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water Company, San Juan Water District, and a portion of the City of Folsom)

A. INTRODUCTION

The San Juan Consortium service area is comprised of the San Juan Water District located in both Sacramento and Placer Counties, Citrus Heights Water District (CHWD), Fair Oaks Water District (FOWD), Orange Vale Water Company (OVWC), and a portion of the City of Folsom. These referenced Districts and the relevant portion of the City of Folsom are hereinafter collectively referred to as the SJWD.

SJWD has a Pre-1914 water right to 33,000 acre feet (AF), a contract with the United States Bureau of Reclamation (USBR) for 11,200 AF and a contract with PCWA for 25,000 AF. The place of use for the PCWA contract is within Placer County. SJWD has contracted with the USBR for an additional 13,000 AF of American River water, as authorized by Public Law 101-514.

All of SJWD surface water is diverted from the Folsom Reservoir and treated at the Sidney N. Peterson Treatment Plant. Treated water is then stored in a 62 million gallon treated storage reservoir.

CHWD, FOWD and OVWC supplement their surface water supply with groundwater to meet their peak needs.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS FROM AMERICAN RIVER

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for the SJWD's American River diversion is 54,200 AF. This includes the full amount of their CVP contract (11,200 AF) and water right (33,000 AF) entitlements in Sacramento County and 10,000 AF of the PCWA contract amount in Placer County.

D. AGREEMENT FOR MEETING SJWD'S WATER SUPPLY NEEDS TO THE YEAR 2030

1. MOST YEARS: As it applies to the SJWD portion of the agreement, Most Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre feet.

In most years, SJWD will divert and use 82,200 AF.

2. DRIER YEARS: As it applies to the SJWD portion of the agreement, Drier Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre feet and equal to or greater than 400,000 acre feet.

In drier years, SJWD will divert and use a decreasing amount of surface water from 82,200 AF to 54,200 AF in proportion to the decrease in the unimpaired inflow to Folsom Reservoir from 950,000 AF to 400,000 AF. During drier years SJWD will reduce their demand proportionally by additional conservation (up to 15%) and use groundwater to meet their additional demands.

3. DRIEST YEARS (i.e. CONFERENCE YEARS): Defined for purposes of the *Water Forum Agreement* as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet.

In the driest years, SJWD will reduce their diversion to 54,200 AF, equivalent to their baseline amount. During driest years SJWD will reduce their demand by additional conservation (up to 15%) and use groundwater to meet their additional demands.

However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre feet there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years SJWD will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Section Four, I. of the *Water Forum Agreement*.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories to the *Agreement* will endorse completion of the PL 101-514 water contract for SJWD.

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions, and

Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

None

SOUTH SACRAMENTO COUNTY AGRICULTURE

(Includes Clay Water District, Galt Irrigation District, Omochumne-Hartnell Water District, and Sacramento County Farm Bureau)

A. INTRODUCTION

South Sacramento County Agriculture is composed of three organized Districts (Clay Water District, Galt Irrigation District and the Omochumne-Hartnell Water District) and other unorganized areas represented by the Sacramento County Farm Bureau in the southeast and southwest part of the County.

South Sacramento County Agriculture currently meets their water needs primarily from ground water, with a small amount of surface water available along the Cosumnes River by riparian users, purchase of tail water from SMUD downstream of the Rancho Seco facility, and spill water contracts with the United States Bureau of Reclamation (USBR) diverted from the Folsom South Canal.

The Folsom South Canal traverses the three Districts and a portion of the southeast unorganized area referred to as "Other Folsom South Canal Users."

Prior to the Central Valley Project Improvement Act, signed into law in October 1992, surface water was used intermittently through temporary contracts between the Districts and the USBR.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. BASELINE DIVERSIONS

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

No American River diversions were included in the baseline for South Sacramento County Agricultural users.

D. AGREEMENT FOR MEETING SOUTH SACRAMENTO COUNTY AGRICULTURAL USERS WATER SUPPLY NEEDS TO THE YEAR 2030

1. MOST YEARS: As it applies to the South Sacramento County Agricultural Users portion of the agreement, Most Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 1,600,000 acre feet, also referenced as 1,900,000 acre feet annually.

In most years, South Sacramento County Agricultural Users will use up to 35,000 acre feet which is diverted into the Folsom South Canal from the American River at Nimbus. The balance of their need would be met by groundwater pumping.

2. DRIER YEARS: As it applies to the South Sacramento County Agricultural Users portion of the agreement, Drier Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 1,600,000 acre feet, also referenced as 1,900,000 acre feet annually.

In drier years, South Sacramento County Agricultural Users will not divert American River water from the Folsom South Canal. Their need would be met by groundwater pumping.

3. DRIEST YEARS (i.e. CONFERENCE YEARS): Defined for purposes of the *Water Forum Agreement* as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet.

In the driest years, South Sacramento County Agricultural Users will not divert American River water from the Folsom South Canal. Their need would be met by groundwater pumping.

However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre feet there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years South Sacramento County Agricultural Users will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Section Four, I. of the *Water Forum Agreement*.

E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will support transfer of a portion of Sacramento Municipal Utility District's Central Valley project entitlement to be used by South Sacramento County agriculture. Signatories will also support continued supply of CVP non storable water under Section 215 to South Sacramento County Agriculture. All signatories to the *Water Forum Agreement* also agree that the Water Forum Successor Effort will consider supporting any additional transfers or new entitlements that may be proposed by South Sacramento County Agriculture.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII.,

Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to

53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

F. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions,

and

Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum*

Agreement, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

G. REMAINING ISSUES

1. Development of a groundwater management arrangement for the South Area and the Galt Area.

2. Water Forum signatories' support for new or increased surface water diversions to serve agricultural uses is dependent on acceptable assurances that those diverters will implement mutually agreed upon agricultural conservation programs.

II. ENVIRONMENTAL INTERESTS AGREEMENT

- Environmental Council of Sacramento (ECOS)
- Friends of the River (FOR)
- Save the American River Association (SARA)
- Sierra Club - Mother Lode Chapter - Sacramento Group

A. INTRODUCTION

The Lower American River's fishery, wildlife, recreational and aesthetic value resulted in it being designated as a state and federal Wild and Scenic River. With over five million visitor days annually, the Lower American River Parkway is already one of the most heavily used parks west of the Mississippi. It is anticipated that the *Water Forum Agreement* will preserve the public trust interests of the Lower American River.

One of the ways these public trust interests will be preserved is through an updated Lower American River flow standard. This new flow standard will be based on conditions in each purveyor's specific agreement as to how much water can be diverted under different hydrologic conditions. It will also incorporate the Improved Pattern of Fishery Flow Releases from Folsom Dam.

The Improved Pattern of Fishery Flow Releases reflects biologists' balancing of the opportunities for two important species, fall-run chinook salmon and steelhead. The Improved Pattern will somewhat reduce summer flows to conserve water to allow increased releases in the fall to benefit fall-run chinook salmon. Increased diversions will also reduce the quantity of water available to be released in the summer. Reduced summer flows will result in slightly higher summer water temperatures which adversely affects steelhead. That is one reason the Habitat Management Element is essential to the *Water Forum Agreement*. Additionally, in 1998, steelhead were listed under the Endangered Species Act as threatened. Therefore, the U.S. Bureau of Reclamation is required to operate Folsom Dam in a way that does not jeopardize the continued existence of the steelhead.

The Water Conservation Element of the *Agreement* will benefit the environment by reducing the amount of water that will have to be diverted from the region's rivers, including the American River. Action to Meet Customer's Needs While Reducing Diversion Impacts in Drier Years will also be effective in minimizing diversions in the drier years when water is critical to the Lower American River.

The Groundwater Management Element will ensure that our groundwater supply is sustained for future generations.

Good water quality is another benefit of the *Agreement*. Protecting surface and groundwater will ensure that our drinking water continues to meet increasingly stringent federal and state standards.

Another benefit is the ability of environmental stakeholders to participate in the implementation of the *Water Forum Agreement*. Their participation in the Water Forum Successor Effort will continue the opportunity to incorporate environmental objectives in regional water planning and ensure that the coequal objective of preserving the Lower American River is achieved.

In addition, environmental stakeholders' participation in the Water Forum Successor Effort will be guided by their principle that Sacramento River and Bay Delta conditions associated with implementation of the *Water Forum Agreement* be addressed.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with Purveyor Specific Agreements and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

> *a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative*

impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir,*

habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. Environmental, Business, and Citizens groups signatory to the *Water Forum Agreement* will acknowledge in writing their endorsement of the Water Forum's Final Environmental Impact Report.

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the

three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

D. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of

Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort

III. CITIZENS ORGANIZATIONS INTERESTS' AGREEMENT

! League of Women Voters of Sacramento
! Sacramento County Alliance of Neighborhoods (SCAN)
! Sacramento County Taxpayers League

A. INTRODUCTION

Both existing and new residents will benefit from the *Water Forum Agreement*. The public will benefit by a more reliable, safe water supply especially during the inevitable drought periods. They will avoid the inconvenience and losses resulting from severe rationing. The local economy will also have a reliable water supply so that our local jobs can be preserved and new jobs can be created.

Good water quality is another benefit of the *Agreement*. Protection of surface and groundwater will ensure that our drinking water continues to meet increasingly stringent federal and state standards.

The public will also benefit from maintaining the fishery, wildlife, recreational and aesthetic values of the Lower American River. With over five million visitor days annually, the Lower American River Parkway is already one of the most appreciated parks west of the Mississippi. The *Water Forum Agreement* will preserve the values that make the Parkway so popular.

Another benefit to the public is the participation of citizens organizations in the implementation of the *Water Forum Agreement*. This participation in the Water Forum successor effort will continue the communication and education of citizen organizations in regional water planning.

Any solution that provides for our future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigations will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money. This Agreement also identifies that capital costs associated with water acquisition, treatment, or delivery be divided equitably. It is also recommended that any costs for facilities funded through bonds be recovered as provided by law. In addition, signatories to the *Water Forum Agreement* agree that operational maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with Purveyor Specific Agreements and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on

the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV., (Agreements in italics are common in all Specific Agreements.)

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. Environmental, Business, and Citizens groups signatory to the *Water Forum Agreement* will acknowledge in writing their endorsement of the Water Forum's Final Environmental Impact Report.

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

D. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven

elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

> *Water Forum Agreement* provisions on water diversions including dry year diversions,
> and
> Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

> a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:
>
> (1) Support for the Improved Pattern of Fishery Flow Releases

(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

IV. BUSINESS INTERESTS AGREEMENT

- Associated General Contractors (AGC)
- Building Industry Association of Superior California (BIA)
- Sacramento Association of Realtors (SAR)
- Sacramento Metropolitan Chamber of Commerce
- Sacramento-Sierra Building and Construction Trades Council

A. INTRODUCTION

Both existing and new businesses will benefit from the *Water Forum Agreement*. A reliable and affordable water supply is important for all businesses and crucial for the health of the regional economy. For instance major employers such as Campbell Soup and Hewlett-Packard as well as land developers need to know that they will have a reliable water supply. Some of these businesses receive water from their own wells.

We need to demonstrate a reliable water supply for the region to support the planned development and to attract the new jobs needed by our residents. The types of clean industries favored by our region are not going to locate here if they believe water supplies will have to be reduced or curtailed during periodic droughts. The reliable water supply provided by an agreement will provide for our region's economic development and planned growth.

Like all other stakeholders, business will also have to contribute to the solution. Their support for environmental improvements and conservation programs will add a powerful voice. In addition they will have to pay their fair share for facilities and programs needed to make the overall solution work.

B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased Surface Water Diversions
- Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

C. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS

(Agreements in italics are common in all Specific Agreements.)

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with Purveyor Specific Agreements and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:

a. All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)

d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:

a. Speak before stakeholder boards and regulatory bodies,

b. Provide letters of endorsement,

c. Provide supportive comments to the media,

d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and

e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.

4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV.,Lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.

14. All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.

15. All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. Environmental, Business, and Citizens groups signatory to the *Water Forum Agreement* will acknowledge in writing their endorsement of the Water Forum's Final Environmental Impact Report.

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.

D. ASSURANCES AND CAVEATS

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

Water Forum Agreement provisions on water diversions including dry year diversions, and

Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

(1) Support for the Improved Pattern of Fishery Flow Releases
(2) Water Forum Successor Effort
(3) Water Conservation Element
(4) Lower American River Habitat Management Element
(5) Support for the Updated Lower American River flow standard
(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "*Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,*" that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.
3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

V. PROCEDURAL AGREEMENTS

ARCADE WATER DISTRICT

The initial *Water Forum Agreement* will record those agreements among stakeholder organizations that could be entered into as of the effective date of the initial agreement. However it is recognized that there may be some stakeholder organizations whose issues cannot be resolved by that time.

The *Water Forum Agreement* will include procedural agreements committing all stakeholders to work in good faith to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.

Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:

a. Amending the *Water Forum Agreement*

b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum EIR.

c. Decisions regarding expenditures of Habitat Management funds.

Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement* they will first attempt to resolve the dispute through mediation in the Successor Effort.

Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.

EL DORADO IRRIGATION DISTRICT

The initial *Water Forum Agreement* will record those agreements among stakeholder organizations that could be entered into as of the effective date of the initial agreement. However it is recognized that there may be some stakeholder organizations whose issues cannot be resolved by that time.

The *Water Forum Agreement* will include procedural agreements committing all stakeholders to work in good faith to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.

Mutually agreed upon Successor Effort expenses related solely to developing the purveyor's Specific Agreement will be reimbursed by that purveyor. As soon as the purveyor has negotiated a Specific Agreement and it signs the *Water Forum Agreement*, it will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have specific agreement*s*.

Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:

a. Amending the *Water Forum Agreement*

b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum EIR.

c. Decisions regarding expenditures of Habitat Management funds.

Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement* they will first attempt to resolve the dispute through mediation in the Successor Effort.

Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

The initial *Water Forum Agreement* will record those agreements among stakeholder organizations that could be entered into as of the effective date of the initial agreement. However it is recognized that there may be some stakeholder organizations whose issues cannot be resolved by that time.

The *Water Forum Agreement* will include procedural agreements committing all stakeholders to work in good faith to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.

Mutually agreed upon Successor Effort expenses related solely to developing the purveyor's Specific Agreement will be reimbursed by that purveyor. As soon as the purveyor has negotiated a Specific Agreement and it signs the *Water Forum Agreement*, it will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have specific agreements.

Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:

a. Amending the *Water Forum Agreement*

b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum EIR.

c. Decisions regarding expenditures of Habitat Management funds.

Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement* they will first attempt to resolve the dispute through mediation in the Successor Effort.

Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

The initial *Water Forum Agreement* will record those agreements among stakeholder organizations that could be entered into as of the effective date of the initial agreement. However it is recognized that there may be some stakeholder organizations whose issues cannot be resolved by that time.

The *Water Forum Agreement* will include procedural agreements committing all stakeholders to work in good faith to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.

Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:

a. Amending the *Water Forum Agreement*

b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum EIR.

c. Decisions regarding expenditures of Habitat Management funds.

Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement* they will first attempt to resolve the dispute through mediation in the Successor Effort.

Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.

APPENDIX A

WATER FORUM AND THE QUESTION OF AUBURN DAM

The Water Forum as a group does not take a position on Auburn Dam. Individual members of the Water Forum and stakeholders they represent have strong and divergent positions on Auburn. Therefore as a group they would never be able to come to consensus on Auburn.

The Water Forum does not address flood control issues, which are being addressed by local, state and federal agencies as a part of a process that has been underway since 1986. However, the Water Forum Proposal is fully consistent with continued operation of Folsom Dam for flood control.

Members of the Water Forum recognize that Auburn Dam is debated in other regional, state and federal venues. While the Auburn debate continues, there are pressing issues concerning regional water supply, water quality, and Lower American River fisheries which the Water Forum is committed to addressing now.

The Water Forum is focusing on important and prudent solutions acceptable to every major constituency. Most of these solutions are necessary with or without Auburn. With or without Auburn Dam, the region needs facilities to divert, treat and distribute water supplies. We also need measures to protect the Lower American River fishery.

APPENDIX B

METHODOLOGY AND ASSUMPTIONS USED TO ASSESS 2030 DEMAND

This Appendix B describes the methodology and assumptions used by the Water Forum for assessing water demands to the year 2030.

As a technical reference, this appendix provides water demand information that includes all purveyors in Sacramento County, Placer County, and El Dorado County. However, it is important to note that the El Dorado Irrigation District and Georgetown Divide Public Utility District have remaining issues that could not be resolved in time for inclusion in the Water Forum Agreement.

SACRAMENTO COUNTY WATER DEMAND PROJECTIONS

METHOD AND DATA

To estimate current water demands and projections of future water demands for Sacramento County, Boyle Engineering Corp. used a forecasting method known as the land-use method, which is a standard model in the water industry. The objective of this method is to forecast future water demands based on how land is expected to be used and how much water is required by projected land use types. The model is:

Water Demand = (Land use acreage) X (Water Demand Factor) X (Weather Normalization Factor) X (Conservation Factors)

The resulting water demands are based on three things: (1) the number of acres in Sacramento County in land use types; (2) the amount of water which is used on an acre for a given land use type; and, (3) adjustments for weather and for water conservation. Each of these factors will be briefly explained in the following paragraphs.

The Water Forum based its water demand projections on those presented in a report entitled *The Estimate of Annual Water Demand within the Sacramento Metropolitan Area,* by Boyle Engineering Corp. (May 1995). Some of these projections were adjusted by recent demand data for specific water purveyors.

LAND USE ACREAGE (acres by land use type):
Estimates of current water demand and projections of future water demands were developed based on the distribution of current land uses and a projection of future land uses. Current land use types were determined from the current Assessor's parcel information. Future land uses were based on the Sacramento County General Plan, adopted December 15, 1993, which incorporated

the latest General Plans for the cities of Folsom, Galt and Sacramento. The General Plan process uses State of California county population forecasts to determine the future need for certain types of land use. For example, when population growth is anticipated the need for future housing may necessitate the conversion of agricultural to urban land uses.

The goal was to forecast the future amount of acres in each land type. The types of land use analyzed include such categories as single family homes, multi-family, commercial, industrial, rural estates and parks. Another significant land use is agriculture/irrigated agriculture. The water forecast to be used per acre is dependent on these land use characteristics.

The amount of acres by land use type for Sacramento County was forecast for two future time periods known as "buildout" and "ultimate buildout" (buildout refers to the completion of development anticipated in the General Plans). Estimates for the "buildout" of the General Plans represent the distribution of land uses projected at the end of the current planning periods of the cities of Folsom, Galt and Sacramento and the Sacramento County General Plans. Estimates of "ultimate buildout" project land uses beyond the 20-year planning horizon of the General Plans. The latter takes into consideration the identification of future growth centers in Sacramento County and the likely conversion of agricultural land to urban land uses. The population estimates for Sacramento County (see Figure 1) correspond roughly to both the buildout and ultimate buildout time periods.

WATER DEMAND FACTOR (acre-feet per acre):
Each land use type, urban and agricultural, is estimated to use a different amount of water depending on the type of land use. For example, for urban land, an acre of multi-family units may have a higher water use than an acre of single family units. Likewise, agricultural and park/recreation acres that are irrigated use more water than those that are not. The demand factors used for the 1990 base year were adjusted for "buildout" and "ultimate buildout" with normalization and conservation factors. Current demand factors were utilized in developing projections of future urban demands, i.e., similar water use was assumed. This information is contained in the previously mentioned Boyle Engineering Report entitled *The Estimate of Annual Water Demand within the Sacramento Metropolitan Area*. Excerpts from that Report are attached which indicate the aggregated demand factors for the water purveyors and other specified areas contained in the Report (see Tables 1 and 2). A copy of that Report is available for review in the Sacramento City-County Office of Metropolitan Water Planning.

For agricultural land, the types of crops grown are key determinants of its water requirement. The water demand factors were derived from the CA Department of Water Resources studies and historical usage data from Sacramento County water purveyors. Current demand factors were utilized in development in projections of future agricultural demands (i.e., current patterns of crop distribution are assumed for the buildout and ultimate buildout periods).

WEATHER NORMALIZATION FACTOR (percentage change in overall water demands):
To adjust for weather differences from year to year, a normalization procedure was applied. A normalization factor of 10% above the determined total water demand projection at ultimate buildout was applied to estimate the range of water demands that may be experienced. This range

reflects maximum demand water years and minimum demand water year, which equate to normal and wet/drought precipitation years, respectively. The percentages were based on a Boyle Engineering analysis of water demands for the City of Sacramento in 1990, both a drought year and the base year for the study.

WATER CONSERVATION FACTOR (percentage reduction in overall water demands): The Boyle report estimated the anticipated reduction in urban water demands due to specific water conservation measures. These were primarily limited to those considered to be the most cost-effective BMPs which could be implemented in Sacramento County in 1990. However, the Water Forum Agreement contains an expanded list of conservation measures, which includes residential water metering. The overall reduction in urban water demands of 25.6% is based on the ultimate implementation of all water conservation measures known as Best Management Practices (BMPs) by the year 2030 (see Table 3). The BMPs, developed by the California Urban Water Conservation Council and the CA Department of Water Resources, are used by the water purveyors statewide. Agricultural water conservation is expected to account for reductions in water use of 5% due to an improvement in irrigation efficiencies. Specifics on the agricultural water conservation program will be negotiated by the Water Forum Successor Effort.

EQUATION OF LAND USE DEMAND PROJECTIONS TO YEAR 2030

A. 1ST STEP - Conversion of land use projections to population.

A methodology was developed in order to equate these land use based buildout and ultimate buildout water projections to population equivalents at specific years. Sacramento area population projections were based on California Department of Finance (DOF) decennial period projections prepared in 1990. Based upon this methodology, the buildout of the policy area of the Sacramento County, and cities of Sacramento, Folsom and Galt General Plans equated to the population projected for the year 2024 (see Figure 1 and Table 1). The ultimate buildout equated to a population considerably beyond the year 2030 based upon DOF projections (see Figure 1 and Table 2).

B. 2ND STEP - Conversion from population estimates to year 2030.

The estimate of total, urban and agricultural demand projections for the year 2030 was developed by utilizing population projections at the buildout of the general plans, projections by DOF at the year 2030, and at ultimate buildout. Water demand projections for the year 2030 were determined by interpolating between the demand projections for the buildout of the policy area (for the Sacramento County and cities of Sacramento, Folsom and Galt General Plans) and ultimate buildout. California Department of Finance population projections were used as the basis of the interpolation. Thus the year 2030 projections become population based, not land use based.

SACRAMENTO COUNTY AREA-WIDE WATER DEMAND PROJECTIONS

FIGURE 1
(All demand values are in units of acre-feet per year.)

Planning Period	Population	Urban Demand	Agricultural Demand	Total Demand
1990 Base Year	1,046,000	394,600	361,600	756,200
Buildout of the General Plans (partial BMP implementation)	1,939,000	667,500	289,400	957,000
Ultimate Buildout (partial BMP implementation)	2,678,000	765,300	262,900	1,028,200
Year 2030 (partial BMP implementation)	2,092,000	687,800	283,900	971,700
Year 2030 (all Water Forum BMPs implemented)	2,092,000	571,100	283,900	855,000

USE OF THIS DATA IN NEGOTIATIONS

The total projected water demand of 855,000 acre-feet per year for the year 2030 is an aggregate projection for the Sacramento county-wide area. This projection was taken into consideration by both the Surface Water and the Groundwater Negotiating Teams as they developed their respective elements of the Agreement.

FOOTHILLS (PLACER AND EL DORADO COUNTIES) WATER DEMAND PROJECTIONS

A. PLACER COUNTY

The water demand projections for the west slope of the Placer County area were based upon population projections made by Placer County Water Agency. Besides the Placer County Water Agency, the west slope area includes other water purveyors such as: City of Roseville; a portion of the San Juan Water District; and the City of Lincoln. Their population assumptions were based upon a constant 3.2% annual growth rate for this area between 1990 and 2030.

In order to project the water demand for this area for the year 2030, the Placer County Water Agency used an estimated water demand figure of 0.3408 acre-feet per capita per year. In 1990 their demands were 54,200 acre-feet and in 2030 they are projected to be 175,228 acre-feet.

B. EL DORADO COUNTY

The 1990 water use in the western slope of El Dorado County, which includes the El Dorado Irrigation District and the Georgetown Divide Public Utility District, was 44,066 acre feet of which 30,000 acre-feet was diverted from the American River. The El Dorado Irrigation District provides service to about 70% of the population of the western slope of El Dorado County. The Georgetown Divide Public Utility District serves much of the remainder of the western slope population.

The El Dorado County Water Agency, in its 1993 County Water Resources Development and Management Plan, projected the 2030 demands for the areas served by the El Dorado Irrigation District and the Georgetown Divide Public Utility District to be 82,090 acre-feet. That plan projected that 67,100 acre-feet of water would be diverted from the American River.

TABLE 1

SACRAMENTO COUNTY-WIDE WATER DEMAND ANALYSIS SYSTEM BUILDOUT AREA DEMANDS SUMMARY

(Equated to the population projected to the year 2024)

Sacramento CCOMWP
Water Demand Analysis System
BUILDOUT AREA DEMANDS SUMMARY

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Group	Area Name	Area (acres)	Demand Factor (ac-ft/ac)	Total Demand (ac-ft)
Normalization Factor = 10.0%	Conservation Factor = 8.0%	Agricultural Efficiencies = 4.0%		
URBAN WATER DISTRICTS	Arcade WD	9,833.7	2.87	28,195.1
	Arden Cordova WS	7,080.2	2.66	18,845.0
	Carmichael WD	5,467.9	2.45	13,385.9
	Citizens Utilities CC	24,195.7	2.89	69,933.3
	Citrus Heights ID	8,029.4	2.50	20,083.3
	Del Paso Manor WD	613.9	3.13	1,919.6
	Elk Grove WW	8,240.4	2.43	20,000.5
	Fair Oaks WD	6,522.8	2.63	17,158.8
	Florin County WD	1,454.1	1.76	2,565.1
	City of Folsom	19,173.2	2.02	38,661.4
	Fruitridge Vista WD	1,913.1	2.86	5,477.0
	City of Galt	3,376.2	2.59	8,742.9
	Northridge WD	9,240.4	2.51	23,164.2
	Orange Vale WC	3,126.2	2.62	8,205.2
	Rancho Murieta CSD	3,544.8	2.44	8,643.4
	Rio Linda WD	11,359.3	1.78	20,178.1
	Sacramento County WMD	9,553.9	2.40	22,911.8
	San Juan Suburban WD	2,740.1	2.08	5,700.7
	Tokay Park WC	57.1	2.56	146.0
	TOTAL GROUP	135,522.4	2.46	333,917.1
AGRICULTURAL DISTRICT	Clay WD	7,067.4	2.19	15,479.2
	Galt ID	33,264.5	2.10	69,724.8
	Natomas Central MWC	19,938.3	2.56	51,063.5
	Omochumne-Hartnell WD	29,504.4	1.50	44,124.9
	TOTAL GROUP	89,774.6	2.01	180,392.3
UNORGANIZED AREAS	Zone 40 Expansion	26,027.4	1.73	45,027.1
	Sunrise A	18,985.7	1.53	29,099.4
	Sunrise B	11,521.5	1.95	22,460.1
	Southwest	33,585.5	2.39	80,220.5
	OFSCU	15,427.7	1.36	20,966.6
	Eastern Foothills	112,819.9	0.05	5,120.1
	TOTAL GROUP	218,367.7	0.93	202,893.7
OTHER AREAS	American River Parkway	4,616.4	0.02	72.4
	Folsom Lake and Prison	2,580.6	0.68	1,753.3
	McClellan AFB	2,601.9	0.71	1,850.8
	North Ridge CC	149.8	3.24	485.3
	Miscellaneous A	223.4	0.39	86.7
	Miscellaneous B	109.9	3.25	356.9
	Rancho Seco	2,131.1	21.28	45,341.7
	Sacramento Metro Air	5,430.9	1.17	6,349.9
	TOTAL GROUP	17,844.0	3.15	56,297.0
CITY	City	63,113.8	2.91	183,509.1
	TOTAL GROUP	63,113.8	2.91	183,509.1
	TOTAL COUNTY	524,622.5	1.82	957,009.2

Note: Total Demand includes Non-Agriculture System Losses
Boyle Engineering Corporation (ctydem2)

NOTE: These demand estimates in the above table were developed before the Water Forum negotiated a full implementation of BMPs as a part of the *Water Forum Agreement*.

TABLE 2

SACRAMENTO COUNTY-WIDE WATER DEMAND ANALYSIS SYSTEM ULTIMATE BUILDOUT AREA DEMANDS SUMMARY

(Equated to the population projected considerably beyond year 2030)

Sacramento CCOMWP
Water Demand Analysis System
ULTIMATE BUILDOUT AREA DEMANDS SUMMARY

08/22/94 Page: 1

Group	Area Name	Area (acres)	Demand Factor (ac-ft/ac)	Total Demand (ac-ft)
Normalization Factor = 10.0% Conservation Factor = 11.9% Agricultural Efficiencies = 5.0%				
URBAN WATER DISTRICTS	Arcade WD	9,833.8	2.82	27,718.7
	Arden Cordova WS	7,080.2	2.74	19,382.8
	Carmichael WD	5,467.9	2.35	12,840.2
	Citizens Utilities CC	24,195.9	3.10	75,085.1
	Citrus Heights ID	8,029.4	2.49	19,988.8
	Del Paso Manor WD	613.9	3.00	1,841.2
	Elk Grove WW	8,240.3	2.59	21,317.6
	Fair Oaks WD	6,522.8	2.53	16,515.2
	Florin County WD	1,454.0	1.87	2,724.6
	City of Folsom	19,173.2	2.10	40,196.3
	Fruitridge Vista WD	1,913.1	2.93	5,611.4
	City of Galt	3,376.2	2.53	8,537.2
	Northridge WD	9,240.3	2.42	22,362.6
	Orange Vale WC	3,126.2	2.52	7,885.2
	Rancho Murieta CSD	3,544.8	2.35	8,332.5
	Rio Linda WD	11,359.5	2.56	29,026.4
	Sacramento County WMD	9,554.0	2.42	23,110.4
	San Juan Suburban WD	2,739.9	2.62	7,185.6
	Tokay Park WC	57.1	2.46	140.2
	TOTAL GROUP	135,522.5	2.58	349,802.1
AGRICULTURAL DISTRICT	Clay WD	7,067.4	2.17	15,329.3
	Galt ID	33,264.5	2.07	68,990.6
	Natomas Central MWC	19,938.1	2.58	51,423.4
	Omochumne-Hartnell WD	29,504.5	1.63	48,058.7
	TOTAL GROUP	89,774.5	2.05	183,802.0
UNORGANIZED AREAS	Zone 40 Expansion	26,027.3	2.19	57,129.5
	Sunrise A	18,985.7	2.48	47,110.4
	Sunrise B	11,521.6	2.48	28,605.9
	Southwest	33,585.1	2.36	79,359.8
	OFSCU	15,427.8	1.35	20,771.8
	Eastern Foothills	112,819.8	0.19	21,658.8
	TOTAL GROUP	218,367.3	1.17	254,636.3
OTHER AREAS	American River Parkway	4,616.4	0.02	69.8
	Folsom Lake and Prison	2,580.6	0.73	1,879.5
	McClellan AFB	2,601.9	0.69	1,791.5
	North Ridge CC	149.8	3.11	466.3
	Miscellaneous A	223.4	2.28	509.8
	Miscellaneous B	109.9	3.12	343.0
	Rancho Seco	2,131.1	20.44	43,562.5
	Sacramento Metro Air	5,430.9	1.25	6,808.5
	TOTAL GROUP	17,844.0	3.11	55,430.8
CITY	City	63,113.8	2.92	184,480.9
	TOTAL GROUP	63,113.8	2.92	184,480.9
	TOTAL COUNTY	524,622.1	1.96	1,028,152.1

Note: Total Demand includes Non-Agriculture System Losses
Boyle Engineering Corporation (ctydem2)

NOTE: These demand estimates in the above table were developed before the Water Forum negotiated a full implementation of BMPs as a part of the *Water Forum Agreement*.

TABLE 3

DEMAND/CONSERVATION TEAM

IMPLEMENTATION OF SELECTED BMPs BY 2030

BMP #	BMP NAME	% CONSERVATION
1.	Single family & multi-family water audits	0.1%
2.	Indoor plumbing retrofit	0.4%
3.	Distrib. Sys. Water Audits/Leak Detection	4.5%
4. & 11.	Residential Metering of New Construction & Commodity Pricing	2.2%
4. & 11.	Residential Metering of Existing Unmetered Connections & Commodity Pricing	6.7%
5.	Large Landscape Water Audits	0.4%
6.	Landscape Req'ts-Comm/lnds/Public/MF	0.2%
12.	Water Efficient Landscaping/AB 325	7.4%
16.	Ultra Low Flush Toilet Replacement	3.7%
	TOTAL	25.6%

APPENDIX C

WHAT IS THE HODGE DECISION?

Existing flow requirements, for the Lower American River, known as Decision D – 893, were set 40 years ago when much less was known about the life cycles and needs of the fish, particularly fall-run chinook salmon. Since then we have learned more about them and watched as their population further declined under the outdated standard.

In 1970 the East Bay Municipal Utility District (EBMUD) contracted with the U. S. Bureau of Reclamation for water that would be diverted from the Lower American River into the Folsom South Canal at Nimbus which is upstream of the Lower American River. Parties including Sacramento County, the Environmental Defense Fund, and Save the American River Association sued EBMUD over concern about how these increased diversions would further impact the Lower American River fishery. Millions of dollars were spent on legal costs and fishery studies.

At the end of the 17-year lawsuit, Judge Hodge evaluated all of the evidence and issued his decision which balanced the needs of the fishery with EBMUD's contractual entitlement to American River water. Judge Hodge reasoned that because EBMUD had reasonable and feasible alternatives for meeting its needs, it could use the Folsom-South Canal diversion only when specified flows would remain in the river. These flows have come to be known as the Hodge Flows.

While Judge Hodge's decision applies only to parties to that lawsuit, the Water Forum is considering the same standards for any water district that was found to have reasonable and feasible alternatives.

The Water Forum also recognizes that some agencies, such as those at higher elevations, have no reasonable and feasible alternatives to increased American River diversions in most years and therefore probably would not be held to the Hodge standard.

D – 893

September 15 – December 31	500 cubic feet per second
January 1 – September 14	250 cubic feet per second

Hodge Decision

October 15 – February	2,000 cubic feet per second
March – June	3,000 cubic feet per second
July – October 14	1,750 cubic feet per second

APPENDIX D

WATER FORUM BEST MANAGEMENT PRACTICES (BMP) IMPLEMENTATION CRITERIA

The Best Management Practices (BMP) Implementation Criteria on the following pages were adopted on July 28, 1997 by the negotiators participating in the Water Forum BMP Criteria Negotiations. They were adapted from the Statewide Memorandum of Understanding (MOU) Regarding Urban Water Conservation Best Management Practices and have been customized for use by the Water Forum.

The Water Forum Successor Effort will facilitate "changed conditions" negotiations to determine how BMP's adopted or amended by California Urban Water Conservation Council (CUWCC) after July, 1997 will be incorporated into the Water Forum purveyors' Water Conservation Plans.

If Water Forum signatories are unable to agree on how BMP's adopted or amended by CUWCC after July, 1997 will be incorporated into the Water Forum purveyors' Water Conservation Plans, individual signatory organizations can advocate how they believe those new BMP's should be implemented. This can be done as part of the review of environmental documentation or in legislative, administrative, regulatory and other venues.

The signatories to this *Agreement* agree that the BMP's be implemented consistent with the Water Forum Negotiated BMP Implementation Criteria, or Functional Equivalent, as described below.

The following language, adopted on July 28, 1997 by the negotiators participating in the BMP Criteria Negotiations, applied to the development of the Water Conservation Plans that will be a part of the *Water Forum Agreement*.

A. Purveyors may choose to implement BMPs using the negotiated criteria described on the following pages.

B. Purveyors also had the option of customizing ways to implement BMPs that will be at least as effective as the negotiated criteria. The Demand/Conservation Team reviewed each of the proposed customized implementation method(s) to determine if the BMP will be at least as effective as the negotiated criteria.

C. Alternately, a functional equivalency determination could have been made based on an integrated review of the entire package of a purveyor's proposed schedule and budget for implementing the BMPs. The Demand/Conservation Team determined if the purveyor's

proposal would provide functional equivalency to the full implementation of BMPs using the negotiated criteria.

D. A purveyor's agreed upon Water Forum Water Conservation Plan shall be implemented for its entire service area including future changed boundaries.[19]

[19] See City of Folsom Purveyor Specific Agreement (Section D) for further information on this item.

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

BMP Implementation Criteria:

The on-going program will include, at a minimum:

A. Within three years of agreement signing, signatories will have:
   1. trained water auditors on staff or available through cooperative agreements with other purveyors;
   2. prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers;
   3. prepared and made available to customers seasonal climate-appropriate irrigation information; and
   4. investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Signatories will annually:
   1. identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits):
      a. (metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area; and
      b. (unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. offer, through bill inserts or other means, water-use reviews to all customers; and
   3. survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. provide audits conducted by trained auditors;
   2. provide audits that may include device installation by purveyor or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading;
   3. provide program participants with seasonal irrigation schedules by hydrozone and/or station; and
   4. provide incentives, such as the following, to achieve 12% annual participation of the targeted 20% of customers:

a. billing adjustments or bill rebates targeted to plumbing system repair or improvement;
b. incentive programs to encourage plumbing system repair or improvement.

D. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

BMP Implementation Criteria:

A. The on-going program will include, at a minimum:
   1. offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets;
   2. offer toilet leak test kits to all change of account customers who visit the purveyor office;
   3. work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents;
   4. work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters; and
   5. investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

BMP Implementation Criteria:

The on-going program will include the following minimum programs (as recommended in AWWA "*Manual of Water Supply Practices, Water Audits and Leak Detection*"):

A. Unmetered signatories will complete and be maintaining:
   1. an annually updated 'system map' of type, size and age of pipes; pressures; leak history; and historic data;
   2. installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses;
   3. an ongoing meter calibration and replacement program for all production and distribution meters;
   4. an ongoing leak detection & repair program (as defined in the manual) focused on high probability leak areas identified by the system map; and
   5. a complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Metered signatories will complete and be maintaining:
   1. an annual system water audit, determining the difference between production and sales;
   2. an annually updated 'system map' of: type, size and age of pipes; pressures; record of leaks; etc.; with historic data;
   3. an ongoing meter calibration and replacement program;
   4. an ongoing leak detection and repair program focused on high probability leak areas identified by the system map; and
   5. a complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost-effective.

C. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

BMP description (customized by the Water Forum):
Purveyors will retrofit at least 85-90 percent of non-residential customers within ten years. Complete non-residential retrofit is not a requirement. This is in recognition of the fact that there could be some smaller non-residential customers whose service locations could be very difficult and expensive to retrofit.

BMP Implementation Criteria:

A. The on-going program will include, at a minimum:
   1. identify all non-residential unmetered customers;
   2. provisionally identify any non-residential unmetered customers which may be very difficult and expensive to retrofit;
   3. adopt a plan to meter at least 10 percent of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90 percent of non-residential customers are metered; and
   4. begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, signatories will provide newly metered non-residential customers with information on how to read their meter and a consumption-based water bill information on purveyor-provided water conservation programs and services; and

C. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

For the purposes of this BMP, 'non-residential' is defined as all accounts except single family and duplex residential dwellings.

BMP 4 RESIDENTIAL METER RETROFIT

BMP description (customized by the Water Forum):
(See Section Three, V., Water Conservation Element, pages 89-95, for a description of this customized BMP.)

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

BMP Implementation Criteria:

The on-going program will include, at a minimum:

A. Within three years of agreement signing, signatories will:
   1. identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database;
   2. have certified and/or trained landscape water auditors on staff or available through cooperative agreements;
   3. prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers;
   4. develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provide that information to the customers with one acre or larger landscapes; and
   5. begin installation of climate appropriate water efficient landscaping at landscaped purveyor facilities, phased in over the five years following agreement signing.

B. Signatories will annually:
   1. directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits);
   2. offer, through bill inserts or other means, landscape water-use reviews to all customers;
   3. survey past program participants to determine if audit recommendations were implemented; and
   4. offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The landscape water-use review program will:
   1. provide audits conducted by certified landscape water auditors;
   2. provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area;
   3. provide program participants with seasonal irrigation schedules by hydrozone and/or station;
   4. provide program participants with regular reminders to adjust irrigation timer settings; and

5. provide incentives, such as the following, to achieve at least 12 percent annual participation of targeted customers:
    a. billing adjustments or bill rebates targeted to irrigation system repair or improvement;
    b. grants, etc. to encourage landscape design and irrigation system improvements; and
    c. ET (evapotranspiration) based tiered rate structure.

D. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

BMP Implementation Criteria:

Cities and counties have either already adopted their own landscape water conservation ordinance for new and existing commercial, industrial, institutional, governmental, and multi-family customers, or are covered by the State landscape water conservation ordinance, pursuant to the "*Water Conservation in Landscaping Act*" (California Code of Regulations, Chapter 2.7, Title 23.).

A. Cities and counties, will enact and implement a landscape water efficiency ordinance pursuant to the "*Water Conservation in Landscaping Act*" (California Code of Regulations, Chapter 2.7), that is at least as effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490 through 495.

B. Cities and counties, in cooperation with purveyors within their jurisdiction, will:
   1. establish a landscape task force with other local governments, water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance;
   2. review, in cooperation with the landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process, to ensure its effectiveness; and
   3. determine, in cooperation with the landscape task force, if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action - for example, the use of consultants.

C. Signatories will publicly support the county or city's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

D. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

BMP Implementation Criteria:

Within three years of agreement signing, a signatory's on-going program will include, at a minimum, one of the three choices listed below:

A. A combination of a purveyor specific program in conjunction with full participation by the purveyor in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time full financial participation in this program is based upon an annual per connection contribution by purveyors to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by the purveyor include, at a minimum:

1. using utility bill inserts or messages on payment notices; and
2. providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before;

OR

B. A combination of a purveyor specific program in conjunction with limited participation by the purveyor in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time limited participation in this program is based upon an annual contribution by a purveyor to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

The purveyor agrees to spend the difference between the annual per connection SAWWA contribution and the flat annual contribution to SAWWA on an enhanced within-service-area implementation of elements 3-6 listed below and elements 3-4 listed in BMP 8, School Education.

1. using utility bill inserts or messages on payment notices;

2. providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before;
3. providing public speakers to community groups and the media;
4. using paid and public service advertising for a water conservation campaign;
5. providing public information to promote other water efficient practices; and
6. coordinating with other governmental agencies, industry groups and public interest groups.

OR

C. An entirely purveyor specific Public Information program, funded at a level equivalent to one-half the full SAWWA per-connection contribution. The program will include activities such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach. The program will also include, as a minimum:

1. using utility bill inserts or messages on payment notices;
2. providing information on metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before;
3. providing public speakers to community groups and the media;
4. using paid and public service advertising for a water conservation campaign;
5. providing public information to promote other water efficient practices; and
6. coordinating with other governmental agencies, industry groups and public interest groups.

BMP 8 SCHOOL EDUCATION

BMP Implementation Criteria:

Within three years of agreement signing, a signatory's program will include, at a minimum, one of the three choices listed below:

A. A combination of a purveyor specific program in conjunction with full participation by the purveyor in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time full financial participation in this program is based upon an annual per connection contribution by purveyors to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by the purveyor include, at a minimum:

1. offering tours of purveyor facilities to elementary schools in the purveyor's service area; and
2. working with schools served by the purveyor to promote school audits, reduced water bills, and innovative funding for equipment upgrades;

OR

B. A combination of a purveyor specific program in conjunction with limited participation by the purveyor in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time limited participation in this program is based upon an annual contribution by a purveyor to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

The purveyor agrees to spend the difference between the annual per connection SAWWA contribution and the flat annual contribution to SAWWA on an enhanced within-service-area implementation of elements 3-4 listed below and elements 3-6 listed in BMP 7, Public Information.

1. offering tours of purveyor facilities to elementary schools in the purveyor's service area;
2. working with schools served by the purveyor to promote school audits, reduced water bills, and innovative funding for equipment upgrades;
3. working with the school districts in the water purveyor's service area to provide educational materials promoting efficient water use to one or more grade levels on an annual basis; and
4. working with school districts in the water purveyor's service area to offer instructional materials and assistance to all teachers of the targeted grade level in order to promote efficient water use. This program is considered successful if a high percent of the teachers of the targeted grade level(s) participate in the training and use the materials in the classroom.

OR

C. An entirely purveyor specific School Education program, funded at a level equivalent to one-half the full SAWWA per-connection contribution. The program will include activities such as: school outreach, advertising campaigns, educational materials for schools, participation at school events and fairs, a Web site, and parent/teacher outreach. The program will also include, as a minimum:

1. offering tours of purveyor facilities to elementary schools in the purveyor's service area;
2. working with schools served by the purveyor to promote school audits, reduced water bills, and innovative funding for equipment upgrades;
3. working with the school districts in the water purveyor's service area to provide educational materials promoting efficient water use to one or more grade levels on an annual basis; and
4. working with school districts in the water purveyor's service area to offer instructional materials and assistance to all teachers of the targeted grade level in order to promote efficient water use. This program is considered successful if a high percent of the teachers of the targeted grade level(s) participate in the training and use the materials in the classroom.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

BMP Implementation Criteria:

A. Within three years of agreement signing, signatories will have:
   1. trained commercial/industrial water auditors on staff or available through cooperative agreements;
   2. the DWR Commercial / Industrial (CI) water-use materials available for CI customers;
   3. established, if possible, cooperative CI audit programs with other utilities; and
   4. a list of available CI water-use consultants.

B. Signatories or their representative will annually:
   1. identify the top 10% of commercial water users and top 10% or industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.):
      a. (for metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high-energy use, etc.); and
      b. (for unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater , and high-energy use. etc.
   2. offer, through bill inserts or other means, CI water-use reviews to all CI customers; and
   3. survey past program participants to determine if audit recommendations were implemented.

C. The signatory's, or cooperative, water-use review program will:
   1. provide audits conducted by trained commercial/industrial water auditors;
   2. provide incentives, such as the following, to achieve at least 20% annual participation of the targeted 10% of existing customers:
      a. billing adjustments or bill rebates targeted to water-use system repair or improvement; and
      b. grants, etc. to partially fund climate-appropriate water-efficient landscaping water-use systems repair or improvement.
   3. contact past program participants for a follow-up audit at least every fifth year.

D. Counties and cities will establish policies requiring water intensive commercial and industrial building permit applicants (new, modified or change-of-water-use) to conduct a water-use efficiency review and submit the findings in any required environmental documentation for the commercial or industrial project.

E. Purveyors will:
   1. promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers;
   2. coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the purveyor's service area to ensure that the submitted findings are reviewed by the purveyor to identify incentive program opportunities;
   3. consider separate landscape water meter(s) when the combined service would require a 1 ½" or larger meter; and
   4. require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

F. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

BMP description (customized by the *Water Forum*):

As soon as practical, purveyors signatory to the *Water Forum Agreement* will begin reading all meters and including the usage on the customer's bills. This includes meters required in new construction since 1992 and meters retrofit onto existing connections. The schedule for each purveyor to implement this provision will be negotiated as part of its Water Conservation Plan. It is recognized that circumstances vary purveyor by purveyor, however as a general guideline for the Water Conservation Plan negotiations, a time period of three years from signing of the *Water Forum Agreement* to implement this provision has been discussed.

As soon as practical, purveyors will base customer charges on the quantity of water used. The schedule for each purveyor to implement this provision will be negotiated as part of its Water Conservation Plan. It is recognized that circumstances vary, purveyor by purveyor, however as a general guideline for the Water Conservation Plan negotiations, a time period of six years from signing of the *Water Forum Agreement* to implement this provision has been discussed.

BMP Implementation Criteria:

A. Within three years of agreement signing, signatories will:
   1. identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale);
   2. establish quantity-based rates for each account type;
   3. begin educating all customers about the quantity-based rate structure; and
   4. provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. Signatories will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

C. If the signatory provides water service and sewer service (collection and/or treatment), within three years of agreement signing, signatories are encouraged to:
   1. identify all metered customers which are also provided sewer service by the signatory;
   2. establish quantity-based sewer rates for each customer type;
   3. begin educating all customers about the quantity-based sewer rate structure; and
   4. provide metered customers with sewer bills which show current charges, actual water use, and future charges based on actual use.

D. Signatories are encouraged to implement quantity-based sewer charges no later than the implementation of quantity-based water charges.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

BMP Implementation Criteria:

A. Signatories will implement a program which includes, at a minimum:
   1. information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the purveyor's service area on an annual basis;
   2. landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts:
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year; and
      b. Metered service areas will actively market landscape audits/surveys to the top 20 percent of existing Single Family customer water-users.
   3. annual pre-irrigation season notification to Single Family Homes served by the purveyor of purveyor-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. A signatory's on-going program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within a purveyor's service area but should be convenient to the purveyor's customers);
   2. annual participation at local and regional landscape fairs and garden shows;
   3. annual cooperative education and marketing campaigns with local nurseries;
   4. annual irrigation season landscape media campaign; and
   5. annual post-irrigation season notification, to all customers, of the importance of timer resets/sprinkler shut-offs.

C. Counties and cities, in cooperation with purveyors within their jurisdiction, will:
   1. establish a landscape task force with other local governments, water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance as pertains to single family homes, and to monitor, and revise, when applicable, the ordinance;
   2. review, in cooperation with the landscape task force, the implementation of the ordinance, including builder compliance, landscape plan review, and final inspection/certification process, to ensure its effectiveness; and

3. determine, in cooperation with the landscape task force, if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action - for example, the use of consultants.

D. Signatories will publicly support the county or city's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

BMP Implementation Criteria:
Within three years of agreement signing, signatories will enact a water waste prohibition ordinance which includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include, at a minimum:
   1. irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter;
   2. leaking pipes, fixtures, or sprinklers shall be repaired promptly;
   3. open hoses not permitted - automatic shut-off nozzles are required; and
   4. swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other suggested measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. restricting irrigation hours or days;
   2. use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety;
   3. restaurants serving water only on request;
   4. restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available; and
   5. limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation/reading.

D. Within three years of agreement signing all purveyors will:
   1. notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season;
   2. have staff will respond to reports of water waste in a timely manner;
   3. will have water waste patrols at least during water shortages; and
   4. will cooperate with the city or county in their program enforcement efforts.

E. Within three years of agreement signing unmetered purveyors will have water waste patrols (including some pre-dawn and post-sunset) during the irrigation season.

BMP 14 WATER CONSERVATION COORDINATOR

BMP Implementation Criteria:

The Water Conservation Plan shall contain the name of the purveyor's water conservation coordinator, who will be responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at a purveyor will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

BMP Implementation Criteria:

A. Within three years of agreement signing, signatories will:
   1. identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use); and
   2. if possible, established a cooperative district / sanitation district ULF rebate program.

B. Signatories will annually offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts which do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The retrofit program will:
   1. offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10 percent of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90 percent of all non-residential toilets being ULFs within ten years;
   2. consider larger rebates for the more expensive high-use flushometer-type ULF installations;
   3. investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents; and
   4. consider monitoring the change in water use at metered-accounts which install ULF toilets.

D. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR RESIDENTIAL CUSTOMERS

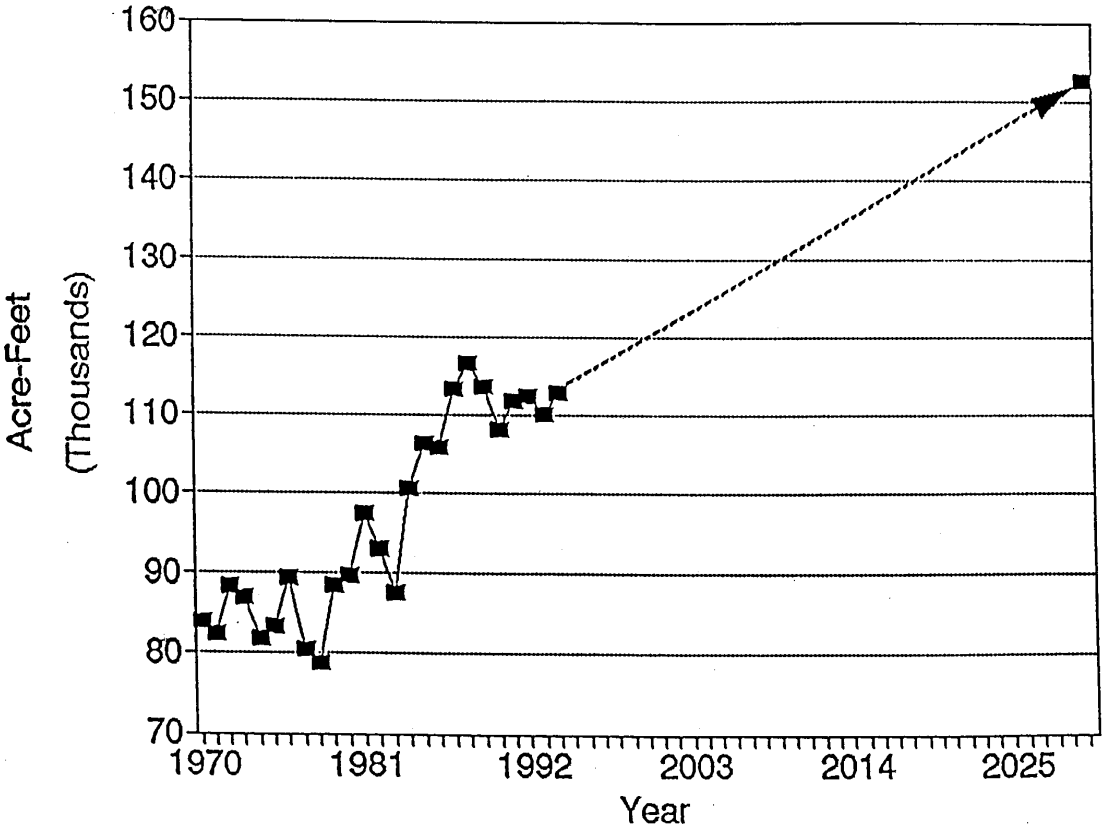
BMP Implementation Criteria:

Under the *Water Forum Agreement* this is a voluntary program. However, it is recommended that purveyors make an effort to replace high water-using residential toilets with ULF toilets, using incentives. This could include any or all of the following program elements: rebates, distribution of toilets at no cost to the customer using programs such as CBOs, co-payment programs in which the customers pay a reduced rate for the toilets, and direct installations.

Water Conservation Plan - **Sample Format**

This sample format has been provided to assist Water Purveyors develop their Water Conservation Plans in accordance with Section 7.d of the Water Conservation Element.

PAST AND PROJECTED WATER USE 1970 - 1994 & 2030



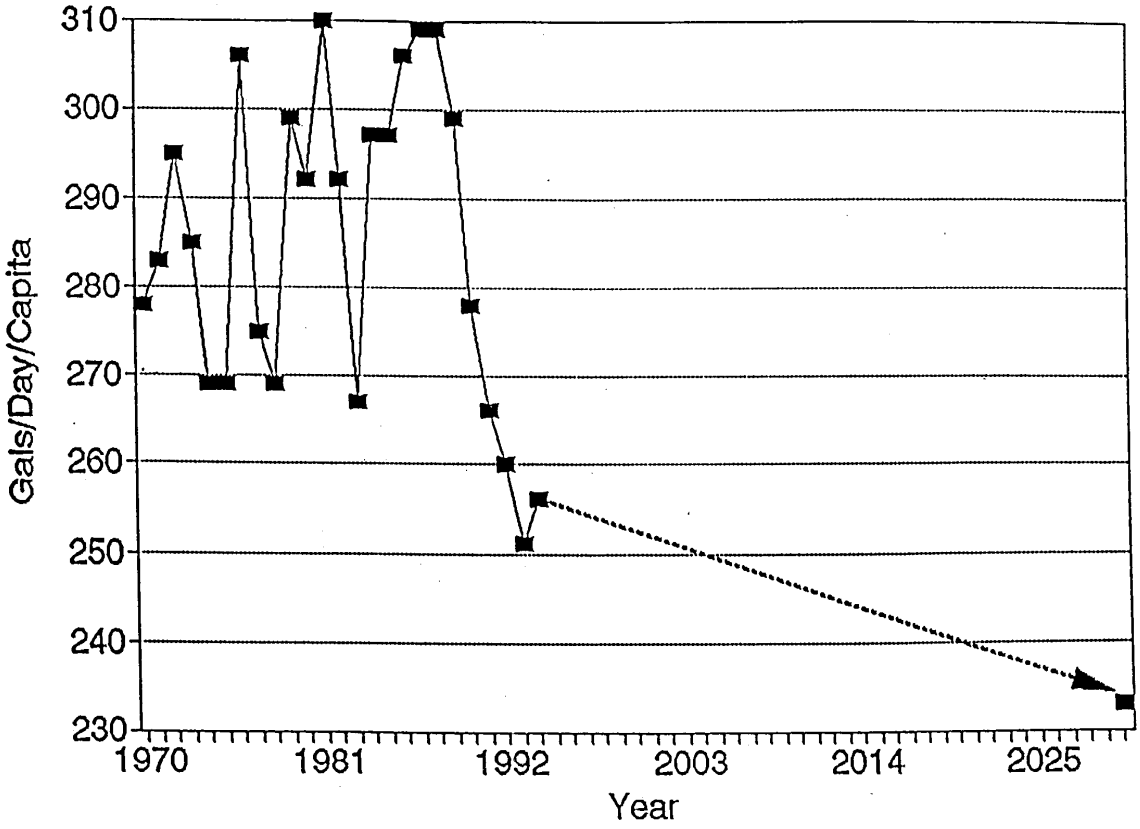
EXAMPLE OF GRAPH

(For illustrative purposes only)

Water Conservation Plan - **Sample Format**

This sample format has been provided to assist Water Purveyors develop their Water Conservation Plans in accordance with Section 7.e of the Water Conservation Element.

Past and Projected per Capita Water Use 1970 - 1994 & 2030



EXAMPLE OF GRAPH

(For illustrative purposes only)

APPENDIX E

JOINT POWERS AGREEMENT BETWEEN THE CITY OF CITRUS HEIGHTS, THE CITY OF FOLSOM, THE CITY OF SACRAMENTO AND THE COUNTY OF SACRAMENTO CREATING THE SACRAMENTO NORTH AREA GROUNDWATER MANAGEMENT AUTHORITY

This Agreement is made and entered into this 11th day of August ,1998, by and between the City of Citrus Heights, a municipal corporation, the City of Folsom, a municipal corporation, the City of Sacramento, a municipal corporation, and the County of Sacramento, a political subdivision of the State of California ("County").

RECITALS

WHEREAS, each of the parties to this agreement is a local government entity functioning within the County of Sacramento; and

WHEREAS, pursuant to the Joint Exercise of Powers Act (Chapter 5 of Division 7 of Title 1 of the California Government Code), two or more public agencies may by agreement jointly exercise any power held in common by the agencies entering into such an agreement; and

WHEREAS, each of the parties hereto has under its police power the authority to regulate groundwater; and

WHEREAS, the parties hereto have each been either directly or indirectly involved in the process commonly referred to as the Sacramento Area Water Forum ("Water Forum"); and

WHEREAS, the Water Forum process has resulted in the development of a Groundwater Management Element, dated August 1998 ("Groundwater Management Element"), which provides for the formation of a groundwater management authority for the north area of the County of Sacramento pursuant to a joint powers agreement between the City of Citrus Heights, the City of Folsom, the City of Sacramento and the County; and

WHEREAS, a true and correct copy of the Groundwater Management Element is attached hereto and incorporated herein as Exhibit "A"; and

WHEREAS, the completion of the Water Forum process and the approval of the final Water Plan by the Water Forum stakeholders has been delayed for reasons unrelated to groundwater management issues; and

WHEREAS, the parties hereto and the Water Forum stakeholders who have been involved in the development of the Groundwater Management Element believe that it is in the public interest to move forward with the development of the institutional framework necessary to implement the Groundwater Management Element within the North Area Basin, rather than suspending those efforts until such time as the Water Forum process is finalized; and

WHEREAS, the formation of the joint powers authority contemplated by this agreement is not legally dependent upon the finalization of the Water Forum process, but is independently authorized by state law; and

WHEREAS, the parties hereto find that it is to their mutual advantage and benefit to establish such a groundwater management authority pursuant to this agreement in order to implement the groundwater management policies embodied in the Groundwater Management Element; and

WHEREAS, the parties hereto find and declare that the conservation of groundwater resources within the North Area Basin for agricultural and municipal and industrial uses is in the public interest and for the common benefit of all water users within the County of Sacramento; and

WHEREAS, the overriding purpose of the joint powers authority established pursuant to this agreement is to maintain the sustainable yield of the North Area Basin as set forth in the Groundwater Management Element; and

WHEREAS, it is the desire of the parties hereto to use the groundwater management powers which they have in common that are necessary and appropriate to further the purposes for which the joint powers authority is being established; and

WHEREAS, the parties hereto are receptive to amending this agreement in the future to include public agencies outside the County of Sacramento who have a specific and relevant interest in the North Area Basin.

NOW, THEREFORE, in consideration of the promises, terms, conditions, and covenants contained herein, the City of Citrus Heights, the City of Folsom, the City of Sacramento and the County hereby agree as follows:

1. **Incorporation of Recitals.** The foregoing recitals are hereby incorporated by reference.

2. **Definitions.** As used in this agreement, the following words and phrases shall have the meanings set forth below unless the context clearly indicates otherwise.

(a) "Conjunctive use" shall mean the planned management and use of both groundwater and surface water in order to maintain the sustainable yield of the North Area Basin.

(b) "North Area Basin" shall mean the groundwater basin underlying the area within the boundaries of the Authority.

(c) "Sustainable yield" shall mean the amount of groundwater which can be safely extracted from the North Area Basin on an estimated average annual basis while maintaining groundwater elevations and groundwater quality at acceptable levels as set forth in the Groundwater Management Element. Sustainable yield requires a balance between extraction and basin recharge and is expressed as the number of acre feet of groundwater per year which can be extracted from the North Area Basin on an average annual basis as set forth in the Groundwater Management Element.

(d) "Total water production" shall be defined as follows:

(i) For purposes of determining assessments, fees or charges to support the **administrative costs** of the Authority, total water production means the combined surface water and groundwater delivered by retail providers, together with that water produced by agricultural and self-supplied users, for use within the boundaries of the Authority.

(ii) For purposes of determining assessments, fees or charges to support **water costs**, total water production means the groundwater portion of the total amount of water delivered by retail providers, together with that water produced by agricultural and self-supplied users, for use within the boundaries of the Authority.

3. <u>Purpose</u>. This agreement is being entered into in order to establish a joint powers authority for the following purposes:

(a) to maintain the long-term sustainable yield of the North Area Basin;

(b) to manage the use of groundwater in the North Area Basin and facilitate implementation of an appropriate conjunctive use program by water purveyors;

(c) to coordinate efforts among those entities represented on the governing body of the joint powers authority to devise and implement strategies to safeguard groundwater quality; and

(d) to work collaboratively with other entities, including groundwater management authorities that may be formed in other areas of the County of Sacramento and adjacent political jurisdictions, to promote coordination of policies and activities throughout the region.

4. <u>Establishment Of The Authority</u>. There is hereby established pursuant to the Joint Exercise of Powers Act a joint powers authority which shall be a public entity separate from the parties to this agreement. The name of such entity shall be the Sacramento North Area Groundwater Management Authority ("Authority"). The boundaries of the Authority shall be as follows: north of the American River to the Sacramento County line; bounded on the south by the American River; on the west by the Sacramento River; on the north and east by the Sacramento County line; and also including the City of Folsom. A map depicting the boundaries of the Authority is attached hereto and incorporated herein as Exhibit "B".

5. <u>Membership Of The Governing Board</u>. The governing body of the Authority shall be a Board of Directors of seventeen (17) members consisting of the following representatives who shall be appointed in the manner set forth in Section 7 of this agreement:

(a) An elected member of the governing board of each of the following public agencies: the Arcade Water District, the Carmichael Water District, the Citrus Heights Water District, the Del Paso Manor Water District, the Fair Oaks Water District, the Northridge Water District, the Rio Linda/Elverta Community Water District, the San Juan Water District, the City of Folsom, the City of Sacramento and the Sacramento County Water Maintenance District.

(b) A member of the board of directors, or designee thereof, of each of the following private water purveyors or investor owned utilities: the Arden Cordova Water Company, Citizens Utilities Company of California, the Natomas Central Mutual Water Company and the Orange Vale Water Company.

(c) One representative of agricultural interests within the boundaries of the Authority.

(d) One representative of commercial/industrial self-supplied water users within the boundaries of the Authority.

6. <u>Adjustment To Composition Of Governing Board</u>. With the exception of the City of Citrus Heights, the City of Folsom, the City of Sacramento and the County, membership in the governing board shall be limited to public and private water purveyors, investor owned utilities and groundwater rights holders within the boundaries of the Authority. Should circumstances change in the future, any person or entity may petition the parties hereto to amend this agreement so as to add or delete representatives to the governing board to accurately reflect groundwater rights within the boundaries of the Authority.

7. <u>Appointment Of Members Of Governing Board</u>.

(a) The members of the governing board of the Authority shall be appointed as follows:

(i) The City of Folsom representative shall be appointed by the Folsom City Council.

(ii) The agricultural representative shall be appointed by the County Board of Supervisors.

(iii) The representative of commercial/industrial self-supplied groundwater users shall be appointed by the Sacramento City Council.

(iv) The Citrus Heights City Council shall appoint the representative of the Citrus Heights Water District.

(iv) The Sacramento City Council shall appoint the representatives of the following entities: Arcade Water District, Arden Cordova Water Company, Citizens Utilities Company of California, the City of Sacramento, Del Paso Manor Water District and the Natomas Central Mutual Water Company.

(v) The County Board of Supervisors shall appoint the representatives of the following entities: Carmichael Water District, Fair Oaks Water District, Northridge Water District, Orange Vale Water Company, Rio Linda/Elverta Community Water District, San Juan Water District and the Sacramento County Water Maintenance District.

(b) Prior to the appointment of the representatives of the entities described in subsections (a)(iv) and (v) above, those entities shall submit a recommended appointment for their respective representatives to the appointing authority. The appointing authority shall give consideration to such recommendations, but shall retain the absolute discretion to appoint any person satisfying the criteria for appointment set forth in Section 5 hereof.

8. <u>Governing Board Voting Requirements</u>.

(a) Each member of the governing board of the Authority shall have one vote. With the exception of fiscal items as set forth in subsections (b) and (c) below, a majority vote of all members of the governing board is required to approve any item.

(b) Fiscal items related to the **administrative costs** of the Authority shall require approval by a double majority consisting of the following: a majority vote of all members of the governing board and a majority vote weighted on the basis of total water production within the boundaries of the Authority, as defined in Section 2(d)(i) hereof, during the previous fiscal year.

(c) Fiscal items related to **water costs** shall require approval by a double majority consisting of the following: a majority of all members of the governing board and a

majority vote weighted on the basis of total water production as defined in Section 2(d)(ii) hereof.

(d) For purposes of subsection (c) hereof, the weighted vote of the representative of agricultural interests and the commercial/industrial self-supplied water users representative shall be weighted on the basis of total water production by all such users within the boundaries of the Authority, adjusted to reflect any differential rate which may be paid by a particular classification of water users; e.g., if each acre foot of water pumped equals one vote and agricultural users pump 100,000 acre feet, but pay only 20% of the per acre assessment, fee or charge levied on other types of pumpers, the vote of the agricultural representative would be calculated at 20,000 votes.

(e) Total water production within the boundaries of the Authority during the previous calendar year for purposes of subsections (b) and (c) above shall be based on an annual determination by the governing body of the Authority of the total water production during the previous fiscal year of each entity represented on the governing body. Until such time as the governing board of the Authority makes its annual determination of total water production, the calculation for the previous year shall be controlling for purposes of the double majority requirement set forth in subsections (b) and (c) above.

9. Quorum. A majority of the members of the governing board shall constitute a quorum for purposes of transacting business, except less than a quorum may vote to adjourn a meeting.

10. Terms Of Office. With the exception of the initial term of the representatives appointed by the City of Folsom and the City of Sacramento, the term of office of each member of the governing board the Authority shall be for a period of four (4) years. The initial term of the City of Folsom and the City of Sacramento representatives shall be for a period of two (2) years. Each member of the governing board shall serve at the pleasure of the appointing body and may be removed as a member of the governing board by the appointing body at any time. If at any time a vacancy occurs on the governing board, a replacement shall be appointed to fill the unexpired term of the previous representative pursuant to the provisions of Section 7 hereof within ninety (90) days of the date that such position becomes vacant.

11. Alternates. The City of Citrus Heights, the City of Folsom, the City of Sacramento and the County, in addition to their regular appointments, shall appoint one or more persons with the required qualifications to serve as alternate members of the governing board of the Authority. Any such alternates shall be empowered to cast votes in the absence of the regular members or, in the event of a conflict of interest preventing the regular member from voting, to vote because of such a conflict of interest.

12. Organization Of The Authority. The governing board of the Authority shall elect a chair, a vice chair and such other officers as the governing board shall find appropriate. Such officers shall serve for a term of one (1) year unless sooner terminated at the pleasure of the governing board.

13. Treasurer, Controller, Clerk and Legal Counsel. The controller and the treasurer of the Authority shall be the County Director of Finance. The governing board of the Authority shall appoint a clerk and legal counsel as it deems appropriate. The controller of the Authority shall cause an independent annual audit of the Authority's finances to be made by a certified public accountant in compliance with Government Code Section 6505. The treasurer of the Authority shall be the depositor and shall have custody of all money of the Authority from whatever source. The controller of the Authority shall draw warrants to pay demands against the Authority when the demands have been approved by the Authority or by its authorized representative pursuant to any delegation of authority adopted by the Authority. The treasurer and controller shall comply strictly with the provisions of statutes relating to their duties found in Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the Government Code.

14. Chief Executive Officer. The governing board of the Authority shall appoint a chief executive officer who shall be responsible to the governing board for the proper and efficient administration of the Authority as directed by the governing board pursuant to the provisions of this agreement or of any ordinance, resolution or order of the governing board. In addition to any other duties which may be assigned, the chief executive officer shall have the following authority:

(a) under the policy direction of the governing board, to plan, organize and direct all Authority activities;

(b) to authorize expenditures within the designations and limitations of the budget approved by the governing board;

(c) to make recommendations to and requests of the governing board concerning any matter which is to be performed, done or carried out by the governing board;

(d) to have the authority to appoint, discipline, assign and otherwise supervise and control the activities of any employees or contractors which may be hired or retained by the Authority; and

(e) to have charge of, handle and have access to any property of the Authority.

15. Meetings. The Authority shall provide for regular and special meetings in accordance with the Ralph M. Brown Act (Chapter 9 (commencing with Section 54950) of Part 1 of Division 2 of Title 5 of the Government Code) or with any successor provision.

16. Powers and Functions.

(a) The Authority shall have no power to regulate land use or to engage in the retail sale of water and shall be prohibited from restricting or otherwise limiting the extraction of groundwater within the boundaries of the Authority except by means of economic incentives and disincentives. The Authority shall further be prohibited from funding any capital construction projects. In addition, during the first five (5) years after the effective date of this agreement, the Authority shall be prohibited from levying annual fees or assessments to fund water cost payments that exceed an annual average charge during such five (5) year period of $5.00 for each acre foot (minimum $0.00-maximum $10.00) of groundwater pumped from the North Area Basin during such five (5) year period. Further, during any individual year of such five (5) year period, the Authority shall be prohibited from levying annual fees or assessments to fund water cost payments that

exceed a charge of $10.00 for each acre foot of groundwater pumped from the North Area Basin during any such year. For purposes of this section, water costs shall include the cost of water, pumping and treatment costs, and other costs related to any conjunctive use program administered by the Authority.

(b) Subject to the limitations set forth in subsection (a), the Authority shall have any and all powers commonly held by the parties hereto necessary or appropriate to regulate groundwater within the boundaries of the Authority including, but not limited to, the following powers:

(i) Collect and monitor data on the extraction of groundwater from, and the quality of groundwater in, the North Area Basin;

(ii) Establish and administer a conjunctive use program for the purpose of maintaining sustainable yields in the North Area Basin consistent with the Groundwater Management Element;

(iii) Buy and sell water on other than a retail basis;

(iv) Exchange water;

(v) Distribute water in exchange for ceasing or reducing groundwater extractions;

(vi) Spread, sink and inject water into the North Area Basin;

(vii) Store, transport, recapture, recycle, purify, treat or otherwise manage and control water for the beneficial use of persons and property within the Authority;

(viii) To implement any conjunctive use program which the Authority deems necessary to maintain sustainable yields in the North Area Basin consistent with the Groundwater Management Element; and

(ix) Study and plan ways and means to implement any or all of the foregoing powers.

(c) For purposes of exercising the authority set forth in subsection (b), and subject to the limitations set forth in subsection (a), the Authority shall have the following corporate and political powers:

(i) To sue and be sued in all actions and proceedings in all courts and tribunals.

(ii) To adopt a seal and alter it at its discretion.

(iii) To take by grant, purchase, gift, devise or lease, to hold, use and enjoy, and to lease, convey or dispose of, real and personal property of every kind, within or without the boundaries of the Authority, necessary or convenient to the full exercise of its power.

(iv) For the common benefit of the Authority, to store water in underground water basins or reservoirs within and outside the Authority, to appropriate water and acquire water rights within or outside the Authority, to import water into the Authority, and to conserve, or cause the conservation of, water within or outside the Authority.

(v) To exercise the right of eminent domain to take any property necessary to supply the Authority or any portion of it with replenishment water; provided that the right of eminent domain may not be exercised with respect to water and water rights, and may not be exercised with respect to any property owned or occupied

by any of the parties hereto or the entities represented on the governing board of the Authority.

(vi) To act jointly, or cooperate, with the United States or any agency thereof, the state, or any county or agency thereof, or any political subdivision or district therein, including flood control districts, private and public corporations, and any person, so that the powers of the Authority may be fully and economically exercised.

(vii) To cause taxes, assessments, fees or charges to be levied in accordance with applicable State law, and in a manner consistent with the Groundwater Management Element, to accomplish the purposes of the Authority.

(viii) To require the permitting of groundwater extraction facilities within the boundaries of the Authority, to maintain a record of extraction with respect to any such facilities, and to require the installation of meters on groundwater extraction facilities for the purpose of determining the amount of groundwater being extracted from the North Area Basin.

(ix) To make contracts, employ labor and to do all acts necessary for the full exercise of the Authority's powers.

(x) To carry on technical and other investigations of all kinds necessary to further the purposes of the Authority.

(xi) To fix rates at which water acquired by the Authority shall be sold for replenishment purposes, and to establish different rates for different classes of service or conditions of service, provided that the rates shall be uniform for like classes and conditions of service.

(xii) To participate in any contract under which producers may voluntarily agree to use surface water in lieu of groundwater, and to that end the Authority may become a party to the contract and pay from Authority funds that portion of the cost of the surface water as will encourage the purchase and use of that water in lieu of pumping so long as persons or property within the boundaries of the Authority are directly or indirectly benefitted by the resulting replenishment of the North Area Basin.

(xiii) To apply for, accept and receive state, federal or local licenses, permits, grants, loans or other aid from any agency of the United States, the State of California, or other public or private entity necessary or appropriate for the Authority's full exercise of its powers.

17. **Budgets.** Within ninety days after the first meeting of the governing board of the Authority, and thereafter prior to the commencement of each fiscal year (defined as July 1 through June 30), the governing board shall adopt a budget for the Authority for the ensuing fiscal year.

18. **Termination.** This agreement shall remain in effect until terminated by one of the parties hereto pursuant to this section. This agreement may be terminated by any of the parties hereto at any time and for any reason by providing ninety (90) days written notice of termination to the other parties. Except as provided in Section 19(b) hereof, the Authority shall automatically terminate upon the effective date of the termination of this agreement.

19. Disposition Of Authority Assets Upon Termination.

(a) In the event of the termination of the Authority where there will be a successor public entity which will carry on the functions of the Authority and assume its assets, the assets of the Authority shall be transferred to the successor public entity.

(b) If there is no successor public entity which will carry on the functions of the Authority and assume its assets, the assets shall be returned to the parties hereto in proportion to the contribution of each party during the term of this agreement.

(c) If there is a successor public entity which will carry on some of the functions of the Authority and assume some of its assets, the assets of the Authority shall be allocated by the governing board of the Authority between the successor public entity and the parties hereto.

20. Liabilities. The debts, liabilities and obligations of the Authority shall be the debts, liabilities and obligations of the Authority alone, and not of the parties to this agreement.

21. Rules. The governing board of the Authority may adopt from time to time such rules and regulations for the conduct of its affairs as it deems necessary and appropriate.

22. Minutes. The clerk appointed by the governing board of the Authority shall cause to be kept minutes of all meetings of the governing board, and shall cause a copy of the minutes to be forwarded to each member of the governing board and to each of the parties hereto.

Effective Date. This agreement shall become effective and the Authority shall be created when the governing bodies of all the parties shall have authorized its execution.

Amendments. This agreement may only be amended by the affirmative vote of the governing bodies of all of the parties hereto.

IN WITNESS WHEREOF, the parties here to execute this agreement on the date first written above.

CITY OF CITRUS HEIGHTS

Dated: 9-25-98

By _____
Mayor

Attest:

Approved As To Form:

_____
City Clerk

_____
City Attorney

CITY OF FOLSOM

Dated: 10/13/98

By _____
Mayor

Attest:

Approved As To Form:

_____
City Clerk

_____
City Attorney

CITY OF SACRAMENTO

Dated: 9-15-98

By _____
Mayor

Attest:

_____
Assistant City Clerk

Approved As To Form:

_____
City Attorney

COUNTY OF SACRAMENTO

Dated: _____

By _____
Chairperson, Board of Supervisors

Attest:

_____
Clerk of the Board

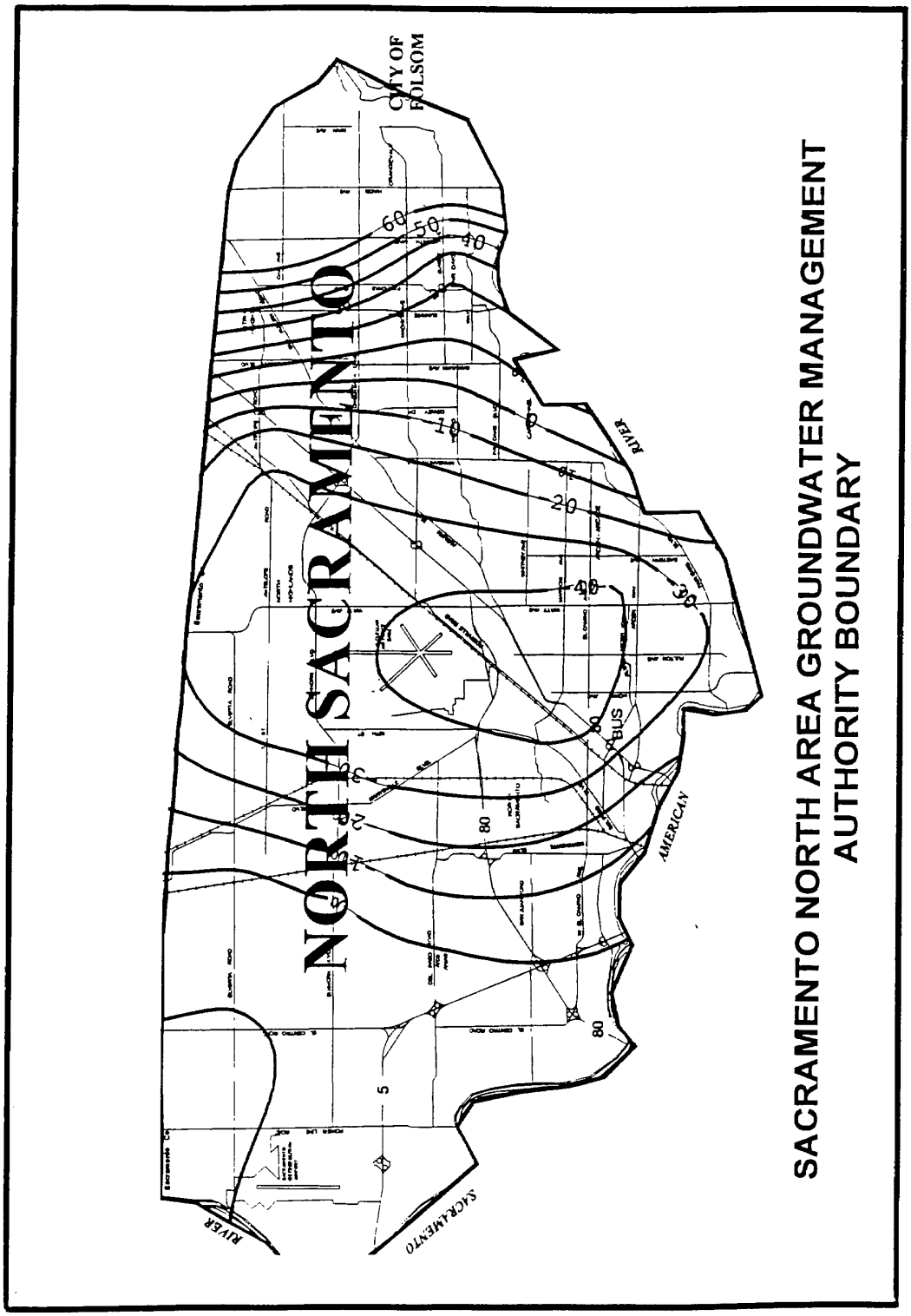
Approved As To Form:

_____
County Counsel

EXHIBIT A

Exhibit A is a copy of the Groundwater Element, found on pages 96-116 of the *Water Forum Agreement.*

EXHIBIT B


SACRAMENTO NORTH AREA GROUNDWATER MANAGEMENT AUTHORITY BOUNDARY
NORTH SACRAMENTO
CITY OF FOLSOM
RIVER
SACRAMENTO
AMERICAN
RIVER
BUS
80
5
60
50
40
30
20
10

APPENDIX F

This is a model agreement.
The agreement that each purveyor signs will reflect the provisions of the purveyor's specific *Water Forum Agreement*.

AGREEMENT FOR REDUCTION IN WATER DIVERSIONS AND DELIVERIES FOR IMPLEMENTATION OF REVISED INSTREAM FLOW STANDARDS FOR THE LOWER AMERICAN RIVER

This agreement is entered into as of _____, by and between the United State of America, acting by and through the Department of the Interior, U.S. Bureau of Reclamation ("Reclamation"), and _____ ("District"), a public agency of the state of California, duly organized, existing and acting pursuant to the laws thereof.

RECITALS

A. The United States has constructed and is operating Folsom Dam and Reservoir and appurtenant facilities ("Project Facilities"), which are part of the Central Valley Project, for diversion, storage, carriage and distribution of waters of the American River for irrigation, municipal, domestic, industrial water supplies, fish and wildlife mitigation, protection and restoration, generation and distribution of electric energy, salinity control, navigation, flood control, recreation and other beneficial uses.

B. **[Alternative 1: for a district with a CVP contract only]** The District and Reclamation have entered into Contract No. _____, dated _____, as amended ("District CVP Contract"), which entitles the District to receive a CVP water supply upstream from Nimbus Dam from Reclamation under the terms of the District CVP Contract.

[Alternative 2: for a district with a CVP contract and water rights] The District and Reclamation have entered into Contract No. _____, dated _____, as amended ("District CVP Contract"), which entitles the District to receive a CVP water supply upstream from Nimbus Dam from Reclamation under the terms of the District CVP Contract. In addition, the District holds water rights for diversion and beneficial use of water from the American River and/or its tributaries upstream from Nimbus Dam ("District Water Rights"), which are identified as follows: _____.

[Alternative 3: for a district with water rights only] The District holds water rights for diversion and beneficial use of water from the American River and/or its tributaries upstream from Nimbus Dam ("District Water Rights"), which are identified as follows: _____ _____.

C. In 1957, the State Water Resources Control Board ("State Board") issued Decision No. 893, which set forth instream flow standards for the Lower American River that Reclamation is required to meet. Since 1996, Reclamation, in consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, has attempted on a voluntary basis to release water from Project Facilities in a manner consistent with the flow objectives for the Lower American River set forth in the draft Anadromous Fish Restoration Plan to the extent Reclamation's available water supply has permitted it to do so.

D. The Lower American River, which is the 23 miles of river flowing below Nimbus Dam to its confluence with the Sacramento River and includes the American River Parkway, is a significant local and national resource. Current use of the American River Parkway is estimated to be approximately 5.5 million visitors per year, and is expected to increase to 7.5 million visitors per year by the year 2000, and to 9.6 million visitors per year by the year 2020. The Lower American River provides water supply, fish, wildlife, recreation and aesthetic benefits, and provides habitat for threatened and endangered species. The Lower American River provides a significant economic benefit to the region. Adequate instream flows in the Lower American River are essential to preserve and protect the Lower American River for use by future generations.

E. Representatives of a diverse group of business and agricultural leaders, environmental advocates, citizen groups, water purveyors and local governments are signatories to the *Water Forum Agreement* ("Water Forum Agreement") to achieve the coequal objectives to (a) provide a reliable and safe water supply for the Sacramento region's economic health and planned development through the year 2030, and (b) preserve the fishery, wildlife, recreational and aesthetic values of the Lower American River. The *Water Forum Agreement* refers to activities of the District for securing a reliable and safe water supply ("District's Project") that the other signatories to the *Water Forum Agreement* agree to support. The Water Forum and Reclamation have developed a method of allocating the water that is available for Lower American River instream purposes in a manner that attempts to optimize the instream beneficial use of the available water supply, which is referred to herein as the "Release Pattern". The quantity of water that is available for release by Reclamation for Lower American River instream purposes will depend in part on the quantity of water diverted upstream of Nimbus Dam.

F. The District is a signatory to the *Water Forum Agreement*, and is willing, in the manner and to the extent set forth in Exhibit B, including conference year principles, attached hereto and incorporated herein, to agree (1) to reduce its diversion or delivery of surface water from the American River and/or its tributaries upstream from Nimbus Dam in certain dry years, or (2) implement alternative dry year actions to achieve the equivalent of such a reduction through arrangements with other water users, to increase the water supply available for the Lower American River, consistent with the terms and conditions of the *Water Forum Agreement*. The alternative dry year actions are referred to herein as "Alternative Dry Year Actions".

Agreement

In consideration of the mutual covenants contained herein, the parties agree as follows:

1. Definitions.

The following terms shall have the same meaning in this agreement as they do in the recitals: Reclamation, District, Project Facilities, District CVP Contract, District Water Rights, State Board, *Water Forum Agreement*, District's Project, Release Pattern and Alternative Dry Year Actions.

2. Updated Lower American River Flow Standard.

Reclamation shall petition the State Board to issue an order that amends Reclamation's water rights permits for operation of Project Facilities consistent with the terms and conditions of this agreement for implementation of the Release Pattern. The District shall support Reclamation's petition for that purpose. The procedures for determining annual dry-year water diversions or deliveries and confirming that alternative supplies will be available are set forth in Exhibit A, attached hereto and incorporated herein.

3. Reduction in Surface Water Deliveries and/or Diversions.

Subject to the terms and conditions of this agreement, the District shall do one or more of the following in the manner and to the extent set forth in Exhibit B: (a) reduce the quantity of water that it schedules for delivery upstream from Nimbus Dam under the District CVP Contract, or (b) reduce the quantity of water that it diverts upstream from Nimbus Dam under the District Water Rights, or (c) implement Alternative Dry Year Actions. Reductions or Alternative Dry Year Actions will be proportional to the increased diversions over the District's baseline amount, as set forth in Exhibit B.

4. Responsibility for Instream Flows.

Subject to the terms of this agreement, Reclamation (and not the District) shall be responsible for providing flows and operating the Project Facilities to meet the instream flow standards for the Lower American River, so that the District shall not be required to reduce its delivery and/or diversion of water from the American River and/or its tributaries for that purpose in addition to the actions agreed to in Section 3 of this agreement. Nothing in this agreement affects Reclamation's authority to determine the quantity of water available to the District under the water shortage provisions of the District CVP Contract. Reductions in CVP deliveries agreed to by the District under this agreement shall be credited by Reclamation to reductions imposed under the water shortage provisions of the District CVP Contract.

5. Conditions.

(a) Performance by the District of the provisions of Section 3 of this agreement shall not take effect before the effective date of a final order of the State Board that amends Reclamation's water rights permits for operating Project Facilities as proposed in Section 2 of this agreement, subject to the termination provisions of subsection (c).

(b) Performance by the District of the provisions of Section 3 of this agreement shall not be required unless and until the District has completed District's Project in whole or in part, in a manner consistent with the *Water Forum Agreement*.

(c) Reclamation and the District shall each have the right to terminate this agreement, and Reclamation may withdraw the petition referred to in Section 2, upon written notice to be delivered to the other party prior to the effective date of the final State Board order referred to in Section 2, if it reasonably determines that any term or condition proposed in the State Board order referred to in Section 2 is inconsistent with the intent of the parties as set forth in this agreement. The parties shall consult with each other and make a good faith effort to amend this agreement, if necessary, to attempt to resolve an unacceptable term of the State Board order.

6. Changed Conditions.

If either party notifies the other party that it believes that changed conditions have or will significantly affect its ability to perform its obligations under this agreement, such as a revision to the Release Pattern after it has been adopted by the State Board, or action by a court, regulatory body or other public agency that results in a significant reduction in the water supply available for use by the District, the parties agree to consult with each other and make a good faith effort to amend this agreement in a manner that achieves the coequal objectives to (a) provide a reliable and safe water supply for the District through the year 2030, and (b) preserve the fishery, wildlife, recreational and aesthetic values of the lower American River. Third party beneficiaries to this agreement shall be provided notice and an opportunity to participate in that negotiation. If the parties do not agree to an amendment of this agreement, they may pursue whatever remedies they may have (e.g., termination or reformation). This section shall not be construed as an admission or acknowledgment that changed circumstances justify any form of relief.

7. Term.

The term of this agreement shall be until December 31, 2030, provided however, that this agreement may be terminated prior to that date pursuant to Sections 5 and 6. The parties shall commence discussions no later than December 31, 2023 concerning renewal or extension of this agreement beyond its termination date.

8. Water Rights Protection.

(a) This agreement sets forth limitations on the manner in which the District may exercise its water rights and entitlements. This agreement is not intended to and should not be interpreted to grant or deprive any party to this agreement of any right to divert, release or use the quantity or flows of water agreed to in this agreement except as expressly set forth herein.

(b) The parties acknowledge and agree that the District (1) shall not relinquish control of or otherwise abandon the right to any quantity of water that it has foregone delivery and/or diversion of under this agreement, and (2) shall retain the right (if any) to transfer that water for other beneficial uses, after that water has served its purpose of assisting Reclamation in the implementation of the Release Pattern, for diversion or rediversion at or downstream of the confluence of the lower American River and the Sacramento River (including the proposed joint project for diversion of water at or upstream of I-5). The parties recognize that any such transfer of water by the District must be in accordance with applicable provisions of federal and state law.

9. General Provisions.

A. General Liability. Each party to this agreement shall be responsible for all losses, claims, liens, demands and causes of action of every kind and character caused by or resulting from that party's performance of this agreement.

B. Integration. This agreement constitutes the sole, final, complete, exclusive and integrated expression and statement of the terms of this agreement among the parties concerning the subject matter addressed herein, and supersedes all prior negotiations, representations or agreement, either oral or written, that may be related to the subject matter of this agreement, except those other documents that are expressly referenced in this agreement.

C. Construction and Interpretation. It is agreed and acknowledged by the parties that this agreement has been arrived at through negotiation, and that each party has had a full and fair opportunity to revise the terms of this agreement. Consequently, the normal rule of construction that any ambiguities are to be resolved against the drafting party shall not apply in construing or interpreting this agreement.

D. Waiver. The waiver at any time by any party of its rights with respect to a default or other matter arising in connection with this agreement shall not be deemed a waiver with respect to any subsequent default or matter.

E. Severability. The invalidity, illegality or unenforceability of any provision of this agreement shall not render the other provisions unenforceable, invalid or illegal.

F. Successors and Assigns. This agreement shall bind and inure to the benefit of the respective successors and assigns of the parties to the extent such successors and assigns are approved by the other party to this agreement, which approval shall not unreasonably be withheld.

G. Amendment. This agreement may be modified or amended only by a subsequent written agreement approved and executed by both parties.

H. Supporting Resolutions. Each party represents that it has legal authority to enter into this agreement and to perform its obligations hereunder, and shall submit to the other party concurrent with execution of this agreement a duly-authorized resolution or other document evidencing that authority and authorizing the person executing this agreement to do so.

I. Additional Documents. Each party agrees to make, execute, and deliver any and all documents reasonably required to implement this agreement.

J. Time. Time is of the essence in the performance of each and every term of this agreement.

K. Third Party Beneficiaries. The other signatories to the *Water Forum Agreement* shall be third party beneficiaries to this agreement solely for the purpose of seeking specific performance of the provisions of Section 3 of this agreement if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to this agreement is dependent on that signatory complying with all terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the District's Project. The parties to this agreement do not intend to create any other third party beneficiaries to this agreement, and expressly deny the creation of any third party beneficiary rights hereunder for any other person or entity.

L. Notices. Any notice, request, tender, demand, delivery, approval or other communication provided for, required, or arising under this agreement shall be in writing and shall be deemed delivered (1) upon confirmation of transmission by facsimile, or (2) three business days after deposit in the United States mail, certified or with return receipt requested, addressed to the party as follows:

[Addresses to be inserted]

The foregoing is hereby agreed to by the parties.

[Signature block to be inserted]

Attachment: Exhibit A: Procedures for Determining Annual Dry-Year Water Diversions and Confirming the Availability of Alternative Supplies

(Exhibit B's will be developed as each purveyor negotiates its individual agreement with the USBR. The content of Exhibit B will be consistent with each purveyor's dry-year actions as set forth in the purveyor's Purveyor Specific Agreement contained in the Water Forum Agreement.)

EXHIBIT A[1]

PROCEDURES FOR DETERMINING ANNUAL
DRY-YEAR WATER DIVERSIONS AND CONFIRMING THE
AVAILABILITY OF ALTERNATIVE SUPPLIES

The State of California Department of Water Resources (DWR) conducts annual snowpack surveys and provides a forecast of runoff for the American River watershed along with other watersheds in the State beginning in February and ending in May of each year. Results of these surveys are published annually in a series of State DWR Bulletins (Bulletin 120-1 through 120-4).

If the February forecast indicates that the March through November unimpaired runoff from the American River will be less than 950,000 acre feet, the USBR shall notify the District as to permissible water diversions or agreed upon Alternative Dry Year Actions. This will be updated with information from the March, April and May forecasts. The rules that the District and the USBR have agreed upon for the Drier Years will be the basis for diversions or Dry Years Alternatives.

In years when diversion reductions are required under this agreement, the District will provide information confirming the availability of alternative supplies to meet their customer's needs. In these years, the District will also report their diversions to the USBR on a monthly basis.

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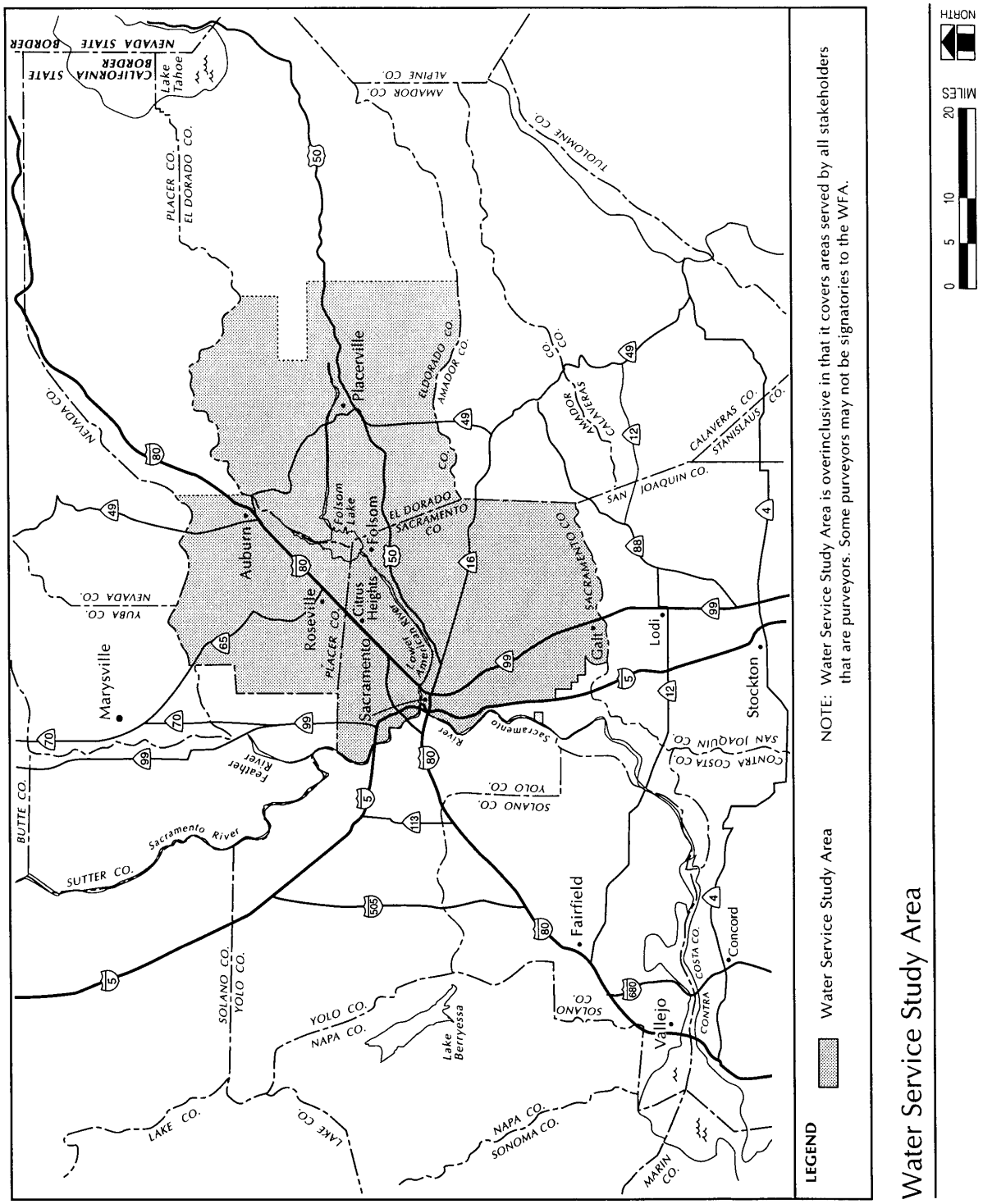
1. This item is still being discussed.

APPENDIX G

Water Forum Map



APPENDIX H

WATER FORUM PUBLICATIONS

DATE	TITLE
November 1994	Water Solutions Newsletter, Volume 1, Issue 1
April 1995	Early Review and Authorization to Proceed –A Briefing Paper Prepared for the Stakeholder Organizations Participating in the Sacramento Area Water Plan Forum
August 1995	Water Solutions Newsletter, Volume 1, Issue 2
November 1995	Findings in Brief – Water and Our Future: Understanding the Views of the Public (A synopsis of research that explored the opinions of residents of Sacramento, El Dorado and Placer counties about water.)
January 1996	Progress Toward a Regional Water Agreement – A Report to the Stakeholder Organizations in the Water Forum
January 1997	Water Solutions Newsletter, Volume 1, Issue 3
January 1997	Draft Recommendations for the *Water Forum Agreement* – Developed and Recommended by Stakeholder Representatives to the Water Forum for Consideration by Their Governing Bodies and the Public
January 1999	*Water Forum Action Plan* – A Plan for Refining the Water Forum Proposal into the *Water Forum Agreement* – Developed by Stakeholder Representatives for Their Governing Boards and the Public
January 1999	Draft Environmental Impact Report for the Water Forum Proposal
October 1999	Final Environmental Impact Report for the Water Forum Proposal - Responses to Comments & Additional Information
January 2000	*Water Forum Agreement* - Developed by Stakeholder Representatives for Adoption by their Stakeholder Boards

APPENDIX I

EXCERPTS FROM THE NOVEMBER 20, 1997
DEPARTMENT OF THE INTERIOR FINAL ADMINISTRATIVE PROPOSAL
ON THE MANAGEMENT OF SECTION 3406 (b) (2) WATER THAT PERTAIN TO FLOWS
IN THE LOWER AMERICAN RIVER

The Water Forum's Improved Pattern of Fishery Flow Releases is defined as the Anadromous Fish Restoration Plan (AFRP) flow objective for the Lower American River as set forth in the November 20, 1997 Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water.

United States Department of the Interior

November 20, 1997

U.S. Fish and Wildlife Service
Region 1
911 N.E. 11th Avenue
Portland OR 97232-4181

U.S. Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way
Sacramento CA 95825-1898

Dear CVP Stakeholders, CALFED Participants, and Interested Parties:

Attached is the Department of the Interior's (Interior) Final Administrative Proposal on the Management of Section 3406(b)(2) Water. This paper presents Interior's conclusions as to how it intends to comply with the statutory mandate to dedicate and manage the water dedicated pursuant to Section 3406(b)(2) of the Central Valley Project Improvement Act.

The release of the Administrative Proposal reflects substantial agency and stakeholder dialogue. The active participation of interested parties and the public has been instrumental in helping Interior determine the approach for managing the 3406 (b)(2) issues. Interior urges the continued involvement and participation of stakeholders and others as it implements, in the coming 5 years, the set of near-term fish and wildlife measures described in the Administrative Proposal.

Copies of the Administrative Proposal can be accessed on the Bureau of Reclamation Mid-Pacific Region's homepage at http:/www.mp.usbr.gov or can be obtained by calling Ms. Lynnette Wirth at 916/978-5100 (TDD 916/978-5608).

Sincerely,

Michael J. Spear
Regional Director
U.S. Fish and Wildlife Service
Region 1

Roger K. Patterson
Regional Director
U.S. Bureau of Reclamation
Mid-Pacific Region

Attachment

Upstream Action #3 - Minimum instream flow requirements below Nimbus shall be based on thresholds of Folsom storage in TAF for October through February as shown below. Minimum instream flow requirements below Nimbus shall be based on thresholds of STOR+INFLO for March through September, where STOR is defined as the beginning-of-month Folsom storage in TAF and INFLO is defined as the forecasted inflow from the current month through September in TAF. The inflows shall be based on a 50 percent forecast. Stability criteria shall dictate that November, December, & January's flows be at least 80 percent of their preceding month's flow. The stability criteria shall also dictate that February & March's flow be at least 90 percent of their preceding month's flow. The stability criteria are ignored if the preceding month's flow was above 4500 cfs.

Month	Criteria

October	If (End-of-Sep Storage) >500 TAF, then use 2500 cfs
	If (End-of-Sep Storage) >463 TAF, then use 2250 cfs
	If (End-of-Sep Storage) >425 TAF, then use 2000 cfs
	If (End-of-Sep Storage) >350 TAF, then use 1750 cfs
	If (End-of-Sep Storage) >300 TAF, then use 1500 cfs
	If (End-of-Sep Storage) >275 TAF, then use 1250 cfs
	If (End-of-Sep Storage) >265 TAF, then use 1000 cfs
	If (End-of-Sep Storage) >255 TAF, then use 750 cfs
	If (End-of-Sep Storage) <255 TAF, then use 500 cfs

November	Same as October
December	Same as October

January	If (End-of-Dec Storage) >500 TAF, then use 2500 cfs
	If (End-of-Dec Storage) >425 TAF, then use 2250 cfs
	If (End-of-Dec Storage) >350 TAF, then use 2000 cfs
	If (End-of-Dec Storage) >300 TAF, then use 1750 cfs
	If (End-of-Dec Storage) >290 TAF, then use 1500 cfs
	If (End-of-Dec Storage) >285 TAF, then use 1250 cfs
	If (End-of-Dec Storage) >280 TAF, then use 1000 cfs
	If (End-of-Dec Storage) >275 TAF, then use 750 cfs
	If (End-of-Dec Storage) <275 TAF, then use 500 cfs

February	If (End-of-Jan Storage) >600 TAF, then use 2500 cfs
	If (End-of-Jan Storage) >350 TAF, then use 2000 cfs
	If (End-of-Jan Storage) >300 TAF, then use 1750 cfs
	If (End-of-Jan Storage) >225 TAF, then use 1250 cfs
	If (End-of-Jan Storage) <225 TAF, then use 500 cfs

March	If (STOR+INFLO) >2850 TAF, then use 4500 cfs
	If (STOR+INFLO) >2766 TAF, then use 4250 cfs
	If (STOR+INFLO) >2683 TAF, then use 4000 cfs
	If (STOR+INFLO) >2600 TAF, then use 3750 cfs
	If (STOR+INFLO) >2516 TAF, then use 3500 cfs
	If (STOR+INFLO) >2433 TAF, then use 3250 cfs
	If (STOR+INFLO) >2350 TAF, then use 3000 cfs
	If (STOR+INFLO) >2025 TAF, then use 2750 cfs
	If (STOR+INFLO) >1700 TAF, then use 2500 cfs
	If (STOR+INFLO) >1500 TAF, then use 2250 cfs
	If (STOR+INFLO) >1300 TAF, then use 2000 cfs
	If (STOR+INFLO) >1150 TAF, then use 1750 cfs
	If (STOR+INFLO) >1000 TAF, then use 1500 cfs
	If (STOR+INFLO) > 967 TAF, then use 1250 cfs
	If (STOR+INFLO) > 933 TAF, then use 1000 cfs
	If (STOR+INFLO) > 900 TAF, then use 750 cfs
	If (STOR+INFLO) > 700 TAF, then use 500 cfs
	If (STOR+INFLO) < 700 TAF, then use 250 cfs

April	If (STOR+INFLO) >2450 TAF, then use 4500 cfs
	If (STOR+INFLO) >2383 TAF, then use 4250 cfs
	If (STOR+INFLO) >2316 TAF, then use 4000 cfs
	If (STOR+INFLO) >2250 TAF, then use 3750 cfs
	If (STOR+INFLO) >2183 TAF, then use 3500 cfs
	If (STOR+INFLO) >2116 TAF, then use 3250 cfs
	If (STOR+INFLO) >2050 TAF, then use 3000 cfs
	If (STOR+INFLO) >1800 TAF, then use 2750 cfs
	If (STOR+INFLO) >1550 TAF, then use 2500 cfs
	If (STOR+INFLO) >1350 TAF, then use 2250 cfs
	If (STOR+INFLO) >1150 TAF, then use 2000 cfs
	If (STOR+INFLO) >1075 TAF, then use 1750 cfs
	If (STOR+INFLO) >1000 TAF, then use 1500 cfs
	If (STOR+INFLO) > 967 TAF, then use 1250 cfs
	If (STOR+INFLO) > 933 TAF, then use 1000 cfs
	If (STOR+INFLO) > 900 TAF, then use 750 cfs
	If (STOR+INFLO) > 700 TAF, then use 500 cfs
	If (STOR+INFLO) < 700 TAF, then use 250 cfs

May	If (STOR+INFLO) >2050 TAF, then use 4500 cfs
	If (STOR+INFLO) >1932 TAF, then use 4250 cfs
	If (STOR+INFLO) >1816 TAF, then use 4000 cfs
	If (STOR+INFLO) >1700 TAF, then use 3750 cfs
	If (STOR+INFLO) >1600 TAF, then use 3500 cfs
	If (STOR+INFLO) >1500 TAF, then use 3250 cfs
	If (STOR+INFLO) >1400 TAF, then use 3000 cfs
	If (STOR+INFLO) >1200 TAF, then use 2750 cfs
	If (STOR+INFLO) >1000 TAF, then use 2500 cfs
	If (STOR+INFLO) > 950 TAF, then use 2250 cfs
	If (STOR+INFLO) > 900 TAF, then use 2000 cfs
	If (STOR+INFLO) > 850 TAF, then use 1750 cfs
	If (STOR+INFLO) > 800 TAF, then use 1500 cfs
	If (STOR+INFLO) > 775 TAF, then use 1250 cfs
	If (STOR+INFLO) > 750 TAF, then use 1000 cfs
	If (STOR+INFLO) > 725 TAF, then use 750 cfs
	If (STOR+INFLO) > 600 TAF, then use 500 cfs
	If (STOR+INFLO) < 600 TAF, then use 250 cfs

June	If (STOR+INFLO) >1800 TAF, then use 4500 cfs
	If (STOR+INFLO) >1750 TAF, then use 4250 cfs
	If (STOR+INFLO) >1700 TAF, then use 4000 cfs
	If (STOR+INFLO) >1600 TAF, then use 3750 cfs
	If (STOR+INFLO) >1500 TAF, then use 3500 cfs
	If (STOR+INFLO) >1400 TAF, then use 3250 cfs
	If (STOR+INFLO) >1300 TAF, then use 3000 cfs
	If (STOR+INFLO) >1266 TAF, then use 2750 cfs
	If (STOR+INFLO) >1133 TAF, then use 2500 cfs
	If (STOR+INFLO) >1000 TAF, then use 2250 cfs
	If (STOR+INFLO) > 950 TAF, then use 2000 cfs
	If (STOR+INFLO) > 900 TAF, then use 1750 cfs
	If (STOR+INFLO) > 800 TAF, then use 1500 cfs
	If (STOR+INFLO) > 775 TAF, then use 1250 cfs
	If (STOR+INFLO) > 750 TAF, then use 1000 cfs
	If (STOR+INFLO) > 725 TAF, then use 750 cfs
	If (STOR+INFLO) > 600 TAF, then use 500 cfs
	If (STOR+INFLO) < 600 TAF, then use 250 cfs

July	If (STOR+INFLO) >1400 TAF, then use 2500 cfs
	If (STOR+INFLO) >1300 TAF, then use 2250 cfs
	If (STOR+INFLO) >1200 TAF, then use 2000 cfs
	If (STOR+INFLO) >1000 TAF, then use 1750 cfs
	If (STOR+INFLO) > 800 TAF, then use 1500 cfs
	If (STOR+INFLO) > 775 TAF, then use 1250 cfs
	If (STOR+INFLO) > 750 TAF, then use 1000 cfs
	If (STOR+INFLO) > 725 TAF, then use 750 cfs
	If (STOR+INFLO) > 600 TAF, then use 500 cfs
	If (STOR+INFLO) < 600 TAF, then use 250 cfs

August	If (STOR+INFLO) >1200 TAF, then use 2500 cfs
	If (STOR+INFLO) >1100 TAF, then use 2250 cfs
	If (STOR+INFLO) >1000 TAF, then use 2000 cfs
	If (STOR+INFLO) > 900 TAF, then use 1750 cfs
	If (STOR+INFLO) > 800 TAF, then use 1500 cfs
	If (STOR+INFLO) > 700 TAF, then use 1250 cfs
	If (STOR+INFLO) > 600 TAF, then use 1000 cfs
	If (STOR+INFLO) > 550 TAF, then use 750 cfs
	If (STOR+INFLO) > 500 TAF, then use 500 cfs
	If (STOR+INFLO) < 500 TAF, then use 250 cfs

September	If (STOR+INFLO) > 800 TAF, then use 2500 cfs
	If (STOR+INFLO) > 750 TAF, then use 2250 cfs
	If (STOR+INFLO) > 700 TAF, then use 2000 cfs
	If (STOR+INFLO) > 600 TAF, then use 1750 cfs
	If (STOR+INFLO) > 500 TAF, then use 1500 cfs
	If (STOR+INFLO) > 400 TAF, then use 1250 cfs
	If (STOR+INFLO) > 350 TAF, then use 1000 cfs
	If (STOR+INFLO) > 325 TAF, then use 750 cfs
	If (STOR+INFLO) > 300 TAF, then use 500 cfs
	If (STOR+INFLO) < 300 TAF, then use 250 cfs

INTRODUCTION: WATER FORUM WATER CONSERVATION PLANS

The Water Conservation Plans provide the way for water purveyors to identify and then report their progress toward implementation of the Best Management Practices (BMPs) and for all parties to confirm that the Conservation Element of the *Agreement* is being implemented. Water Forum Stakeholder representatives negotiated with each purveyor the specific of that purveyor's Water Conservation Plan.

Components of the Water Conservation Plans are:

a. Description of how the purveyor will implement each BMP.

b. Annual targets, staffing, and budgets for the first year of full implementation (the beginning of the fourth year after *Agreement* signing).

c. Description of how the purveyor will implement its citizen involvement program.

d. Past (at least from 1975 on) and projected total water use to the year 2030 – demonstrating consistency with assumptions used in *Water Forum Agreement.*

e. Past (at least from 1975 on) and projected per capita water use to the year 2030.

A purveyor's agreed upon Water Forum Water Conservation Plan shall be implemented for its entire service area including future changed boundaries.[1]

Water purveyors will prepare annual reports on the implementation of water conservation activities as outlined in their Water Conservation Plans. These reports will be shared with the Water Forum Successor Effort.

a. Purveyors will annually report their conservation activities for prior year and compare total and per capita water use with their original projections.

b. If there were any significant differences from what water conservation activities or results were planned, an explanation of the differences will be included. If water conservation results were significantly less than anticipated, an indication of how the results will be achieved in the future will be described.

c. Each purveyor's progress toward BMP implementation will be annually reviewed and reported by the Water Forum Successor Effort.

Water purveyors will update their Water Conservation Plans every five years.

[1] See City of Folsom Purveyor Specific Agreement for further information on this item.

WATER CONSERVATION ELEMENT

Introduction

This Water Conservation Element is essential to meeting both of the coequal goals of the Water Forum. First, conserved water will be available to help supply increased demand. Secondly, conservation will minimize the need for increased groundwater pumping and increased use of surface water, including water diverted from the American River.

Continued commitment to water conservation will benefit water purveyors, customers, and the environment because it:

> Reflects growing public support for the conservation of limited natural resources and adequate water supplies.
>
> Allows water districts to optimize the use of existing facilities.
>
> Delays or reduces the capital investments required for capacity expansion of water and wastewater treatment facilities even though the service area may grow.
>
> Is essential for the state and federal agency approvals that will be required for specific projects.

MUNICIPAL AND INDUSTRIAL WATER CONSERVATION

A. Intent

Water purveyors in the region have been working hard to conserve water through implementation of a number of water conservation Best Management Practices (BMPs). The Water Conservation Element of the *Water Forum Agreement* is intended to set forth the water purveyors' programs for implementing all of the BMPs. They were adapted from the Statewide Memorandum of Understanding (MOU) Regarding Urban Water Conservation Best Management Practices and have been customized for use by the Water Forum.

This Water Conservation Element contains the basic components of Water Conservation Plans that will be implemented by the purveyors as described in each purveyor's Water. Conservation Plans.

B. Purveyors Receiving Central Valley Project Water Supplies

San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water District, Sacramento County, City of Roseville, City of Folsom, El Dorado Irrigation District, Georgetown Divide Public Utility District, and Placer County Water Agency are, or will become, users of Central Valley Project water supplies. As such they are subject to the water conservation provisions of the Central Valley Project Improvement Act

(CVPIA). CVPIA conservation requirements and related costs are independent of the *Water Forum Agreement*.

C. Basic Elements of Water Conservation Plan for Municipal and Industrial Uses

1. RESIDENTIAL[2] METER RETROFIT (BMP # 4) and CONSERVATION PRICING (BMP #11)
   Volumetric measurement and conservation pricing are essential elements of a water conservation program. Water users need to be able to know how much they are using in order to be efficient. Users need accurate economic signals -- which require volumetric measurement and conservation pricing -- in order to encourage the use of water in the most efficient manner possible.

   a. **El Dorado Irrigation District, Georgetown Divide Public Utility District, Placer County Water Agency, Rancho Murrieta Community Services District, and Rio Linda/Elverta Community Water District.** These five purveyors are already fully metered and use volumetric billing.

   b. **San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water District, Sacramento County, City of Roseville, and City of Folsom.** It is recognized that CVPIA meter retrofit provisions are outside the scope of the *Water Forum Agreement* and that they require faster implementation than what is included in the *Water Forum Agreement*. Purveyors signing the *Water Forum Agreement* who receive CVP water agree that if for any reason any or all of their service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed they would annually retrofit at least 3.3%-5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement*.

   c. In the first two years after the *Water Forum Agreement* is signed, the **Northridge Water District, the Carmichael Water District, and Citizens Utilities** would plan for, budget, and prepare the public for a residential meter retrofit program. Beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed these purveyors would retrofit at least 3.3%-5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement*.

   d. **City of Galt, Florin County Water District, Del Paso Manor County Water District.** It is recognized that residential water meter retrofit along with quantity based pricing are important tools for improving the efficiency of water use. This helps extend the supply while also reducing the need for increased groundwater pumping or diversions from the American River.

      It is also recognized that these three relatively smaller water purveyors currently rely totally on groundwater and will not realize immediate water supply benefits from participating in the *Water Forum Agreement*. Therefore until such time as these three

[2] "Residential" for purposes of defining the scope of this BMP is defined as single family or duplex customers.

purveyors need discretionary approvals for new or expanded surface water supplies, an active voluntary meter retrofit with incentives is acceptable. Nothing in the *Water Forum Agreement* prevents purveyors from deciding to undertake a more rapid meter retrofit program.

At such time as any of these purveyors needs discretionary approvals for new or expanded surface water supplies they agree to annually retrofit at least 3.3%-5% of the total number of unmetered residential connections and read and bill as set forth below. If in the future any of these purveyors receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

e. **City of Sacramento**: The City of Sacramento has a provision in its Charter prohibiting mandatory residential meters. It is recognized that it would be very difficult to amend the Charter. Going as far as possible within the limitations of its Charter, the City of Sacramento would implement a voluntary meter retrofit program. It is also recognized that environmental signatory organizations prefer and will continue to advocate that all connections be metered.

f. Water Forum signatories would not implement local retrofit on resale, or any other requirements that would impose escrow or disclosure responsibilities on realtors. This provision would not apply to the City of Sacramento since their Charter prohibits mandatory residential metering. All purveyors would retain the ability to implement incentives for a voluntary meter retrofit at time of resale that would not impose escrow or disclosure requirements.

g. In administrative proceedings related to statewide matters such as the Bay-Delta water rights proceeding, signatories to this *Agreement* may need to advocate statewide meter retrofit schedules different than what is included in this *Agreement*. h. All signatories to the *Water Forum Agreement* will actively support the California Public Utilities Commission (CPUC) allowing investor-owned utilities to recover all costs of meter retrofit through rates.

h. All signatories to the *Water Forum Agreement* will actively support the California Public Utilities Commission (CPUC) allowing investor-owned utilities to recover all costs of meter retrofit through rates.

i. As soon as practical, purveyors signatory to the *Water Forum Agreement* will begin reading all meters and including the usage on the customers' bills. This includes meters required in new construction since 1992 and meters retrofit onto existing connections. It is recognized that circumstances vary purveyor by purveyor. However the general guideline used for negotiating each purveyor's water conservation plan was that purveyors would read the meters and provide usage information within three years of signing of the *Water Forum Agreement*. Each purveyor's schedule for implementing this provision is included as part of its Water Conservation Plan.

j. As soon as practical, purveyors will implement conservation pricing which bases customer charges on the quantity of water used. With conservation pricing, the unit rate is constant regardless of quantity used (uniform rate) or the rate increases as the quantity of water used increases (increasing block rate). It is recognized that circumstances vary purveyor by purveyor. However the general guideline used for negotiating each purveyor's water conservation plan was that purveyors would base customer charges on the quantity of water used within six years of signing of the *Water Forum Agreement*. Each purveyor's schedule for implementing this provision is included as part of its Water Conservation Plan.

2. NON- RESIDENTIAL METER RETROFIT (BMP #4)
Purveyors will retrofit at least 85%-90% of non-residential customers within ten years. Complete non-residential retrofit is not a requirement. This is in recognition of the fact that there could be some smaller nonresidential customers whose service locations could be very difficult and expensive to retrofit.

3. RESIDENTIAL ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM (BMP #16)
California Plumbing Codes require the installation of Ultra-low Flush (ULF) (1.6 gallon) toilets in new construction, which saves approximately 3.5 gallons per flush over older models. ULF toilet retrofitting programs have shown that the water savings average 44 gallons per day for toilets replaced in a multiple family complex and 28 gallons per day saved in single family retrofits.

Purveyors are encouraged, but not required, to establish residential toilet replacement programs. This could be done in conjunction with any toilet replacement programs implemented by sanitation districts. It could also be implemented in cooperative programs with community organizations.

4. NON-RESIDENTIAL TOILET PROGRAM (BMP #16)
Purveyors will provide incentives for replacement of non-residential toilets with ULF toilets. This could also be done in conjunction with any toilet replacement program implemented by sanitation districts.

5. BEST MANAGEMENT PRACTICES OTHER THAN METERS, CONSERVATION PRICING, AND TOILETS
If they have not already done so, purveyors will start implementing the remaining Best Management Practices (BMPs) within three years of signing the *Water Forum Agreement* in a manner consistent with the Water Forum BMP Implementation Criteria (see Appendix D). These criteria were adopted on July 28, 1997 by the Water Forum. They were adapted from the Statewide Memorandum of Understanding (MOU) Regarding Urban Water Conservation Best Management Practices (BMPs) developed by the California Urban Water Conservation Council (CUWCC) and have been customized for use by the Water Forum. These criteria include a Functional Equivalency Provision which in some cases allowed purveyors to negotiate alternative implementation methods that will be as effective as the standard criteria.

The Water Forum Successor Effort will facilitate "changed conditions" negotiations to determine how BMPs adopted or amended by CUWCC after July 1997 will be incorporated into the Water Forum purveyors' Water Conservation Plans.

If Water Forum signatories are unable to agree on how BMPs adopted or amended by CUWCC after July 1997 will be incorporated into the Water Forum purveyors' Water Conservation Plans, individual signatory organizations can advocate how they believe those new BMPs should be implemented. This can be done as part of the review of environmental documentation or in legislative, administrative, regulatory and other venues.

6. CITIZEN INVOLVEMENT PROGRAM
In the implementation of BMPs (especially meter retrofit and pricing programs) the water purveyors will establish a citizen involvement program, such as citizen advisory committees, to help design, implement and market water conservation programs. Each purveyor will establish this program within three years of signing the Water Forum Agreement, if they do not already have a program established. Each purveyor's citizen involvement program is described in its Water Conservation Plan.

7. WATER CONSERVATION PLANS INCLUDED AS AN APPENDIX TO THE WATER FORUM AGREEMENT
The Water Conservation Plans provide the way for water purveyors to identify and then report their progress toward the implementation of the BMPs and for all parties to confirm that the Conservation Element of the Agreement is being implemented. Water Forum's stakeholder representatives negotiated with each purveyor the specifics of that purveyor's Water Conservation Plan.

Components of the Water Conservation Plans are:

a. Description of how the purveyor will implement each BMP.

b. Annual targets, staffing, and budgets for each of the initial four years.

c. Description of how the purveyor will implement its citizen involvement program.

d. Past (at least from 1975 on) and projected total water use to the year 2030 – demonstrating consistency with assumptions used in *Water Forum Agreement* (see Appendix D for format).

e. Past (at least from 1975 on) and projected per capita water use to the year 2030 (see Appendix D for format.).

8. IMPLEMENTATION OF WATER FORUM BMPS FOR NEW OR EXPANDED SERVICE AREA
   A purveyor's agreed upon Water Forum Water Conservation Plan shall be implemented for its entire service area including future changed boundaries.[3]

9. ANNUAL REPORTS
   Water purveyors will prepare annual reports on the implementation of water conservation activities as outlined in their Water Conservation Plans. These reports will be shared with the Water Forum Successor Effort.

   a. Purveyors will annually report their conservation activities for prior year and compare total and per capita water use with their original projections. (i.e., updating the charts originally prepared for item 7 d and e above).

   b. If there were any significant differences from what water conservation activities or results were planned, an explanation of the differences will be included. If water conservation results were significantly less than anticipated, an indication of how the results will be achieved in the future will be described.

   c. Each purveyor's progress toward BMP implementation will be annually reviewed and reported by the Water Forum Successor Effort.

10. UPDATING WATER CONSERVATION PLANS
    Purveyors will update their Water Conservation Plans every five years.

D. Specific Agreement on the Water Conservation Element for Municipal and Industrial Uses

All signatories will support, and where appropriate, participate in the Water Conservation Element as set forth above and as described in their Water Conservation Plans negotiated for the *Water Forum Agreement.* Purveyors' Water Conservation Plans are incorporated as Appendix J to the *Water Forum Agreement* and are on file at the Water Forum office.

[3] See City of Folsom Purveyor Specific Agreement, *Water Forum Agreement, page 176.*

WATER FORUM BEST MANAGEMENT PRACTICES (BMP) IMPLEMENTATION CRITERIA

The Best Management Practices (BMP) Implementation Criteria on the following pages were adopted on July 28, 1997 by the negotiators participating in the Water Forum BMP Criteria Negotiations. They were adapted from the Statewide Memorandum of Understanding (MOU) Regarding Urban Water Conservation Best Management Practices and have been customized for use by the Water Forum.

The Water Forum Successor Effort will facilitate "changed conditions" negotiations to determine how BMPs adopted or amended by California Urban Water Conservation Council (CUWCC) after July 1997 will be incorporated into the Water Forum purveyors' Water Conservation Plans.

If Water Forum signatories are unable to agree on how BMPs adopted or amended by CUWCC after July 1997 will be incorporated into the Water Forum purveyors' Water Conservation Plans, individual signatory organizations can advocate how they believe those new BMPs should be implemented. This can be done as part of the review of environmental documentation or in legislative, administrative, regulatory and other venues.

The signatories to this *Agreement* agree that the BMPs be implemented consistent with the Water Forum Negotiated BMP Implementation Criteria, or Functional Equivalent, as described below.

The following language, adopted on July 28, 1997 by the negotiators participating in the BMP Criteria Negotiations, applied to the development of the Water Conservation Plans that will be apart of the *Water Forum Agreement*.

A. Purveyors may choose to implement BMPs using the negotiated criteria described on the following pages.

B. Purveyors also had the option of customizing ways to implement BMPs that will be at least as effective as the negotiated criteria. The Demand/Conservation Team reviewed each of the proposed customized implementation method(s) to determine if the BMP will be at least as effective as the negotiated criteria.

C. Alternately, a functional equivalency determination could have been made based on an integrated review of the entire package of a purveyor's proposed schedule and budget for implementing the BMPs. The Demand/Conservation Team determined if the purveyor's proposal would provide functional equivalency to the full implementation of BMPs using the negotiated criteria.

D. A purveyor's agreed upon Water Forum Water Conservation Plan shall be implemented for its entire service area including future changed boundaries.[4]

[4]See City of Folsom Purveyor Specific Agreement (Section D) for further information on this item.

WATER FORUM BMP Implementation Criteria

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

The ongoing program will include, at a minimum:

A. Within three years of agreement signing, signatories will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Signatories will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits):
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by purveyor or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives, such as the following, to achieve 12% annual participation of the targeted 20% of customers:
      a. Billing adjustments or bill rebates targeted to plumbing system repair or improvement.
      b. Incentive programs to encourage plumbing system repair or improvement.

D. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. The ongoing program will include, at a minimum:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the purveyor office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

The ongoing program will include the following minimum programs (as recommended in AWWA "*Manual of Water Supply Practices, Water Audits and Leak Detection*"):

A. Unmetered signatories will complete and be maintaining:
   1. An annually updated "system map" of type, size and age of pipes; pressures; leak history; and historic data.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection & repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Metered signatories will complete and be maintaining:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc., with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost-effective.

C. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

Purveyors will retrofit at least 85-90% of non-residential customers within ten years. Complete non-residential retrofit is not a requirement. This is in recognition of the fact that there could be some smaller non-residential customers whose service locations could be very difficult and expensive to retrofit.

A. The ongoing program will include, at a minimum:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers which may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10% of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90% of nonresidential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, signatories will provide newly metered nonresidential customers with information on how to read their meter and a consumption based water bill information on purveyor-provided water conservation programs and services.

C. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

For the purposes of this BMP, "non-residential" is defined as all accounts except single family and duplex residential dwellings.

BMP 4 RESIDENTIAL METER RETROFIT

(See Section Three, V., Water Conservation Element, pages 89-95, for a description of this customized BMP.)

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

The ongoing program will include, at a minimum:

A. Within three years of agreement signing, signatories will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provide that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped purveyor facilities, phased in over the five years following agreement signing.

B. Signatories will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide incentives, such as the following, to achieve at least 12% annual participation of targeted customers:
      a. Billing adjustments or bill rebates targeted to irrigation system repair or improvement.
      b. Grants, etc. to encourage landscape design and irrigation system improvements.
      c. ET (evapotranspiration) based tiered rate structure.

D. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTIFAMILY DEVELOPMENTS

Cities and counties have either already adopted their own landscape water conservation ordinance for new and existing commercial, industrial, institutional, governmental, and multifamily customers, or are covered by the State landscape water conservation ordinance, pursuant to the "*Water Conservation in Landscaping Act*" (California Code of Regulations, Chapter 2.7, Title 23.).

A. Cities and counties, will enact and implement a landscape water efficiency ordinance pursuant to the "*Water Conservation in Landscaping Act*" (California Code of Regulations, Chapter 2.7), that is at least as effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490-495.

B. Cities and counties, in cooperation with purveyors within their jurisdiction, will:
   1. Establish a landscape task force with other local governments, water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with the landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process, to ensure its effectiveness.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action – for example, the use of consultants.

C. Signatories will publicly support the county or city's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

D. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, a signatory's ongoing program will include, at a minimum, one of the three choices listed below:

A. A combination of a purveyor specific program in conjunction with full participation by the purveyor in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time full financial participation in this program is based upon an annual per connection contribution by purveyors to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials,

community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by the purveyor include, at a minimum:

1. Using utility bill inserts or messages on payment notices.
2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

OR

B. A combination of a purveyor specific program in conjunction with limited participation by the purveyor in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time limited participation in this program is based upon an annual contribution by a purveyor to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach. The purveyor agrees to spend the difference between the annual per connection SAWWA contribution and the flat annual contribution to SAWWA on an enhanced within-service area implementation of elements 3-6 listed below and elements 3-4 listed in BMP 8, School Education.
   1. Using utility bill inserts or messages on payment notices.
   2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.
   3. Providing public speakers to community groups and the media.
   4. Using paid and public service advertising for a water conservation campaign.
   5. Providing public information to promote other water efficient practices.
   6. Coordinating with other governmental agencies, industry groups and public interest groups.

OR

C. An entirely purveyor specific Public Information program, funded at a level equivalent to one-half the full SAWWA per-connection contribution. The program will include activities such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach. The program will also include, as a minimum:
   1. Using utility bill inserts or messages on payment notices.
   2. Providing information on metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.
   3. Providing public speakers to community groups and the media.
   4. Using paid and public service advertising for a water conservation campaign.
   5. Providing public information to promote other water efficient practices.
   6. Coordinating with other governmental agencies, industry groups and public interest groups.

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, a signatory's program will include, at a minimum, one of the three choices listed below:

A. A combination of a purveyor specific program in conjunction with full participation by the purveyor in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time full financial participation in this program is based upon an annual per connection contribution by purveyors to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach. Elements implemented directly by the purveyor include, at a minimum:
   1. Offering tours of purveyor facilities to elementary schools in the purveyor's service area.
   2. Working with schools served by the purveyor to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

OR

B. A combination of a purveyor specific program in conjunction with limited participation by the purveyor in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time limited participation in this program is based upon an annual contribution by a purveyor to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

   The purveyor agrees to spend the difference between the annual per connection SAWWA contribution and the flat annual contribution to SAWWA on an enhanced within-service area implementation of elements 3-4 listed below and elements 3-6 listed in BMP 7, Public Information.
   1. Offering tours of purveyor facilities to elementary schools in the purveyor's service area.
   2. Working with schools served by the purveyor to promote school audits, reduced water bills, and innovative funding for equipment upgrades.
   3. Working with the school districts in the water purveyor's service area to provide educational materials promoting efficient water use to one or more grade levels on an annual basis.
   4. Working with school districts in the water purveyor's service area to offer instructional materials and assistance to all teachers of the targeted grade level in order to promote efficient water use. This program is considered successful if a high percent of the teachers of the targeted grade level(s) participate in the training and use the materials in the classroom.

OR

C. An entirely purveyor specific School Education program, funded at a level equivalent to one-half the full SAWWA per-connection contribution. The program will include activities such as: school outreach, advertising campaigns, educational materials for schools, participation at school events and fairs, a Web site, and parent/teacher outreach. The program will also include, as a minimum:
   1. Offering tours of purveyor facilities to elementary schools in the purveyor's service area.
   2. Working with schools served by the purveyor to promote school audits, reduced water bills, and innovative funding for equipment upgrades.
   3. Working with the school districts in the water purveyor's service area to provide educational materials promoting efficient water use to one or more grade levels on an annual basis.
   4. Working with school districts in the water purveyor's service area to offer instructional materials and assistance to all teachers of the targeted grade level in order to promote efficient water use. This program is considered successful if a high percent of the teachers of the targeted grade level(s) participate in the training and use the materials in the classroom.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, signatories will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Signatories or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% or industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.):
      a. (for metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high-energy use, etc.).
      b. (for unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater , and high-energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The signatory's, or cooperative, water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives, such as the following, to achieve at least 20% annual participation of the targeted 10% of existing customers:
      a. Billing adjustments or bill rebates targeted to water-use system repair or improvement.
      b. Grants, etc. to partially fund climate-appropriate water-efficient landscaping water-use systems repair or improvement.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Counties and cities will establish policies requiring water intensive commercial and industrial building permit applicants (new, modified or change-of-water-use) to conduct a water-use efficiency review and submit the findings in any required environmental documentation for the commercial or industrial project.

E. Purveyors will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the purveyor's service area to ensure that the submitted findings are reviewed by the purveyor to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter; and
   4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

F. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

As soon as practical, purveyors signatory to the *Water Forum Agreement* will begin reading all meters and including the usage on the customer's bills. This includes meters required in new construction since 1992 and meters retrofit onto existing connections. The schedule for each purveyor to implement this provision will be negotiated as part of its Water Conservation Plan. It is recognized that circumstances vary purveyor by purveyor, however as a general guideline for the Water Conservation Plan negotiations, a time period of three years from signing of the *Water Forum Agreement* to implement this provision has been discussed.

As soon as practical, purveyors will base customer charges on the quantity of water used. The schedule for each purveyor to implement this provision will be negotiated as part of its Water Conservation Plan. It is recognized that circumstances vary, purveyor by purveyor, however as a general guideline for the Water Conservation Plan negotiations, a time period of six years from signing of the *Water Forum Agreement* to implement this provision has been discussed.

A. Within three years of agreement signing, signatories will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information that shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. Signatories will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

C. If the signatory provides water service and sewer service (collection and/or treatment), within three years of agreement signing, signatories are encouraged to:
   1. Identify all metered customers which are also provided sewer service by the signatory.
   2. Establish quantity-based sewer rates for each customer type.
   3. Begin educating all customers about the quantity-based sewer rate structure.
   4. Provide metered customers with sewer bills which show current charges, actual water use, and future charges based on actual use.

D. Signatories are encouraged to implement quantity-based sewer charges no later than the implementation of quantity-based water charges.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Signatories will implement a program that includes, at a minimum:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the purveyor's service area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts:
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
   3. Annual pre-irrigation season notification to Single Family Homes served by the purveyor of purveyor-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. A signatory's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within a purveyor's service area but should be convenient to the purveyor's customers).

2. Annual participation at local and regional landscape fairs and garden shows.
3. Annual cooperative education and marketing campaigns with local nurseries.
4. Annual irrigation season landscape media campaign.
5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/sprinkler shut-offs.

C. Counties and cities, in cooperation with purveyors within their jurisdiction, will:
   1. Establish a landscape task force with other local governments, water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance as pertains to single family homes, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with the landscape task force, the implementation of the ordinance, including builder compliance, landscape plan review, and final inspection/certification process, to ensure its effectiveness.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action – for example, the use of consultants.

D. Signatories will publicly support the county or city's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, signatories will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include, at a minimum:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other suggested measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.

4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation/reading.

D. Within three years of agreement signing all purveyors will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

E. Within three years of agreement signing unmetered purveyors will have water waste patrols (including some pre-dawn and post-sunset) during the irrigation season.

BMP 14 WATER CONSERVATION COORDINATOR

The Water Conservation Plan shall contain the name of the purveyor's water conservation coordinator, who will be responsible for preparing, implementing and monitoring the Plan. Within three years of agreement signing, at least one staff member at a purveyor will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NONRESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, signatories will:
   1. Identify all non-residential customers, estimate the approximate number of non- ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. Signatories will annually offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of nonresidential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.

2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMPfor their constituents.
4. Consider monitoring the change in water use at metered-accounts which install ULF toilets.

D. Signatories will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR RESIDENTIAL CUSTOMERS

Under the *Water Forum Agreement* this is a voluntary program. However, it is recommended that purveyors make an effort to replace high water-using residential toilets with ULF toilets, using incentives. This could include any or all of the following program elements: rebates, distribution of toilets at no cost to the customer using programs such as CBOs, co-payment programs in which the customers pay a reduced rate for the toilets, and direct in installations.

ARDEN-CORDOVA WATER SERVICE
WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Arden-Cordova Water Service will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.

   Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Arden Cordova Water Service will annually:
   1. Identify the top 20% of water users, not previously audited, in each customer type and offer them water use reviews (audits)
   a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
   b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by Arden-Cordova Water Service or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. Arden-Cordova Water Service will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, Arden-Cordova Water Service will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation information to new residents.
   4. Work with local hardware/home stores to offer free water conservation information at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits.

B. Arden-Cordova Water Service will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

The ongoing program will include the following minimum programs (as recommended in AWWA "Manual of Water Supply Practices, Water Audits and Leak Detection.")

A. Within three years of agreement signing, Arden-Cordova Water Service, will complete and maintain, in the unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; leak history; and historic data.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Within three years of agreement signing, Arden-Cordova Water Service will complete and maintain, in the metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc.; with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.

5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. Arden-Cordova Water Service will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, Arden-Cordova Water Service will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers, which may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10% of unmetered non-residential accounts yearly so that within 10 years of becoming a signatory, 85-90% of non-residential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, Arden-Cordova Water Service will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on Arden-Cordova Water Service -provided water conservation programs and services.

C. Arden-Cordova Water Service will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

For the purposes of this BMP, "non-residential" is defined as all accounts except single family and duplex residential dwellings.

BMP 4 RESIDENTIAL METER RETROFIT

The remaining unmetered single-family residential customers will be retrofitted with meters starting in 2003 to achieve full metering within 30 years or less.

New single-family residential customers since 1995 are being billed based on water use. All multi-
family residential customers are fully metered and billed based on water use.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Arden-Cordova Water Service will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Utilizing materials and information developed by others, such as SAWWA, distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Utilizing seasonal climate-appropriate information developed by others, such as SAWWA, determine irrigation schedules for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provide that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped Arden-Cordova Water Service facilities, phased in over the five years following agreement signing.

B. Arden-Cordova Water Service will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The Arden-Cordova Water Service's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
      5. Provide incentives, such as the following, to achieve at least 12% annual participation of targeted customers:
      a. Billing adjustments or bill rebates targeted to irrigation system repair or improvement
      b. Grants, etc., to encourage landscape design and irrigation system improvements.
      c. ET (evapotranspiration) based tiered rate structure.
      d. Tiered rate structure, such as the existing rate structure, to provide the customer a pricing signal that encourages the efficient use of landscape water.

D. Arden-Cordova Water Service will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Cities and counties will enact and implement a landscape water efficiency ordinance pursuant to the "Water Conservation in Landscaping Act" (California Code of Regulations, Chapter 2.7) that is at least as effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490-495.

B. Cities and counties, in cooperation with Arden-Cordova Water Service will:
   1. Establish a landscape task force with other local governments and water purveyors, the building and green industries and environmental/public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with the landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
      3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action, for example, the use of consultants.

C. Arden-Cordova Water Service will publicly support the county or city's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

D. Arden-Cordova Water Service will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

A combination of an Arden-Cordova Water Service specific program in conjunction with full participation by the Arden-Cordova Water Service in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time full financial participation in this program is based upon an annual per connection contribution by Arden-Cordova Water Service to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by Arden-Cordova Water Service include:

1. Using utility bill inserts or messages on payment notices.
2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

BMP 8 SCHOOL EDUCATION

A combination of an Arden-Cordova Water Service specific program in conjunction with full participation by Arden-Cordova Water Service in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time full financial participation in this program is based upon an annual per connection contribution by Arden-Cordova Water Service to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach..

Elements implemented directly by the Arden-Cordova Water Service include:

1. Offering tours of Arden-Cordova Water Service facilities to elementary schools in the Arden-Cordova Water Service's service area.
2. Working with schools served by Arden-Cordova Water Service to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Arden-Cordova Water Service will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Arden-Cordova Water Service or their representative will annually provide the following water-use review program, if it is available, cooperatively, through SAWWA, or other regional program:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high-energy use, etc.).

b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.

2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
3. Survey past program participants to determine if audit recommendations were implemented.

C. Arden-Cordova Water Service water use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Counties and cities will establish policies requiring water intensive commercial and industrial building permit applicants (new, modified or change-of-water use) to conduct a water-use efficiency review and submit the findings in any required environmental documentation for the commercial or industrial project.

E. Within three years of signing, Arden-Cordova Water Service will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Coordinate with Sacramento County during the permitting of new, modified or change-of-water-use CI projects within the Arden-Cordova Water Service's service area to ensure that the submitted findings are reviewed by the Arden-Cordova Water Service to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
   4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

F. Arden-Cordova Water Service will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, Arden-Cordova Water Service will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. Arden-Cordova Water Service will bill, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing serve as well as on quantity of water used.

C. If Arden-Cordova Water Service provides water service and sewer service (collection and/or treatment), within three years of agreement signing, Arden-Cordova Water Service is encouraged to:
   1. NA – identify all metered customers that are also provided sewer service by the signatory.
   2. NA – establish quantity-based sewer rates for each customer type.
   3. NA – begin educating all customers about the quantity-based sewer rate structure.
   4. NA – provide metered customers with sewer bills that show current charges, actual water use, and future charges based on actual use.

D. Arden Cordova Water Service is encouraged to implement quantity-based sewer charges no later than the implementation of quantity-based water charges.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE-FAMILY HOMES

A. Arden-Cordova Water Service will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management offered to change of customer accounts, and in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing single-family homes in the Arden-Cordova Water Service's serve area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts.
      a. Unmetered service areas will actively market landscape audits/surveys to each existing single family home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing single-family customer water users.
   3. Annual pre-irrigation season notification to single family homes served by the Arden-Cordova Water Service -provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Arden-Cordova Water Service's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other Arden Cordova Water Service, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within Arden-Cordova Water Service's service area but should be convenient to the Arden-Cordova Water Service's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.

5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/sprinkler shut-offs.

C. Counties and cities, in cooperation with Arden-Cordova Water Service, will:
   1. Establish a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance as pertains to single-family homes, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with the landscape task force, the implementation of the ordinance, including builder compliance, landscape plan review and final inspection/certification process, to ensure its effectiveness.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise and, if so, recommend and support correction action, for example, the use of consultants.

D. Arden-Cordova Water Service will publicly support the county or city's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Arden-Cordova Water Service will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, Arden-Cordova Water Service will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted – automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other included measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.

5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing all Arden-Cordova Water Service will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff that will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

E. Within three years of agreement signing unmetered Arden-Cordova Water Service will have water waste patrols (including some pre-dawn and post-sunset) during the irrigation season.

BMP 14 WATER CONSERVATION COORDINATOR

The Water Conservation Plan and Annual Update shall contain the name of Arden-Cordova Water Service's water conservation coordinator, who will be responsible for preparing, implementing and monitoring the plan.

Within three years of agreement signing, at least one staff member at Arden-Cordova Water Service will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Arden-Cordova Water Service will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, establish a cooperative district/sanitation district ULF toilet rebate program.

B. Arden-Cordova Water Service will consider annually:
   1. Offering, through direct mail or other direct communication, ULF toilet rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non-ULF-toilets.

C. The retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF

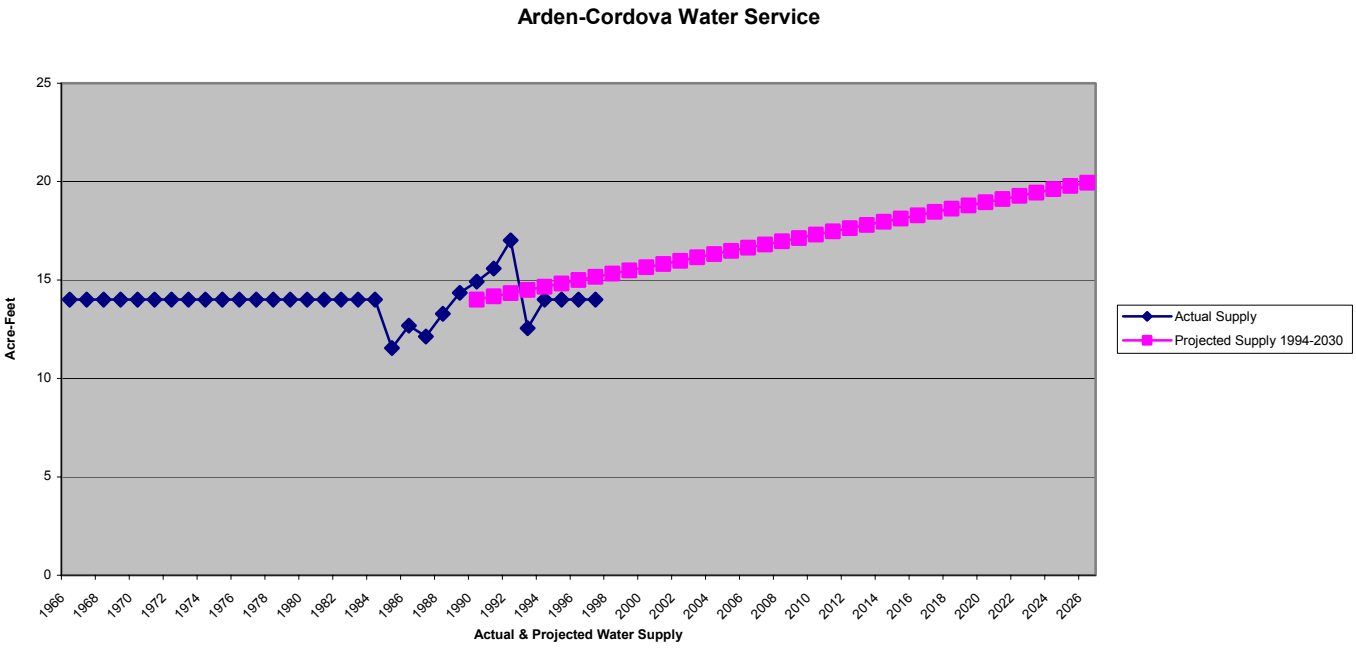
toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULF toilets within ten years.

2. Consider larger rebates for the more expensive high-use flushometer-type ULF toilet installations.
3. Investigate opportunities for community-based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

D. Arden-Cordova Water Service will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZEN INVOLVEMENT PROGRAM

Purveyor will consider the establishment of a citizen involvement program that goes beyond their current practices as well as those that they do under the CA-PUC provisions, within three years of Agreement signing.


Arden-Cordova Water Service
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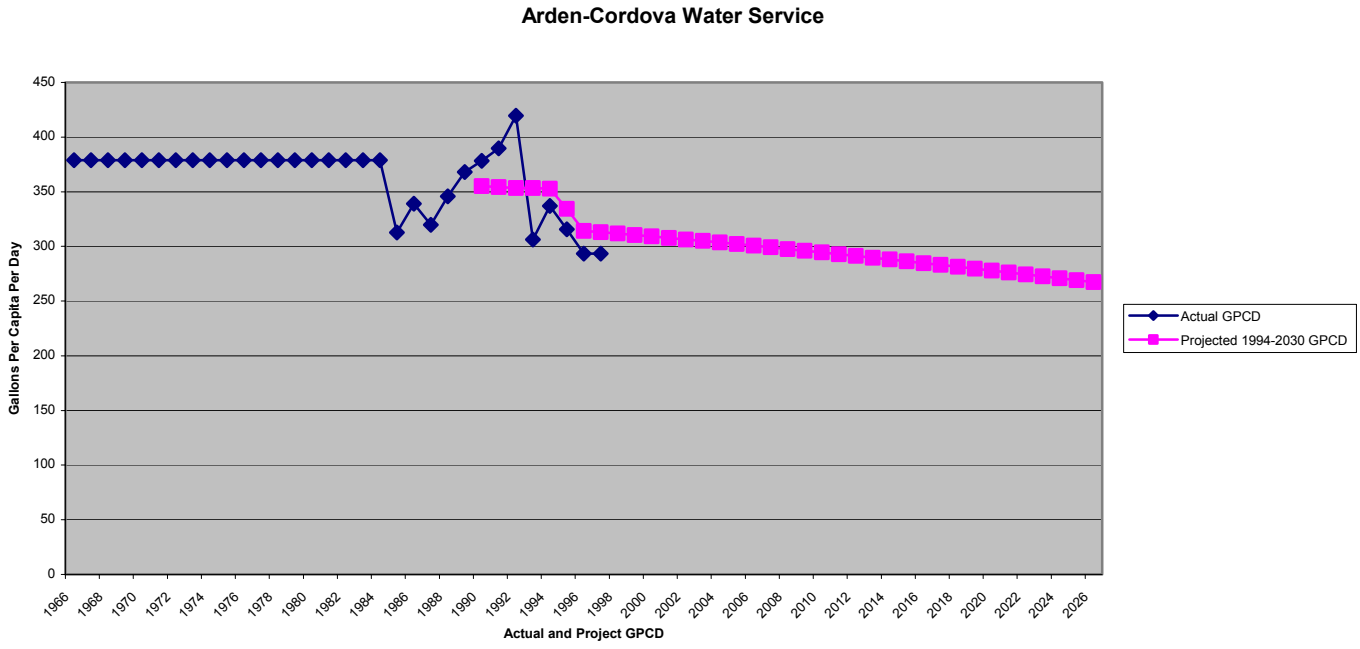
Actual & Projected Water Supply
Actual Supply
Projected Supply 1994-2030


Arden-Cordova Water Service
Gallons Per Capita Per Day
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Actual and Project GPCD
Actual GPCD
Projected 1994-2030 GPCD

CARMICHAEL WATER DISTRICT
WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Carmichael Water District will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Carmichael Water District will annually:
   1. Offer water-use reviews to all accounts that receive a meter.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
      4. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by purveyor or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
      5. Once the District is 100% metered, offer audits to the top 20% of water users not previously audited.

D. Carmichael Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Carmichael Water District's ongoing program will:
   1. Offer to all customers, during the water audit, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the purveyor office.
   3. When feasible, work with the local "Welcome Wagon" or equivalent organization to provide water conservation information to new residents.

4. When feasible, work with local hardware/home stores to offer free water conservation information at the check-out counters.
6. Investigate partnership programs with local energy utilities to provide water conservation audits.

F. Carmichael Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Carmichael Water District, in unmetered areas, will complete and be maintaining:
1. An annually updated "system map" of type, size and age of pipes; pressures; leak history; and historic data.
2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
3. An ongoing meter calibration and replacement program for all production and distribution meters.
4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Carmichael Water District will, in metered areas, complete and be maintaining:
1. An annual system water audit, determining the difference between production and sales.
2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc.; with historic data.
3. An ongoing meter calibration and replacement program.
4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. Carmichael Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. The ongoing program will include, at a minimum:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers, which may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter 100 % of unmetered non-residential accounts by the end of 2001.
      6. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within six months of meter installation, Carmichael Water District will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
      6. Information on purveyor-provided water conservation programs and services.

F. Carmichael Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

A. In the first two years after the *Water Forum Agreement* is signed, the Carmichael Water District would plan for, budget, and prepare the public for a residential meter retrofit program. Beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed, the Carmichael Water District would annually retrofit at least 3.3%-5% of their total number of unmetered residential connection as of the date of the *Water Forum Agreement*.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Carmichael Water District will:
   1. During meter installation, identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Receive from SAWWA and prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Receive from SAWWA seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   6. Begin installation of climate appropriate water efficient landscaping at landscaped purveyor facilities, phased in over the five years following agreement signing.

B. Carmichael Water District will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Offer audits to all targeted accounts that receive a meter.

D. Carmichael Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Carmichael Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
      7. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

B. Carmichael Water District will publicly support the county 's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

G. Carmichael Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, Carmichael Water District's ongoing program will include:

A combination of a Carmichael Water District specific program in conjunction with full participation by Carmichael Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by Carmichael Water District include:

1. Using utility bill inserts or messages on payment notices.
6. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.
7. Issuing quarterly newsletters to customers to publicize water conservation efforts.
8. Making conservation materials available in the District office.

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, Carmichael Water District's ongoing program will include:

A combination of a Carmichael Water District specific program in conjunction with full participation by Carmichael Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, and a Web site.

Elements implemented directly by Carmichael Water District include:

1. Offering tours of Carmichael Water District facilities to elementary schools in the Carmichael Water District service area.
2. Working with schools served by Carmichael Water District to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Carmichael Water District will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Carmichael Water District or their representative will annually:

1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.).
    a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high-energy use, etc.).
    b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.
2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
3. Survey past program participants to determine if audit recommendations were implemented.

C. Carmichael Water District will be part of a SAWWA cooperative review program that will:
    1. Provide audits conducted by trained commercial/industrial water auditors.
    2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
    3. Contact past program participants for a follow-up audit at least every fifth year.

D. Carmichael Water District will:
    1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
    2. Coordinate with Sacramento County during the permitting of new, modified or change-of-water-use CI projects within the purveyor's service area to ensure that the submitted findings are reviewed by the purveyor to identify incentive program opportunities.
    3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.

E. Carmichael Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, Carmichael Water District will:
    1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
    2. Establish quantity-based rates for each account type during 1998.
    3. Begin educating all customers about the quantity-based rate structure.

B. Carmichael Water District will bill all non-residential customers on metered use within one year of metering, and bill all residential customers on metered use within three years of metering.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE-FAMILY HOMES

A. Carmichael Water District will implement a program that includes:
   1. Information from SAWWA on climate-appropriate landscape design, plants and efficient irrigation equipment/management offered to all accounts during audits, at the office and by mail.
   2. Landscape audit/water-use survey program offered to all accounts that receive a meter, all new homes and all change-of-customer accounts.
   3. Annual pre-irrigation season notification to Single Family Homes served by the purveyor of purveyor-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Carmichael Water District's ongoing program, through participation in SAWWA, will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within Carmichael Water District's service area but should be convenient to the purveyor's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   9. Annual post-irrigation season notification, to all customers, of the importance of timer resets/sprinkler shut-offs.

C. Carmichael Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

H. Carmichael Water District will publicly support the county or city's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Carmichael Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, Carmichael Water District will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted – automatic shut-off nozzles are required.
      8. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other included measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
      9. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing all Carmichael Water District will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff that will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
      5. Will cooperate with the city or county in their program enforcement efforts.

I. Within three years of agreement signing unmetered Carmichael Water District will have water waste patrols (including some pre-dawn and post-sunset) during the irrigation season.

BMP 14 WATER CONSERVATION COORDINATOR

Carmichael Water District's water conservation coordinator, xxx xxx, will be responsible for preparing, implementing and monitoring the Plan.

If the AWWA Certified Water Conservation Practitioner Program becomes an industry standard, within three years of agreement signing, at least one staff member at Carmichael Water District will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Carmichael Water District will participate in a regional toilet rebate program that will:
   Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).

B. Carmichael Water District will annually, as part of a regional toilet rebate program:
   Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

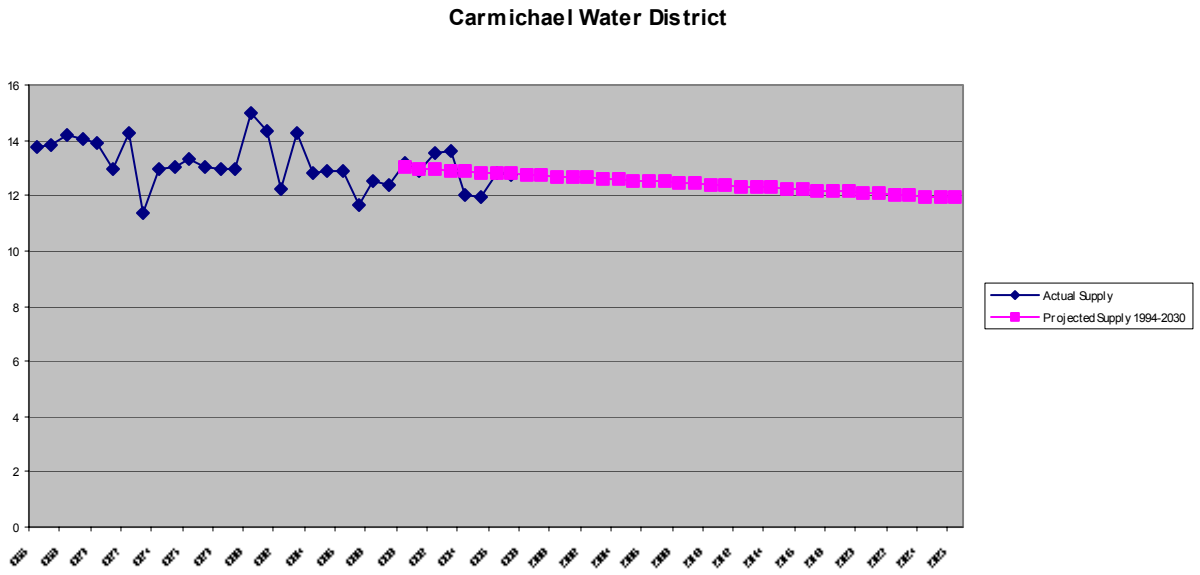
C. The retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90 % of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
      5. Investigate opportunities for community-based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
      6. Consider monitoring the change in water use at metered-accounts which install ULF toilets.

G. Carmichael Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing. Carmichael Water District will consider an independent toilet rebate program beginning in 2016 (when meter installation completed).

CITIZEN INVOLVEMENT PROGRAM

Carmichael currently has a citizen's advisory committee established to participate in a rate study process. Issues such as metering have been discussed at the committee meetings.

Recommendations from the committee are being considered by the Board of Directors. At this time the District is not considering forming a separate citizen's involvement program but would be interested in participating in a regional program that is advisory in nature.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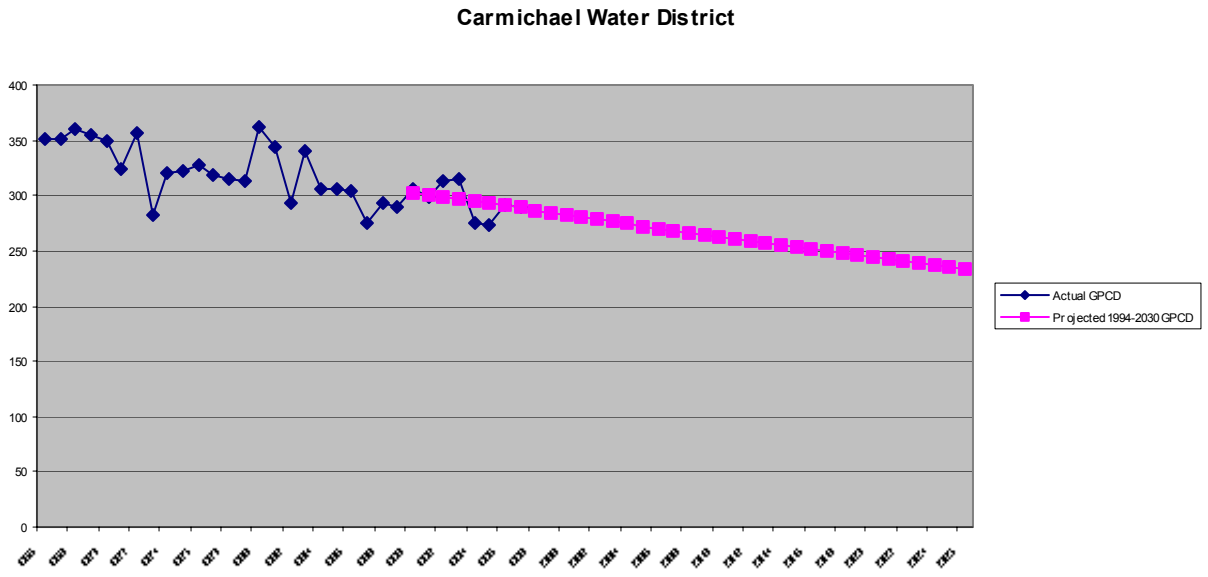
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Actual GPCD
Projected 1994-2030 GPCD

CITIZENS UTILITIES
WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Citizens Utilities will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Citizens Utilities will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits).
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by Citizens Utilities or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. Citizens Utilities will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, Citizens Utilities will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Citizens Utilities will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, Citizens Utilities will complete and maintain, in the unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; leak history; and historic data.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Within three years of agreement signing, Citizens Utilities will complete and maintain, in the metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc.; with historic data
   3. An ongoing meter calibration and replacement program.
      4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
      5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. Citizens Utilities will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

Citizens Utilities non-residential accounts are fully metered and use volumetric pricing.

BMP 4 RESIDENTIAL METER RETROFIT

In the first two years after the Water Forum Agreement is signed, Citizens Utilities would plan for, budget, and prepare the public for a residential meter retrofit program. Beginning no later than the start of the fourth year after the Water Forum Agreement is signed, Citizens Utilities would annually retrofit at least 3.3%-5% of the total number of unmetered residential connections
as of the date of the Water Forum Agreement.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Citizens Utilities will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped Citizens Utilities facilities, phased in over the five years following agreement signing.

B. Citizens Utilities will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The Citizens Utilities' landscape water-use review program will:

1. Provide audits conducted by certified landscape water auditors.
2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
4. Provide program participants with regular reminders to adjust irrigation timer settings.
5. Provide incentives, such as the following, to achieve at least 12% annual participation of targeted customers:
    a. Billing adjustments or bill rebates targeted to irrigation system repair or improvement.
    b. Grants, etc. to encourage landscape design and irrigation system improvements
    c. ET (evapotranspiration) based tiered rate structure.

D. Citizens Utilities will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Citizens Utilities will:
    1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
    2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
    3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

B. Citizens Utilities will publicly support the county's and city's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

C. Citizens Utilities will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

A combination of a Citizens Utilities specific program in conjunction with full participation by Citizens Utilities in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by the Citizens Utilities include:

1. Using utility bill inserts or messages on payment notices.
2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

BMP 8 SCHOOL EDUCATION

A combination of a Citizens Utilities specific program in conjunction with full participation by Citizens Utilities in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, a Web site, and allied organizations outreach.

Elements implemented directly by the Citizens Utilities include:

1. offering tours of Citizens Utilities facilities to elementary schools in the service area;
2. working with schools served by the Citizens Utilities to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Citizens Utilities will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Citizens Utilities or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high energy use, etc.).

b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.

2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
3. Survey past program participants to determine if audit recommendations were implemented.

C. The Citizens Utilities' water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Within three years of agreement signing, Citizens Utilities will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the Citizens Utilities' service area to ensure that the submitted findings are reviewed by the Citizens Utilities to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
   4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Citizens Utilities will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, Citizens Utilities will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. Citizens Utilities will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Citizens Utilities will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the Citizens Utilities' service area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts.
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
      3. Annual pre-irrigation season notification to Single Family Homes served by the Citizens Utilities of Citizens Utilities-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Citizens Utilities' ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, and other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within Citizens Utilities' service area but should be convenient to the Citizens Utilities' customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. Citizens Utilities will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

D. Citizens Utilities will publicly support the county's and city's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Citizens Utilities will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, Citizens Utilities will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted – automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons – requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing Citizens Utilities will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff that will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

Citizens Utilities' Water Conservation Coordinator, Johnnie Lane, is responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at Citizens Utilities will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Citizens Utilities will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use.
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. Citizens Utilities will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The retrofit program will:
   1. Offer the necessary incentive to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts which install ULF toilets.

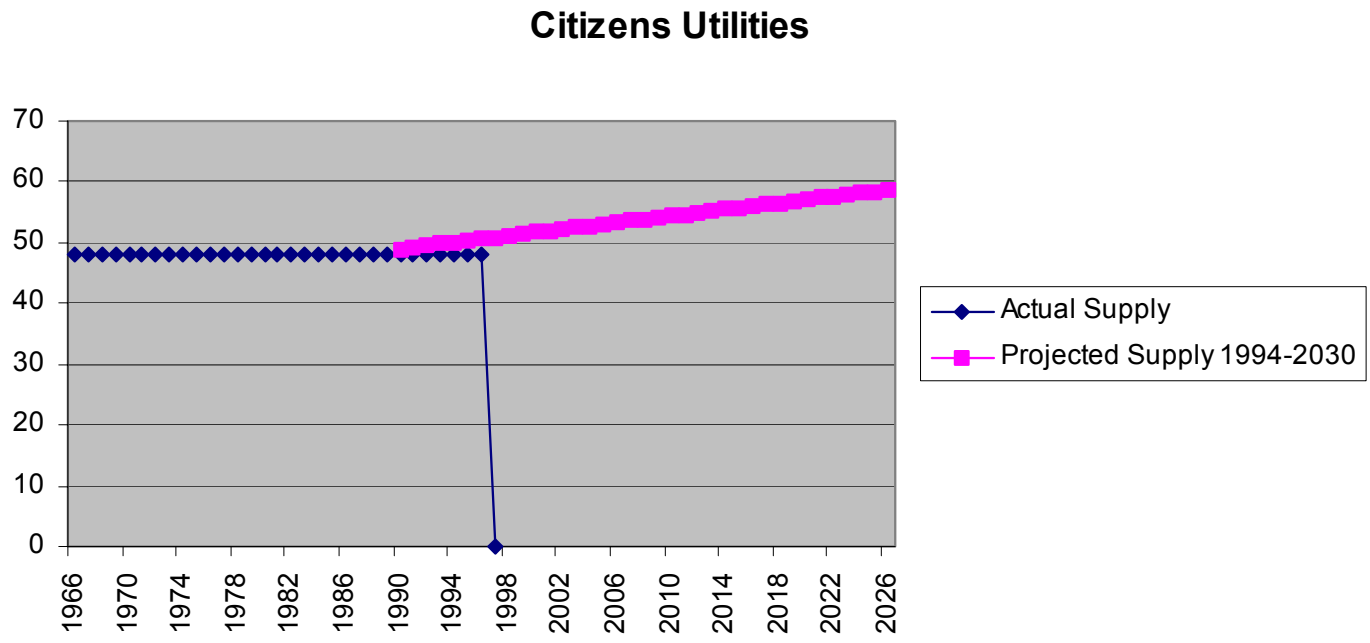
D. Citizens Utilities will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZENS INVOLVEMENT PROGRAM

Citizens Utilities will establish a Customer Advisory and Appeals Board. This board would consist of 5 residential and or commercial customers, selected from applications, representing the major service areas served by Citizens Sacramento District.

The purpose of the Citizens Utilities Customer Advisory and Appeals Boards will be to:

1. To advise the Company with regard to Company Funded Capital Improvements and Budgets, including proposed facility locations, alignments, and priorities.
2. To advise the Company with regard to Company Outreach Programs such as community an public relations, charitable donations, sponsorships, etc.
3. To advise the Company on design, implementation and monitoring of the Company's Water Conservation Plan elements and Best Management Practices.
4. To act as an Appeals Board for customers who have meters installed at their residences due to the "3-Strikes Water Waste Program" reference in BMP 13, c.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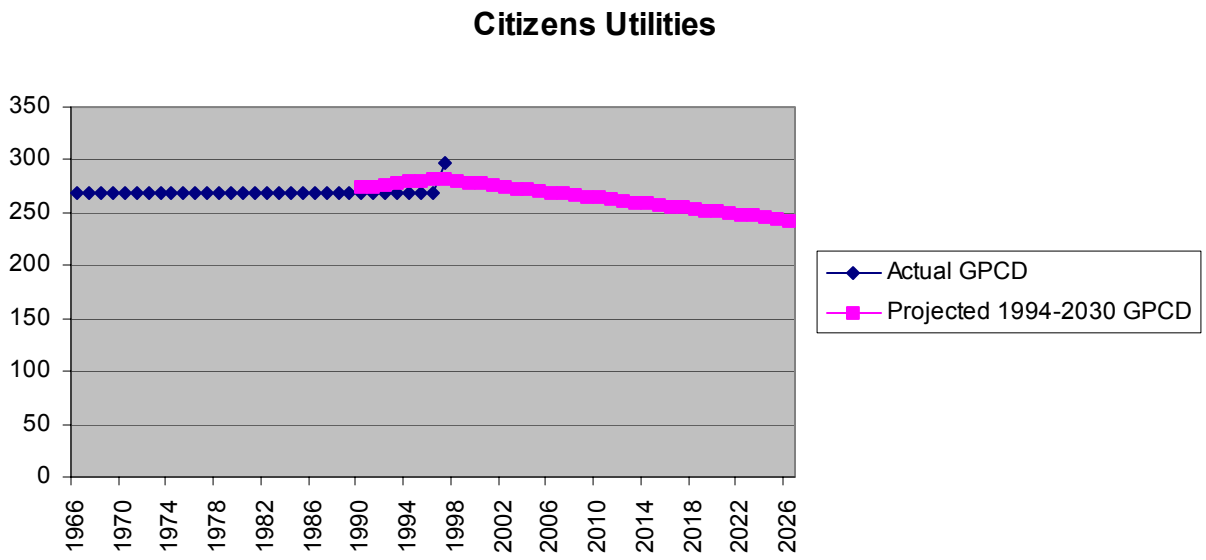
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Actual GPCD
Projected 1994-2030 GPCD

CITRUS HEIGHTS WATER DISTRICT
WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, the Citrus Heights Water District program will have:

1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Citrus Heights Water District will annually:

1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits).
   a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
   b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The Citrus Heights Water District water-use review program will:

1. Provide audits conducted by trained auditors.
2. Provide audits that may include device installation by Citrus Heights Water District staff or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. Citrus Heights Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. The Citrus Heights Water District program will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the Citrus Heights Water District office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Citrus Heights Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Citrus Heights Water District, as an unmetered District, will complete and be maintaining:
   1. An annually updated "system map" of type, size and age of pipes; pressures; leak history; and historic data.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. When Citrus Heights Water District is completely metered, the District will complete and be maintaining:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc.; with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.

5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. Citrus Heights Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. The Citrus Heights Water District program will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers that may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10% of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90% of non-residential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, Citrus Heights Water District will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on Citrus Heights Water District-provided water conservation programs and services.

C. Citrus Heights Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

It is recognized that CVPIA meter retrofit provisions are outside the scope of the *Water Forum Agreement* and that they require faster implementation than what is included in the *Water Forum Agreement*. The Citrus Heights Water District receives CVP water and agrees that if for any reason any or all of its service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed they would annually retrofit at least 3.3%-5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement.*

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Citrus Heights Water District will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.

2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
5. Begin installation of climate appropriate water efficient landscaping at landscaped Citrus Heights Water District facilities, phased in over the five years following agreement signing.

B. Citrus Heights Water District will annually:
1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
3. Survey past program participants to determine if audit recommendations were implemented.
4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The landscape water-use review program will:
1. Provide audits conducted by certified landscape water auditors.
2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
4. Provide program participants with regular reminders to adjust irrigation timer settings.
5. Provide incentives to achieve at least 12% annual participation of targeted customers.

D. Citrus Heights Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Citrus Heights Water District, in cooperation with Sacramento County, will:
1. Participate in a landscape task force with other local governments, water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.

2. Review, in cooperation with landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process, to ensure its effectiveness.
3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

B. Citrus Heights Water District will publicly support the county 's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

C. Citrus Heights Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, Citrus Heights Water District's ongoing program will include:

A combination of a Citrus Heights Water District specific program in conjunction with full participation by Citrus Heights Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by Citrus Heights Water District include:

1. Using utility bill inserts or messages on payment notices.
2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, Citrus Heights Water District's ongoing program will include:

A combination of a Citrus Heights Water District specific program in conjunction with full participation by Citrus Heights Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, and a Web site.

Elements implemented directly by Citrus Heights Water District include:

1. Offering tours of Citrus Heights Water District facilities to elementary schools in the Citrus Heights Water District service area.
2. Working with schools served by Citrus Heights Water District to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Citrus Heights Water District will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities; and
      4. A list of available CI water-use consultants.

B. Citrus Heights Water District will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.):
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high-energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater , high energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
      3. Survey past program participants to determine if audit recommendations were implemented.

C. Citrus Heights Water District's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
      3. Contact past program participants for a follow-up audit at least every fifth year.

D. Citrus Heights Water District will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the Citrus Heights Water District service area to ensure that the submitted findings are reviewed by Citrus Heights Water District staff to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
      4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Citrus Heights Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, Citrus Heights Water District will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. Citrus Heights Water District will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Citrus Heights Water District will implement a program, which includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the Citrus Heights Water District service area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts:
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
   3. Annual pre-irrigation season notification to Single Family Homes served by Citrus Heights Water District of Citrus Heights Water District-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Citrus Heights Water District's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing.
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.

5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/sprinkler shut-offs.

C. Citrus Heights Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

D. Citrus Heights Water District will publicly support the county 's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Citrus Heights Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, Citrus Heights Water District will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The Citrus Heights Water District waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers.

D. Within three years of agreement signing Citrus Heights Water District will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

E. Within three years of agreement signing Citrus Heights Water District, in unmetered areas, will:
   1. Have water waste patrols (including some pre-dawn and post-sunset) during the irrigation season.

BMP 14 WATER CONSERVATION COORDINATOR

Joe Scherrer, the Citrus Heights Water District water conservation coordinator, is responsible for preparing, implementing and monitoring the Plan.

If the AWWA Certified Water Conservation Practitioner Program becomes an industry standard, within three years of agreement signing, at least one staff member at Citrus Heights Water District will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Citrus Heights Water District will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. Citrus Heights Water District will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The Citrus Heights Water District retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.

2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

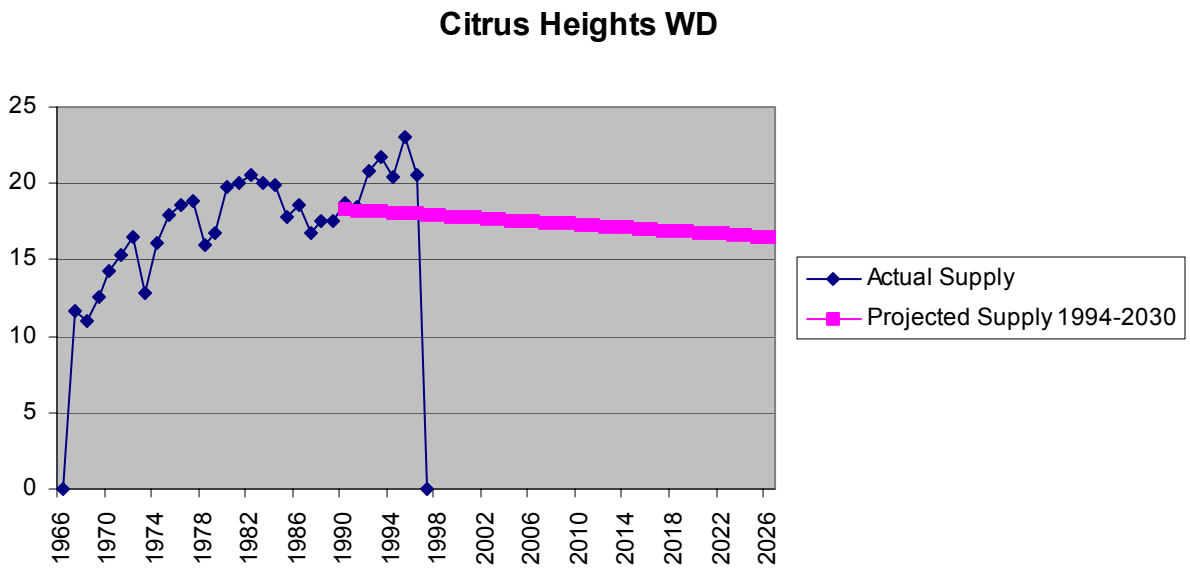
D. Citrus Heights Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZEN INVOLVEMENT PROGRAM

A series of public workshops will be conducted to assist in formulating and implementing the District's meter retrofit program. Workshops were already conducted with commercial property owners in 1996 prior to starting the District's commercial meter retrofit program. The District will hold additional workshops as part of the multi-family meter retrofit program, and similar workshops in subsequent years to aid in planning and marketing the residential meter retrofit program.

The District initiated a voluntary meter retrofit program in 1997 to gain customer involvement and acceptance of water meters. Feedback from these customers, as well as the data gathered from their meters, will be used to plan and fine-tune the District's meter retrofit program. The District will continue to offer the voluntary program for the next several years until the residential retrofit program is fully underway.

The District already invites customers to become involved in the development and implementation of water conservation programs through direct mailings, newsletters to its customers, media coverage, local school activities and participation in local and regional community events. The District will continue to use these methods on an ongoing basis. Customers will have opportunities to become involved in a number of public processes that help to shape the District's water conservation program. These include, but are not limited to, the budget development process, the capital improvement planning process, and the process for setting rates and charges including the development of conservation pricing.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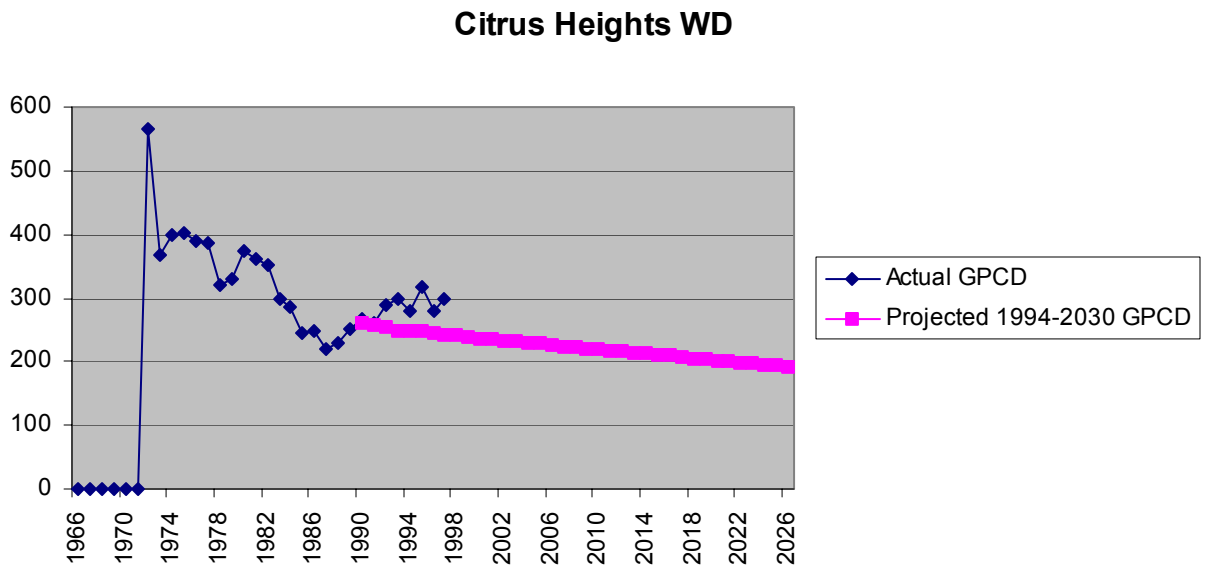
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CITY OF FOLSOM WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, the City of Folsom will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. The City of Folsom will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits).
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by the City of Folsom or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives, such as the following, to achieve 12% annual participation of the targeted 20% of customers:
      a. Billing adjustments or bill rebates targeted to plumbing system repair or improvement.
      b. Incentive programs to encourage plumbing system repair or improvement.

D. The City of Folsom will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, the City of Folsom will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. The City of Folsom will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

The ongoing program will include the following minimum programs (as recommended in AWWA *"Manual of Water Supply Practices, Water Audits and Leak Detection"):*

A. The City of Folsom will complete and maintain:
   1. An annually updated "system map" with appropriate information as determined by the City.
   2. The City will use industry accepted methods for determination of leakage or un-accounted for water.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Once fully metered, the City of Folsom will complete and maintain:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" with appropriate information as determined by the City.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.

5. A complete system wide leak detection program will be conducted when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. The City of Folsom will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, the City of Folsom will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers whom may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10% of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90% of non-residential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, the City of Folsom will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on the City of Folsom-provided water conservation programs and services.

C. The City of Folsom will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

For purposes of this BMP, "non-residential" is defined as all accounts except single family and duplex residential dwellings.

BMP 4 RESIDENTIAL METER RETROFIT

It is recognized that CVPIA meter retrofit provisions are outside the scope of the *Water Forum Agreement* and that they require faster implementation that what is included in the *Water Forum Agreement.* The City of Folsom may receive CVP water in the future and agrees that if for any reason any of all of their service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later that the start of the fourth year after the *Water Forum Agreement* is signed they would annually retrofit at least 3.3%-5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement.*

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, the City of Folsom will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at Folsom City Hall and the Water Treatment Plant when appropriate.

B. The City of Folsom will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The City of Folsom's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Consider incentives, such as the following, to achieve at least 12% annual participation of targeted customers:
      a. Billing adjustments or bill rebates targeted to irrigation system repair or improvement.
      b. Grants, etc., to encourage landscape design and irrigation system improvements.
      c. ET (evapotranspiration) based tiered rate structure.

D. The City of Folsom will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. The City of Folsom has enacted a landscape water efficiency ordinance pursuant to the "Water Conservation in Landscaping Act" (California Code of Regulations, Chapter 2.7), that is at least as effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490-495.

B. The City of Folsom will:
   1. Establish a landscape task force with the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

C. The City of Folsom will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

A combination of a City of Folsom specific program in conjunction with full participation by the City of Folsom in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by the City of Folsom include:
   1. Using utility bill inserts or messages on payment notices.
   2. When the billing system is improved, providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the previous year.

BMP 8 SCHOOL EDUCATION

A combination of a City of Folsom specific program in conjunction with full participation by the City of Folsom in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, media advertising campaigns, promotional materials, community events and fairs, and a Web site.

Elements implemented directly by the City of Folsom include:

1. Offering tours of the City of Folsom facilities to elementary schools in the City.
2. Working with schools served by the City of Folsom to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, the City of Folsom will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities; and
   4. A list of available CI water-use consultants.

B. The City of Folsom or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, wastewater, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high-energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, and high-energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The City of Folsom's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
      2. Provide incentives, such as the following, to achieve at least 20% annual participation of the targeted 10% of existing customers:
      a. Billing adjustments or bill rebates targeted to water-use system repair or improvement.
      b. Grants, etc., to partially fund climate-appropriate water-efficient landscaping water-use systems repair or improvement.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. The City of Folsom will establish policies requiring water intensive commercial and industrial building permit applicants (new, modified or change-of-water-use) to conduct a water-use efficiency review and submit the findings in any required environmental documentation for the commercial or industrial project.

E. Within three years of agreement signing, the City of Folsom will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
   3. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

F. The City of Folsom will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, the City of Folsom will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. By the year 2003, provide metered customers with monthly or bi-monthly information that shows current flat-rate charges and what charges would have been if based on actual use (excluding isolated metered customers).

B. The City of Folsom will, by the year 2006, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. The City of Folsom will implement a program, which includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the City of Folsom's service area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts.
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
   3. Annual pre-irrigation season notification to Single Family Homes served by the City of Folsom of the City of Folsom-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. The City of Folsom's ongoing program, in cooperation with the California Landscape Contractors Association and Sacramento Area Water Works Association will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within the City of Folsom's service area but should be convenient to the City of Folsom's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/sprinkler shut-offs.

C. The City of Folsom, will:
   1. Establish a landscape task force with the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance as pertains to single family homes, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with the landscape task force, the implementation of the ordinance, including builder compliance, landscape plan review, and final inspection/certification process.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city staff time constraints, budget or lack of landscape knowledge/expertise.

D. The City of Folsom will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, the City of Folsom will enact a water waste prohibition ordinance, which includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires City approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.

4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing the City of Folsom will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff respond to reports of water waste in a timely manner.
   3. Have water waste patrols at least during water shortages.

BMP 14 WATER CONSERVATION COORDINATOR

The Water Conservation Plan shall contain the name of the City of Folsom's water conservation coordinator, who will be responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, the City of Folsom will have encouraged and provided financial support to at least one staff member at become an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, the City of Folsom will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. The City of Folsom will annually:
   1. Consider offering, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The retrofit program will:
   1. Offer incentives in an attempt to achieve 10% of non-residential non-ULF toilets replacement with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.

3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
4. Consider monitoring the change in water use at metered-accounts, which install ULF toilets.

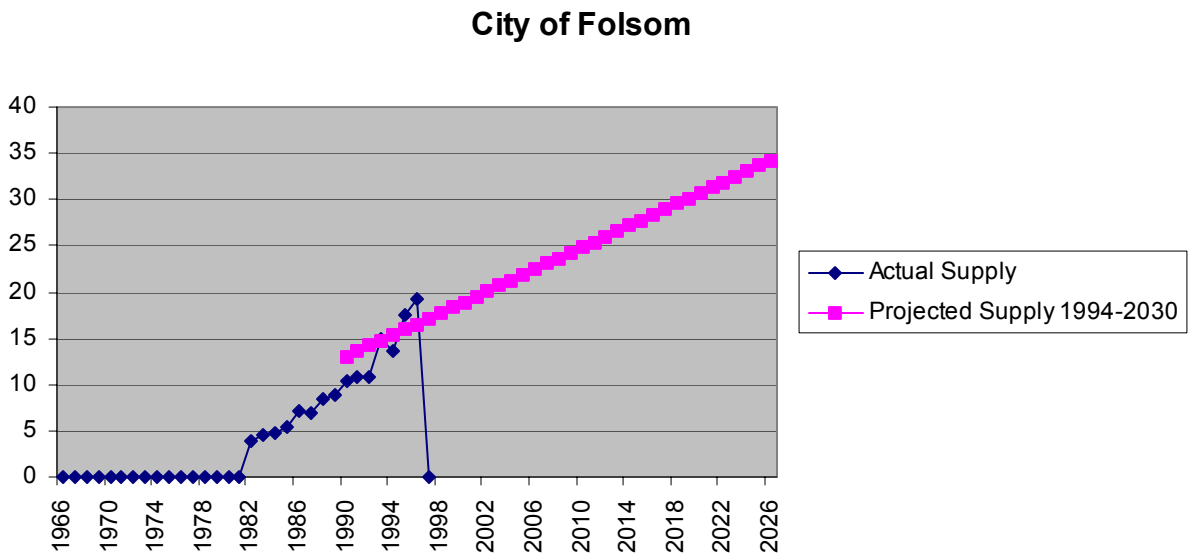
D. The City of Folsom will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR RESIDENTIAL CUSTOMERS

Under the *Water Forum Agreement* this is a voluntary program. However, it is recommended that purveyors make an effort to replace high water-using residential toilets with ULF toilets, using incentives. This could included any or all of the following program elements: rebates, distribution of toilets at no cost to the customer using programs such as CBOs, co-payment programs in which the customers pay a reduced rated for the toilets, and direct installations.

CITIZEN INVOLVEMENT PROGRAM

The City of Folsom will establish a water conservation and metering advisory committee by seeking applications from the citizens of Folsom. The Committee will be charged with providing lines of communication between the public, City staff, and the City Council. The Committee will help the Council by identifying and resolving problems in advance of implementation and help in education the public as to the need and benefits of such programs. The goal of this Committee is to provide input and guidance to the City staff and City Council such that both the Water Conservation Plan and Meter Retrofit Program can be implemented with the least disruption to the Citizens of Folsom.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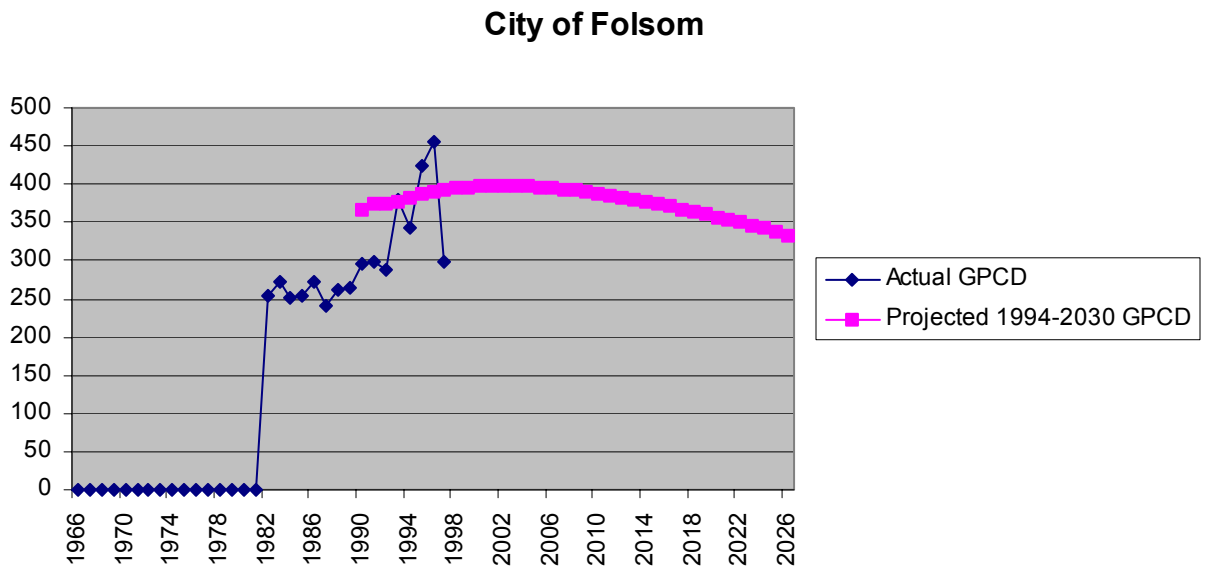
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CITY OF GALT
WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, the City of Galt will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Received from SAWWA, or other organization, and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Received from SAWWA, or other organization, and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. The City of Galt will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits).
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by the City of Galt or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Try to achieve 12% annual participation of the targeted 20% of customers through direct mail to the targeted customers. Additional actions will be used to try to reach the annual goal. As the price of water increases, the incentive to have an audit will increase.

D. The City of Galt will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, the City of Galt will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. The City of Galt will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, the City of Galt will complete and maintain, in the unmetered areas:
   1. A "system map" of type, size and age of pipes; pressures; leak history; and historic data.
   2. Installation of devices (such as pressure recorders) or use of other methods in high probability leak areas designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A leak detection program, focused on the ten miles of older water mains, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Within three years of agreement signing, the City of Galt will complete and maintain, in the metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc.; with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. The City of Galt will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, the City of Galt will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers that may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10% of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90% of non-residential customers are metered.
   4. Begin installation of meters at all city-owned landscape areas, with completion by 2001. Then all non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, the City of Galt will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill; and
      2. Information on the City of Galt-provided water conservation programs and services.

C. The City of Galt will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

It is recognized that the City of Galt is a relatively smaller water purveyor currently relying totally on groundwater and will not realize immediate water supply benefits from participating in the Water Forum Agreement. Therefore until such time as the City of Galt needs discretionary approvals for new or expanded surface water supplies, an active voluntary meter retrofit with incentives is acceptable. Nothing in the Water Forum Agreement prevents purveyors from deciding to undertake a more rapid meter retrofit program.

At such time as the City of Galt needs discretionary approvals for new or expanded surface water supplies it agrees to annually retrofit at least 3.3%-5% of the total number of unmetered residential connections and read and bill as set forth in Appendix D of the Water Forum Agreement.

If in the future the City of Galt receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, the City of Galt will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Receive from SAWWA, or other organization, and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Receive from SAWWA, or other organization, seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provide that information to the customers with one acre or larger landscapes.

B. The City of Galt will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The City of Galt's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Try to achieve 12% annual participation of the targeted 20% of customers through direct mail to the targeted customers. Additional actions will be used to try to reach the annual goal. As the price of water increases, the incentive to have an audit will increase.

D. The City of Galt will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. The City of Galt will enact and implement a landscape water efficiency ordinance pursuant to the "Water Conservation in Landscaping Act" (California Code of Regulations, Chapter 2.7), that is at least as effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490-495.

B. The City of Galt will:
   1. Establish a landscape task force with the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

D. The City of Galt will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

A combination of the City of Galt specific program in conjunction with full participation by the City of Galt in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by the City of Galt include:

1. Using utility bill inserts or messages on payment notices.
2. When residential accounts are metered, providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the year before.

BMP 8 SCHOOL EDUCATION

A combination of the City of Galt specific program in conjunction with full participation by the City of Galt in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, and a Web site.

Elements implemented directly by the City of Galt include:

1. Offering tours of the City of Galt facilities to elementary schools in the City's service area.
2. Working with schools served by the City of Galt to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, the City of Galt will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. The City of Galt or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high-energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The City of Galt's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Try to achieve 20% annual participation of the targeted 10% of customers through direct mail to the targeted customers. Additional actions will be used to try to reach the annual goal. As the price of water increases, the incentive to have an audit will increase.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. The City of Galt will establish policies requiring water intensive commercial and industrial building permit applicants (new, modified or change-of-water-use) to conduct a water-use efficiency review and submit the findings in any required environmental documentation for the commercial or industrial project.

E. Within three years of agreement signing, the City of Galt will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
   3. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

F. The City of Galt will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, the City of Galt will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information that shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. The City of Galt, within six years of agreement signing, will bill all non-residential metered customers based on the quantity of water use. The City installs only meter setters at residential accounts and will not install meters or bill by quantity at these accounts in the foreseeable future.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. The City of Galt will:
   1. Receive information from SAWWA, or other organization, on climate-appropriate landscape design, plants and efficient irrigation equipment/management and provide that information to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the City of Galt's service area on an annual basis.
   2. Market landscape audit/water-use survey program to all new homes and change-of-customer accounts:
      a. Unmetered service areas will use a bill insert and a newspaper advertisement to market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.

3. Annual pre-irrigation season notification to Single Family Homes served by the City of Galt of the City of Galt-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. The City of Galt's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within the City of Galt's service area but should be convenient to the City of Galt's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. The City of Galt, will:
   1. Establish a landscape task force, with an estimated staff time of eight hours every third year, including the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is as effective as the Model Water Efficient Landscape Ordinance as pertains to single family homes, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with the landscape task force, the implementation of the ordinance, including builder compliance, landscape plan review, and final inspection/certification process.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

D. The City of Galt will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, the City of Galt will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days;
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety;
   3. Restaurants serving water only on request;
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available; and
      5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing the City of Galt will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the City or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The Water Conservation Plan and Annual Update shall contain the name of the City of Galt's water conservation coordinator, who will be responsible for preparing, implementing and monitoring the Plan.

If the AWWA Certified Water Conservation Practitioner Program becomes an industry standard, within three years of agreement signing, at least one staff member at the City of Galt will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, the City of Galt will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
      2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. The City of Galt will annually:
    1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The retrofit program will:
    1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
    2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
    3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
    4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

D. The City of Galt will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZEN INVOLVEMENT PROGRAM

The City of Galt has an existing citizen committee titled the Beautification Committee that is assigned the responsibility of review the various landscape and streetscape features in the City in an effort to improve the image of the Community. One of its functions is to review landscape designs and select a monthly winner of an award for outstanding landscape design and maintenance. This committee is comprised of 5 members each of which are selected by individual Council members. This committee will serve as the citizen involvement mechanism for the City water program as they represent an appropriate cross section of the community.

CITY OF ROSEVILLE
WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY AND MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, the City of Roseville will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. The City of Roseville will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits).
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
      3. Survey past program participants to determine if audit recommendations were implemented

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by the City of Roseville or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
      4. Attempt to achieve 12% annual participation of the targeted 20% of customers.

D. The City of Roseville will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, the City of Roseville will:
   1. Offer to customers with pre-1982 homes, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets. Customers with 1982-92 homes will receive kits without showerheads.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. The City of Roseville will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, the City of Roseville will complete and maintain, in the unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; and leak history.
   2. An ongoing meter calibration and replacement program for all production and distribution meters.
   3. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.

B. Within three years of agreement signing, the City of Roseville will complete and maintain, in the metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc.; with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

The City of Roseville will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, the City of Roseville will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers that may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10% of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90% of non-residential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, the City of Roseville will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on the City of Roseville-provided water conservation programs and services.

C. The City of Roseville will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

It is recognized that CVPIA meter retrofit provisions are outside the scope of the Water Forum Agreement and that they require faster implementation than what is included in the Water Forum Agreement. The City of Roseville receives CVP water and agrees that if for any reason any or all of its service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later than the start of the fourth year after the Water Forum Agreement is signed they would annually retrofit at least 3.3%-5% of the total number of unmetered residential connections as of the date of the Water Forum Agreement.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, the City of Roseville will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers / landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management*

Handbook, and provided that information to the customers with one acre or larger landscapes.

5. Begin installation of climate appropriate water efficient landscaping at landscaped City of Roseville facilities, phased in over the five years following agreement signing.

B. The City of Roseville will annually:
   1. Directly contact all (non-reclaimed water) Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The City of Roseville's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide incentives to achieve at least 12% annual participation of targeted customers.

D. The City of Roseville will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. The City of Roseville will enact and implement a landscape water efficiency ordinance pursuant to the "Water Conservation in Landscaping Act" (California Code of Regulations, Chapter 2.7), that is at least as effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490-495.

B. The City of Roseville will:
   1. Establish a landscape task force with the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process.

3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city staff time constraints, budget or lack of landscape knowledge/expertise.

C. The City of Roseville will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, the City of Roseville program will include:

A combination of a City of Roseville specific program in conjunction with full participation by the City in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by the City of Roseville include:

1. Using utility bill inserts or messages on payment notices.
2. Providing information on residential metered customers' bills showing use per day for the last billing period compared to the same period the year before;

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, the City of Roseville program will include:

A combination of a City of Roseville specific program in conjunction with full participation by the City in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, and a Web site.

Elements implemented directly by the City of Roseville include:

1. Offering tours of the City of Roseville facilities to elementary schools in the City.
2. Working with schools served by the City of Roseville to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, the City of Roseville will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants

B. The City of Roseville or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The City of Roseville's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Plan for at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. The City of Roseville will establish policies requiring water intensive commercial and industrial building permit applicants (new, modified or change-of-water-use) to conduct a water-use efficiency review and submit the findings in any required environmental documentation for the commercial or industrial project.

E. Within three years of agreement signing, the City of Roseville will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
      2. Consider separate landscape meter(s) when the combined service would require a 1½"+ meter.
      3. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

F. The City of Roseville will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within four years of agreement signing, the City of Roseville will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.

3. Begin educating all customers about the quantity-based rate structure.

B. The City of Roseville will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. The City of Roseville will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the City of Roseville's service area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts.
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
      3. Annual pre-irrigation season notification to Single Family Homes served by the City of Roseville of City-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. The City of Roseville's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within the City of Roseville's service area but should be convenient to the City of Roseville's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. The City of Roseville will:
   1. Establish a landscape task force with the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process.

3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by city staff time constraints, budget or lack of landscape knowledge/expertise.

D. The City of Roseville will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, the City of Roseville will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing the City of Roseville will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The City of Roseville's water conservation coordinator is Ed Kris and he is responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at the City of Roseville will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, the City of Roseville will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use.
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. The City of Roseville will annually:
   1. Offer, through direct mail or other communication, ULF rebates to all non-residential accounts that do not have ULF toilets, with special focus on those with the highest number of non ULF-toilets.

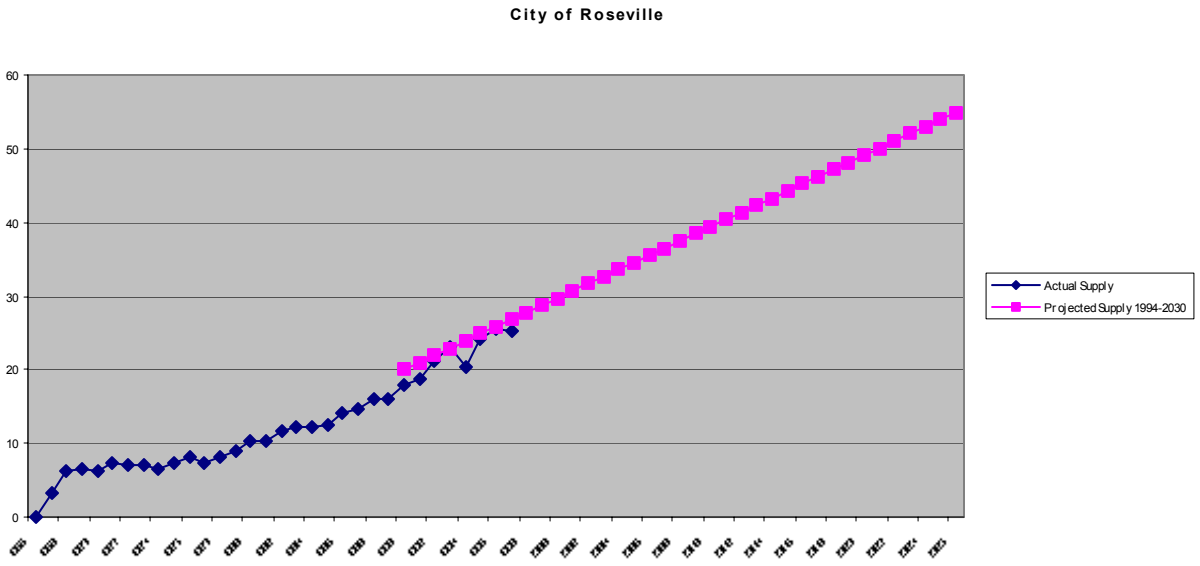
C. The retrofit program will:
   1. Offer an incentive to encourage that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

D. The City of Roseville will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZENS INVOLVEMENT PROGRAM

The City of Roseville will establish a citizens advisory committee to assist in the development of the City's Water Conservation Plan. The committee will represent all classes of water customers in the City: single and multi-family residences; commercial customers; industrial users; and irrigation accounts. Committee members maybe drawn from organizations such as the Roseville Coalition of Neighborhoods, the Chamber of Commerce, companies like Hewlett-Packard or NEC, and/or school districts.
The citizens' committee will meet with the City's Environmental Utilities Department in several workshops designed to educate members about several issues: a plan to retrofit

residences and business with water meters; making the transition from flat rates to metered rates for water service; and a proposed meter water rate structure.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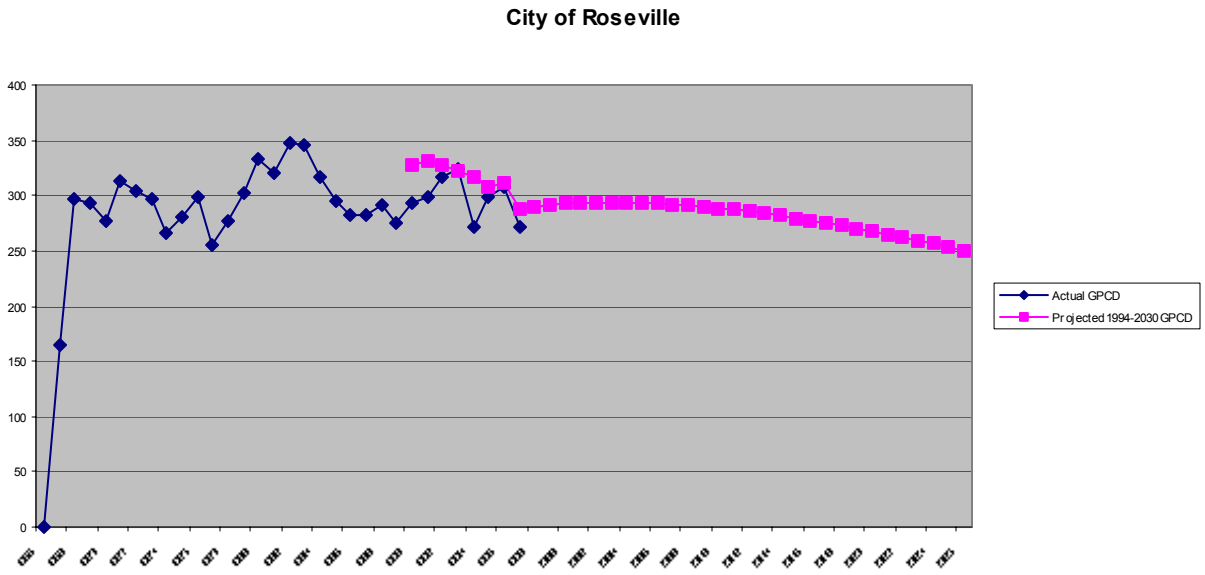
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Actual GPCD
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CITY OF SACRAMENTO
WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY AND MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, the City of Sacramento will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. The City of Sacramento will annually:
   1. Audit all SF and MF accounts that receive a meter, offer audits to all Institutional accounts which receive a meter and promote audits to unmetered SF and MF customers.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by the City of Sacramento or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, the City of Sacramento will:
   1. Provide plumbing retrofit kits to al least 2% of residential accounts and, where appropriate, install high quality low-flow showerheads and faucet aerators. The program has an installed retrofit device target of 20% of residential customers in ten years.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information at the check-out.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, the City of Sacramento will complete and maintain, in the unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; and leak history.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
      4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
      5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Within three years of agreement signing, the City of Sacramento will complete / maintain, in metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc., with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection/repair program focused on high probability leak areas identified by map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, the City of Sacramento will:
   1. Identify all non-residential unmetered customers (does not include MF customers);
   2. Provisionally identify any non-residential unmetered customers that may be very difficult and expensive to retrofit.
   3. Meter 100% of unmetered non-residential within five years.
   4. Consider installing separate landscape meters at non-residential unmetered customer locations.

B. Within 60 days of meter installation, the City of Sacramento will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on the City of Sacramento-provided water conservation programs and services.

C. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

Going as far as possible within the limits of its City Charter, the City of Sacramento would implement a voluntary meter retrofit program.

The goals of the program are to:

A. Complete 400-555 residential retrofits annually.

B. Build public understanding and acceptance of alternative water saving programs through education and broad-based community outreach.

C. Provide opportunity for each retrofitted service to voluntarily convert to a metered billing via a comparison billing process.

The program elements and participation procedures for the voluntary residential meter retrofit program are as follows:

A. City allocates $250,000-$400,000 for residential meter retrofit program fiscal year xx-xx..

B. Program is offered to all eligible single-family residential customers and accepted on a first come-first serve basis.

C. City crews install meter at no cost to customer.

D. Meter reading occurs monthly by city staff utilizing either two methods: AMR (Automated Meter Reading) or electronic meter books.

E. Water use consumption data is displayed on customers utility bill for each monthly read, represented in gallons per day.

F. After two years, customers will be provided a summary of water use data including a comparison of residential flat rates and residential metered rates. At that time the customer will be asked to choose:

Option A – which is to remain on the residential flat rate structure.
Option B – which is to change to a residential metered rate structure and bill according to actual water used. Once converted to residential meter rate structure, service to the property is bound to metered rate.

Regardless, customers will continue to receive water use consumption data on a monthly basis and if **Option A** is chosen customer will have the right to choose **Option B** at anytime.

The City will market its voluntary residential meter retrofit program in the following manner:

A. Printed material such as: program brochures; Q&A fact sheet; application forms; and efficient irrigation materials.

B. Paid advertisements in the following publications such as: Sacramento Bee Neighbors Sections; The Old City Guardian; Land Park News; East Sac News; Inside East Sac; Natomas Journal; and the Pocket News.

C. Use of city resources to provide program information in: utility bill inserts; billboard on Capitol City Freeway; message on utility bills; City Hall display; and on the City Web Site Home Page.

D. Displays at community events such as: City services nights and the Thursday night market.

E. Develop targeted mailing to: Neighborhood Association Newsletters; Utility Department database; and City neighborhood associations who received Water Forum presentations.

F. Develop homeowners' packets for: Newcomers to Sacramento and Chamber of Commerce Offices.

Potential incentives that might be offered by the City to encourage residents to participate in the voluntary residential meter retrofit program include:

A. Indoor / outdoor audits for single family and multi-family residences.

B. Rebates for
   1. ULF toilets
   2. Indoor fixture replacement
   3. Indoor appliance replacements
   4. Landscape plant material
   5. Landscape irrigation equipment

C. Financial savings such as a reduction in sewer fees based upon metered water use.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, the City of Sacramento will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers/landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped the City of Sacramento facilities, phased in over the five years following agreement signing.

B. The City of Sacramento will annually:
   1. Directly contact metered Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water audits.
   2. Provide landscape audits to all CII and Irrigation accounts at time of metering.
      3. Survey past program participants to determine if audit recommendations were implemented.
      4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The City of Sacramento's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide audits to 12% of metered greater than 1acre CII and Irrigation accounts annually. Audit 33 schools each year and provide financial assistance to repair their irrigation systems. Spend $30,000 on irrigation system improvements at each of five City parks annually for 20 years.

D. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. The City of Sacramento will enact and implement a landscape water efficiency ordinance pursuant to the "Water Conservation in Landscaping Act" (California Code of Regulations, Chapter 2.7), that is at least as effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490-495.

B. The City of Sacramento will:
   1. Participate in and support a regional landscape task force established by the Water Forum Successor Effort. The Taskforce will include other local governments and water purveyors, the building and green industries and environmental / public interest groups. It will review the existing local ordinances to determine if they are at least as effective as the Model Water Efficient Landscape Ordinance. The Taskforce may suggest revisions to the existing landscape ordinances.
   2. As part of the Taskforce, participate in a review of the implementation of the local ordinances, including builder compliance, landscape plan review, final inspection/certification process and actual water use to determine their effectiveness.
   3. As part of the Taskforce, determine if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

C. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

A. Within three years of agreement signing, the City of Sacramento program will include:

1. A combination of a City of Sacramento specific program in conjunction with limited participation by the City of Sacramento in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time limited participation in this program is based upon an annual contribution by the City of Sacramento to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

2. The City of Sacramento agrees to spend the difference between the annual per connection SAWWA contribution and their flat annual contribution to SAWWA on an enhanced within-service-area implementation of elements a-f listed below:
   a. Using utility bill inserts or messages on payment notices.
   b. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.
   c. Providing public speakers to community groups and the media.
   d. Using paid and public service advertising for a water conservation campaign.
   e. Providing public information to promote other water efficient practices.
   f. Coordinating with other governmental agencies, industry groups and public interest groups.

BMP 8 SCHOOL EDUCATION

A. Within three years of agreement signing, the City of Sacramento program will include:

1. A combination of a City of Sacramento specific program in conjunction with limited participation by the City of Sacramento in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time limited participation in this program is based upon an annual contribution by a the City of Sacramento to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, promotional materials, community events/fairs, and a Web site.

2. The City of Sacramento agrees to spend the difference between the annual per connection SAWWA contribution and their flat annual contribution to SAWWA on an enhanced within-service-area implementation of elements a-d listed below:
   a. Offering tours of the City of Sacramento facilities to elementary schools in the City.
   b. Working with schools served by the City of Sacramento to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

c. Working with the school districts in the City's service area to provide educational materials promoting efficient water use to one or more grade levels on an annual basis.
d. Working with school districts in the City's service area to offer instructional materials and assistance to all teachers of the targeted grade level in order to promote efficient water use.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, the City of Sacramento will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. The City of Sacramento or their representative will annually:
   1. Provide audits to all newly metered CI accounts.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The City of Sacramento's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. The City of Sacramento will establish policies requiring water intensive commercial and industrial building permit applicants (new, modified or change-of-water-use) to conduct a water-use efficiency review and submit the findings in any required environmental documentation for the commercial or industrial project.

E. Within three years of agreement signing, the City of Sacramento will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Consider separate landscape water meter(s) when the combined service require a 1½" meter.
   3. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

F. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, the City of Sacramento will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type, except SF and MF accounts.
   3. Begin educating all customers about the quantity-based rate structure.
      4. Provide metered customers with monthly or bi-monthly information that shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. The City of Sacramento will, within ten years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. The City of Sacramento will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing SF accounts in the City's service area on an annual basis.
   2. Audit all SF/MF accounts that receive a meter and promote audits to unmetered SF/MF customers.
      3. Annual pre-irrigation season notification to Single Family Homes served by the City of City provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. The City of Sacramento's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within the City of Sacramento's service area but should be convenient to the City of Sacramento's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
      3. Annual cooperative education and marketing campaigns with local nurseries.
      4. Annual irrigation season landscape media campaign.
      5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. The City of Sacramento will:
   1. Participate in and support a regional landscape task force established by the Water Forum Successor Effort. The Taskforce will include other local governments and water purveyors, the building and green industries and environmental / public interest groups.

It will review the existing local ordinances to determine if they are at least as effective as the Model Water Efficient Landscape Ordinance: The Taskforce may suggest revisions to the existing landscape ordinances.

2. As part of the Taskforce, participate in a review of the implementation of local ordinances, including builder compliance, landscape plan review, final inspection/certification process and actual water use to determine their effectiveness.
3. As part of the Taskforce, determine if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

F. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, the City of Sacramento will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing the City of Sacramento will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The City of Sacramento's water conservation coordinator is Elizabeth Brenner and she is responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at the City of Sacramento will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, the City of Sacramento will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use.
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. The City of Sacramento will annually provide $75 ULF rebates vouchers to newly metered non-residential accounts for each 3.5+ gpf toilet.

C. The retrofit program will:
   1. Offer the necessary incentive to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts which install ULF toilets.

D. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR RESIDENTIAL CUSTOMERS

Under the Water Forum Agreement this is a voluntary program. The City of Sacramento will annually provide a $75 ULF rebate voucher to each Single-Family and Multi-Family Unit that is audited.

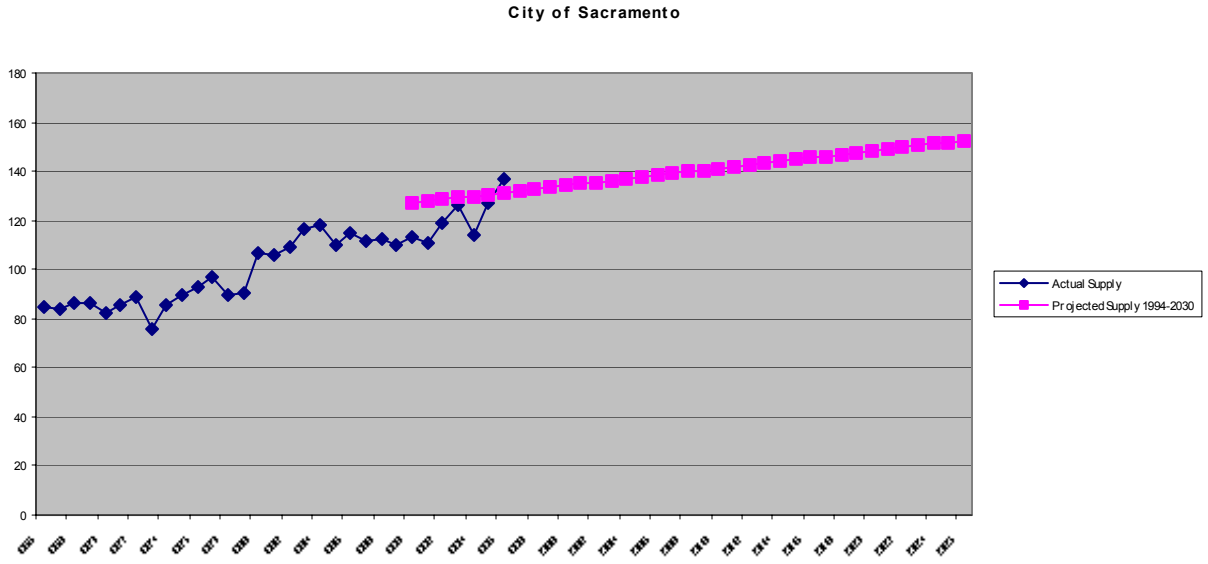
CITIZEN INVOLVEMENT PROGRAM

The City of Sacramento currently has two well-established neighborhood based organizations that would be beneficial for community involvement in terms of both public participation and consumer education. The Neighborhood Association Advisory Group (NAAG) and Sacramento County Alliance of Neighborhoods (SCAN) each meet monthly and have been approached many times by the City of Sacramento Department of Utilities to comment on issues not just relevant to water, but to sewer and drainage issues as well.

The City is committed to fostering this relationship that provides a vital link for local government and neighborhoods to communicate on a regular basis. Annual presentations will be given, and if mutually agreed upon, perhaps the development of a sub-committee would be formed to focus on water management issues, to include, but not limited to: Conservation, meters, public acceptance, rate structures, water supply issues, operation and maintenance costs and treatment procedures.

The City will also continue to communicate with all 72 Neighborhood Associations at least once a year and offer to provide an annual update on the City's Water Conservation Programs, seek community input prior to the development of any new water conservation program or implementation of BMPs, provide written articles for inclusion in Neighborhood Newsletters and monthly publications and offer to provide public workshops on relevant issues of concern.

Also, the Sacramento City Council will receive annual progress reports summarizing the Department of Utilities' efforts to encourage water wise management programs that are efficient, cost-effective and affordable for our community.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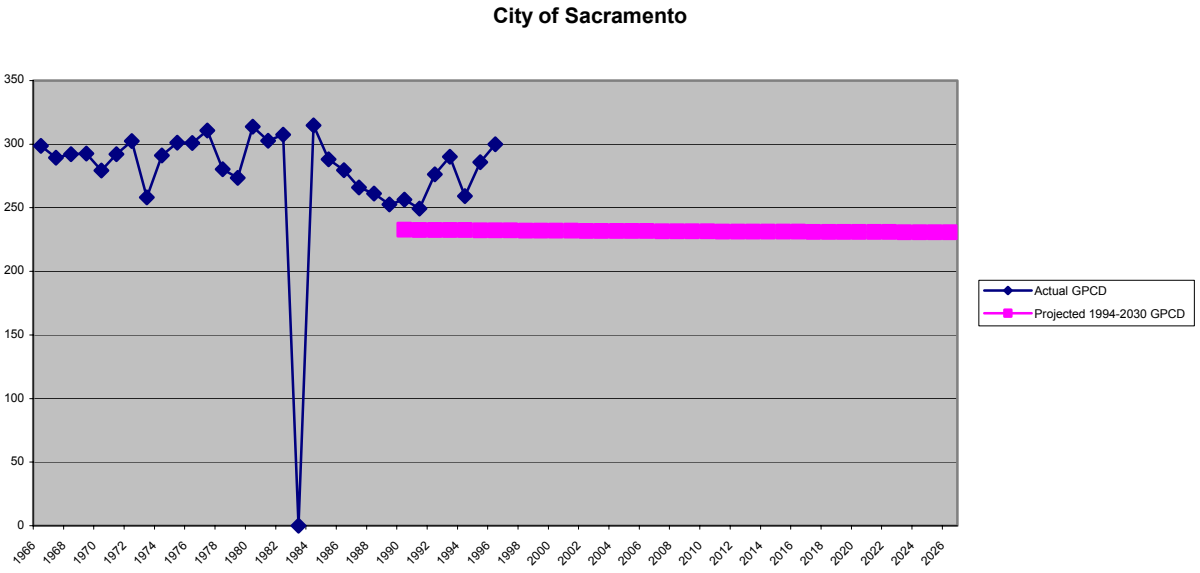
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COUNTY OF SACRAMENTO
WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, the County of Sacramento will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. The County of Sacramento will annually:
   1. Actively market an interior and exterior, including landscape, water audit program which targets customers when they are most likely to be receptive to participation and which continues to target the top 20% water users.
      a. During conversion to complete service area meter reading, offer water use reviews to all SF, MF and Institutional customers which receive a meter and continue to offer these reviews to customers whose meter readings indicate they are in the top 20% of water users.
      b. After complete service area meter reading, continue to actively market the water audit program to the top 20% of water users.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by the County of Sacramento or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.

D. The County of Sacramento will be fully implementing the program described above no later that the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, the County of Sacramento will:
   1. Have SAWWA offer to all customers with home built between 1987 and 1992 retrofit kits that include high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. The County of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, the County of Sacramento will complete and maintain, in the unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; and leak history.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Within three years of agreement signing, the County of Sacramento will complete and maintain, in the metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc.; with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection/repair program focused on high probability leak areas identified by map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. The County of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, the County of Sacramento will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customer accounts that may be very difficult and expensive to retrofit.
   3. Meter unmetered non-residential accounts so that within two years all are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within ten years of meter installation, the County of Sacramento will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on the County-provided water conservation programs and services.

C. The County of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP4 RESIDENTIAL METER RETROFIT

A. The agreement related to the implementation of a residential meter retrofit program is described in the Water Forum Agreement, Section Three, V., 3., C., 1. b, page XXX.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, the County of Sacramento will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers/landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR Landscape Water Management Handbook, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped the County of Sacramento facilities, phased in over the five years following agreement signing.

B. The County of Sacramento will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The County of Sacramento's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide incentives to achieve at least 12% annual participation of targeted customers.

D. The County of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. The County of Sacramento will enact and implement a landscape water efficiency ordinance pursuant to the "Water Conservation in Landscaping Act" (California Code of Regulations, Chapter 2.7), that is at least as effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490-495. The County of Sacramento will:
   1. Participate in and support a regional landscape task force established by the Forum Successor Effort. The Taskforce will include other local governments and water purveyors, the building and green industries and environmental / public interest groups. It will review the existing local ordinances to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance. The Taskforce may suggest revisions to the existing landscape ordinances.
   2. As part of the Taskforce, participate in a review of the implementation of the local ordinances, including builder compliance, landscape plan review, final inspection/certification process and actual water use to determine their effectiveness.
   3. As part of the Taskforce, determine if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

B. The County of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

A. Within three years of agreement signing, the County of Sacramento program will include:

A combination of a County specific program in conjunction with full participation by the County in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

B. Elements implemented directly by the County of Sacramento will include:
   1. Using utility bill inserts or messages on payment notices.
   2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

BMP 8 SCHOOL EDUCATION

A. Within three years of agreement signing, the County of Sacramento program will include:
A combination of a County specific program in conjunction with full participation by the County in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, and a Web site.

B. Elements implemented directly by the County of Sacramento include:
   1. Offering tours of County facilities to elementary schools in the County's service area.
   2. Working with schools served by the County to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, the County of Sacramento will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. The County of Sacramento or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, wastewater, energy, on-site treatment, etc.).

a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high-energy use, etc.).
b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, or high-energy use, etc.

2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
3. Survey past program participants to determine if audit recommendations were implemented.

C. The County of Sacramento's water-use review program will:
1. Provide audits conducted by trained commercial/industrial water auditors.
2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of customers.
3. Contact past program participants for a follow-up audit at least every fifth year.

D. The County of Sacramento will establish policies requiring water intensive commercial and industrial building permit applicants (new, modified or change-of-water-use) to conduct a water-use efficiency review and submit the findings in required environmental documentation for the commercial or industrial project.

E. Within three years of agreement signing, the County of Sacramento will:
1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
2. Consider separate landscape water meter(s) when combined service would require a 1½" meter.
3. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

F. The County of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, the County of Sacramento will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. The County of Sacramento will, within ten years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. The County of Sacramento will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the County of Sacramento's service area on an annual basis.
   2. Landscape audit program offered to all SF and MF accounts that receive a meter or interior audit. and
      3. Annual pre-irrigation season notification to Single Family Homes served by the County of Sacramento of the County of Sacramento-provided landscape assistance.

B. The County of Sacramento's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within the County of Sacramento's service area but should be convenient to the County of Sacramento's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. The County of Sacramento will:
   1. Participate in and support a regional landscape task force established by the Forum Successor Effort. The Taskforce will include other local governments and water purveyors, the building and green industries and environmental / public interest groups.

It will review the existing local ordinances to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance. The Taskforce may suggest revisions to the existing landscape ordinances.

2. As part of the Taskforce, participate in a review of the implementation of the local ordinances, including builder compliance, landscape plan review, final inspection/certification process and actual water use to determine their effectiveness.
3. As part of the Taskforce, determine if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

D. The County of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, the County of Sacramento will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required. and
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available. and
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing the County of Sacramento will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The County of Sacramento's water conservation coordinator is XXXXXXXX and she/he is responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at the County of Sacramento will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, the County of Sacramento will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. The County of Sacramento will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts, which do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

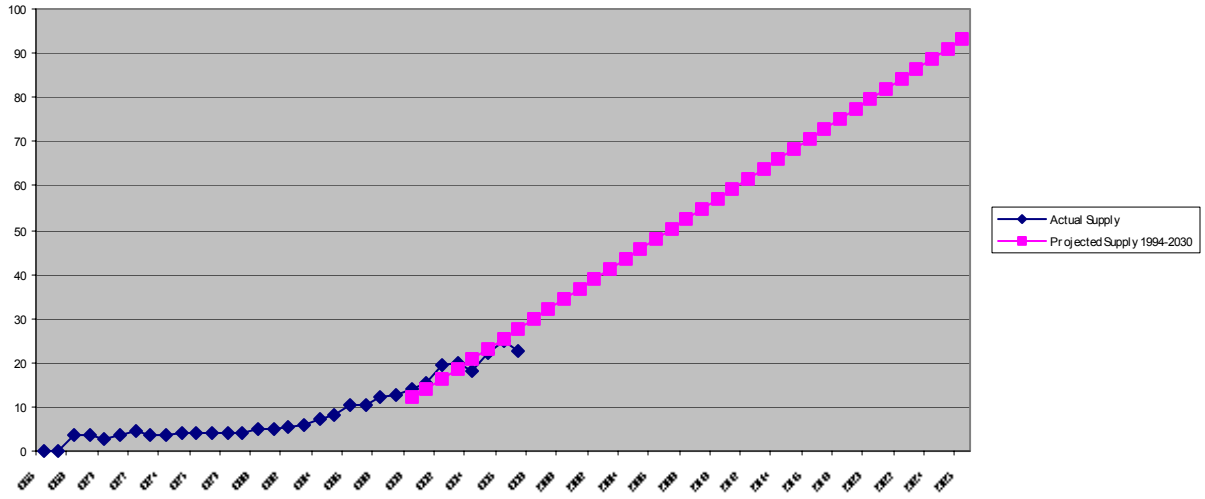
C. The retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents. and
   4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

D. The County of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZEN INVOLVEMENT PROGRAM

County will invite the existing Community Planning Advisory Committees to designate a representative(s) to provide input to the proposed residential metering implementation plan. It is intended that this informal group will serve to provide valuable citizens' input on the overall approach to implementation of residential metering.

County of Sacramento



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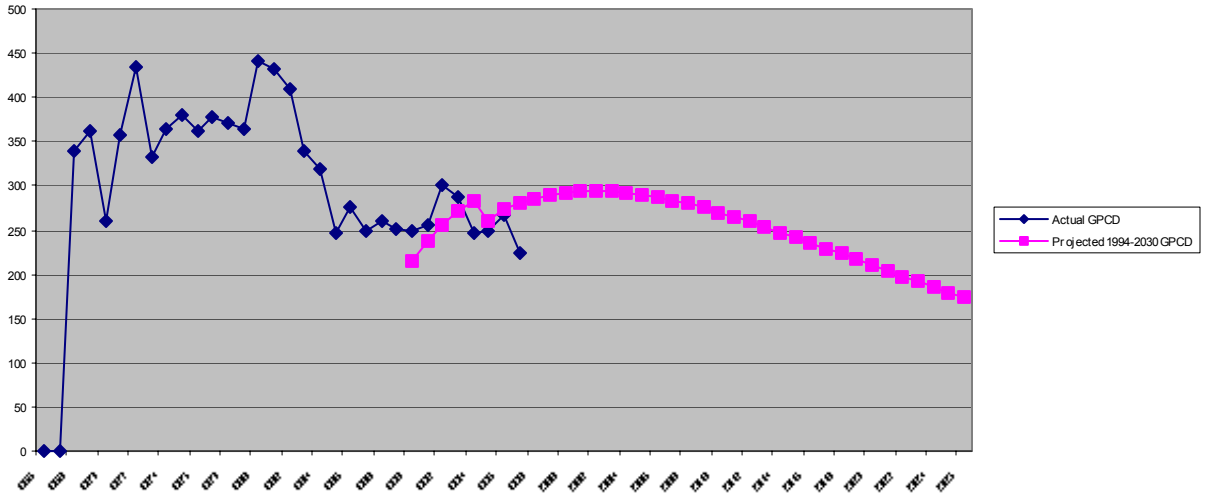


DEL PASO MANOR WATER DISTRICT
WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Del Paso Manor Water District will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Del Paso Manor Water District will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits).
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by Del Paso Manor Water District or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. Del Paso Manor Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, Del Paso Manor Water District will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Del Paso Manor Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, Del Paso Manor Water District will complete and maintain, in the unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; leak history; and historic data.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Within three years of agreement signing, Del Paso Manor Water District will complete and maintain, in the metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc., with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. Del Paso Manor Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, Del Paso Manor Water District will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers that may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10% of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90% of non-residential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, Del Paso Manor Water District will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on Del Paso Manor Water District-provided water conservation programs and services.

C. Del Paso Manor Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

It is recognized that Del Paso Manor Water District is a relatively smaller water purveyor currently relying totally on groundwater and will not realize immediate water supply benefits from participating in the Water Forum Agreement. Therefore until such time as Del Paso Manor Water District needs discretionary approvals for new or expanded surface water supplies, an active voluntary meter retrofit with incentives is acceptable. Nothing in the Water Forum Agreement prevents purveyors from deciding to undertake a more rapid meter retrofit program.

At such time as Del Paso Manor Water District needs discretionary approvals for new or expanded surface water supplies it agrees to annually retrofit at least 3.3% - 5% of the total number of unmetered residential connections and read and bill as set forth in Appendix D of the Water Forum Agreement.

If in the future Del Paso Manor Water District receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Del Paso Manor Water District will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped Del Paso Manor Water District facilities, phased in over the five years following agreement signing.

B. Del Paso Manor Water District will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The Del Paso Manor Water District's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide incentives, such as the following, to achieve at least 12% annual participation of targeted customers:
      a. Billing adjustments or bill rebates targeted to irrigation system repair or improvement.
      b. Grants, etc. to encourage landscape design and irrigation system improvements.
      c. ET (evapotranspiration) based tiered rate structure.

D. Del Paso Manor Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Del Paso Manor Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by county staff time constraints, budget or lack of landscape knowledge/expertise.

B. Del Paso Manor Water District will publicly support the county's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

C. Del Paso Manor Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, the Del Paso Manor Water District program will include:

A combination of a Del Paso Manor Water District specific program in conjunction with full participation by the Del Paso Manor Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by the Del Paso Manor Water District will include:
   1. Using utility bill inserts or messages on payment notices.
   2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, the Del Paso Manor Water District program will include:

A combination of a Del Paso Manor Water District specific program in conjunction with full participation by the Del Paso Manor Water District in the Sacramento Area Water

Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This includes programs such as: school outreach, promotional materials, community events and fairs, and a Web site.

Elements implemented directly by the Del Paso Manor Water District include:

1. Offering tours of Del Paso Manor Water District facilities to elementary schools in the Del Paso Manor Water District's service area.
2. Working with schools served by the Del Paso Manor Water District to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Del Paso Manor Water District will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Del Paso Manor Water District or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The Del Paso Manor Water District's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Within three years of agreement signing, Del Paso Manor Water District will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.

2. Coordinate with the county during the permitting of new, modified or change-of-water-use CI projects within the Del Paso Manor Water District's service area to ensure that the submitted findings are reviewed by the Del Paso Manor Water District to identify incentive program opportunities.
3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Del Paso Manor Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, Del Paso Manor Water District will:
1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
2. Establish quantity-based rates for each account type.
3. Begin educating all customers about the quantity-based rate structure.
4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. Del Paso Manor Water District will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Del Paso Manor Water District will implement a program that includes:
1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the Del Paso Manor Water District's service area on an annual basis.
2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts:
   a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
   b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
3. Annual pre-irrigation season notification to Single Family Homes served by the Del Paso Manor Water District of Del Paso Manor Water District-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Del Paso Manor Water District's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other Del Paso Manor Water District, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within Del Paso Manor Water District's service area but should be convenient to the Del Paso Manor Water District's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
      5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. Del Paso Manor Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
      3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

D. Del Paso Manor Water District will publicly support the county's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Del Paso Manor Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, Del Paso Manor Water District will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
      4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing Del Paso Manor Water District will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The Water Conservation Plan and Annual Update shall contain the name of Del Paso Manor Water District's water conservation coordinator, who will be responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at Del Paso Manor Water District will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

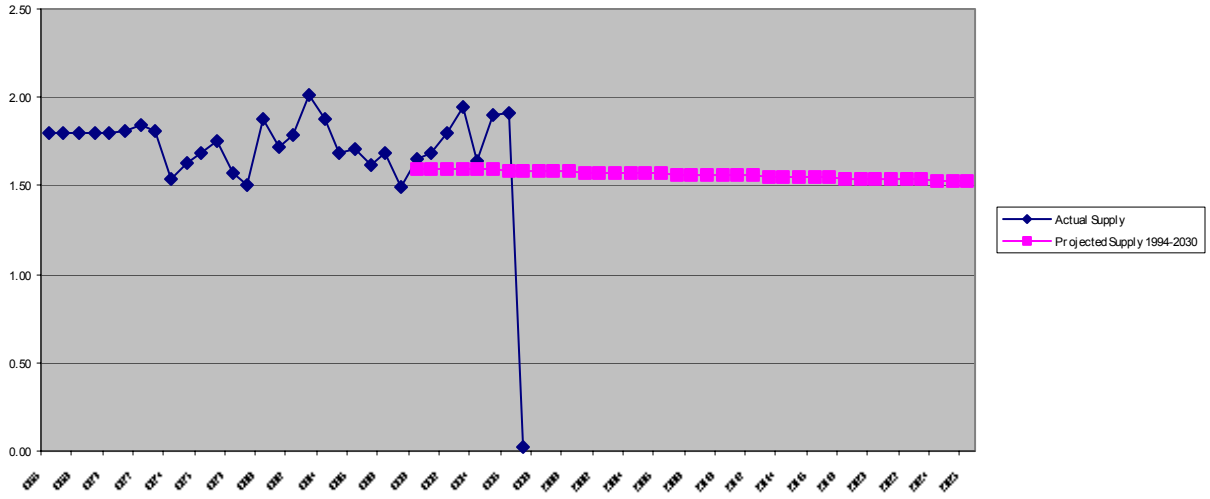
A. Within three years of agreement signing, Del Paso Manor Water District will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. Del Paso Manor Water District will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

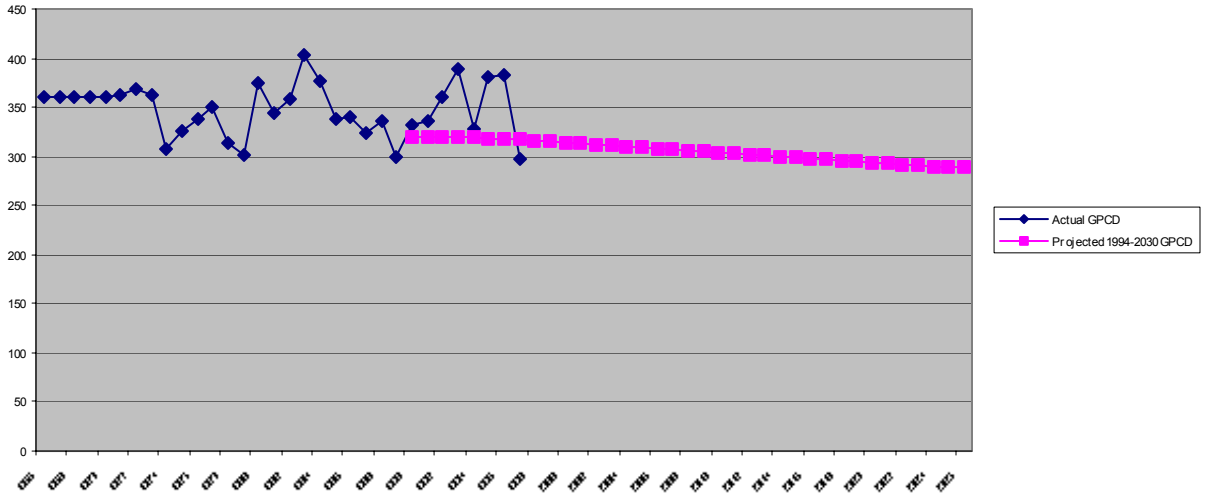
C. The retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

D. Del Paso Manor Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

Del Paso Manor WD



Del Paso Manor WD



FAIR OAKS WATER DISTRICT
WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Fair Oaks Water District will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Fair Oaks Water District will annually:
   1. Provide audits to all customers receiving a meter.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by purveyor or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.

D. Fair Oaks Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. The ongoing program will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the purveyor office.
   3. Work with the local “Welcome Wagon” or equivalent organization to provide water conservation materials to new residents.

4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Fair Oaks Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Fair Oaks Water District will complete and maintain, in the unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; and leak history.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement. Fair Oaks Water District, thus far, has replaced or abandoned 18-miles of steel pipe. It is estimated that by the year 2010, all steel pipe, that is not cement-mortared lined, will be replaced or abandoned. The amount of remaining pipe to replace is estimated at 10-miles.

B. Fair Oaks Water District will complete and maintain, in the metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of type, size and age of pipes; pressures; leak history.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection/repair program focused on high probability leak areas identified by map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. Fair Oaks Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing Fair Oaks Water District will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers that may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 20 percent of unmetered non-residential accounts yearly so that within five years of becoming a signatory 85-90 percent of non-residential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, Fair Oaks Water District will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on purveyor-provided water conservation programs and services.

C. Fair Oaks Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

It is recognized that CVPIA meter retrofit provisions are outside the scope of the *Water Forum Agreement* and that they require faster implementation than what is included in the *Water Forum Agreement*. The Fair Oaks Water District receives CVP water and agrees that if for any reason any or all of its service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later than the start of the fourth year afer the *Water Forum Agreement* is signed they would annually retrofit at least 3.3%-5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement.*

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Fair Oaks Water District will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management*

Handbook, and provided that information to the customers with one acre or larger landscapes.

5. Begin installation of climate appropriate water efficient landscaping at landscaped purveyor facilities, phased in over the five years following agreement signing.

B. Fair Oaks Water District will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide incentives to achieve at least 12 % annual participation of targeted customers.

D. Fair Oaks Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Fair Oaks Water District, in cooperation with Sacramento County, will:
   1. Participate in a landscape task force with other local governments, water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process, to ensure its effectiveness.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

B. Fair Oaks Water District will publicly support the county's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

C. Fair Oaks Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, Fair Oaks Water District's ongoing program will include a combination of a Fair Oaks Water District specific program in conjunction with full participation by Fair Oaks Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by Fair Oaks Water District include:

1. Using utility bill inserts or messages on payment notices.
2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, Fair Oaks Water District's ongoing program will include a combination of a Fair Oaks Water District specific program in conjunction with full participation by Fair Oaks Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, and a Web site.

Elements implemented directly by Fair Oaks Water District include:

1. Offering tours of Fair Oaks Water District facilities to elementary schools in the Fair Oaks Water District service area.
2. Working with schools served by Fair Oaks Water District to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Fair Oaks Water District will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Fair Oaks Water District will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. Fair Oaks Water District's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Fair Oaks Water District will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Coordinate with the county during the permitting of new, modified or change-of-water-use CI projects within the purveyor's service area to ensure that the submitted findings are reviewed by the purveyor to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
      4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Fair Oaks Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, Fair Oaks Water District will:
      1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
      2. Establish quantity-based rates for each account type.
      3. Begin educating all customers about the quantity-based rate structure.

4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. Fair Oaks Water District will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Fair Oaks Water District will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the purveyor's service area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts.
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
      3. Annual pre-irrigation season notification to Single Family Homes served by the purveyor of purveyor-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Fair Oaks Water District's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within a purveyor's service area but should be convenient to the purveyor's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/sprinkler shut-offs.

C. Fair Oaks Water District will publicly support the county's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

D. Fair Oaks Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, Fair Oaks Water District will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing Fair Oaks Water District will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff respond to reports of water waste in a timely manner.
   3. Have water waste patrols at least during water shortages.
   4. Cooperate with the city or county in their program enforcement efforts.

E. Within three years of agreement signing unmetered areas of Fair Oaks Water District will:
   1. Have water waste patrols (including some pre-dawn and post-sunset) during the irrigation season.

BMP 14 WATER CONSERVATION COORDINATOR

The Fair Oaks Water District's Water Conservation Coordinator, xxxxxxxxxxxx, will be responsible for preparing, implementing and monitoring the Plan.

If the AWWA Certified Water Conservation Practitioner Program becomes an industry standard, within three years of agreement signing, at least one staff member at Fair Oaks Water District will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Fair Oaks Water District will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. Fair Oaks Water District will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The retrofit program will:
   1. Offer the necessary incentive to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

D. Fair Oaks Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZENS INVOLVEMENT PROGRAM

In the interest of securing popular support for the metering program, the District involves those directly affected by the metering policies. Prior to installing meters, District staff notifies customers of the impending work and informs them of the benefits of meters. Often customers are asked if they would like to modify their service size at the time of metering. The general public is also kept informed on many aspects of the District's metering program, through bill inserts and mass distributed newsletters and pamphlets.

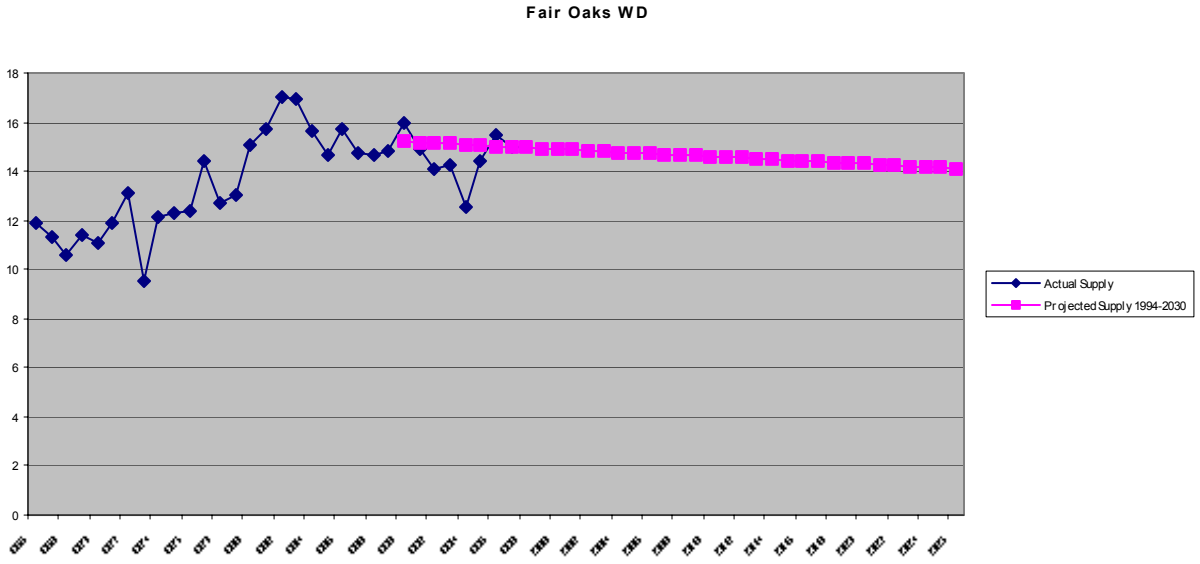
In order to further promote implementation of water conservation programs, particularly with regard to metering and new commodity rates, the District will generally seek to increase customer involvement. To accomplish involvement goals, the District will continue to use the following practices:

A. From the customer base, a committee or team of individuals will be selected to review programs and provide some input and support, serving as a sounding board.

B. The committee representatives from the following groups will include, but not be limited to:
    1. Member of the Fair Oaks Community Advisory Council.
    2. Officer of the Fair Oaks Chamber of Commerce.
    3. Unmetered resident of the District who has volunteered for a meter.
    4. Unmetered resident of the District who has not yet volunteered for a meter.
    5. Resident of the District who currently has a meter.

C. Following review and input by the committee the programs will be submitted to the Board of Directors for approval.

D. The process will be documented and the programs promoted in the District's newsletter, Water Currents.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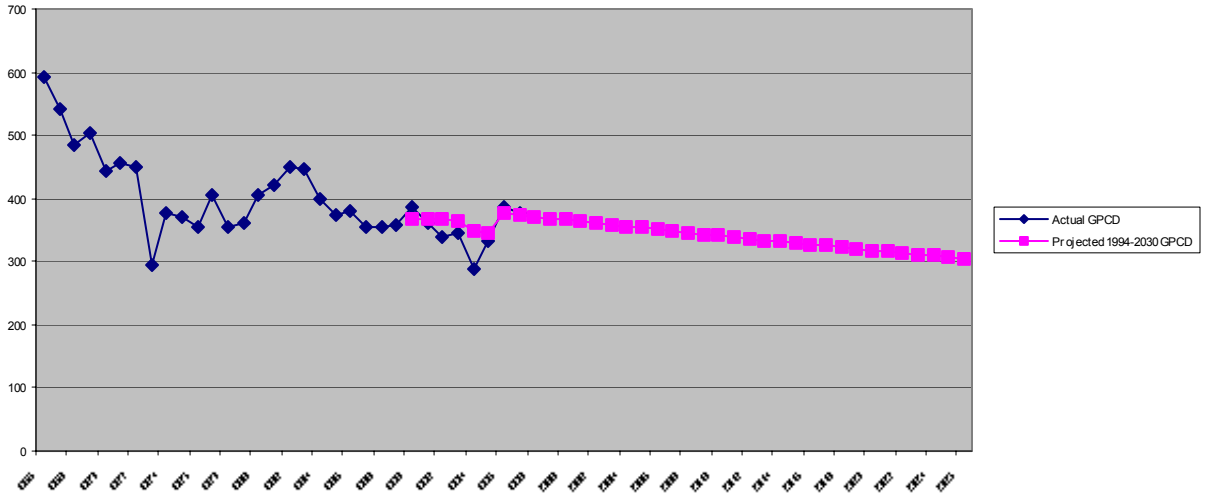
Fair Oaks WD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FLORIN COUNTY WATER DISTRICT
WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Florin County Water District will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Florin County Water District will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits):
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use and, when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by purveyor or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. Florin County Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. The ongoing program will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the purveyor office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Florin County Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Florin County Water District will complete and be maintaining, for unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; and leak history.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Florin County Water District will complete and be maintaining, for metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc., with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. Florin County Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. The ongoing program will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers that may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10 percent of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90% of non-residential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, Florin County Water District will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on purveyor-provided water conservation programs and services.

C. Florin County Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

It is recognized that Florin County Water District is a relatively smaller water purveyor currently relying totally on groundwater and will not realize immediate water supply benefits from participating in the Water Forum Agreement. Therefore until such time as Florin County Water District needs discretionary approvals for new or expanded surface water supplies, an active voluntary meter retrofit with incentives is acceptable. Nothing in the Water Forum Agreement prevents purveyors from deciding to undertake a more rapid meter retrofit program.

At such time as Florin County Water District needs discretionary approvals for new or expanded surface water supplies it agrees to annually retrofit at least 3.3%-5% of the total number of unmetered residential connections and read and bill as set forth in Appendix D of the Water Forum Agreement.

If in the future Florin County Water District receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Florin County Water District will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped purveyor facilities, phased in over the five years following agreement signing.

B. Florin County Water District will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide incentives to achieve at least 12% annual participation of targeted customers.

D. Florin County Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Florin County Water District, in cooperation with Sacramento County, will:
   1. Participate in a landscape task force with other local governments, water Fair Oaks Water District, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process, to ensure its effectiveness.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

B. Florin County Water District will publicly support the county or city's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

C. Florin County Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, a Florin County Water District's ongoing program will include:

A combination of a Florin County Water District specific program in conjunction with limited participation by the Florin County Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and outreach.

The purveyor agrees to spend the difference between the annual per connection SAWWA contribution and the Florin County Water District's flat annual contribution to SAWWA on an enhanced within-service-area implementation of elements 3-6 listed below:

1. Using utility bill inserts or messages on payment notices.
2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.
3. Providing public speakers to community groups and the media.
4. Using paid and public service advertising for a water conservation campaign.
5. Providing public information to promote other water efficient practices.

6. Coordinating with other governmental agencies, industry groups and public interest groups.

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, a Florin County Water District's ongoing program will include:

A combination of a Florin County Water District specific program in conjunction with limited participation by the Florin County Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, a Web site, and allied organizations outreach.

Florin County Water District agrees to spend the difference between the annual per connection SAWWA contribution and the Florin County Water District's flat annual contribution to SAWWA on an enhanced within-service-area implementation of elements 3-4 listed below:

1. Offering tours of purveyor facilities to elementary schools in the purveyor's service area.
2. Working with schools served by the purveyor to promote school audits, reduced water bills, and innovative funding for equipment upgrades.
3. Working with the school districts in the water purveyor's service area to provide educational materials promoting efficient water use to one or more grade levels on an annual basis.
4. Working with school districts in the water purveyor's service area to offer instructional materials and assistance to all teachers of the targeted grade level in order to promote efficient water use. This program is considered successful if a high percent of the teachers of the targeted grade level(s) participate in the training and use the materials in the classroom.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Florin County Water District will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Florin County Water District or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.):
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-

use factors (high water use, high wastewater flows, poor quality wastewater, high energy use, etc.).

   b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.

2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
3. Survey past program participants to determine if audit recommendations were implemented.

C. Florin County Water District water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Florin County Water District will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the purveyor's service area to ensure that the submitted findings are reviewed by the purveyor to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
   4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Florin County Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, Florin County Water District will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. Florin County Water District will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Florin County Water District will implement a program that includes, at a minimum:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the purveyor's service area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts:
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
   3. Annual pre-irrigation season notification to Single Family Homes served by the purveyor of purveyor-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. A signatory's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within a purveyor's service area but should be convenient to the purveyor's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/sprinkler shut-offs.

C. Florin County Water District, in cooperation with Sacramento County, will:
   1. Participate in a landscape task force with other local governments, water Fair Oaks Water District, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Review, in cooperation with landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process, to ensure its effectiveness.
   3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

D. Florin County Water District will publicly support the county's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Florin County Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, Florin County Water District will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include, at a minimum:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other suggested measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing Florin County Water District will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The Florin County Water District Water Conservation Plan shall contain the name of the purveyor's water conservation coordinator, who will be responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at Florin County Water District will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Florin County Water District will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. Florin County Water District will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

D. Florin County Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

NORTHRIDGE WATER DISTRICT
WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Northridge Water District's will:
   1. Contract for trained water auditors.
   2. Prepare and make available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepare and make available to customers seasonal climate-appropriate irrigation information.
   4. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Northridge Water District's contractor will annually:
   1. Offer audits to all Single Family, Multi Family and Institutional customers beginning metered billing.
   2. Offer, through bill inserts or other means, water-use reviews to all customers receiving a meter.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program contractor will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by contractor or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. Northridge Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, Northridge Water District will:
   1. Provide high quality low-flow showerheads, faucet aerators and toilet leak detection tablets, as appropriate at time of audit, to customers without efficient fixtures.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.

3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Northridge Water District and its contractor will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, Northridge Water District will complete and be maintaining:
   1. An annually updated "system map" of type, size and age of pipes; pressures; leak history; and historic data.
   2. Installation, where appropriate, of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program when Northridge Water District is completely metered.

B. Northridge Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, Northridge Water District will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers whom may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 20 percent of unmetered non-residential accounts yearly so that within five years of becoming a signatory 85-90 percent of non-residential customers are metered.
      4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, Northridge Water District will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on Northridge Water District-provided water conservation programs and services.

C. Northridge Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

In the first two years after the *Water Forum Agreement* is signed, the Northridge Water District would plan for, budget, and prepare the public for a residential meter retrofit program. Beginning no later that the start of the fourth year after the *Water Forum Agreement* is signed, the Northridge Water District would annually retrofit at least 3.3-5% of their total number of unmetered residential connections as of the date of the *Water Forum Agreement*.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Northridge Water District's will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Contract for certified and/or trained landscape water auditors.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped Northridge Water District facilities, phased in over the five years following agreement signing.

B. Northridge Water District's contractor will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The Northridge Water District landscape water-use review program contractor will:

1. Provide audits conducted by certified landscape water auditors.
2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
4. Provide program participants with regular reminders to adjust irrigation timer settings.
5. Provide incentives to achieve at least 12 percent annual participation of targeted customers.

D. Northridge Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Northridge Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

B. Northridge Water District will publicly support the county's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

C. Northridge Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

A. Within three years of agreement signing, Northridge Water District's program will include:
   1. Combination of a Northridge Water District specific program in conjunction with full participation by the Northridge Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

2. Elements implemented directly by the Northridge Water District will include:
   a. Using utility bill inserts or messages on payment notices.
   b. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

BMP 8 SCHOOL EDUCATION

A. Within three years of agreement signing, Northridge Water District's program will include:
   1. A combination of a Northridge Water District specific program in conjunction with full participation by the Northridge Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, a Web site, and allied organizations outreach.
   2. Elements implemented directly by the Northridge Water District include:
      a. Offering tours of Northridge Water District xeriscape gardens to elementary schools in the Northridge Water District service area.
      b. Working with schools served by the Northridge Water District to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Northridge Water District's will have:
   1. Contracted for trained commercial/industrial water auditors.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Northridge Water District's contractor will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, wastewater, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high-energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, and high-energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The Northridge Water District water-use review program contractor will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Within three years of agreement signing, Northridge Water District will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the Northridge Water District's service area to ensure that the submitted findings are reviewed by the Northridge Water District to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
   4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Northridge Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, Northridge Water District will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in ccf (hundred cubic feet), and what charges would have been if based on actual use.

B. Northridge Water District will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Northridge Water District's contractor will implement a program, which includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the Northridge Water District's service area on an annual basis.

2. Landscape audit/water-use survey program actively marketed to all SF customers at the beginning of metered billing.
3. Annual pre-irrigation season notification to Single Family Homes served by the Northridge Water District of Northridge Water District-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Northridge Water District's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within Northridge Water District's service area but should be convenient to the Northridge Water District's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. Northridge Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance as pertains to single family homes, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including builder compliance, landscape plan review, and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

D. Northridge Water District will publicly support the county's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Northridge Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Northridge Water District has a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, will be considered and may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibition enforcement mechanisms are a graduated series of responses, which include: personal notification, monetary fees, and service termination.

D. Within three years of agreement signing Northridge Water District will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

Northridge Water District's water conservation coordinator is Warren Jung, who will be responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one Northridge Water District staff member or employee of the Northridge Water District's conservation program contractor will be an AWWA Certified Water Conservation Practitioner (Level II), if the program becomes an industry standard, or will pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Northridge Water District's contractor will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

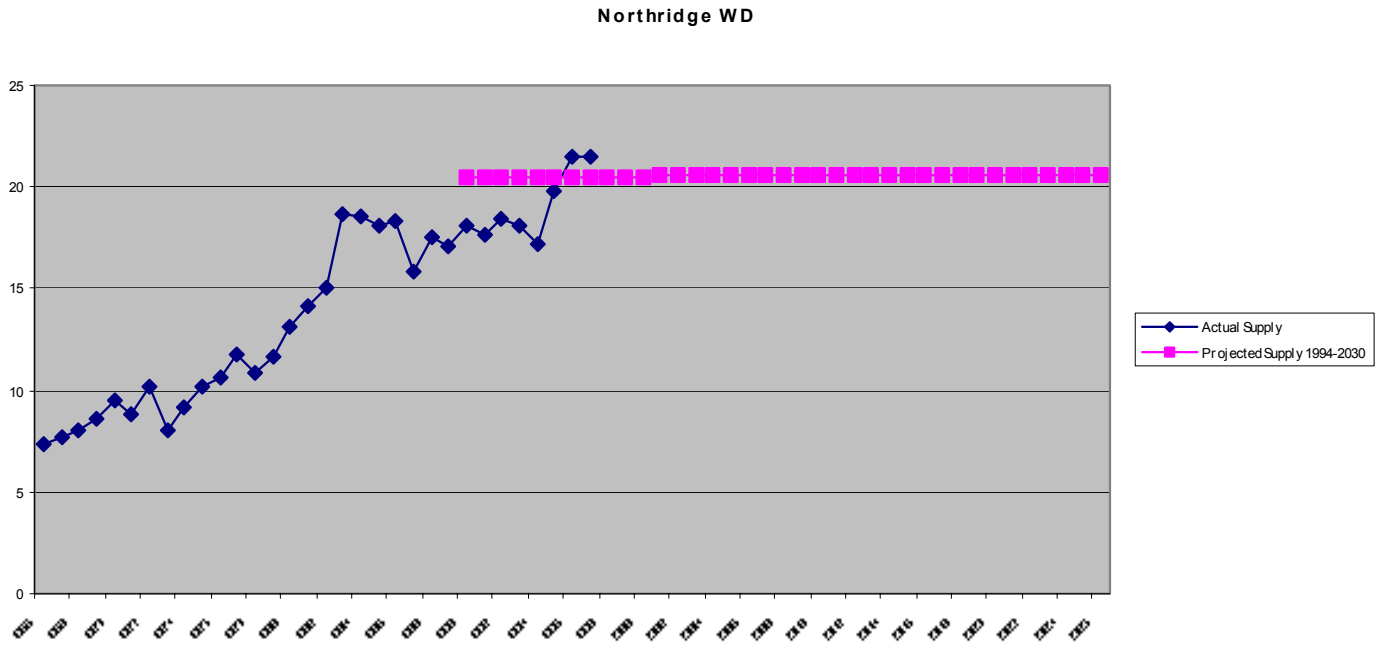
B. If a regional program is established, Northridge Water District's contractor will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The regional retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10 percent of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90 percent of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community-based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

D. Northridge Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZEN INVOLVEMENT PROGRAM

The Northridge Water District is investigating ways to implement this aspect of the *Water Forum Agreement* by using existing citizen groups such as perhaps the various CPAC's (County Planning Advisory Committees such as the North Highlands – Foothill Farms Area CPAC, the Carmichael CPAC, and the Antelope CPAC) in their service area.


Northridge WD
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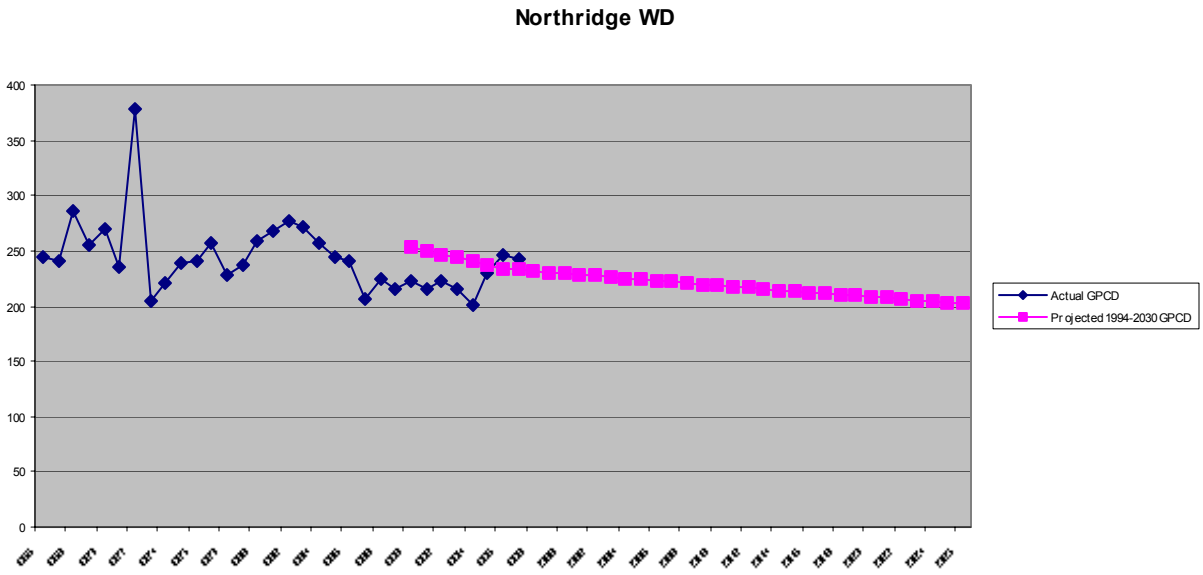
Actual Supply
Projected Supply 1994-2030


Northridge WD
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Actual GPCD
Projected 1994-2030 GPCD

ORANGE VALE WATER COMPANY
WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Orange Vale Water Company will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Orange Vale Water Company will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits):
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by Orange Vale Water Company or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. Orange Vale Water Company will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, Orange Vale Water Company will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Orange Vale Water Company will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, Orange Vale Water Company will complete and maintain, in the unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; and leak history.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection and repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Within three years of agreement signing, Orange Vale Water Company will complete and maintain, in the metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc., with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. Orange Vale Water Company will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, Orange Vale Water Company will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers that may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10% of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90% of non-residential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, Orange Vale Water Company will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on Orange Vale Water Company-provided water conservation programs and services.

C. Orange Vale Water Company will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

It is recognized that CVPIA meter retrofit provisions are outside the scope of the *Water Forum Agreement* and that they require faster implementation than what is included in the *Water Forum Agreement*. The Orange Vale Water Company receives CVP water and agrees that if for any reason any or all of its service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed they would annually retrofit at least 3.3%-5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement.*

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Orange Vale Water Company will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped Orange Vale Water Company facilities, phased in over the five years following agreement signing.

B. Orange Vale Water Company will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The Orange Vale Water Company's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide incentives to achieve at least 12% annual participation of targeted customers.

D. Orange Vale Water Company will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Orange Vale Water Company will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

B. Orange Vale Water Company will publicly support the city's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

C. Orange Vale Water Company will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, the Orange Vale Water Company program will include:
An entirely Orange Vale Water Company specific Public Information program, funded at a level equivalent to one-half the full SAWWA per-connection contribution. The program will include activities such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events/fairs, evapotranspiration data availability, a Web site, and allied organizations outreach. The program will also include:

1. Using utility bill inserts or messages on payment notices.
2. Providing information on metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.
3. Providing public speakers to community groups and the media.
4. Using paid and public service advertising for a water conservation campaign.
5. Providing public information to promote other water efficient practices.
6. Coordinating with other governmental agencies, industry groups and public interest groups.

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, the Orange Vale Water Company program will include:
An entirely Orange Vale Water Company specific School Education program, funded at a level equivalent to one-half the full SAWWA per-connection contribution. The

program will include activities such as: school outreach, advertising campaigns, educational materials for schools, participation at school events and fairs, a Web site, and parent/teacher outreach. The program will also include:

1. Offering tours of Orange Vale Water Company facilities to elementary schools in the service area.
2. Working with schools served by the Orange Vale Water Company to promote school audits, reduced water bills, and innovative funding for equipment upgrades.
3. Working with the school districts in the Orange Vale Water Company service area to provide educational materials promoting efficient water use to one or more grade levels on an annual basis.
4. Working with school districts in the Orange Vale Water Company service area to offer instructional materials and assistance to all teachers of the targeted grade level in order to promote efficient water use. This program is considered successful if a high percent of the teachers of the targeted grade level(s) participate in the training and use the materials in the classroom.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Orange Vale Water Company will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Orange Vale Water Company or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.):
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
      3. Survey past program participants to determine if audit recommendations were implemented.

C. The Orange Vale Water Company's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.

3. Contact past program participants for a follow-up audit at least every fifth year.

D. Within three years of agreement signing, Orange Vale Water Company will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the Orange Vale Water Company's service area to ensure that the submitted findings are reviewed by the Orange Vale Water Company to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
   4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Orange Vale Water Company will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, Orange Vale Water Company will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. Orange Vale Water Company will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Orange Vale Water Company will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the Orange Vale Water Company's service area on an annual basis.

2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts:
    a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
    b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
    3. Annual pre-irrigation season notification to Single Family Homes served by the Orange Vale Water Company of Orange Vale Water Company-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Orange Vale Water Company's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
    1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within Orange Vale Water Company's service area but should be convenient to the Orange Vale Water Company's customers).
    2. Annual participation at local and regional landscape fairs and garden shows.
    3. Annual cooperative education and marketing campaigns with local nurseries.
    4. Annual irrigation season landscape media campaign.
    5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. Orange Vale Water Company will:
    1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
    2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
    3. Participate in the landscape task force's determination if program effectiveness is diminished by city staff time constraints, budget or lack of landscape knowledge/expertise.

D. Orange Vale Water Company will publicly support the city's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Orange Vale Water Company will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, Orange Vale Water Company will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
      4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
      5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing Orange Vale Water Company will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The Water Conservation Plan and Annual Update shall contain the name of Orange Vale Water Company's water conservation coordinator, who will be responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at Orange Vale Water Company will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Orange Vale Water Company will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. Orange Vale Water Company will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

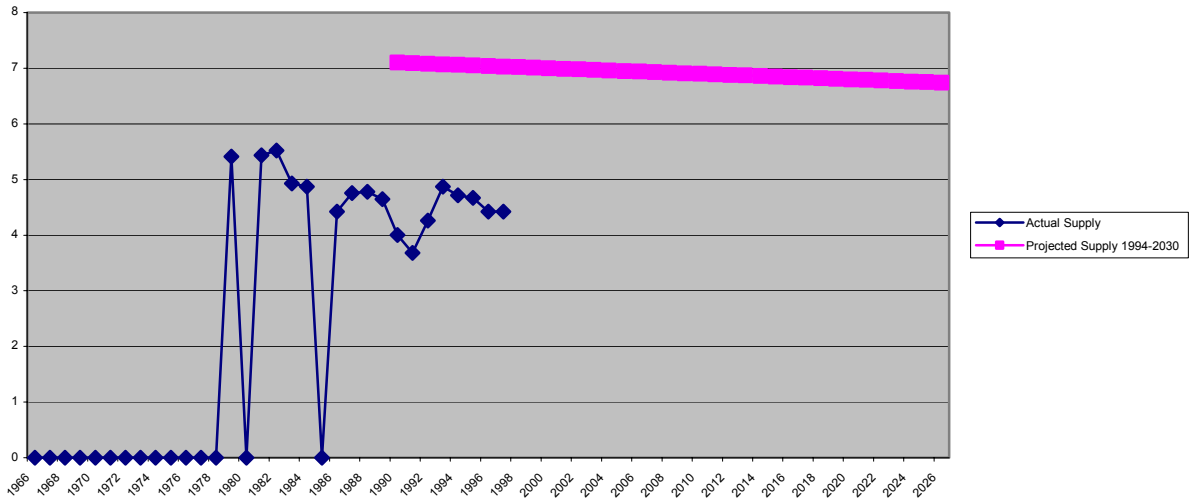
C. The retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

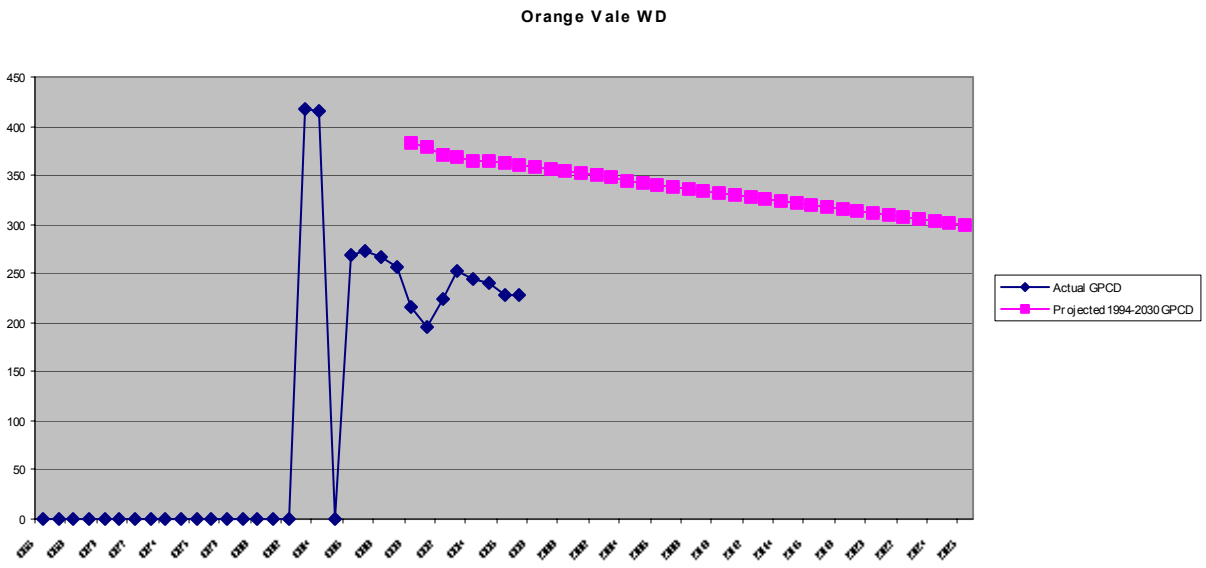
D. Orange Vale Water Company will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZEN INVOLVEMENT PROGRAM

After becoming signatory to the Water Forum Agreement, Orange Vale Water Company will implement a “Citizen Involvement Program” consisting of development of a committee that will represent various portions of the district to assist in the design and implementation of a conservation plan.

Orange Vale WD




Orange Vale WD
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Actual GPCD
Projected 1994-2030 GPCD

PLACER COUNTY WATER AGENCY
WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Placer County Water Agency will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Placer County Water Agency will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits).
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The Placer County Water Agency water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by purveyor or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. Placer County Water Agency will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. The Placer County Water Agency ongoing program will include, at a minimum:
   1. Offer to all customers with pre-1993 homes, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the purveyor office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Placer County Water Agency will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Placer County Water Agency will complete and be maintaining (for the treated water system):
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc. with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

B. Placer County Water Agency will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

Placer County Water Agency is fully metered and uses volumetric billing.

BMP 4 RESIDENTIAL METER RETROFIT

Placer County Water Agency is fully metered and uses volumetric billing.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

Negotiations are not yet complete for this BMP.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Placer County Water Agency will:
Enact and implement a landscape water efficiency ordinance pursuant to the "Water Conservation in Landscaping Act" (California Code of Regulations, Chapter 2.7), that is at least effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490-495.

B. Placer County Water Agency will:
1. Attend and participate in a landscape task force with other local governments, water purveyors, the building and green industries and environmental / public interest groups to review the existing Placer County Efficient Landscape Ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
2. Review in cooperation with the landscape task force, the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
3. Determine, in cooperation with the landscape task force, if program effectiveness is diminished by county/city staff time constraints, budget or lack of landscape knowledge / expertise, and, if so, recommend and support corrective action – for example, the use of consultants.

C. Placer County Water Agency will publicly support county/city actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

D. Placer County Water Agency will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, Placer County Water Agency's public information program will include activities such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, and allied organizations outreach.

The program will also include, at a minimum:

1. Using utility bill inserts or messages on payment notices.
2. Providing information on customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.
3. Providing Placer County Water Agency speakers to community groups and the media.
4. Paid and public service advertising for a water conservation campaign.
5. Providing public information to promote other water efficient practices.
6. Coordinating with other governmental agencies, industry groups and public interest groups.

The program will be funded at a level equivalent to one-half the full SAWWA per-connection contribution.

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, Placer County Water Agency's program will include programs such as: school outreach, promotional materials, community events and fairs, a Web site, and allied organizations outreach.

The program will also include, as a minimum:

1. Offering tours of Placer County Water Agency facilities to elementary schools in the Placer County Water Agency service area.
2. Working with schools served by Placer County Water Agency to promote school audits, reduced water bills, and innovative funding for equipment upgrades.
3. Working with the school districts in the Placer County Water Agency service area to provide educational materials promoting efficient water use to one or more grade levels on an annual basis.
4. Working with school districts in the Placer County Water Agency service area to offer instructional materials and assistance to all teachers of the targeted grade level to promote efficient water use.

The program will be funded at a level equivalent to one-half the full SAWWA per-connection contribution.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Placer County Water Agency will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Placer County Water Agency or their representative will annually:
   1. Identify the top 10% of commercial and top 10% of industrial water users, not previously audited; directly contact them or the appropriate customer's representative and offer them water-use reviews (audits); and provide these customers with data on their current water-related costs.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. Placer County Water Agency's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Placer County Water Agency will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by Placer County Water Agency.
   2. Coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the purveyor's service area to ensure that the submitted findings are reviewed by Placer County Water Agency to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
   4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Placer County Water Agency will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

Placer County Water Agency is fully metered and uses volumetric billing.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Placer County Water Agency will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the purveyor's service area on an annual basis.

2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts, and to the top 20% of existing Single Family customer water-users.
3. Annual pre-irrigation season notification to Single Family Homes served by the Placer County Water Agency of Placer County Water Agency-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Placer County Water Agency's ongoing program, in cooperation with California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Maintenance of the existing Placer County Water Agency demonstration garden.
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. Placer County Water Agency will:
   1. Attend and participate with a landscape task force of other local governments, water purveyors, the building and green industries and environmental / public interest groups to review the existing Efficient Landscape Ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance as it pertains to single-family homes, and to monitor, and revise, when applicable, the ordinance.
   2. Participate, in cooperation with the landscape task force, the implementation of the ordinance, including builder compliance, landscape plan review and final inspection/certification process, to ensure its effectiveness.
   3. Participate, in cooperation with the landscape task force, to determination if program effectiveness is diminished by county/city staff time constraints, budget or lack of landscape knowledge/expertise, and if so, recommend and support corrective action – for example, the use of consultants.

D. Placer County Water Agency will publicly support the county or city's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Placer County Water Agency will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, Placer County Water Agency will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include, at a minimum:
   1. Irrigation water shall not be allowed to run off to adjoining property, roadside ditch or gutter.

2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
3. Encourage the use of automatic shut-off nozzles on open hoses, through public information.
4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons – agency requires notification.

B. The following measures may be permanent, seasonal or related to water shortage:
1. Restricting irrigation hours or days.
2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
3. Restaurants serving water only on request.
4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes; personal notification and an offer of a water-use review/repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation/reading.

D. Within three years of agreement signing Placer County Water Agency will:
1. Notify all customers at least of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
2. Staff will respond to reports of water waste in a timely manner.
3. Will have water waste patrols at least during water shortages.
4. Will cooperate with the city or county in their program enforcement efforts.

E. Within three years of agreement signing unmetered purveyors will:
Have water waste patrol (including some pre-dawn and post-summer) during the irrigation season.

BMP 14 WATER CONSERVATION COORDINATOR

Placer County Water Agency's water conservation coordinator is Harley Lukenbill, who is responsible for preparing, implementing and monitoring the Plan. Within three years of agreement signing, at least one staff member at Placer County Water Agency will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Placer County Water Agency will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use.
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. Placer County Water Agency will annually:
   Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The retrofit program will:
   1. Offer the necessary incentive to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community-based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Monitor the change in water use at metered-accounts which install ULF toilets.

D. Placer County Water Agency will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR RESIDENTIAL CUSTOMERS

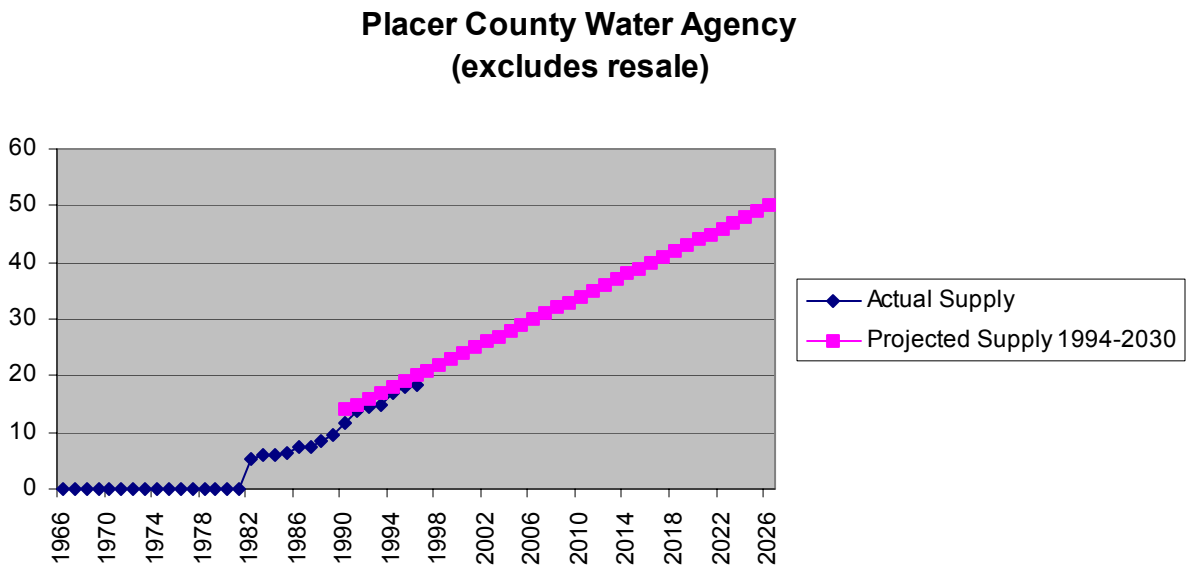
Under the Water Forum Agreement this is a voluntary program:

A. Placer County Water Agency will study the requirements to replace old high use toilets with new ULF toilets when a property is sold. Action by the Board of Directors is necessary after the study.

B. Placer County Water Agency will offer $75 incentives for toilet retrofits, up to 100 per year and will monitor the change in water use of the accounts retrofit to the new ULF toilets.

CITIZEN INVOLVEMENT PROGRAM

Placer County Water Agency will establish a citizen involvement program after board approval of the Water Forum Agreement and the USBR water management plans. This would be in place within three years after signing the Water Forum Agreement.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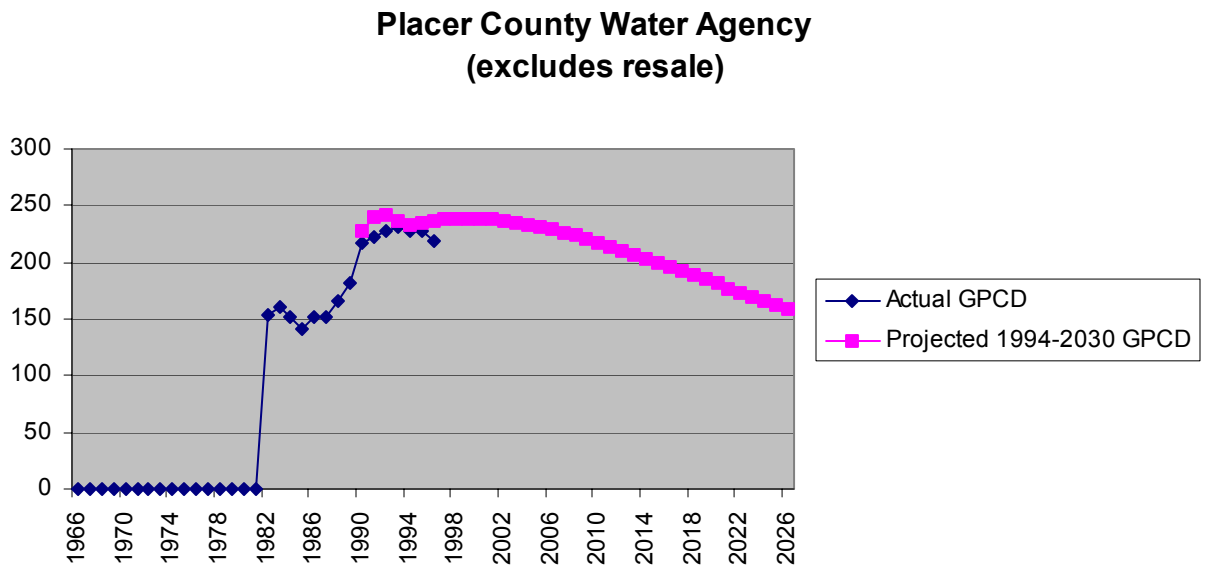
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RIO LINDA/ELVERTA COMMUNITY WATER DISTRICT WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, Rio Linda/Elverta Community Water District will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. Rio Linda/Elverta Community Water District will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits).
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by Rio Linda/Elverta Community Water District or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. Rio Linda/Elverta Community Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, Rio Linda/Elverta Community Water District will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. Rio Linda/Elverta Community Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

B. Within three years of agreement signing, Rio Linda/Elverta Community Water District will complete and be maintaining:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks; etc., with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection and repair program focused on high probability leak areas identified by the system map.
   5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. Rio Linda/Elverta Community Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

Rio Linda/Elverta Community Water District is fully metered and uses volumetric pricing.

BMP 4 RESIDENTIAL METER RETROFIT

Rio Linda/Elverta Community Water District is fully metered and uses volumetric pricing.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, Rio Linda/Elverta Community Water District will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through cooperative agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped Rio Linda/Elverta Community Water District facilities, phased in over the five years following agreement signing.

B. Rio Linda/Elverta Community Water District will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The Rio Linda/Elverta Community Water District's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide incentives, such as the following, to achieve at least 12% annual participation of targeted customers:
      a. Billing adjustments or bill rebates targeted to irrigation system repair or improvement.
      b. Grants, etc. to encourage landscape design and irrigation system improvements.
      c. ET (evapotranspiration) based tiered rate structure.

D. Rio Linda/Elverta Community Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. Rio Linda/Elverta Community Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

B. Rio Linda/Elverta Community Water District will publicly support the county and city's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

C. Rio Linda/Elverta Community Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

A. The Rio Linda/Elverta Community Water District will have its own specific program in conjunction with full participation in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program. This SAWWA program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, evapotranspiration data availability, and allied organizations outreach.

   The Rio Linda/Elverta Community Water District specific program will include:
   1. Using utility bill inserts or messages on payment notices.
   2. Providing information on customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

BMP 8 SCHOOL EDUCATION

A. The Rio Linda/Elverta Community Water District will have its own specific program in conjunction with full participation in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's School Education program. This SAWWA program includes programs such as school outreach, community events/fairs, and a Web site.

   The Rio Linda/Elverta Community Water District specific program will include:
   1. Offering tours of District facilities to elementary schools in the District's service area.
   2. Working with schools served by the District to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, Rio Linda Water District will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. Rio Linda/Elverta Community Water District or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The Rio Linda/Elverta Community Water District's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Within three years of agreement signing, Rio Linda/Elverta Community Water District will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.
   2. Coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the Rio Linda/Elverta Community Water District's service area to ensure that the submitted findings are reviewed by the Rio Linda/Elverta Community Water District to identify incentive program opportunities.
   3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
   4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Rio Linda/Elverta Community Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

Rio Linda/Elverta Community Water District is fully metered and uses volumetric billing.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. Rio Linda/Elverta Community Water District will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the Rio Linda/Elverta Community Water District's service area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts.
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
   3. Annual pre-irrigation season notification to Single Family Homes served by the Rio Linda/Elverta Community Water District of the District-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. Rio Linda/Elverta Community Water District's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other water purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within Rio Linda/Elverta Community Water District's service area but should be convenient to the Rio Linda/Elverta Community Water District's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. Rio Linda/Elverta Community Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.

2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

D. Rio Linda/Elverta Community Water District will publicly support the county and city's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Rio Linda/Elverta Community Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

A. The Rio Linda/Elverta Community Water District has enacted a water waste prohibition ordinance that includes measures and enforcement mechanisms per the criteria for this BMP.

B. Within three years of agreement signing the Rio Linda/Elverta Water District will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or country in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The Rio Linda/Elverta Community Water District's Water Conservation Coordinator is Liz Maxwell and she is responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at Rio Linda/Elverta Community Water District will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, Rio Linda/Elverta Community Water District will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. if possible, established a cooperative district / sanitation district ULF rebate program.

B. Rio Linda/Elverta Community Water District will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

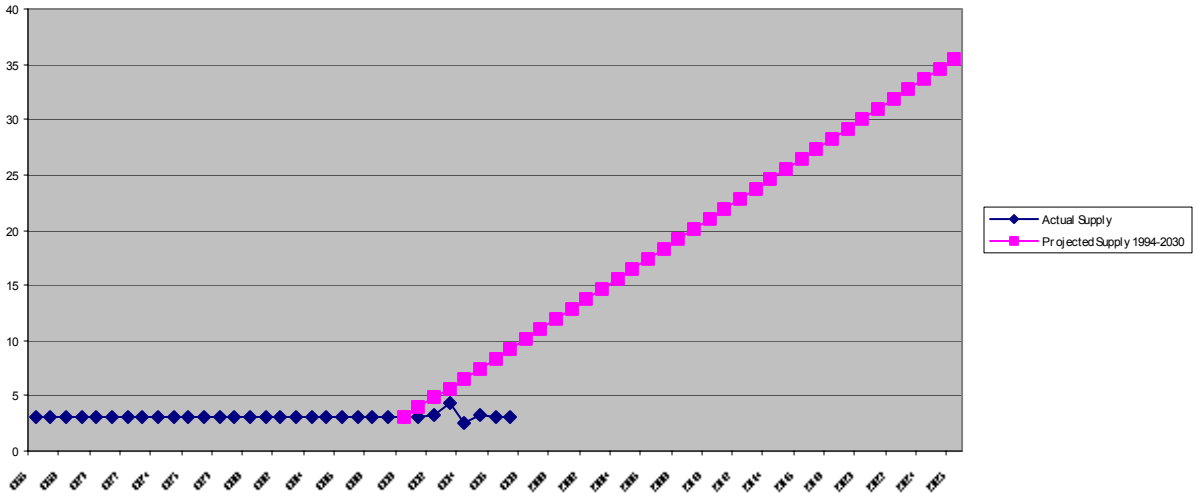
C. The retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts which install ULF toilets.

D. Rio Linda/Elverta Community Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZENS INVOLVEMENT PROGRAM

The Rio Linda/Elverta Community Water District will invite members of the existing Rio Linda/Elverta Community Planning Advisory Council (CPAC) to provide input to the implementation of water conservation measures identified in the District's Water Forum Water Conservation Plan. It is intended that this informal group will serve to provide valuable citizens' input on the overall approach to implementation of water conservation measures in the District.

Rio Linda WD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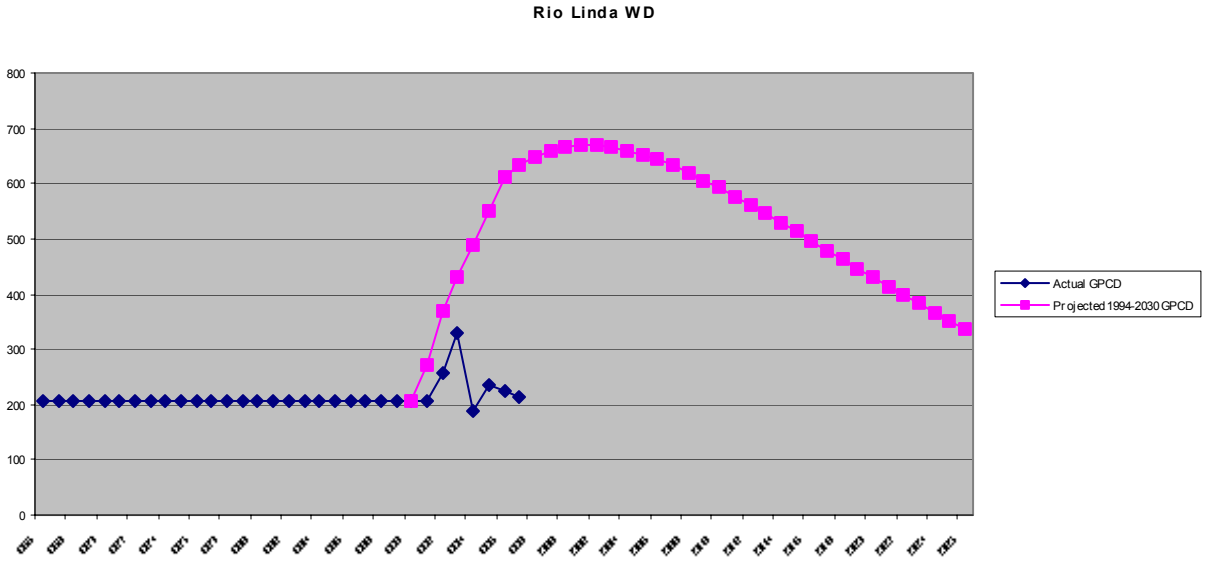
Rio Linda WD
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SAN JUAN WATER DISTRICT
WATER FORUM WATER CONSERVATION PLAN

BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, the San Juan Water District will have:
   1. Trained water auditors on staff or available through cooperative agreements with other purveyors.
   2. Prepared and made available, as needed, multi-lingual interior and exterior water audit materials for customers.
   3. Prepared and made available to customers seasonal climate-appropriate irrigation information.
   4. Investigated opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.

B. The San Juan Water District will annually:
   1. Identify the top 20% of water-users, not previously audited, in each customer type and offer them water-use reviews (audits).
      a. (Metered accounts) annually determine the top 20% of water users in each customer type based on water use, and when appropriate, lot size and/or landscape area.
      b. (Unmetered accounts) annually determine the top 20% of water users in each customer type based on lot size and/or landscape area or other water-use indicators.
   2. Offer, through bill inserts or other means, water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The water-use review program will:
   1. Provide audits conducted by trained auditors.
   2. Provide audits that may include device installation by the San Juan Water District or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide incentives to achieve 12% annual participation of the targeted 20% of customers.

D. The San Juan Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, the San Juan Water District will:
   1. Offer to all customers, through bill inserts or other means, retrofit kits which include, but are not limited to, high quality low-flow showerheads, faucet aerators and toilet leak detection tablets.
   2. Offer toilet leak test kits to all change of account customers who visit the signatory's office.
   3. Work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents.
   4. Work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters.
   5. Investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. The San Juan Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, the San Juan Water District will complete and maintain, in the unmetered areas:
   1. An annually updated "system map" of type, size and age of pipes; pressures; and leak history.
   2. Installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses.
   3. An ongoing meter calibration and replacement program for all production and distribution meters.
   4. An ongoing leak detection & repair program (as defined in the manual) focused on high probability leak areas identified by the system map.
   5. A complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Within three years of agreement signing, the San Juan Water District will complete and maintain, in the metered areas:
   1. An annual system water audit, determining the difference between production and sales.
   2. An annually updated "system map" of: type, size and age of pipes; pressures; record of leaks, etc., with historic data.
   3. An ongoing meter calibration and replacement program.
   4. An ongoing leak detection/repair program focused on high probability leak areas identified by map.

5. A complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. The San Juan Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 NON-RESIDENTIAL METER RETROFIT

A. Within three years of agreement signing, the San Juan Water District will:
   1. Identify all non-residential unmetered customers.
   2. Provisionally identify any non-residential unmetered customers that may be very difficult and expensive to retrofit.
   3. Adopt a plan to meter at least 10% of unmetered non-residential accounts yearly so that within ten years of becoming a signatory 85-90% of non-residential customers are metered.
   4. Begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.

B. Within 60 days of meter installation, the San Juan Water District will provide newly metered non-residential customers with:
   1. Information on how to read their meter and a consumption-based water bill.
   2. Information on the San Juan Water District-provided water conservation programs and services.

C. The San Juan Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 4 RESIDENTIAL METER RETROFIT

It is recognized that CVPIA meter retrofit provisions are outside the scope of the Water Forum Agreement and that they require faster implementation than what is included in the Water Forum Agreement. The San Juan Water District receives CVP water and agrees that if for any reason any or all of its service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later than the start of the fourth year after the Water Forum Agreement is signed they would annually retrofit at least 3.3%-5% of the total number of unmetered residential connections as of the date of the Water Forum Agreement.

BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS

A. Within three years of agreement signing, the San Juan Water District will:
   1. Identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database.
   2. Have certified and/or trained landscape water auditors on staff or available through agreements.
   3. Prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers/landscape workers.
   4. Develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes.
   5. Begin installation of climate appropriate water efficient landscaping at landscaped The San Juan Water District facilities, phased in over the five years following agreement signing.

B. The San Juan Water District will annually:
   1. Directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits).
   2. Offer, through bill inserts or other means, landscape water-use reviews to all customers.
   3. Survey past program participants to determine if audit recommendations were implemented.
   4. Offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The San Juan Water District's landscape water-use review program will:
   1. Provide audits conducted by certified landscape water auditors.
   2. Provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area.
   3. Provide program participants with seasonal irrigation schedules by hydrozone and/or station.
   4. Provide program participants with regular reminders to adjust irrigation timer settings.
   5. Provide incentives to achieve at least 12% annual participation of targeted customers.

D. The San Juan Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. The San Juan Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

B. The San Juan Water District will publicly support the county and city's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.

C. The San Juan Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

Within three years of agreement signing, the San Juan Water District program will include:

A combination of a San Juan Water District specific program in conjunction with full participation by the District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

Elements implemented directly by the San Juan Water District include:
1. Using utility bill inserts or messages on payment notices.
2. Providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

BMP 8 SCHOOL EDUCATION

Within three years of agreement signing, the San Juan Water District program will include:

A combination of a San Juan Water District specific program in conjunction with full participation by the District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional

program. This program includes programs such as: school outreach, promotional materials, community events and fairs, and a Web site.

Elements implemented directly by the San Juan Water District include:

1. Offering tours of San Juan Water District facilities to elementary schools in the District's service area.
2. Working with schools served by the District to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION

A. Within three years of agreement signing, the San Juan Water District will have:
   1. Trained commercial/industrial water auditors on staff or available through cooperative agreements.
   2. The DWR Commercial / Industrial (CI) water-use materials available for CI customers.
   3. Established, if possible, cooperative CI audit programs with other utilities.
   4. A list of available CI water-use consultants.

B. The San Juan Water District or their representative will annually:
   1. Identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, waste water, energy, on-site treatment, etc.).
      a. (For metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high energy use, etc.).
      b. (For unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, high energy use, etc.
   2. Offer, through bill inserts or other means, CI water-use reviews to all CI customers.
   3. Survey past program participants to determine if audit recommendations were implemented.

C. The San Juan Water District's water-use review program will:
   1. Provide audits conducted by trained commercial/industrial water auditors.
   2. Provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers.
   3. Contact past program participants for a follow-up audit at least every fifth year.

D. Within three years of agreement signing, the San Juan Water District will:
   1. Promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers.

2. Coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the San Juan Water District's service area to ensure that the submitted findings are reviewed by the District to identify incentive program opportunities.
3. Consider separate landscape water meter(s) when the combined service would require a 1½" or larger meter.
4. Require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. The San Juan Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, the San Juan Water District will:
   1. Identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale).
   2. Establish quantity-based rates for each account type.
   3. Begin educating all customers about the quantity-based rate structure.
   4. Provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. The San Juan Water District will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. The San Juan Water District will implement a program that includes:
   1. Information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the San Juan Water District's service area on an annual basis.
   2. Landscape audit/water-use survey program actively marketed to all new homes and change-of-customer accounts.
      a. Unmetered service areas will actively market landscape audits/surveys to each existing Single Family Home at least every fifth year.
      b. Metered service areas will actively market landscape audits/surveys to the top 20% of existing Single Family customer water-users.
   3. Annual pre-irrigation season notification to Single Family Homes served by the San Juan Water District of District-provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. The San Juan Water District's ongoing program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. Participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within the San Juan Water District's service area but should be convenient to the District's customers).
   2. Annual participation at local and regional landscape fairs and garden shows.
   3. Annual cooperative education and marketing campaigns with local nurseries.
   4. Annual irrigation season landscape media campaign.
   5. Annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. The San Juan Water District will:
   1. Attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance.
   2. Participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process.
   3. Participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

D. The San Juan Water District will publicly support the county or city's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. The San Juan Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 13 WATER WASTE PROHIBITION

Within three years of agreement signing, the San Juan Water District will enact a water waste prohibition ordinance that includes measures and enforcement mechanisms.

A. The water waste prohibition measures will include:
   1. Irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter.
   2. Leaking pipes, fixtures, or sprinklers shall be repaired promptly.
   3. Open hoses not permitted - automatic shut-off nozzles are required.
   4. Swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water shortage:
   1. Restricting irrigation hours or days.
   2. Use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety.
   3. Restaurants serving water only on request.
   4. Restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available.
   5. Limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of responses to water wasting customers. Enforcement typically includes: personal notification and an offer of a water-use review / repair service, monetary fees, service termination and, in some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing the San Juan Water District will:
   1. Notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season.
   2. Have staff will respond to reports of water waste in a timely manner.
   3. Will have water waste patrols at least during water shortages.
   4. Will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The San Juan Water District's water conservation coordinator is XXXXXXX and she/he is responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at the San Juan Water District will be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16 ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS

A. Within three years of agreement signing, the San Juan Water District will:
   1. Identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use).
   2. If possible, established a cooperative district / sanitation district ULF rebate program.

B. The San Juan Water District will annually:
   1. Offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts that do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.

C. The retrofit program will:
   1. Offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10% of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90% of all non-residential toilets being ULFs within ten years.
   2. Consider larger rebates for the more expensive high-use flushometer-type ULF installations.
   3. Investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
   4. Consider monitoring the change in water use at metered-accounts that install ULF toilets.

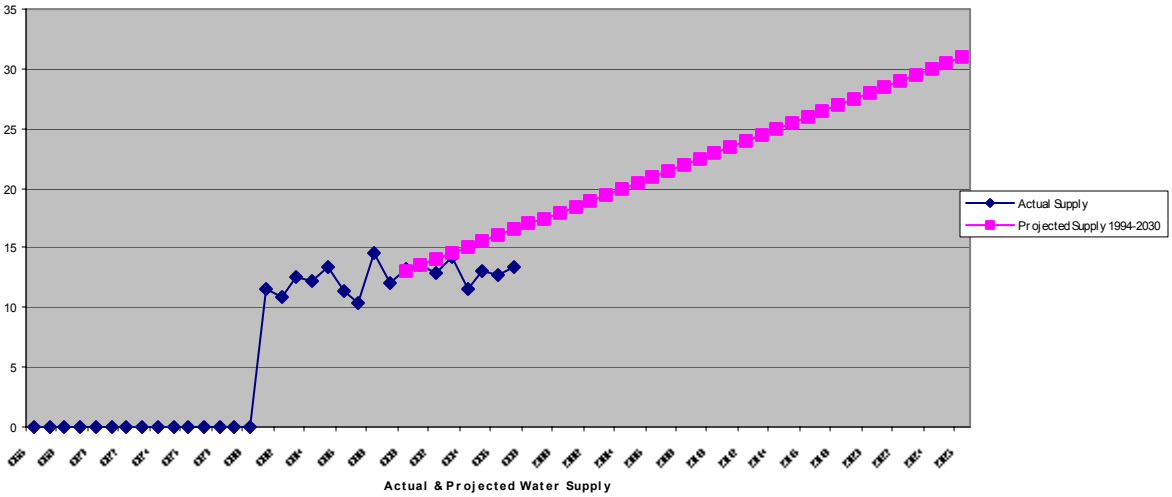
D. The San Juan Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZENS INVOLVEMENT PROGRAM

The San Juan Water District had an extensive public involvement program during the initial phases of their meter installation program. The meter installation program is now currently underway.

As far as a public involvement program for conservation pricing, the San Juan Water District will develop a committee that will include a representative sampling of the public from their retail area. The District plans to be completely metered by the year 2003, with metered billing in effect for all customers by 2005. The District also plans to show a comparison of flat and metered rates on all bills for a minimum of two years. To complete this schedule, the public involvement program will need to convene prior to 2000.

San Juan WD


35
30
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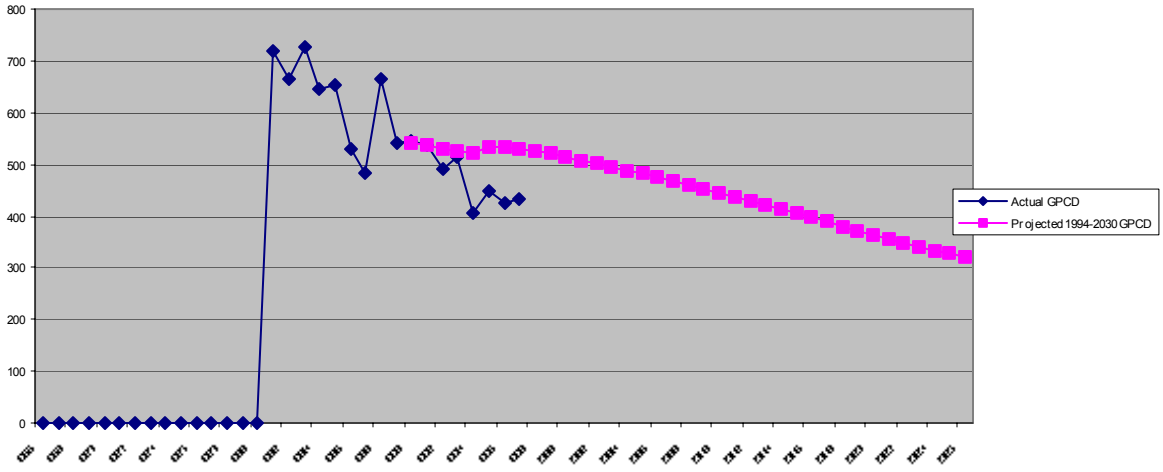
Actual Supply
Projected Supply 1994-2030
Actual & Projected Water Supply

San Juan WD


800
700
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Actual GPCD
Projected 1994-2030 GPCD

Glossary

Sources of definitions indicated in italics

Acre foot (AF)
An acre is about the size of a football field. An acre foot is the amount of water that would cover one acre of land one foot deep. It equals 325,800 gallons. That is about how much water five people use a year for drinking, washing, and landscape watering.

Aquifer
A geologic formation that stores, transmits and yields significant quantities of water to wells and springs. *Water Education Foundation*

Anadromous Fish
Pertaining to fish that spend a part of their life cycle in the sea and return to freshwater streams to spawn.

Bay-Delta Standards
Standards to balance and protect all beneficial uses of San Francisco Bay-Delta water - including fishery and other instream uses - and to modify existing water rights if necessary to achieve that balance. *Volume I of United States Bureau of Reclamation American River Water Resources Investigation (USBR ARWRI)*

Best Management Practices (Water Conservation)
A policy, program, practice, rule, regulation or ordinance of the use of devices, equipment or facilities which is an established and generally accepted practice that results in more efficient use or conservation of water, or a practice that has been proven to indicate that significant conservation benefits can be achieved. *MOU Regarding Water Conservation in California*

California Environmental Quality Act
An act conceived primarily as a means to require public agency decision makers to document and consider the environmental implications of their actions. *Guide to the California Environmental Quality Act: Remy & Thomas*

Central Valley Project Improvement Act (CVPIA)
This Act amends the Central Valley Project (CVP) reauthorization act of 1937 and reauthorized the CVP to add mitigation, protection, and restoration of fish and wildlife as project purposes equal to agricultural and domestic uses, and to make fish and wildlife enhancement a project purpose equal to power. *USBR ARWRI*

cfs
cubic feet per second. One cubic foot is about 7 ½ gallons.

Change of Service
Point of time at which a water service account is transferred.

Changed Conditions
This refers to significant changes in circumstances such as laws, regulations, and even the health of the river which may occur after a *Water Forum Agreement* is signed. If there are changed conditions which may interfere with implementation of the agreement, the Successor Effort would reopen negotiations.

Conjunctive Use
The planned joint use of surface and groundwater to improve overall water supply reliability. *Water Education Foundation*

Conservation Pricing
Pricing which provides an incentive to reduce average or peak use, or both. *MOU Regarding Water Conservation in California*

Contractual Entitlement
A water entitlement based on a contract, such as a contract with the United States Bureau of Reclamation for Central Valley Project water.

Cost-Effective
A case where the financial benefits of a project are greater than the overall cost.

CVPIA Programmatic Environmental Impact Statement
The program level document prepared by the United States Bureau of Reclamation on the Central Valley Project Improvement Act to comply with the requirements of the National Environmental Policy Act.

Deal Breaker
A person, organization, or entity who causes a bargain or agreement to fail.

Equity
The state, ideal, or quality of being just, impartial, and fair.

Fishery Flow Pattern
Pattern of river flows needed for spawning, incubation and rearing of young fish as well as migration of juvenile and adult fish. *Water Education Foundation*
For purposes of the *Water Forum Agreement*, the Improved Pattern of Fishery Flow Releases is defined as the AFRP flow objective for the Lower American River as set forth in the November 20, 1997 "*Department of the Interior Final Administrative Proposal on the Management of Section 3406(b)(2) Water*."

Groundwater
The water in an aquifer. For human use and consumption this water is generally pumped to the surface through a well.

Inter-basin Transfer
Water transfers from entities outside of a watershed to entities within a watershed.

Interior Audit Program
A program which identifies the top water users and offers a water use audit service that will identify where water can be saved and provides incentives sufficient to achieve customer implementation. *MOU Regarding Water Conservation in California*

Landscape Efficiencies
What is achieved through skillful planting and irrigation design, appropriate use of plant materials, and intelligent management to assure landscape development that avoids excessive demands and is less vulnerable to periods of severe drought. *Water Conservation Ordinance for Landscape Water Conservation*

Memorandum of Understanding (MOU)
A means of gaining formal consensus between two or more parties on a particular complex issue.

Meter Retrofit Programs
Programs targeted toward unmetered homes and businesses which either install a new meter or repair an existing meter to provide for billing based on volume of use. *MOU Regarding Water Conservation in California*

mgd
million gallons per day

Point of Diversion
The place along the stream channel where a diverter takes control of the water. *How to File an Application to Appropriate Water, State Water Resources Control Board*

Public Trust
The legal doctrine that protects the rights of the public to use water courses for commerce, navigation, fisheries, recreation, open space, preservation of ecological units in their natural state, and similar uses for which those lands are uniquely suited. It is based on the California State Constitution and goes back to English Common Law. The California Supreme Court stated, "*The state has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible*." *National Audubon (33Cal.3d 419 1983)*

Purveyor
An agency or district that provides water to customers for a fee.

Reasonable-Feasible
Practicable and in accord with reason.

Reclaimed Water
Municipal, industrial or agricultural wastewater treated and/or managed to produce water of quality suitable for additional uses.

Riparian Vegetation
Of, adjacent to, or living on, the bank of a river or, sometimes, of a lake, pond, etc. *Webster's Ninth New Collegiate Dictionary*

Stakeholder
In a negotiation, a person, organization or entity entrusted to represent those with an interest in the outcome. There are 46 stakeholder organizations participating in the Water Forum.

State Water Project
California's state - owned and operated water project consisting of 22 dams and reservoirs which delivers water 600 miles from the Sacramento Valley to Los Angeles. *Water Education Foundation*

Surface Water Diversions
Water that is diverted and/or pumped from above ground sources such as rivers, streams, reservoirs and lakes as opposed to groundwater which is water pumped from the aquifer.

Sustainable Yield
Sustainable yield is a balance between pumping and basin recharge and is expressed as the number of acre feet of water per year which can be pumped from the basin on a long term average annual basis.

Subsidence
Sinking of the land surface due to a number of factors, of which groundwater extraction is one. *Water Education Foundation*

Water Forum
A community collaboration process involving stakeholder organizations and commitment to the coequal objectives of *providing a reliable and safe water supply for the region's economic health and planned development through the year 2030 and preserving the fishery, wildlife, recreational, and aesthetic values of the Lower American River*.

Water Forum Agreement
The formal agreement among the Water Forum representatives that will be presented to stakeholder organizations in fall 1999 for ratification without revision. The *Water Forum Agreement* will include an Implementation and Monitoring Plan. The agreement will include many interrelated pieces that could not be separated without destroying the overall solution.

Ultra-Low Flush (ULF) Toilet
A 1.6 gallon toilet. *MOU Regarding Water Conservation in California*