

**20X2020 AGENCY TEAM ON WATER CONSERVATION
PUBLIC WORKSHOP #2: CURRENT ACTIONS AND
INITIAL THOUGHTS ON NEW ACTIONS
November 20, 2008**

Workshop Summary

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Webcast Information: This workshop was webcast and can be viewed at <http://cawater.rmxpres.com/webcast/data/2020workshop112008/msh.htm>

1. Welcome, Introductions, Agenda, and Ground Rules

Barbara Evoy, Deputy Director for Financial Assistance at the State Water Resources Control Board, welcomed participants to the meeting. Judie Talbot, the meeting facilitator from the Center for Collaborative Policy CSUS, reviewed the meeting agenda and reviewed the basic ground rules for the meeting, including using common conversational courtesy and not having to defend or promote comments.

2. Overview of the 20X2020 Process

Barbara gave a brief presentation on the 20X2020 Process, including reminding audience members of the highlights from the technical memoranda on a baseline and targets. This included the following topics:

- the goal of the process and whether it is achievable
- the approach, including public input
- parallel planning, legislative, and regulatory initiatives
- accomplishments to date

- a summary of baseline and target results

Barbara's full presentation can be downloaded at

http://www.swrcb.ca.gov/water_issues/hot_topics/20x2020/index.shtml

3. Clarifying Questions – Overview of the 20X2020 Process

Barbara and other members of the Agency Team panel then answered questions from the audience for clarification.

1. *Question: How is recycled water being handled?* Answer: The baseline does not include it. The process focuses on potable water. Recycled water is part of the solution, but not in the baseline.
2. *Q: Is a 20% reduction appropriate, and is a list of programs for the State to regulate being developed?* A: Based on the two preexisting studies cited in the presentation, we believe it is achievable. The process will describe options and additional actions, ranging from voluntary measures through legislation.
3. *Q: Will desalinated water be treated the same as recycled water?* A: It is a very small amount of water and not included in the baseline. More so, since the process focuses on the conservation of potable water, desalination proposals to develop potable water may be treated differently from recycled water because they may augment potable supplies, whereas recycled water is a substitute for potable water uses. The Team has not reached a final decision on this distinction.
4. *Q: Is there a floor level at which people have done enough, they're below normal human use, like in Monterey?* A: Larger regions do not have the same issue, areas for improvement remain.
5. *Q: How will past investment in conservation be treated in balancing of targets across regions? The technique adopted in Technical Memorandum 2 remains opaque, and transparency is needed.* A: This was discussed in depth at the previous workshop. The Water Boards will host a follow-up conference call with interested parties.
6. *Q: Will the existing TMs be reworked based on public comments?* Rather than revising existing technical memoranda, changes based on public workshop comments will be incorporated in the final report.
7. *Q: Has the evaporation/loss of water transported long distances been included in consumption?* A: This has not been accounted for separately.
8. *Q: How is untreated water used for irrigation by residential homes being addressed? This occurs in the Northern California foothills.* A: There has been a proactive effort to not include non-potable uses and take agricultural water use out.

4. Presentation of Current Actions and Initial Thoughts on New Actions Technical Memoranda

Anil Bamezai, Principal, Western Policy Research, presented the public draft technical memoranda on current actions and initial thoughts on new actions together. The presentation slides covered the following topics:

- how current actions are defined and what they include
- methodology and data, including key assumptions
- savings from current actions, including code and Best Management Practices (BMPs)
- where “business as usual” will likely lead by 2020, and associated caveats
- key weaknesses associated with current conditions
- potential future actions, including grant funds, new technologies, accelerated goals, regulatory initiatives, and additional tools
- projected savings compared with targeted savings
- potential non-quantifiable regulatory initiatives
- overall observations

The complete Current Actions memorandum and draft New Actions memorandum, as well as the and presentation slides can be downloaded at http://www.swrcb.ca.gov/water_issues/hot_topics/20x2020/index.shtml

5. Clarifying Questions

Anil and Agency Team members answered a series of clarifying questions from workshop participants, including:

1. *Q: It seems like the figure for water losses is actually unaccounted-for water (meter error, fire flows). Is a distinction drawn between unaccounted-for water and water loss? Could this change potential savings?* A: The data is not clear about this. The terms have been used interchangeably here and need to be more specific.
2. *Two Questions: How might conservation credit trading work, given the differences between investor-owned utilities, municipalities, and public wholesalers? Second, how would a public goods charge be handled, as compared with the energy sector?* A: Current these are just concepts, we have not developed details. Both strategies provide potential ways to generate money for conservation activities.
3. *Q: How can additional measures be supplemented?* A: In the next portion of today’s workshop.

4. *Q: Once agencies complete metering will they be required to institute conservation pricing as well? These are two different BMPs.* A: Yes, they are separate questions.
5. *Three Questions: How are the foundational BMPs handled? It looks like only quantifiable BMPs are included. Second, how are washing machines being dealt with (BMP 6)? This program has been around all along, and in the Bay Area aggressively implemented by PG&E. Third, is this initiative going to become a program to become an elevated implementation and education program, or just allow agencies to continue doing what they're doing, including non-performing agencies?* A: The foundational BMPs are important but did not contribute to the savings estimates. Furthermore, given uneven implementation, we take only 80% of the projected savings as the figure for what we think existing BMPs can achieve. On the second question, this is complicated because the earlier CALFED study assumed these washers would be in place and not have to rely on active BMPs to achieve those savings; the present version of the study changes this methodology, which is why it is dealt with in Technical Memorandum 5 despite being on the BMP list. However, the savings do make it into the final total – this will need clarification.
6. *Q: How will reconcile (A) regions that have to implement a range of cost-effective BMPs and meet State codes to meet their targets, and (B) regions that do not? BMP implementation estimates by region reflect regional costs of water, yet code and cost effectiveness should be a common statewide base level that everyone must achieve, and equity across regions considered thereafter.* A: Cost-effectiveness is not the only criterion, the effort also includes what's feasible. Furthermore, there is great disagreement about what the marginal cost of water is and hence what is cost effective in different parts of the state. Finally, San Francisco Bay is the only area where State codes plus cost-effective BMPs equals the targeted savings.
Later supplement: Pricing for water differs across regions and types of purveyors, including whether externalities are considered. Cost-effectiveness for a particular district is a very localized consideration. This process is examining at every feasible strategy for reducing per capita water consumption within a region, not just what is cost-effective.
7. *Q: How will recalibrate targets now that have analyzed cost-effectiveness?* A: We will look at that as a result of feedback from the workshops, implementation is still to come.
8. *Comment: For public agencies and investor-owned utilities regulated by the Public Utilities Commission, water charges equal service costs and do not generate profits. Language about penalties and rewards should therefore be removed.*
9. *Comment: If some agencies have to implement additional measures to reach their targets and others do not, this will be a disproportionate burden. Second, some areas have already been implementing the list of additional measures, hence these savings may be overestimated.*
10. *Two Questions: Who will be responsible for regional goals when agencies cross hydrologic regions? And again, how will past conservation efforts be credited?* A: These are both implementation questions and hence premature, right now we are focusing on planning. Down the road various approaches can be taken in the context of legislation.

6. Discussion Questions and Comments

Workshop participants then took a 15 minute break before continuing. After coming back, Judie Talbot asked participants to focus on three questions written on a two-page worksheet:

- (1) What changes, additions, or corrections need to be made regarding current or potential actions?
- (2) What other conservation efforts or tools are available? Are there conservation programs that promote new approaches?
- (3) What factors need to be considered regarding implementation of either new or potential conservation? What are some of the lessons learned from various conservation efforts?

1. *Comment: Synthetic turf rebates are a tool to add to the toolkit, and can be applied to commercial, residential, and municipal projects. City bans based on historical concerns about turf quality should be reconsidered.*
2. *Comment: In addition to straight metering there are also AMRs and emerging AMIs, and integration with energy utilities should also be examined. Another area is GIS and site-specific consumption information – guidelines and directions from this group would help the industry as it moves into water conservation.*
3. *Comment: The California Urban Water Conservation Council will be voting on updated BMPs on December 10. This includes revisions as well as a “flex-track” option. The Team may want to look at these.*
4. *Comment: The concept of a loading order is inappropriate because this is inconsistent with the approach recommended in the California Water Plan and Integrated Regional Water Management planning that encourages diversification of local water supplies to improve local reliability and development of local sources. Agencies are developing all methods concurrently and need to be able to do so in order to maintain a reliable supply. A loading order would force methods to be sequenced, for example, all conservation must be done before recycled water, before desalination, before conjunctive use. A: We recognize that while some solutions may be general concepts, like a loading order or cap-and-trade system, the tool for the energy sector will not look the same as the one for the water sector. These are useful thinking devices. We will not try and copy and force-fit them. We will look carefully at the how different parts of the system are connected.*
5. *Comment: The Orange County saturation study estimates included two types: natural replacement and active implementation. The Technical Memorandum should examine whether and how this was acknowledged, and active implementation should be separated from natural turnover.*
6. *Comment: Further investigation of the savings from turf replacement is needed. You already have a framework for taking those hydrologic and other differences into account,*

and could determine an overall or generalized hydrologic regional savings per square foot of turf removed.

7. *Comment: Pint - 0.125 GPF urinals are superior to waterless urinals and don't require special fluids. For landscapes, evapotranspiration controllers hold promise but require work with vendors and landscapers. For outreach, billing statements providing bar graphs that compare current to prior use information and target use would be helpful.*
8. *Comment: Recycled water should be expressed as an efficiency measure. In the industrial sector, for example, recirculation makes more sense than taking the water off-site, treating it, and bringing it back on-site for use. You save 100%.*
9. *Comment: In relation to grants, DWR should look at the possibility of increasing cost shares – it seems that the agencies that most need the money are left out if they need more than 10%.*
10. *Two Comments (and response): (1) Regarding potential irrigation savings, simply lowering the ET adjustment factor does not mean water will be applied appropriately, so the savings may be overstated. (2) The average landscape area for homes is approximated at 6,000 square feet, but in some areas this would be huge and may not accurately represent what exists. And there is also a hardscape portion, so irrigation savings may be overstated. We have landscape area measurements as well as a regression formula for calculating appropriate irrigation areas as a result of lot size that we can share as well. (3) Our service area is probably 90% irrigated by recycled water, so again savings may be overestimated. A: The estimate of the savings that the more rigorous model landscape ordinance will generate is not used in the overall summary because it is captured through other elements of the summary. But we still would like to improve the data.*
11. *Comment: In work with the Building Industry Association, we have used a formula of thirds – 1/3 lot footprint, 1/3 hardscape, 1/3 softscape. This isn't perfect but is more accurate.*
12. *Two Comments (and response): A line item in the State budget should be added for CUWCC just like the Agricultural Council. This would produce many benefits, including the online reporting used to verify GPCD savings. (2) Legislation could accelerate the billing of all meters. A: Current law does require that all meters be read by 2010, and then be billed accordingly soon thereafter.*
13. *Two Comments: (1) Inherent differences between regions need to be taken into account – in the high desert north and south Lahontan regions, the landscape is very different, so the 1/3 rule mentioned earlier does not apply. (2) On the lack of a downward trend in GPCD, while population growth skyrockets regional water consumption may remain level, which counters this.*
14. *Two Comments: (1) It would be very helpful to engage the League of Cities here. (2) Artificial turf may have tradeoffs when it comes to heat generation, so this process needs to be in balance with the Climate Action Team's work and AB 32.*

15. *Q: How can DWR assist with the permitting of innovative solutions, particularly when local planning departments impose drawn out processes and extra requirements? A: Improving the relationship between water suppliers and local government has already been identified as an area to focus on, this came up in developing an updated model water efficient landscape ordinance.*
16. *Comment: How will efforts in different hydrologic zones be coordinated in the next phase? CUWCC is statewide, but when separated into regions people may not know their partners within this. Facilitating coordination and sharing information will be critical in the next phase.*
17. *Comment: With regard to accelerating the metering schedule, here in Sacramento we're working hard to get a 3% rate increase. Meter retrofit out to 2025 is predicated on a 3% minimum rate increase. There is a real economic problem here, no applications are being processed, the political will is absent to support or even commit to a 3% increase to 2025.*
18. *Comment: Metropolitan Water District is considering a 20% rate increase.*
19. *Comment: Investor-owned utilities just need proof of quality upgrades to the system. But the costs of washers and dryers and toilets is expensive. Things that depend upon residential economies should be pushed into the future because people can't afford the upgrades. We have to look at what is placed on the backs of agencies, investor-owned utilities, as well as consumers. A (1): We are all trying to meet our responsibilities of managing resources and providing services. We are seeking input on what people think can be done and should be done. We can't just go out and get more water or make more money. We have to deal with difficult resource management issues now so they do not become a crisis later. We've been grappling with these issues for years, and done easy things, now we need to do the harder things and it will take us all working together to find solutions. We can look to other sectors and others in our industry for solutions so that we actually have resources to manage later. A (2): The California Urban Water Conservation Council has been running a small statewide rebate program with smaller utilities and found increased industry demand for more efficient fixtures in the past two months. This means people are purchasing and installing the devices because they are investing in their houses for the long-term, they see their utility bills and the need to save water to save money, particularly when the State is talking about drought a lot.*
20. *Comment: This process is helpful because different sectors are coming together to share ideas and determine our own destiny. And its good to water losses – usually we just focus on the end user and do not look at what we can achieve at the system level. We all have aging infrastructure, so methods for quantifying and valuing in terms of revenue the water lost there is still a new area but is something that the system and utilities can do to achieve the goal.*

7. Next Steps Presentation

Rick Soehren, Chief of the Water Use Efficiency and Transfers Office of the California Department of Water Resources, gave a final presentation on next steps. This included:

- next work products, including a completed Technical Memorandum 5 (New Actions), technical memoranda on implementation and performance metrics, and a draft plan
- upcoming workshops – January for the memoranda, February for the draft plan
- subsequent technical assistance and tools, and legislation and regulation

Rick noted that in the new year and legislative session a number of bills will likely focus on the 20% conservation goal, and that AB 2175 was a learning experience. The legislative process could overtake this process, and by the next workshop in January there could be multiple bills. Therefore, Rick asked for feedback on a series of questions regarding possible approaches, including:

- should a legislative approach focus on planning or prescription?
 - accounting for regional differences – this needs to be done equitably
 - hydrologic regions or ET zones? AB 2175 focused on evapotranspiration zones, while this process, Proposition 84, and the California Water Plan focus on hydrologic regions
 - residential versus commercial-institutional-industrial (CII) – should residential be treated differently, and do we know enough to do this?
 - what's in, what's out? (recycling, desalination, etc) the Air Resources Board AB 32 Scoping Plan contends that everything needs to be done, AB 2175 includes recycling as a tool to get a 20% reduction in potable use
 - agriculture – parallel or linked? AB 2175 treated agriculture differently but included it in the same bill
 - what other tools are needed? what help will be necessary from the State and what will water suppliers or local governments need to achieve on their own?
1. *Comment: Two more questions should be added: (1) how will address differences among urban water suppliers – different oversight mechanisms, budgeting and planning processes, general rate cases? (2) how will address the impact on the regional economy, in terms of development being the financial basis for local government? The consequences go beyond the resources.*
 2. *Comment: We must tie in agriculture, there is more low-lying fruit in agriculture than in urban these days. Even a 5% water savings in agriculture equals 20% in urban. This must be looked at in conjunction.*
 3. *Comment: The California Urban Water Conservation Council's BMP revision process will vote and includes two new compliance methodologies – the flex-track menu approach mentioned earlier that allows agencies to choose from a list to meet their goals, and a Gallons Per Capita Daily-based approach that will be defined by June 2009. The effort here should keep an eye on that process*
 4. *Comment: Recognition that recycled water represents a 100% savings of potable water is important, we need to encourage agencies to continue to invest like this and ensure full*

crediting of this in the final options and targets. Regarding regions and ET zones, differences exist even at a smaller scale – agencies can be primarily residential or heavily industrial, and this can affect their ability to meet a one-size-fits-all GPCD target. So the final targets need an adjustment mechanism. Regarding planning versus prescriptive, targets need to be worked on, but the flex-track approach is the best approach.

5. *Comment: The process should be prescriptive but give credit to those who can demonstrate savings prior to 2005 implementation. Second, if a prescriptive approach is taken it must include landscaping and irrigation requirements.*
6. *Comment: If CII is included, the people involved in those industries must be involved in the discussions, CII supports the economy. They were not involved in AB 2175 discussions. In San Diego they've done a great deal of work on their own that's not related to anything we're doing – they're making changes to processes and saving water that's not being accounted for, and we need a much better idea of the potential savings in that sector and what's already been done.*
7. *Comment: The UC Davis Efficiency Center is hosting a corporate water footprinting conference in San Francisco on December 2-3. This effort should leverage relationships and partnerships with academia that are doing work around water-energy efficiency and provide a very good source of information.*
8. *Comment: The Department of Education should be involved in changing policy mindsets. A lot of this comes from K through 6 education – turning of lights, stopping smoking, turning off faucets. This is an inexpensive approach, but needs to be part of the curriculum rather than based on the wealth of individual agencies. You can't put a price on behavioral change, and this can have a huge impact on residential users.*
9. *Comment: Will the technical memoranda be updated? A: The Technical Memoranda are transitory insofar as they will not be revised, but the feedback and new ideas we've received will be reflected in the final report to the Governor.*
10. *Comment: Will the final report notate the changes made compared with the TMs and the thinking behind these changes? A: That is a good idea, we'll think about how to address that and produce a correct and complete record of our work.*
11. *Comment: A major challenge is to reach out to small water agencies and others that have not yet started implementing conservation programs or thinking about accelerating and adding new programs. Identifying them, inspiring them, and bringing them on board will be critical to success.*

8. Closing Comments and Next Steps

Rick Soehren reminded participants that comments on the Current and draft New Actions technical memoranda are critically important and are requested by

December 5. The Team website is

http://www.swrcb.ca.gov/water_issues/hot_topics/20x2020/index.shtml and comments can be submitted by email to 2020comments@ccp.csus.edu

Barbara Evoy (SWRCB), Lorraine White (California Energy Commission), Cindy Truelove (Public Utilities Commission), and Cindy Forbes (Department of Public Health) thanked people for attending and participating, and asked them to help spread the work and bring other people into the process.

9. Worksheets Submitted at the Workshop

Three participants handed in written comments on their worksheets.

Set One:

What other efforts or tools are available? *Artificial turf and synthetic grass systems used in both residential, commercial and municipal projects. Rebates – check with MWD. Move away from existing city bands of artificial turn products.*

Set Two:

Changes, additions, corrections? *Water loss estimates need verifiable sourcing – levels are too high to be economically feasible. Regional conservation actions are not in place – baseline and target numbers may be regionally-based but conservation programs are done on an agency-level basis. This should lead to consistent water savings tracking.*

What other efforts or tools are available? *Turf replacement rebates for residential/commercial/institutional water customers in conjunction with irrigation control technologies (see Mojave Water Agency Water Conservation Incentive Program). Water waste/nuisance water ordinances that refer back to similar methodology used for water-efficient landscape ordinances.*

What factors need to be considered in implementation, and what lessons learned? *Past credit for currently implemented efforts. Implementation question should not be put aside to be addressed after the document is ready – there seems to be too much deference on these issues when they should be incorporated into the process.*

Set Three:

Changes, additions, corrections? *Recycled water should be removed from GPCD calculation. Impossible to assume non-metered agencies can meet all BMPs. Unrealistic to assume that pricing can be the save-all – agencies with a low cost of water shouldn't be forced to charge more when waster is readily available and easily accessible; dependent on local council/board approval and Prop 218 conditions. 2005 baseline does not recognize past performance; there are agencies that have met all BMPs but are still well over regional targets. ET zones should be used rather than hydrologic regions. What about agencies with a large industrial base – how will this be accounted for (or exempted)? Marginal cost of water should be discussed and agreed upon by region. To resolve equity issue – what about a 20% regional reduction for entire state?*

What other efforts or tools are available? *Best results would come from cities and counties with land use authority. New ordinance relates to new construction. What about existing*

landscapes? Legislation on efficient irrigation should be implemented. Only sell efficient products with informational brochure.

What factors need to be considered in implementation, and what lessons learned? Theoretical approaches do not work. Customer habits and behaviors can override changeout of showerheads or toilets. Irrigation is primary to save water.

10. Attendance

Last Name, First Name	Affiliation/Organization
Alaniz, Tamara	Mojave Water Agency
Amaral, Lisa	City of Riverside
Archibald, Elaine	California Urban Water Association
Barr, Tim	Western MWD
Batoon, Benhur	Caltrans
Bayer, Paul	BMFS
Berg, Joe	MWD Orange County
Betancourt, Elizabeth	El Dorado Irrigation District
Bishop, Tracy Edm	El Dorado County Water Agency
Blair, Tim	MWD of Southern California
Boles, Michael	Monterey Peninsula Water Management District
Brenner, Liz	City of Sacramento
Cole, Kathy	MWD of Southern California
Costa, Anne B.	Association of Synthetic Grass Installers
Cruz, Steve	California Building Industry Association
Dolezal, Robert	California Association of Nursery and Garden Centers
Florendo, Andy	Solano County Water Agency
Florey, Lynn	Sonoma County Water Agency
Gagnier, Judy	San Juan Water
Hite, Mark	Lucas Advocates
Hollis, Mike	MWD of Southern California
Junbreis, Jeremy	US Marine Corps - MCF West
Kingsbury, John	Placer County Water Agency
Knott, Randi	California American
Kretschmann, Tess	Brown and Caldwell
LaPlante, Alexa	Montgomery-Watson Harza Sacramento
Latham, Barbara	San Juan Water
Lee, Brian	Sonoma County Water Agency
Lesko, Diane	Sonoma County Water Agency
Lopez, Joone	Apple Valley Ranchos Water Company
Ortez, Kristina	Natural Resources Defense Council
Quan, Judi	California Alliance for Jobs
Roberson, Mark	Sacramento Water Forum
Roy, Toby	San Diego County Water Authority
Sadler, Walter	City of Folsom
Sanchez, Fiona	Irvine Ranch Water District
Smith, Don	City of Folsom
Thompson, Rosi	MWD of Southern California

Underwood, Dave
Wisniewski, Emilia

Sonoma County Water Agency
East Bay Municipal Utility District

Agency Team and Staff

Alemi, Manucher	DWR
Bamezai, Anil	Western Policy Research
Blanchard, Wayne	CUWCC
Brown, Chris	CUWCC
Calvillo, Pauline	USBR
Evoy, Barbara	SWRCB
Farahnak, Shahla	SWRCB
Forbes, Cindy	DPH
Fougères, Dorian	CCP
Maughan, James	SWRCB
Mills, Rich	SWRCB
Prillwitz, Marsha	CUWCC
Schiff, Albert	CPUC
Talbot, Judie	CCP
Truelove, Cynthia	CPUC
White, Bryce	USBR
White, Lorraine	CEC