

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**MEETING OF OCTOBER 12, 2011
VICTORVILLE, CALIFORNIA**

ITEM: 12

SUBJECT: **PROPOSED SCOPE OF WORK AND DEVELOPMENT OF A SALT AND NUTRIENT MANAGEMENT PLAN FOR THE ANTELOPE VALLEY, ANTELOPE VALLEY REGIONAL WATER MANAGEMENT GROUP, LOS ANGELES AND KERN COUNTIES**

CHRONOLOGY: February 2009 Recycled Water Policy Adopted by State Water Resources Control Board (State Water Board)

ISSUE: To provide the Water Board an opportunity to provide input on the content and development of a regional Salt and Nutrient Management Plan (SMP) to manage salts and nutrients within the Antelope Valley basin (Enclosure 1). The final SMP will likely be adopted as a Basin Plan amendment at a later date.

DISCUSSION: Since May 2006, member agencies of the Antelope Valley Regional Water Management Group (Group) have met and developed an Integrated Regional Water Management Plan (IRWMP). The purpose of the IRWMP is to provide a watershed-based approach for addressing water supply, water quality, flood control, land use, and environmental resource management within the Antelope Valley basin. All member agencies separately adopted the final IRWMP during public meetings held between December 2007 and January 2008.

The Recycled Water Policy, State Water Board Resolution No. 2009-0011, establishes goals to manage a sustainable water supply through increased use of recycled water, enhanced stormwater management, and improved water conservation efforts (Enclosure 2). The Water Boards have determined that regulating individual waste discharges in a groundwater basin may not be effective or efficient at ensuring long term protection of groundwater resources and its beneficial uses without some overall evaluation of potential salt and nutrient loading. One of the key elements of the Policy is the development of a SMP for every groundwater basin within California by 2014. The purpose of the SMP is to evaluate the potential for salt and nutrient increases from all sources and to develop a management plan to protect groundwater from accumulating salts and nutrients at concentrations that would degrade the quality of groundwater and limit its beneficial uses. Waste discharges could then be regulated in a manner

consistent with the SMP. Potential sources of salts and nutrients include naturally occurring salts and minerals in soils and bedrock, irrigation water (which could originate from surface water, groundwater, and/or recycled water), water banking projects, and discharges of waste to land from land uses (such as agricultural, industrial, commercial, and/or residential). The development of the SMP is to be driven, controlled, and funded by local stakeholders, such as the Antelope Valley Group, with participation by the Water Boards. Once developed, a SMP will provide a roadmap for water agencies to manage salt and nutrient loading within a basin. Ultimately, the Water Boards will incorporate the various SMPs into the Basin Plans. To offset the costs of developing and implementing a SMP, grant funds are available through Proposition 84, which are administered by the California Department of Water Resources.

In the Lahontan Region, the Antelope Valley Group has made the most progress towards developing a SMP and intends to incorporate the plan as an appendix to the IRWMP. The objectives of the Antelope Valley SMP are: 1) gather available water quality data to evaluate the quality of surface water and groundwater at the watershed and sub-basin level within the basin; 2) identify potential sources of salt and nutrients and quantify loads for the sources; 3) determine assimilative capacity of the groundwater based on site-specific characteristics and source water quality for individual sub-basins; 4) develop a water quality monitoring and reporting plan that is designed to evaluate and track the long-term impacts to groundwater quality resulting from past, current, and future land uses; 5) identify and recommend most appropriate methods and best management practices for reducing and/or maintaining salt and nutrient loadings; and 6) demonstrate that implementation of the SMP will satisfy the requirements of the State Antidegradation Policy, Resolution No. 68-16 and the Recycled Water Policy. The scope of work for the Antelope Valley basin SMP follows draft guidance provided by the State Water Board (Enclosure 3). A timeline for tasks associated with the development of the Antelope Valley SMP is outlined in Enclosure 4.

Water Board staff has provided the Antelope Valley Group comments on the Proposed Scope of Work dated June 2010. Technical comments were made to guide the Group in developing a defensible SMP based on a reliable dataset. Staff comments included: 1) basin assimilative capacity must be based on site-specific characteristics and source water quality; 2) data management should follow a format consistent with the State Water Board's Groundwater Ambient Monitoring and Assessment Program; 3) the effects of importation of water and transferring recycled water sources between sub-basins should be considered; and 4) long-term monitoring should continue until steady state conditions within the basin have been achieved. Based on the

actual conditions over time, planning time scales may need to be adjusted. Water Board staff will meet with representatives of the Antelope Valley Group on September 27, 2011, to discuss staff comments. It is anticipated that the Antelope Valley Group will submit a revised scope of work incorporating staff comments by October 4, 2011. The Antelope Valley Group will present their revised scope of work, including preliminary data gathered to support the SMP, at the Water Board meeting.

Water Board staff has solicited comments from the Group and interested parties regarding this agenda item. No comments regarding this agenda item have been received.

RECOMMENDATION:

This is an informational item only. Water Board members may provide direction and input on the proposed scope of work and content of the regional SMP for the Antelope Valley basin.

Enclosures:

1. Proposed Scope of Work, June 2010 (Revised Scope of Work to be submitted to Board members prior to the Board meeting)
2. Recycled Water Policy
3. Suggested Elements of a SMP (State Water Board Draft Guidance)
4. Timeline of Tasks

ENCLOSURE 1

DRAFT SCOPE OF WORK
Salt/Nutrient Management Plan
Prepared by Antelope Valley IRWMP Group

PURPOSE

To develop a regional Salt/Nutrient Management Plan (SMP) for the Antelope Valley to manage salts and nutrients (and possibly other constituents of concern) from all sources within the basin to maintain water quality objectives and support beneficial uses. The intention is to involve all surface water and groundwater users and wastewater dischargers in the Antelope Valley basin to participate in efforts to protect these waters from accumulating concentrations of salt and nutrients that would degrade the quality of water supplies in the Antelope Valley to the extent that it may limit their use.

BACKGROUND

On February 3, 2009, the State Water Resources Control Board (SWRCB) adopted a Recycled Water Policy (Policy) that addresses the concern for protecting the quality of California's groundwater basins. In response to this Policy, Los Angeles County Waterworks Districts and Sanitation Districts of Los Angeles County have, with support of the Lahontan Regional Water Quality Control Board (Lahontan Water Board) staff, initiated efforts to organize a group to develop a regional SMP for the Antelope Valley.

Activities, such as irrigation using imported water, groundwater or recycled water can potentially add salts, typically measured as total dissolved solids (TDS), and nutrients to groundwater basins. Other sources of salts/nutrients can include natural soil conditions, discharges of waste, soil amendments and water supply augmentation using surface water or recycled water.

The SMP shall be completed and proposed to the Lahontan Water Board by May 14, 2014, unless the Lahontan Water Board finds that the stakeholders are making substantial progress toward completion of the plan. In no case shall the period for the completion of the plan exceed seven years.

GOALS

One goal is to address salt/nutrient loading in the region through the development of a management plan by the collaborative stakeholder process rather than the regional regulating agency imposing requirements on individual water projects. The process shall involve participation by Lahontan Water Board staff and be in compliance with California Environmental Quality Act (CEQA) regulations. The involvement of local agencies in a SMP may lead to more cost-effective means of protecting and enhancing groundwater quality, quantity, and availability.

Another goal is to assess impacts resulting from all activities with potential long-term basin-wide effects on groundwater quality, such as surface water, groundwater,

imported water, and recycled water irrigation projects and groundwater recharge projects, as well as other salt/nutrient contributing activities through regional groundwater monitoring.

The design and implementation of a regional groundwater monitoring program must involve all stakeholders, including, but not limited to, water importers, purveyors, stormwater management agencies, wastewater agencies, Lahontan Water Board, and other significant salinity/nutrient contributors, in addition to the recycled water stakeholders.

The completion of the SMP may lead to the potential for enhanced partnering opportunities and potential project funding between water and wastewater agencies, or other stakeholders, for developing and protecting water supplies.

PLAN REQUIREMENTS

Data Collection and Assessment

1. Stakeholder Participation
 - a. Outreach to the Lahontan Water Board staff and the stakeholders.
 - b. Convene stakeholder meetings.
 - c. Receive and review stakeholder input.
2. Determine SMP Area Boundaries
 - a. The current scope includes the Lancaster, Buttes, and Pearland sub-basins. Additional sub-basins may be included in the scope depending on the willingness of users, purveyors, wastewater agencies, regulators, significant salt/nutrient contributors, and other stakeholders to participate and provide data.
 - b. Within the determined scope, identify surface water, groundwater, and sub-basin locations, aquifers, and wells.
3. Understand Current and Future Basin Uses
 - a. Create a database of current land uses contributing to potential salt/nutrient impacts.
 - b. Identify existing surface/groundwater data collection efforts throughout the region.
 - c. Create a map with land uses, including: irrigation sites; wastewater disposal sites; large water recycling sites; groundwater augmentation sites; and other potential sources of salinity/nutrient contributions to the groundwater supply.
4. Create Groundwater Quality Database for Sub-basin
 - a. Determine groundwater characteristics, recharge areas, and background water quality.

- b. Compile data and determine existing water quality, defined as the average concentration of salts/nutrients and other constituents of concern measured at each well.
5. Data Analysis
 - a. Conduct a regional analysis of available groundwater quality databases to determine whether sufficient data and ongoing monitoring is available for the sub-basin.
 - b. If necessary, chose an appropriate model for data analysis and run the model. Calibrate the model used to analyze the data (including debugging of the chosen model) and verify the input data. Compare various model runs to observed values for each basin, as applicable.

Characterization of Basin

6. Salt and Nutrient Characterization
 - a. Identify the current and projected sources and loadings of salts/nutrients.
 - b. Determine the basin's assimilative capacity of salts/nutrients.
 - c. Determine the fate and transport of salt/nutrients.
 - d. Include other constituents of concern as necessary and appropriate.
 - e. Identify potential salt sinks
 - f. Develop future planning scenarios for future users/uses that would include expected requests for projected recycled water production, reuse, discharges to Antelope Valley basins, and expected quality for each wastewater treatment facility (existing and projected). Planning scenarios could include appropriate planning spans, including, for example, a 5-year plan, 10-year plan, 25-year plan and a 50-year projected plan, or some combination as determined by the stakeholders.
 - g. Prepare a draft report to the stakeholders to present the data collected during basin characterization and the results for assimilative capacity (by sub-basin).

Monitoring

7. Develop a Monitoring Plan
 - a. Define the scale of the monitoring plan component, dependent on site-specific conditions.
 - b. Monitor for salts, nutrients, and other constituents of concern that potentially could adversely affect the water quality of the basin.
 - c. Determine appropriate monitoring by targeting basin water quality at existing water supply and monitoring wells and areas proximate to large water recycling projects, and groundwater recharge projects.
 - d. The monitoring plan should be designed to evaluate the long-term impacts to groundwater quality resulting from current and future land uses.
 - e. Identify stakeholders responsible for conducting, compiling, and reporting the monitoring data.

8. Monitoring Implementation

- a. Monitor each location at a determined frequency to assess impacts and take into account changes in all significant sources.
- b. Establish criteria for concentrations above ambient conditions based on statistical evaluation of data to trigger additional investigations.
- c. Conduct monitoring of constituents of concern, as recommended by the “blue-ribbon” Advisory Panel and approved by the SWRCB.
- d. Report data to the Lahontan Water Board staff every 3 years.

Implementation Measures

9. Manage Salt/Nutrient Loadings on a Sustainable Basis

- a. Identify potential methods and best management practices to reduce and/or maintain salt and nutrient loadings—such as disposal and/or reducing methods.
- b. Recommend most appropriate methods and best management practices for reducing and/or maintaining salt and nutrient loadings.

10. Water Recycling and Stormwater Use/Recharge

- a. Identify goals and objectives.

Antidegradation

11. Analysis

- a. Demonstrate that the projects included in the SMP will satisfy the requirements of the State Antidegradation Policy (Resolution No. 68-16).

Proposed Schedule

Task	Description	Estimated Completion Date
1	Outreach to RWQCB and Stakeholders	July 2009
2	Convene Initial S/N Management Plan Meeting	August 2009
3	Data Collection	July 2010
4	Data Assessment	October 2010
5	Initial Characterization of Basin	January 2011
6	Develop Monitoring Plan	July 2011
7	Identify Implementation Measures	November 2011
8	Antidegradation Analysis	January 2012
9	Draft S/N Management Plan	July 2012
10	Completion of Draft CEQA Documents	January 2013
11	Final S/N Management Plan Submitted to RWQCB	October 2013

ENCLOSURE 2

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2009-0011**

**ADOPTION OF A POLICY FOR
WATER QUALITY CONTROL FOR RECYCLED WATER**

WHEREAS:

1. The Strategic Plan Update 2008-2012 for the Water Boards includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and ensure adequate water flows for fish and wildlife habitat. This Recycled Water Policy (Policy) is intended to support the Strategic Plan priority to Promote Sustainable Local Water Supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change. The Policy is also intended to encourage beneficial use of, rather than solely disposal of, recycled water.
2. California Water Code section 13140 authorizes the State Water Resources Control Board (State Water Board) to adopt state policy for water quality control.
3. On March 20, 2007, the State Water Board conducted a public workshop on recycled water.
4. On September 28, 2007, staff circulated a draft Recycled Water Policy and a draft staff report/certified regulatory program environmental analysis/California Environmental Quality Act (CEQA) checklist for public comment.
5. On October 2, 2007, the State Water Board conducted a public workshop on the draft Recycled Water Policy.
6. On February 15, 2008, the State Water Board circulated an updated version of the draft Policy and the draft staff report/certified regulatory program environmental analysis/CEQA checklist.
7. On November 21, 2008, the State Water Board circulated another updated version of the draft Policy and the draft staff report/certified regulatory program environmental analysis/CEQA checklist.
8. Staff has responded to significant verbal and written comments received from the public and made revisions to the draft Policy in response to the comments.
9. On January 6, 2009, the State Water Board conducted a public hearing on the draft Policy. In response, staff has revised the draft Policy, which is available at http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/docs/draft_recycled_water_policy_011609.pdf. Staff has also revised the draft staff report, which is available at http://www.swrcb.ca.gov/water_issues/programs/water_recycling_policy/docs/020309_drafts_taffreport_checklist_01162009.pdf.
10. The Policy includes findings, including findings related to compliance with State Water Board Resolution No. 68-16, that are hereby incorporated by reference.

11. The State Water Board received a letter from statewide water and wastewater entities dated December 19, 2008, strongly urging their member agencies to commit funding and in-kind resources to facilitate development of salt/nutrient management plans within the five-year timeframe established by the State Water Board in the Policy.
12. The Resources Agency has approved the State Water Board's and the Regional Water Quality Control Boards' water quality control planning process as a "certified regulatory program" that adequately satisfies the CEQA requirements for preparing environmental documents. State Water Board staff has prepared a "substitute environmental document" for this project that contains the required environmental documentation under the State Water Board's CEQA regulations. (California Code of Regulations, title 23, section 3777.) The substitute environmental documents include the "Draft Staff Report and Certified Regulatory Program Environmental Analysis Recycled Water Policy," which includes an environmental checklist, the comments and responses to comments, the Policy itself, and this resolution. The project is the adoption of a Recycled Water Policy.
13. In preparing the substitute environmental documents, the State Water Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends these documents to serve as a Tier 1 environmental review. The State Water Board has considered the reasonably foreseeable consequences of adoption of the draft Policy; however, potential site-specific recycled water project impacts may need to be considered in any subsequent environmental analysis performed by lead agencies, pursuant to Public Resources Code section 21159.1.
14. Consistent with CEQA, the substitute environmental documents do not engage in speculation or conjecture but, rather, analyze the reasonably foreseeable environmental impacts related to methods of compliance with the draft Policy, reasonably foreseeable mitigation measures to reduce those impacts, and reasonably feasible alternative means of compliance that would avoid or reduce the identified impacts.
15. The draft Policy incorporates mitigation that reduces to a level that is insignificant any adverse effects on the environment. From a program-level perspective, incorporation of the mitigation measures described in the substitute environmental document will foreseeably reduce impacts to less than significant levels.
16. A policy for water quality control does not become effective until adopted by the State Water Board and until the regulatory provisions are approved by the Office of Administrative Law (OAL).
17. If, during the OAL approval process, OAL determines that minor, non-substantive modifications to the language of the Policy are needed for clarity or consistency, the Executive Director or designee may make such changes consistent with the State Water Board's intent in adopting this Policy, and shall inform the State Water Board of any such changes.

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves and adopts the CEQA substitute environmental documentation, which includes the staff report/certified regulatory program environmental analysis/CEQA checklist, and the response to comments, which was prepared in accordance with the requirements of the State Water Board's certified regulatory CEQA process (as set forth in California Code of Regulations, title 23, section 3775, et seq.), Public Resources Code section 21159, and California Code of Regulations, title 14, section 15187, and directs the Executive Director or designee to sign the environmental checklist.
2. After considering the entire record, including oral testimony at the public hearing, adopts the Recycled Water Policy.
3. Authorizes the Executive Director or designee to submit the Recycled Water Policy to OAL for review and approval.
4. If, during the OAL approval process, OAL determines that minor, non-substantive modifications to the language of the Policy are needed for clarity or consistency, directs the Executive Director or designee to make such changes and inform the State Water Board of any such changes.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on February 3, 2009.

AYE: Chair Tam M. Doduc
Charles R. Hoppin
Frances Spivy-Weber

NAY: None

ABSENT: Arthur G. Baggett, Jr.

ABSTAIN: None



Jeanine Townsend
Clerk to the Board

Recycled Water Policy

1. *Preamble*

California is facing an unprecedented water crisis.

The collapse of the Bay-Delta ecosystem, climate change, and continuing population growth have combined with a severe drought on the Colorado River and failing levees in the Delta to create a new reality that challenges California's ability to provide the clean water needed for a healthy environment, a healthy population and a healthy economy, both now and in the future.

These challenges also present an unparalleled opportunity for California to move aggressively towards a sustainable water future. The State Water Resources Control Board (State Water Board) declares that we will achieve our mission to "preserve, enhance and restore the quality of California's water resources to the benefit of present and future generations." To achieve that mission, we support and encourage every region in California to develop a salt/nutrient management plan by 2014 that is sustainable on a long-term basis and that provides California with clean, abundant water. These plans shall be consistent with the Department of Water Resources' Bulletin 160, as appropriate, and shall be locally developed, locally controlled and recognize the variability of California's water supplies and the diversity of its waterways. We strongly encourage local and regional water agencies to move toward clean, abundant, local water for California by emphasizing appropriate water recycling, water conservation, and maintenance of supply infrastructure and the use of stormwater (including dry-weather urban runoff) in these plans; these sources of supply are drought-proof, reliable, and minimize our carbon footprint and can be sustained over the long-term.

We declare our independence from relying on the vagaries of annual precipitation and move towards sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse and the use of stormwater. To this end, we adopt the following goals for California:

- Increase the use of recycled water over 2002 levels by at least one million acre-feet per year (afy) by 2020 and by at least two million afy by 2030.
- Increase the use of stormwater over use in 2007 by at least 500,000 afy by 2020 and by at least one million afy by 2030.
- Increase the amount of water conserved in urban and industrial uses by comparison to 2007 by at least 20 percent by 2020.
- Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The purpose of this Policy is to increase the use of recycled water from municipal wastewater sources that meets the definition in Water Code section 13050(n), in a manner that implements state and federal water quality laws. The State Water Board expects to

develop additional policies to encourage the use of stormwater, encourage water conservation, encourage the conjunctive use of surface and groundwater, and improve the use of local water supplies.

When used in compliance with this Policy, Title 22 and all applicable state and federal water quality laws, the State Water Board finds that recycled water is safe for approved uses, and strongly supports recycled water as a safe alternative to potable water for such approved uses.

2. *Purpose of the Policy*

- a. The purpose of this Policy is to provide direction to the Regional Water Quality Control Boards (Regional Water Boards), proponents of recycled water projects, and the public regarding the appropriate criteria to be used by the State Water Board and the Regional Water Boards in issuing permits for recycled water projects.
- b. It is the intent of the State Water Board that all elements of this Policy are to be interpreted in a manner that fully implements state and federal water quality laws and regulations in order to enhance the environment and put the waters of the state to the fullest use of which they are capable.
- c. This Policy describes permitting criteria that are intended to streamline the permitting of the vast majority of recycled water projects. The intent of this streamlined permit process is to expedite the implementation of recycled water projects in a manner that implements state and federal water quality laws while allowing the Regional Water Boards to focus their limited resources on projects that require substantial regulatory review due to unique site-specific conditions.
- d. By prescribing permitting criteria that apply to the vast majority of recycled water projects, it is the State Water Board's intent to maximize consistency in the permitting of recycled water projects in California while also reserving to the Regional Water Boards sufficient authority and flexibility to address site-specific conditions.
- e. The State Water Board will establish additional policies that are intended to assist the State of California in meeting the goals established in the preamble to this Policy for water conservation and the use of stormwater.
- f. For purposes of this Policy, the term "permit" means an order adopted by a Regional Water Board or the State Water Board prescribing requirements for a recycled water project, including but not limited to water recycling requirements, master reclamation permits, and waste discharge requirements.

3. *Benefits of Recycled Water*

The State Water Board finds that the use of recycled water in accordance with this Policy, that is, which supports the sustainable use of groundwater and/or surface water, which is

sufficiently treated so as not to adversely impact public health or the environment and which ideally substitutes for use of potable water, is presumed to have a beneficial impact. Other public agencies are encouraged to use this presumption in evaluating the impacts of recycled water projects on the environment as required by the California Environmental Quality Act (CEQA).

4. *Mandate for the Use of Recycled Water*

- a. The State Water Board and Regional Water Boards will exercise the authority granted to them by the Legislature to the fullest extent possible to encourage the use of recycled water, consistent with state and federal water quality laws.
 - (1) The State Water Board hereby establishes a mandate to increase the use of recycled water in California by 200,000 afy by 2020 and by an additional 300,000 afy by 2030. These mandates shall be achieved through the cooperation and collaboration of the State Water Board, the Regional Water Boards, the environmental community, water purveyors and the operators of publicly owned treatment works. The State Water Board will evaluate progress toward these mandates biennially and review and revise as necessary the implementation provisions of this Policy in 2012 and 2016.
 - (2) Agencies producing recycled water that is available for reuse and not being put to beneficial use shall make that recycled water available to water purveyors for reuse on reasonable terms and conditions. Such terms and conditions may include payment by the water purveyor of a fair and reasonable share of the cost of the recycled water supply and facilities.
 - (3) The State Water Board hereby declares that, pursuant to Water Code sections 13550 *et seq.*, it is a waste and unreasonable use of water for water agencies not to use recycled water when recycled water of adequate quality is available and is not being put to beneficial use, subject to the conditions established in sections 13550 *et seq.* The State Water Board shall exercise its authority pursuant to Water Code section 275 to the fullest extent possible to enforce the mandates of this subparagraph.
- b. These mandates are contingent on the availability of sufficient capital funding for the construction of recycled water projects from private, local, state, and federal sources and assume that the Regional Water Boards will effectively implement regulatory streamlining in accordance with this Policy.
- c. The water industry and the environmental community have agreed jointly to advocate for \$1 billion in state and federal funds over the next five years to fund projects needed to meet the goals and mandates for the use of recycled water established in this Policy.

- d. The State Water Board requests the California Department of Public Health (CDPH), the California Public Utilities Commission (CPUC), and the California Department of Water Resources (CDWR) to use their respective authorities to the fullest extent practicable to assist the State Water Board and the Regional Water Boards in increasing the use of recycled water in California.

5. *Roles of the State Water Board, Regional Water Boards, CDPH and CDWR*

The State Water Board recognizes that it shares jurisdiction over the use of recycled water with the Regional Water Boards and with CDPH. In addition, the State Water Board recognizes that CDWR and the CPUC have important roles to play in encouraging the use of recycled water. The State Water Board believes that it is important to clarify the respective roles of each of these agencies in connection with recycled water projects, as follows:

- a. The State Water Board establishes general policies governing the permitting of recycled water projects consistent with its role of protecting water quality and sustaining water supplies. The State Water Board exercises general oversight over recycled water projects, including review of Regional Water Board permitting practices, and shall lead the effort to meet the recycled water use goals set forth in the Preamble to this Policy. The State Water Board is also charged by statute with developing a general permit for irrigation uses of recycled water.
- b. The CDPH is charged with protection of public health and drinking water supplies and with the development of uniform water recycling criteria appropriate to particular uses of water. Regional Water Boards shall appropriately rely on the expertise of CDPH for the establishment of permit conditions needed to protect human health.
- c. The Regional Water Boards are charged with protection of surface and groundwater resources and with the issuance of permits that implement CDPH recommendations, this Policy, and applicable law and will, pursuant to paragraph 4 of this Policy, use their authority to the fullest extent possible to encourage the use of recycled water.
- d. CDWR is charged with reviewing and, every five years, updating the California Water Plan, including evaluating the quantity of recycled water presently being used and planning for the potential for future uses of recycled water. In undertaking these tasks, CDWR may appropriately rely on urban water management plans and may share the data from those plans with the State Water Board and the Regional Water Boards. CDWR also shares with the State Water Board the authority to allocate and distribute bond funding, which can provide incentives for the use of recycled water.
- e. The CPUC is charged with approving rates and terms of service for the use of recycled water by investor-owned utilities.

6. *Salt/Nutrient Management Plans*

a. *Introduction.*

- (1) Some groundwater basins in the state contain salts and nutrients that exceed or threaten to exceed water quality objectives established in the applicable Water Quality Control Plans (Basin Plans), and not all Basin Plans include adequate implementation procedures for achieving or ensuring compliance with the water quality objectives for salt or nutrients. These conditions can be caused by natural soils/conditions, discharges of waste, irrigation using surface water, groundwater or recycled water and water supply augmentation using surface or recycled water. Regulation of recycled water alone will not address these conditions.
- (2) It is the intent of this Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The State Water Board finds that the appropriate way to address salt and nutrient issues is through the development of regional or subregional salt and nutrient management plans rather than through imposing requirements solely on individual recycled water projects.

b. *Adoption of Salt/ Nutrient Management Plans.*

- (1) The State Water Board recognizes that, pursuant to the letter dated December 19, 2008 and attached to the Resolution adopting this Policy, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Regional Water Board staff.
 - (a) It is the intent of this Policy for every groundwater basin/sub-basin in California to have a consistent salt/nutrient management plan. The degree of specificity within these plans and the length of these plans will be dependent on a variety of site-specific factors, including but not limited to size and complexity of a basin, source water quality, stormwater recharge, hydrogeology, and aquifer water quality. It is also the intent of the State Water Board that because stormwater is typically lower in nutrients and salts and can augment local water supplies, inclusion of a significant stormwater use and recharge component within the salt/nutrient management plans is critical to the long-term sustainable use of water in California. Inclusion of stormwater recharge is consistent with State Water Board Resolution No. 2005-06, which establishes sustainability as a core value for State Water Board programs and

also assists in implementing Resolution No. 2008-30, which requires sustainable water resources management and is consistent with Objective 3.2 of the State Water Board Strategic Plan Update dated September 2, 2008.

- (b) Salt and nutrient plans shall be tailored to address the water quality concerns in each basin/sub-basin and may include constituents other than salt and nutrients that impact water quality in the basin/sub-basin. Such plans shall address and implement provisions, as appropriate, for all sources of salt and/or nutrients to groundwater basins, including recycled water irrigation projects and groundwater recharge reuse projects.
 - (c) Such plans may be developed or funded pursuant to the provisions of Water Code sections 10750 *et seq.* or other appropriate authority.
 - (d) Salt and nutrient plans shall be completed and proposed to the Regional Water Board within five years from the date of this Policy unless a Regional Water Board finds that the stakeholders are making substantial progress towards completion of a plan. In no case shall the period for the completion of a plan exceed seven years.
 - (e) The requirements of this paragraph shall not apply to areas that have already completed a Regional Water Board approved salt and nutrient plan for a basin, sub-basin, or other regional planning area that is functionally equivalent to paragraph 6(b)3.
 - (f) The plans may, depending upon the local situation, address constituents other than salt and nutrients that adversely affect groundwater quality.
- (2) Within one year of the receipt of a proposed salt and nutrient management plan, the Regional Water Boards shall consider for adoption revised implementation plans, consistent with Water Code section 13242, for those groundwater basins within their regions where water quality objectives for salts or nutrients are being, or are threatening to be, exceeded. The implementation plans shall be based on the salt and nutrient plans required by this Policy.
- (3) Each salt and nutrient management plan shall include the following components:
- (a) A basin/sub-basin wide monitoring plan that includes an appropriate network of monitoring locations. The scale of the basin/sub-basin monitoring plan is dependent upon the site-specific conditions and shall be adequate to provide a reasonable,

cost-effective means of determining whether the concentrations of salt, nutrients, and other constituents of concern as identified in the salt and nutrient plans are consistent with applicable water quality objectives. Salts, nutrients, and the constituents identified in paragraph 6(b)(1)(f) shall be monitored. The frequency of monitoring shall be determined in the salt/nutrient management plan and approved by the Regional Water Board pursuant to paragraph 6(b)(2).

- (i) The monitoring plan must be designed to determine water quality in the basin. The plan must focus on basin water quality near water supply wells and areas proximate to large water recycling projects, particularly groundwater recharge projects. Also, monitoring locations shall, where appropriate, target groundwater and surface waters where groundwater has connectivity with adjacent surface waters.
 - (ii) The preferred approach to monitoring plan development is to collect samples from existing wells if feasible as long as the existing wells are located appropriately to determine water quality throughout the most critical areas of the basin.
 - (iii) The monitoring plan shall identify those stakeholders responsible for conducting, compiling, and reporting the monitoring data. The data shall be reported to the Regional Water Board at least every three years.
- (b) A provision for annual monitoring of Emerging Constituents/ Constituents of Emerging Concern (e.g., endocrine disrupters, personal care products or pharmaceuticals) (CECs) consistent with recommendations by CDPH and consistent with any actions by the State Water Board taken pursuant to paragraph 10(b) of this Policy.
 - (c) Water recycling and stormwater recharge/use goals and objectives.
 - (d) Salt and nutrient source identification, basin/sub-basin assimilative capacity and loading estimates, together with fate and transport of salts and nutrients.
 - (e) Implementation measures to manage salt and nutrient loading in the basin on a sustainable basis.
 - (f) An antidegradation analysis demonstrating that the projects included within the plan will, collectively, satisfy the requirements of Resolution No. 68-16.

- (4) Nothing in this Policy shall prevent stakeholders from developing a plan that is more protective of water quality than applicable standards in the Basin Plan. No Regional Water Board, however, shall seek to modify Basin Plan objectives without full compliance with the process for such modification as established by existing law.

7. *Landscape Irrigation Projects*

- a. *Control of incidental runoff.* Incidental runoff is defined as unintended small amounts (volume) of runoff from recycled water use areas, such as unintended, minimal over-spray from sprinklers that escapes the recycled water use area. Water leaving a recycled water use area is not considered incidental if it is part of the facility design, if it is due to excessive application, if it is due to intentional overflow or application, or if it is due to negligence. Incidental runoff may be regulated by waste discharge requirements or, where necessary, waste discharge requirements that serve as a National Pollutant Discharge Elimination System (NPDES) permit, including municipal separate storm water system permits, but regardless of the regulatory instrument, the project shall include, but is not limited to, the following practices:
 - (1) Implementation of an operations and management plan that may apply to multiple sites and provides for detection of leaks, (for example, from broken sprinkler heads), and correction either within 72 hours of learning of the runoff, or prior to the release of 1,000 gallons, whichever occurs first,
 - (2) Proper design and aim of sprinkler heads,
 - (3) Refraining from application during precipitation events, and
 - (4) Management of any ponds containing recycled water such that no discharge occurs unless the discharge is a result of a 25-year, 24-hour storm event or greater, and there is notification of the appropriate Regional Water Board Executive Officer of the discharge.
- b. *Streamlined Permitting*
 - (1) The Regional Water Boards shall, absent unusual circumstances (i.e., unique, site-specific conditions such as where recycled water is proposed to be used for irrigation over high transmissivity soils over a shallow (5' or less) high quality groundwater aquifer), permit recycled water projects that meet the criteria set forth in this Policy, consistent with the provisions of this paragraph.
 - (2) If the Regional Water Board determines that unusual circumstances apply, the Regional Water Board shall make a finding of unusual circumstances based on substantial evidence in the record, after public notice and hearing.

- (3) Projects meeting the criteria set forth below and eligible for enrollment under requirements established in a general order shall be enrolled by the State or Regional Water Board within 60 days from the date on which an application is deemed complete by the State or Regional Water Board. For projects that are not enrolled in a general order, the Regional Water Board shall consider permit adoption within 120 days from the date on which the application is deemed complete by the Regional Water Board.
 - (4) Landscape irrigation projects that qualify for streamlined permitting shall not be required to include a project specific receiving water and groundwater monitoring component unless such project specific monitoring is required under the adopted salt/nutrient management plan. During the interim while the salt management plan is under development, a landscape irrigation project proponent can either perform project specific monitoring, or actively participate in the development and implementation of a salt/nutrient management plan, including basin/sub-basin monitoring. Permits or requirements for landscape irrigation projects shall include, in addition to any other appropriate recycled water monitoring requirements, recycled water monitoring for CECs on an annual basis and priority pollutants on a twice annual basis. Except as requested by CDPH, State and Regional Water Board monitoring requirements for CECs shall not take effect until 18 months after the effective date of this Policy. In addition, any permits shall include a permit reopener to allow incorporation of appropriate monitoring requirements for CECs after State Water Board action under paragraph 10(b)(2).
 - (5) It is the intent of the State Water Board that the general permit for landscape irrigation projects be consistent with the terms of this Policy.
- c. *Criteria for streamlined permitting.* Irrigation projects using recycled water that meet the following criteria are eligible for streamlined permitting, and, if otherwise in compliance with applicable laws, shall be approved absent unusual circumstances:
- (1) Compliance with the requirements for recycled water established in Title 22 of the California Code of Regulations, including the requirements for treatment and use area restrictions, together with any other recommendations by CDPH pursuant to Water Code section 13523.
 - (2) Application in amounts and at rates as needed for the landscape (i.e., at agronomic rates and not when the soil is saturated). Each irrigation project shall be subject to an operations and management plan, that may apply to multiple sites, provided to the Regional Water Board that specifies the agronomic rate(s) and describes a set of reasonably practicable measures to ensure compliance with this requirement, which may include the development of water budgets for use areas, site

supervisor training, periodic inspections, tiered rate structures, the use of smart controllers, or other appropriate measures.

- (3) Compliance with any applicable salt and nutrient management plan.
- (4) Appropriate use of fertilizers that takes into account the nutrient levels in the recycled water. Recycled water producers shall monitor and communicate to the users the nutrient levels in their recycled water.

8. *Recycled Water Groundwater Recharge Projects*

- a. The State Water Board acknowledges that all recycled water groundwater recharge projects must be reviewed and permitted on a site-specific basis, and so such projects will require project-by-project review.
- b. Approved groundwater recharge projects will meet the following criteria:
 - (1) Compliance with regulations adopted by CDPH for groundwater recharge projects or, in the interim until such regulations are approved, CDPH's recommendations pursuant to Water Code section 13523 for the project (e.g., level of treatment, retention time, setback distance, source control, monitoring program, etc.).
 - (2) Implementation of a monitoring program for constituents of concern and a monitoring program for CECs that is consistent with any actions by the State Water Board taken pursuant to paragraph 10(b) of this Policy and that takes into account site-specific conditions. Groundwater recharge projects shall include monitoring of recycled water for CECs on an annual basis and priority pollutants on a twice annual basis.
- c. Nothing in this paragraph shall be construed to limit the authority of a Regional Water Board to protect designated beneficial uses, *provided* that any proposed limitations for the protection of public health may only be imposed following regular consultation by the Regional Water Board with CDPH, consistent with State Water Board Orders WQ 2005-0007 and 2006-0001.
- d. Nothing in this Policy shall be construed to prevent a Regional Water Board from imposing additional requirements for a proposed recharge project that has a substantial adverse effect on the fate and transport of a contaminant plume or changes the geochemistry of an aquifer thereby causing the dissolution of constituents, such as arsenic, from the geologic formation into groundwater.
- e. Projects that utilize surface spreading to recharge groundwater with recycled water treated by reverse osmosis shall be permitted by a Regional Water Board within one year of receipt of recommendations from CDPH. Furthermore, the Regional Water Board shall give a high priority to review and approval of such projects.

9. *Antidegradation*

- a. The State Water Board adopted Resolution No. 68-16 as a policy statement to implement the Legislature's intent that waters of the state shall be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the state.
- b. Activities involving the disposal of waste that could impact high quality waters are required to implement best practicable treatment or control of the discharge necessary to ensure that pollution or nuisance will not occur, and the highest water quality consistent with the maximum benefit to the people of the state will be maintained.
- c. Groundwater recharge with recycled water for later extraction and use in accordance with this Policy and state and federal water quality law is to the benefit of the people of the state of California. Nonetheless, the State Water Board finds that groundwater recharge projects using recycled water have the potential to lower water quality within a basin. The proponent of a groundwater recharge project must demonstrate compliance with Resolution No. 68-16. Until such time as a salt/nutrient management plan is in effect, such compliance may be demonstrated as follows:
 - (1) A project that utilizes less than 10 percent of the available assimilative capacity in a basin/sub-basin (or multiple projects utilizing less than 20 percent of the available assimilative capacity in a basin/sub-basin) need only conduct an antidegradation analysis verifying the use of the assimilative capacity. For those basins/sub-basins where the Regional Water Boards have not determined the baseline assimilative capacity, the baseline assimilative capacity shall be calculated by the initial project proponent, with review and approval by the Regional Water Board, until such time as the salt/nutrient plan is approved by the Regional Water Board and is in effect. For compliance with this subparagraph, the available assimilative capacity shall be calculated by comparing the mineral water quality objective with the average concentration of the basin/sub-basin, either over the most recent five years of data available or using a data set approved by the Regional Water Board Executive Officer. In determining whether the available assimilative capacity will be exceeded by the project or projects, the Regional Water Board shall calculate the impacts of the project or projects over at least a ten year time frame.

- (2) In the event a project or multiple projects utilize more than the fraction of the assimilative capacity designated in subparagraph (1), then a Regional Water Board-deemed acceptable antidegradation analysis shall be performed to comply with Resolution No. 68-16. The project proponent shall provide sufficient information for the Regional Water Board to make this determination. An example of an approved method is the method used by the State Water Board in connection with Resolution No. 2004-0060 and the Regional Water Board in connection with Resolution No. R8-2004-0001. An integrated approach (using surface water, groundwater, recycled water, stormwater, pollution prevention, water conservation, etc.) to the implementation of Resolution No. 68-16 is encouraged.
- d. Landscape irrigation with recycled water in accordance with this Policy is to the benefit of the people of the State of California. Nonetheless, the State Water Board finds that the use of water for irrigation may, regardless of its source, collectively affect groundwater quality over time. The State Water Board intends to address these impacts in part through the development of salt/nutrient management plans described in paragraph 6.
- (1) A project that meets the criteria for a streamlined irrigation permit and is within a basin where a salt/nutrient management plan satisfying the provisions of paragraph 6(b) is in place may be approved without further antidegradation analysis, provided that the project is consistent with that plan.
 - (2) A project that meets the criteria for a streamlined irrigation permit and is within a basin where a salt/nutrient management plan satisfying the provisions of paragraph 6(b) is being prepared may be approved by the Regional Water Board by demonstrating through a salt/nutrient mass balance or similar analysis that the project uses less than 10 percent of the available assimilative capacity as estimated by the project proponent in a basin/sub-basin (or multiple projects using less than 20 percent of the available assimilative capacity as estimated by the project proponent in a groundwater basin).

10. *Emerging Constituents/Chemicals of Emerging Concern*

a. *General Provisions*

- (1) Regulatory requirements for recycled water shall be based on the best available peer-reviewed science. In addition, all uses of recycled water must meet conditions set by CDPH.
- (2) Knowledge of risks will change over time and recycled water projects must meet legally applicable criteria. However, when standards change, projects should be allowed time to comply through a compliance schedule.

- (3) The state of knowledge regarding CECs is incomplete. There needs to be additional research and development of analytical methods and surrogates to determine potential environmental and public health impacts. Agencies should minimize the likelihood of CECs impacting human health and the environment by means of source control and/or pollution prevention programs.
 - (4) Regulating most CECs will require significant work to develop test methods and more specific determinations as to how and at what level CECs impact public health or our environment.
- b. *Research Program.* The State Water Board, in consultation with CDPH and within 90 days of the adoption of this Policy, shall convene a “blue-ribbon” advisory panel to guide future actions relating to constituents of emerging concern.
- (1) The panel shall be actively managed by the State Water Board and shall be composed of at least the following: one human health toxicologist, one environmental toxicologist, one epidemiologist, one biochemist, one civil engineer familiar with the design and construction of recycled water treatment facilities, and one chemist familiar with the design and operation of advanced laboratory methods for the detection of emerging constituents. Each of these panelists shall have extensive experience as a principal investigator in their respective areas of expertise.
 - (2) The panel shall review the scientific literature and, within one year from its appointment, shall submit a report to the State Water Board and CDPH describing the current state of scientific knowledge regarding the risks of emerging constituents to public health and the environment. Within six months of receipt of the panel’s report the State Water Board, in coordination with CDPH, shall hold a public hearing to consider recommendations from staff and shall endorse the recommendations, as appropriate, after making any necessary modifications. The panel or a similarly constituted panel shall update this report every five years.
 - (3) Each report shall recommend actions that the State of California should take to improve our understanding of emerging constituents and, as may be appropriate, to protect public health and the environment.
 - (4) The panel report shall answer the following questions: What are the appropriate constituents to be monitored in recycled water, including analytical methods and method detection limits? What is the known toxicological information for the above constituents? Would the above lists change based on level of treatment and use? If so, how? What are possible indicators that represent a suite of CECs? What levels of CECs should trigger enhanced monitoring of CECs in recycled water, groundwater and/or surface waters?

- c. *Permit Provisions.* Permits for recycled water projects shall be consistent both with any CDPH recommendations to protect public health and with any actions by the State Water Board taken pursuant to paragraph 10(b)(2).

11. *Incentives for the Use of Recycled Water*

- a. *Funding*

The State Water Board will request CDWR to provide funding (\$20M) for the development of salt and nutrient management plans during the next three years (i.e., before FY 2010/2011). The State Water Board will also request CDWR to provide priority funding for projects that have major recycling components; particularly those that decrease demand on potable water supplies. The State Water Board will also request priority funding for stormwater recharge projects that augment local water supplies. The State Water Board shall promote the use of the State Revolving Fund (SRF) for water purveyor, stormwater agencies, and water recyclers to use for water reuse and stormwater use and recharge projects.

- b. *Stormwater*

The State Water Board strongly encourages all water purveyors to provide financial incentives for water recycling and stormwater recharge and reuse projects. The State Water Board also encourages the Regional Water Boards to require less stringent monitoring and regulatory requirements for stormwater treatment and use projects than for projects involving untreated stormwater discharges.

- c. *TMDLs*

Water recycling reduces mass loadings from municipal wastewater sources to impaired waters. As such, waste load allocations shall be assigned as appropriate by the Regional Water Boards in a manner that provides an incentive for greater water recycling.

ENCLOSURE 3

DRAFT
SALT/NUTRIENT MANAGEMENT PLANS
— SUGGESTED ELEMENTS —

I. BACKGROUND
<ul style="list-style-type: none"> • Purpose <ul style="list-style-type: none"> • Protection of Beneficial Use • Sustainability of Water Resources • Problem Statement • Salt/Nutrient Management Objectives • Regulatory Framework • Groundwater Beneficial Uses • Stakeholder Roles and Responsibilities • Process to Develop Salt/Nutrient Management Plan
II. GROUNDWATER BASIN CHARACTERISTICS
1. GROUNDWATER BASIN OVERVIEW
<ul style="list-style-type: none"> • Physiographic Description • Groundwater Basin and/or Sub-Basin Boundaries • Watershed Boundaries • Geology • Hydrogeology/Hydrology • Aquifers • Recharge Areas • Hydrologic Areas Tributary to the Groundwater Basin • Climate • Land Cover and Land Use • Water Sources
2. GROUNDWATER INVENTORY
<ul style="list-style-type: none"> • Groundwater Levels <ul style="list-style-type: none"> • Historical, Existing, Regional Changes • Groundwater Storage <ul style="list-style-type: none"> • Historical, Existing, Changes • Groundwater Production <ul style="list-style-type: none"> • Historical, Existing, Spatial and Temporal Changes, Safe Yield • Groundwater Mixing and Movement <ul style="list-style-type: none"> • Subsurface Inflow/Outflow • Horizontal and Vertical Movement and Mixing
3. BASIN WATER QUALITY
<ul style="list-style-type: none"> • Groundwater Quality <ul style="list-style-type: none"> • Background, Historical, Existing • Water Quality Objectives • Surface Water Quality • Delivered Water Quality • Imported Water Quality • Recycled Water Quality

Bold = Required by the Recycled Water Policy

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— SUGGESTED ELEMENTS —

III. BASIN EVALUATION
1. WATER BALANCE
<ul style="list-style-type: none"> • Conceptual Model • Basin Inflow/Outflow • Groundwater, Surface Water, Imported Water, Water Transfers, Recycled Water Irrigation, Waste Water Discharges, Agricultural Runoff, Stormwater Runoff (Urban, Agriculture, Open Space), Precipitation • Infiltration, Evaporation, Evapotranspiration, Recharge, Surface Water and Groundwater Connectivity
2. SALT AND NUTRIENT BALANCE
<ul style="list-style-type: none"> • Conceptual Model • Salt and Nutrient Source Identification • Salt and Nutrient Loading Estimates <ul style="list-style-type: none"> • Historical, Existing, Projected • Import/Export • Basin/Sub-Basin Assimilative Capacity for Salt and Nutrients • Fate and Transport of Salt and Nutrients
3. CONSTITUENTS OF EMERGING CONCERNS (CECs)*
<p>* - Requirements for monitoring CECs will be determined following State Water Board review of the CEC Advisory Panel's report due in June 2010.</p> <ul style="list-style-type: none"> • Constituents • CEC Source Identification
4. PROJECTED WATER QUALITY
IV. SALT AND NUTRIENT MANAGEMENT STRATEGIES
<ul style="list-style-type: none"> • Load Reduction Goals • Future Land Development and Use • Salt/Nutrient Management Options • Salt/Nutrient Management Strategies and Modeling <ul style="list-style-type: none"> • Management Strategy Model Results • Feasibility • Cost
V. BASIN MANAGEMENT PLAN ELEMENTS
1. GROUNDWATER MANAGEMENT GOALS
<ul style="list-style-type: none"> • Groundwater Management Goals • Recycled Water and Stormwater Use/Recharge Goals and Objectives
2. BASIN MONITORING PROGRAMS
<ul style="list-style-type: none"> • Identify Responsible Stakeholder(s) Implementing the Monitoring • Monitoring Program Goals • Sampling Locations • Water Quality Parameters • Sampling Frequency • Quality Assurance/Quality Control • Database Management

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SALT/NUTRIENT MANAGEMENT PLANS
— SUGGESTED ELEMENTS —

<ul style="list-style-type: none"> • Data Analysis and Reporting • Groundwater Level Monitoring • Basin Water Quality Monitoring • Groundwater Quality Monitoring <ul style="list-style-type: none"> • Areas of Surface Water and Groundwater Connectivity • Areas of Large Recycled Water Projects • Recycled Water Recharge Areas • Surface Water Quality Monitoring • Stormwater Monitoring • Wastewater Discharge Monitoring • Recycled Water Quality Monitoring • Salt and Nutrient Source Loading Monitoring • Other Constituents of Concern • Water Balance Monitoring <ul style="list-style-type: none"> • Climatological Monitoring • Surface Water Flow Monitoring • Groundwater Production Monitoring
3. SALT AND NUTRIENT LOAD ALLOCATIONS
VI. CEQA ANALYSIS
VII. ANTIDegradation ANALYSIS
VIII. PLAN IMPLEMENTATION
1. SALT AND NUTRIENT MANAGEMENT PROGRAM
<ul style="list-style-type: none"> • Organizational Structure • Stakeholder Responsibilities • Implementation Measures to Manage Salt and Nutrient Loading • Salt/Nutrient Management <ul style="list-style-type: none"> • Water Supply Quality • Regulations of Salt/Nutrients • Load Allocations • Salt and Nutrient Source Control • CEC Source Control • Site Specific Requirements • Groundwater Resource Protection • Additional Studies
2. PERIODIC REVIEW OF SALT/NUTRIENT MANAGEMENT PLAN
<ul style="list-style-type: none"> • Adaptive Management Plan • Performance Measures • Performance Evaluation
3. COST ANALYSIS
<ul style="list-style-type: none"> • CWC § 13141, "...prior to implementation of any agricultural water quality control program, an estimate of the total cost of such a program, together with an identification of potential sources of funding, shall be indicated in any regional water quality control plan."
4. IMPLEMENTATION SCHEDULE

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SALT/NUTRIENT MANAGEMENT PLANS
— SUGGESTED ELEMENTS —

5. PUBLIC HEARING AND ADOPTION

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ENCLOSURE 4

**TIMELINE FOR TASKS ASSOCIATED WITH THE DEVELOPMENT OF
A SALT AND NUTRIENT MANAGEMENT PLAN FOR THE ANTELOPE VALLEY**

**COMPLETED
TASKS:**

May 2006	Memorandum of Understanding establishing member agencies of the Antelope Valley Regional Water Management Group (Group)
December 2007/ January 2008	Antelope Valley Integrated Regional Water Management Plan (IRWMP) adopted by member agencies of the Group
February 2009	Recycled Water Policy Adopted by State Water Resources Control Board (State Water Board)
February 2011	CA Department of Water Resources (DWR) awarded a grant of \$471,919 to the Group for the purpose of updating its IRWMP. Of the total grant amount, \$27,707 (combined with a match amount of \$270,500) will be used to complete a draft Antelope Valley Salt and Nutrient Management Plan (SMP) by July 2012. (Regional Board staff coordinated with DWR staff on review of the grant application prior to the award)

**SCHEDULE FOR
UPCOMING
TASKS:**

July 2012	Draft Antelope Valley SMP available for review
January 2013	Draft California Environmental Quality Act documentation for Antelope Valley SMP available for review
2013/2014	Final Antelope Valley SMP presented to Water Board for adoption as a Basin Plan Amendment
2014/2016	Compliance with statewide requirement to develop SMP for all groundwater basins (State Water Board may grant a two-year extension if there is substantial progress towards completion of a plan)