SALT/NUTRIENT MANAGEMENT PLAN
STAKEHOLDER MEETING MINUTES
January 13, 2010
Location: Palmdale City Hall – Cultural Center

Attendees: Tom Barnes (AVEK), Jessica Bunker (Waterworks District), Cathie Campbell (Rosamond Community Services District), Richard Caulkins (LACSD), Patrice Copeland (Lahontan RWQCB), Erika de Hollan (LACSD), Dan Lafferty (Waterworks District), Bob Large (Lake Town Council), Yvonne Malikowski (Lake LA Park Association), Vickie Nelson (Antelope Acres Town Council), Jose Ojeda (California Water Service Company), Curtis Paxton (PWD), Gordon Phair (City of Palmdale), Dave Rydman (Waterworks District), Jennifer Wong (California DWR), Peter Zorba (City of Lancaster), Lauren Everett (Kennedy Jenks), Tom West (RMC), Virginia Fowler (Waterworks District), Jamshed Yazdani (City of Lancaster)

Collaborative Process/Stakeholder Participation

Patrice Copeland with the Lahontan Regional Water Quality Control Board spoke about the importance of stakeholder participation. Our 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. Patrice also mentioned available grant funding (see **Appendix 1**).

Area/Boundary Determination

Our objective is to use existing wells to determine water quality throughout the sub-basins and to determine the appropriate boundary limits for salt/nutrient management efforts. The Antelope Valley groundwater sub-basin boundary map (see **Appendix 2**) was handed out and the areas highlighted in red (to indicate coverage in the salt/nutrient management plan) included the Lancaster, Buttes, and Pearland sub-basins. This list of sub-basins provided a starting point for which sub-basins should be included in planning efforts based on available information from existing wells within these sub-basins. Additional sub-basins may be included in the scope of work boundary limits depending on the willingness of users, water and wastewater agencies, regulators, and stakeholders to participate and provide data.

Suggestions from stakeholders were requested on which additional sub-basins the Salt/Nutrient Management Plan (SMP) should include within the boundary limits, in addition to the water quality data available in the new proposed basin area. There were recommendations to include Neenach, West Antelope, Willow Springs, and Edwards Air Force Base sub-basins. Within these sub-basins, water quality data needs to be provided in order to be included in the SMP boundary map. Below are the stakeholders who have volunteered to obtain water quality information for each specific sub-basin.

Neenach: Tom Barnes mentioned that Antelope Valley East-Kern Water Agency (AVEK) and United States Geological Survey may have some valuable water quality information. Cathie Campbell mentioned Rosamond Community Services District (RCSD) also has some data information in this sub-basin.

West Antelope: Tom Barnes with AVEK mentioned that he would contact Tejon Ranch to obtain water quality information for this sub-basin.

Willow Springs: Tom Barnes mentioned that the AVEK's groundwater banking project is in this sub-basin and water quality information is available.

Edwards Air Force Base: Peter Zorba with City of Lancaster will contact Edwards Air Force Base for their water quality information from existing wells on their property.

Finger Buttes: This sub-basin was mentioned as a possible area to include in the mapped area boundary. There will still need to be someone to volunteer available data information in this area in order for the sub-basin to be included in the SMP.

Boron: There was a suggestion to possibly include this sub-basin. Tom Barnes with AVEK mentioned he may have a point of contact because of the potential Aquifer & Storage Recovery project in the area.

The boundary limits for the SMP have not been finalized. This boundary map is a work in progress and any sub-basin is welcome to be included in the SMP, as long as there is sufficient applicable water quality information. The water quality data will enable the stakeholder group to assess impacts from all activities with potential long-term basin-wide effects on groundwater quality and the ability to implement a groundwater monitoring program. Based on the proposed sub-basins, if anyone knows stakeholders that should be participating in the development of this SMP please contact or send your recommendations to Jessica Bunker or Erika de Hollan. These stakeholders will be encouraged to attend the meetings.

Definitions

Erika de Hollan mentioned that when attending SMP stakeholder meetings in other jurisdictions, establishing the definitions early in the SMP process is an important factor in the success of a SMP. She reviewed the Antelope Valley proposed SMP definitions (see **Appendix 3**) and mentioned the group will be continuing to add definitions to this living document. This list of terms will continue to grow and the stakeholder group will have to reach consensus on the definitions.

Draft Scope of Work

The draft scope of work (see **Appendix 4**) was prepared in order to have a guideline on how to proceed with the SMP. The scope of work will help the stakeholder group focus their efforts on specific tasks during meetings and accomplish milestones in the development of the SMP. The draft scope of work's purpose, background, goals, plan requirements and proposed schedule were briefly reviewed. The proposed schedule should help keep the stakeholders on track and allow them to check off each milestone of the SMP. Please submit your comments or suggestions to Jessica Bunker or Erika de Hollan by Wednesday, February 24, 2010. The revised draft scope of work will be updated by the next SMP stakeholder meeting.

Data Collection and Assessment

The Los Angeles County Sanitation District (LACSD) along with the Waterworks District (WWD) compiled a map with their existing well locations throughout the originally proposed area boundary. Additional water quality and monitoring location data needs to be obtained to determine where the spatial gaps, within the boundary limits, are located in order to have a complete analysis of data and to determine the monitoring plan for the SMP.

A SMP "Technical Work Group" Sub-Committee was formed from this meeting. This technical work group will meet in between this meeting and the next SMP stakeholder meeting to provide and analyze any surface and/or groundwater quality data. The technical work group will consist of stakeholders who can provide the available water quality data: LACSD, WWD, RCSD, Palmdale Water District, City of Lancaster, City of Palmdale, Edwards Air Force Base, Quartz Hill Water District, AVEK, and any stakeholder who can provide water quality data within the proposed boundary map.

There was a comment regarding the farmers' reluctance to share their existing well water quality information and how the stakeholder group will deal with the privacy issue. The technical work group sub-committee will come back to the stakeholder group with possible solutions to ensure confidentiality to the private well owners. The technical work group will need to work out how the private well owners' water quality information will solely be used for the purpose of baseline and/or monitoring information, and how their specific well site location will not be released to the public.

Next Steps

A meeting request will be sent to the SMP "Technical Work Group" Sub-Committee to discuss data collection and assessment.

On the last column of the sign-in sheet there was a box that stated "check box if we can contact you re: surface water and groundwater quality data". Jessica Bunker or Erika de Hollan will contact these stakeholders to obtain additional data information.

The next SMP stakeholder meeting will be held after the Antelope Valley Integrated Regional Water Management Plan stakeholder meeting on Wednesday, April 14, 2010 to discuss potential salt/nutrient sources in the basin. A report on the amount of data that was obtained and analyzed during the "technical work group" meeting will also be discussed at the next SMP stakeholder meeting.

APPENDIX 1: Available grant funding

Update
Integrated Regional Water Management (IRWM)
Salt/Nutrient Management Plan
Upcoming Grant Solicitations

1. Salt/Nutrient Plans

The State Board's Recycled Water Policy became effective 5/14/2009 and requires the development of Salt/Nutrient Management Plans for all priority groundwater basins. The development and funding of the plans will be by local stakeholders (e.g. local water and wastewater entities) with the participation of Regional Board staff. We are in the process of working with the State Water Board staff to develop our strategy to facilitate development of S/N mgmt. plans for all the priority ground water basins in our Region. Since the AV is likely to be a high priority and the process to develop the S/N plan is to be stakeholder driven, we are glad to see the AVIRWM stakeholders starting the plan development process and look forward to future coordination with them.

2. Local Groundwater Grants/DWR

DWR has put out draft guidelines for its upcoming Local Groundwater Assistance grant solicitation. We encourage the AVIRWM stakeholders to review these guidelines and consider this as a potential source of funds to help with S/N plan development. Local public agencies can apply for up to $250,000 to conduct groundwater studies or carry out groundwater monitoring and management activities. Approximately $4.7 million in funding from Proposition 84 is available for the fiscal year 2009-2010 LGA Grant Program. Priority for Proposition 84 LGA grant funding will be given to local public agencies that have adopted a Groundwater Management Plan and demonstrate collaboration with other agencies in the management of a groundwater basin. The link to draft guidelines is: http://www.water.ca.gov/lgagrant/ Public meetings to solicit comments were held 1/5 and 1/7 with public comments due 1/12. It is expected that proposal applications will be due in April 2010.

3. Proposition 84/Prop 1E IRWM for Planning and Implementation Grants

DWR is in the process of developing the grant guidelines for these funds. To use Prop 84 funds, it will be necessary for IRWM plans to be updated to meet statutory grant requirements. Planning funds to update the IRWM plans total $30M with a $1M maximum grant per plan. The planning funds will be released in two cycles - $20M in first cycle and $10M in second cycle.

The State and Regional Boards are working with DWR to coordinate salt/nutrient management as part of the IRWM plan update. DWR is also drafting solicitation materials combining Prop 84 and Proposition 1E Stormwater/Flood Prevention. The total funding for Prop 84 IRWM statewide is $900,000M – keep in mind that only $27M of this amount can be used in Lahontan. It is anticipated that $3.3M of the $27M will be released in the first grant cycle for IRWM implementation projects for our Region.

For Prop 1E funding in the first cycle, estimated amounts available statewide are:

- Up to $100M to strengthen flood control facilities to address seismic safety issues
- Up to $72M for stormwater flood management projects not part of the State Plan for Flood Control

DWR anticipates that these grant guidelines may be available for public review by March.

4. Other Funding Opportunities to Watch

California Strategic Growth Council http://www.sgc.ca.gov/ may be soliciting for projects to improve air and water quality, protect natural resources and agriculture lands, increase affordable housing, improve infrastructure systems, promote public health and assist with local planning of sustainable communities. Request for Proposals (RFP) may be released in late February.

The California Financing Coordinating Committee (CFCC) has scheduled its Funding Fairs for 2010. CFCC agencies fund drinking water, wastewater, water quality, water supply, energy efficiency, flood management, streets and highways and emergency response vehicles. At these free CFCC Funding Fairs, these CFCC agencies (six state and one federal) share information about financial and technical resources available. www.cfcc.ca.gov for more information

Fairs start at 9 am and finish at 3 pm

Dates and Locations:

February 2	Coachella
February 4	Fillmore
March 9	Fresno
April 14	Redding
May 6	Sacramento

APPENDIX 2: Antelope Valley groundwater sub-basin boundary map

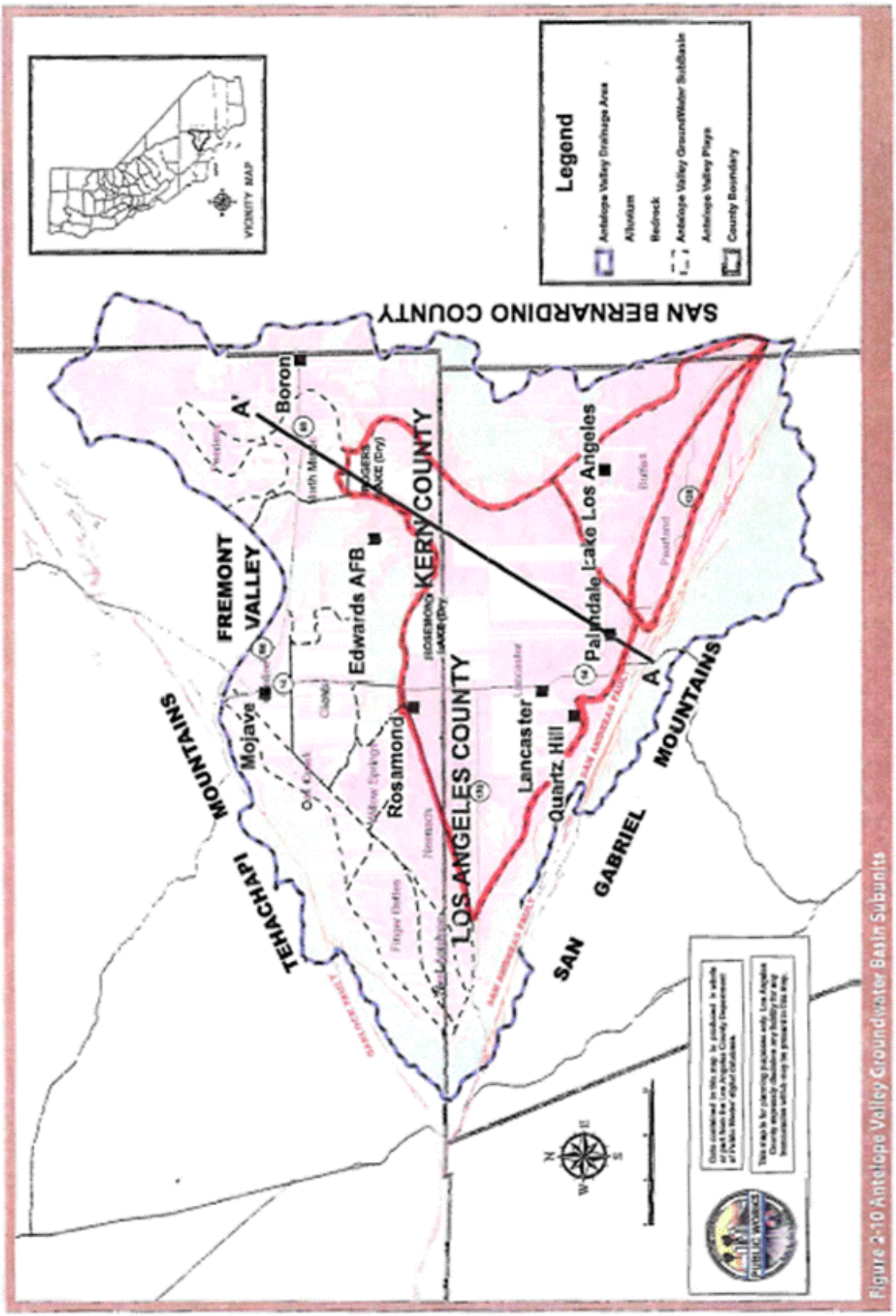

Figure 2-10 Antelope Valley Groundwater Basin Subunits

APPENDIX 3: SMP definitions

Salt/Nutrient Management Plan Definitions

Salts: Observed by measuring total dissolved solids

Nutrients: Nitrogenous species (i.e. nitrate, nitrite, ammonia, organic)

Constituents of emerging concern (CECs): To be determined by "blue ribbon" advisory panel, approved by State Water Resources Control Board (and California Department of Public Health)

Water Quality Objectives: Allowable level of a water quality constituent that is established for the reasonable protection of beneficial use(s) of water or the prevention of nuisance within a specific area

Current ambient conditions: Average concentration of constituent measured in water (surface or groundwater) for past 10 years

Assimilative capacity: Difference between the objective and current quality is the amount of assimilative capacity available. If the current quality of a water is the same or poorer than the water quality objective, assimilative capacity does not exist. If the current quality is better than the water quality objective, then assimilative capacity exists.

assimilative capacity = (water quality objective) – (current ambient condition)

Antidegradation: State Board Antidegradation Policy (Resolution 68-16)

Basin and Sub-Basin boundaries: coverage to be determined

APPENDIX 4: Draft scope of work

DRAFT SCOPE OF WORK
Salt/Nutrient Management Plan

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 attain water quality objectives and support beneficial uses. The intention is to involve all surface water and groundwater users 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 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 Regional Water Quality Control Board (RWQCB) by May 14, 2014, unless the RWQCB 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 RWQCB 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 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, RWQCB, 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 RWQCB 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; groundwater augmentation sites; and other potential sources of salinity/nutrient contributions to the water 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.

Characterization of Basin

6. Salt and Nutrient Characterization
    a. Identify the 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.

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, particularly 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 RWQCB 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 and Assessment	June 2010
4	Initial Characterization of Basin	January 2011
5	Develop Monitoring Plan	July 2011
6	Identify Implementation Measures	November 2011
7	Antidegradation Analysis	January 2012
8	Draft S/N Management Plan	July 2012
9	Completion of Draft CEQA Documents	January 2013
10	Final S/N Management Plan Submitted to RWQCB	October 2013