CALIFORNIA URBAN WATER AGENCIES

December 30, 2013

Jeanne Chilcott
Central Valley Regional Water Board
11020 Sun Center Drive, Ste. 200
Rancho Cordova, CA 95670

Subject: Comments on CV-SALTS CEQA Scoping Documents

Dear Ms. Chilcott:

California Urban Water Agencies (CUWA) is pleased to provide comments on the issues to be considered in the substitute environmental document (SED) for the Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS) program. CUWA's primary interest in this process is in protecting the MUN beneficial use and preventing degradation of water quality in downstream water bodies. The SED should evaluate the potential impacts of the alternatives to the MUN beneficial uses on the downstream users throughout the State. This should include the potential costs of downstream treatment that could result from relaxing drinking water quality objectives or removing or limiting the MUN beneficial uses. Protection of source water quality is the first barrier to preventing contaminants from harming public health.

1. Linkage of the Strategic Salt Accumulation Land and Transport Study (SSALTS) Project to Regulatory Relief Proposals – The California Environmental Quality Act (CEQA) Scoping Meeting Information Document does not contain much detail on the specific projects that will be included in the Salt and Nitrate Management Plan that will actually reduce the salt loading in the Central Valley. Based on our review of the scoping documents and other documents on the Salinity Coalition website, it appears that the Salt and Nitrate Management Plan will contain a list of potential projects to reduce salt loading with some evaluation of the feasibility of these projects. It is unclear how these projects will be implemented to not only reduce the current salt and nitrate loads in the valley but also to address the potential increase in loads that could occur as a result of some of the regulatory relief actions that are proposed to be included in the Basin Plan Amendment. The SSALTS Project needs to be clearly described and the linkage of the proposed projects to the proposed modifications to the Basin Plan to provide regulatory relief to dischargers needs to be discussed in the SED.
2. Impacts of Climate Change –The impacts of climate change on surface water flows and assimilative capacity need to be evaluated when reviewing the alternative actions described in the scoping documents.
3. Fresh Water Required to Dilute Salt Loads – The problem statement needs to include a description of how the Delta and Vernalis water quality objectives for specific conductance (EC) and chloride are met. This needs to include a discussion of how salt loads are frequently diluted with water released from New Melones Reservoir to meet the Vernalis EC objective and how water is released from reservoirs in the Sacramento Basin to meet EC and chloride objectives at other locations in the Delta. Each of the proposed actions needs to be evaluated to determine if additional water would be required to dilute an increased salt load in the San Joaquin River, the

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Alameda County Water District
Santa Clara Valley Water District
Zone 7 Water Agency
San Diego County Water Authority
City of San Diego Public Utilities Department
Contra Costa Water District
San Francisco Public Utilities Commission
East Bay Municipal Utility District
Metropolitan Water District of Southern California
Los Angeles Department of Water & Power

Sacramento River, and the Delta resulting from those actions. This analysis needs to consider the water supply impacts, particularly during drought years, of each of the proposed actions.

4. Refined MUN Beneficial Use – The alternatives associated with refining the MUN beneficial uses are written in very broad terms. If a limited or restricted MUN subcategory is developed, it should be limited to the agricultural drains and agriculturally dominated water bodies that were included in the original scope of this effort. It should not be broadened to include other water bodies.

   It should be clearly stated that the no action alternative also includes the potential to remove or change beneficial use designations, using the established regulatory framework, which incorporates the Basin Planning amendment process. The environmental document should explain why a separate process is needed for changing the MUN beneficial use in agricultural water bodies and it should describe how the new uses for those water bodies will be incorporated into the Basin Plans. Evaluating the beneficial uses should not be rushed if there is the potential to adversely affect the drinking water uses.

   Issues to consider in evaluating the feasibility of developing a limited or restricted MUN use include:

   - The factors that should be used to determine if limited MUN or restricted MUN apply to a water body should be tied to the hydrologic considerations laid out in the flow chart developed by the MUN subgroup. It should not be tied to levels of water treatment.
   - The evaluation should include both existing and potential future water supplies. Water quality must be protected throughout MUN designated water bodies because future intakes may be located in areas that are currently not used as drinking water supplies due to population growth in the Central Valley. There are currently several proposed new intakes on the Sacramento River that may be constructed in the near future.
   - It should address the cumulative impacts on downstream water bodies of multiple water bodies being changed from MUN to limited or restricted MUN.
   - Consistency with the Antidegradation Policy should be addressed.
   - The impacts of changing the MUN use in multiple water bodies on the ability to meet downstream salinity objectives should be evaluated.
   - The monitoring program that will ensure that downstream water supplies will be protected needs to be described.
   - Corrective action that will be taken if downstream water supplies are impacted should be described.
   - Will changing the MUN use to limited or restricted MUN lead to dischargers changing their point of discharge so that effluent limitations will be relaxed? How will this potential outcome be precluded?
   - Developing a limited or restricted MUN beneficial use subcategory should be based on the uses of the water, not on the challenges to meeting water quality objectives.

5. MUN and Secondary MCLs – The importance of secondary maximum contaminant levels (MCLs) to the drinking water community is understated in several documents prepared for CV-SALTS. The SED needs to correctly describe the secondary MCLs, how they are applied by the California Department of Public Health (CDPH), and the implications for drinking water agencies if secondary MCLs are not met. While water suppliers are required to treat raw water to meet all drinking water standards, constituents in the raw water can have significant downstream costs and impacts on treatment processes. These costs should not be borne by the downstream water

supply agencies. We offer the following comments on the alternatives proposed for consideration:

- CUWA objects to the alternative that would remove the secondary MCLs from the Basin Plan and replace them with a narrative objective. We request that this alternative not be considered as a viable alternative that merits evaluation.
- The scoping document could consider an assessment of the impacts and costs associated with poor water quality in excess of the drinking water standards, including manganese, on the downstream agencies as a basis for establishing appropriate numeric water quality objectives.
- CUWA does not support the alternative that the upper and short term salinity secondary MCLs be considered reasonable for continuous use. This is contrary to the language in Title 22 of the California Code of Regulations. See Attachment 1
- The alternative that considers translators from raw water supplies to treated water supplies would need to address a number of factors such as the addition of salts in the water treatment process. This could result in more stringent water quality objectives for the salinity constituent secondary MCLs than currently exist. Other factors that must be considered include site specific differences and changes in water chemistry that cause particulate metals to enter the dissolved phase and the impacts of potentially higher metals concentrations on membrane treatment. The secondary MCLs for metals are important to urban water agencies. Many of these constituents may present significant challenges for downstream water users. Alameda County Water District has recently experienced a number of customer complaints due to discolored water caused by elevated manganese concentrations in treated drinking water. Many customers understandably believe that water is not safe to drink if it is discolored or it smells or tastes bad. The average customer does not distinguish between the exceedance of a secondary MCL and a primary MCL.

6. Other Impacts of Increased Salinity – If the application of the salinity secondary MCLs is changed in such a way that increased loads of salt will be discharged to Central Valley water bodies, several factors must be evaluated in the SED.
   - Impact on Meeting Downstream Water Quality Objectives – As discussed previously, water quality salinity objectives are often met by releasing high quality water from reservoirs. The additional amount of water required to meet water quality objectives must be evaluated.
   - Recycled Water – Need to address impact that higher salinity has on the ability to recycle wastewater.
   - Groundwater Recharge – Need to address impact that higher salinity has on reducing options for groundwater recharge (e.g. some source waters have salinity levels which prevent or hinder groundwater recharge.
   - Blending of Water Supplies – Water agencies often use lower salinity water to blend with higher salinity groundwater or surface water sources to meet salinity goals in treated water. If the TDS of the lower salinity source increases, it reduces the ability to blend down the higher sources.
7. MUN and Nitrate-related Water Quality Objectives – The existing nitrate water quality objective of 10 mg/L as N protects human health. It is equal to the primary MCL for nitrate. Any consideration of applying this objective at limited compliance points rather than throughout a water body designated with the MUN beneficial use must be carefully evaluated. Both existing and potential future use of the water body for drinking water must be considered.

While the primary issue for groundwater supplies is compliance with the nitrate MCL, for surface water supplies, the impacts of nutrients, including nitrogen and phosphorus, on the biological, physical and chemical quality of the water is extremely important. The salt and nitrate plan and scoping document focuses only on nitrate and fails to adequately address the impacts of all nutrients on beneficial uses. Factors that must be considered include:

- A comprehensive set of narrative and/or numeric objectives should be developed that address the full impact of nutrients on surface water quality and downstream beneficial uses.
- Nitrate is soluble and is therefore not removed by water treatment processes typically used in the Central Valley and throughout the service areas that are supplied with water from the Delta.
- Nitrate is a nutrient that stimulates algal growth. Increased levels of nitrate in surface waters can lead to problems with filter clogging algae, algae that produce taste and odor compounds, and algae that produce algal toxins.
- Nitrate loading to the ecosystem can also lead to increases in the ratio of nitrogen to phosphorus. There is strong support in the scientific literature that the N:P ratio in the Delta influences phytoplankton community composition, and increases in N:P can, for example, lead to shifts in phytoplankton community structure from diatoms to toxin producing algae that impact the food web.

8. Impacts of Groundwater on Surface Water – The alternatives that address changing compliance with salt and nitrate objectives in groundwater need to be evaluated to determine the potential impact on surface water supplies from saline groundwater inflows. The monitoring program that will be established to monitor the impacts on surface water supplies should be described and the corrective action plan that will address downstream impacts must be described.
9. Controlled Degradation – The SED should evaluate how the concept of controlled degradation is consistent with the Antidegradation Policy and with the State Water Resources Control Board's review of the Antidegradation Policy. Other factors to consider are:
   - The impacts on downstream water bodies must be evaluated and the monitoring and corrective action plan must be described.
   - Given the current state of the Delta, controlled degradation of the Delta should not be considered in the alternatives that will be evaluated.
10. Monitoring Requirements – One alternative that is being considered is to use existing monitoring programs and another alternative is to modify the existing monitoring programs. The existing monitoring programs do not cover all of the constituents that are regulated for drinking water supplies. These constituents should be evaluated to determine if there is any potential for an increase in these constituents at drinking water intakes.

Please contact me at (925) 210-2477 if you have any questions on our comments.

Sincerely,

Cindy Paulson, Ph.D.

Executive Director

Attachment 1

Table 64449-B
Secondary Maximum Contaminant Levels
"Consumer Acceptance Contaminant Level Ranges"

	Maximum Contaminant Level Ranges		
Constituent, Units	*Recommended*	*Upper*	*Short Term*
Total Dissolved Solids, mg/L	500	1,000	1,500
or			
Specific Conductance, µS/cm	900	1,600	2,200
Chloride, mg/L	250	500	600
Sulfate, mg/L	250	500	600

(d) For the constituents shown on Table 64449-B, no fixed consumer acceptance contaminant level has been established.

(1) Constituent concentrations lower than the Recommended contaminant level are desirable for a higher degree of consumer acceptance.

(2) Constituent concentrations ranging to the Upper contaminant level are acceptable if it is neither reasonable nor feasible to provide more suitable waters.

(3) Constituent concentrations ranging to the short term contaminant levelare acceptable only for existing community water systems on a temporary basis pending construction of treatment facilities or development of acceptable new water sources.

(e) New services from community water systems serving water which carries constituent concentrations between the Upper and Short Term contaminant levels shall be approved only:

(1) If adequate progress is being demonstrated toward providing water of improved mineral quality.

(2) For other compelling reasons approved by the Department.