CALIFORNIA WATER SERVICE COMPANY
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SALINAS DISTRICT

October 27, 2008

Mr. Carl Holm
Assistant Director, Monterey County Planning Department
168 W. Alisal St., 2nd Floor
Salinas, CA 93901

Re: Monterey County General Plan Draft EIR

Dear Mr. Holm:

California Water Service Company (Cal Water) provides drinking water to many communities in the Salinas area. We have reviewed the Draft Environmental Impact Report (DEIR) for the County's General Plan, and comments in three main categories (water quality, supply, and demand projections) are provided below.

1. The DEIR should address, in more detail, the extent and degree of nitrate contamination in the basin. This will lead to a more effective plan to improve water quality. Nitrate is an acute toxic substance that has immediate adverse health effects. The following language regarding the health effects of nitrates was taken from the California Department of Public Health website: *Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur, seek medical attention immediately.* (http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Notices/Tier%201%20Nitrate%20Notice.doc)

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The following excerpt could lead to an interpretation that nitrate concentrations are not a problem because they are generally below the MCL: "A cooperative effort between the MCWRA and the USGS has found that nitrates are present in the Salinas valley basin in concentrations generally below the MCL" (Page 4.3-22). The increasing nitrate concentrations in the Salinas Valley are a completely preventable public health risk and are best addressed in any countywide long term plan. This is consistent with the MCWRA's responsibility to manage not only the quantity but also the quality of water in the basin. For many years, MCWRA has focused primarily on agricultural water needs and less on those of the urban areas.

2. We support the development of best management practices to reduce nitrate contamination; however, we believe that such a program should be implemented county wide to improve groundwater quality. Changes to the proposed mitigation are suggested below.

Page 4.3-22: "Sufficient information is available, and initial steps have been taken, toward developing best management practices (BMPs) that will reduce the rate of nitrate contamination in the Salinas Valley basin (and other areas of the county). Nitrate contamination can be reduced by farmers through improved methods and control of fertilizer application, soil management and adoption of water conservation practices. Achieving a significant reduction of nitrate contamination will require that best management practices be effectively implemented basin-wide. Examples of programs that have been successfully implemented include North County and along Chualar Creek, where local farmers and landowners have partnered with the RCD and NRCS. Goals for reduction of nitrate contamination need to be established and implementation of best management practices needs to be routinely monitored. The major uncertainty at this time is the degree to which current levels of groundwater contamination by nitrates from agricultural fertilizers can be reduced." 2

3. Water providers in the Salinas area have experienced wide spread nitrate contamination. Loss of wells which have to be properly destroyed, purchasing land, design and construction of new replacement wells and providing ion exchange treatment are very expensive in terms capital, operations and maintenance costs. High levels of nitrate contamination have and will continue to cause urban users to pay more than what they would for non-contaminated ground water. 3

Page 4.3-23: "Treatment to remove nitrates and other contaminates remains very cost-prohibitive. For this reason, the common solution in most areas of the county is to drill a new well and deeper well with a deep seal to prevent contaminated water from entering the perforations. All of the Salinas Valley water utilities, as well as many small water systems throughout the county, have implemented this solution."

4. The loss of production capacity in wells because of groundwater contamination combined with increasing demand due to population growth is placing increased pressure on water distribution systems to meet peak demands. Cal Water has taken a proactive approach to solving future supply challenges and is preparing a long-term water supply plan to address these issues. 4

5. On page 4.3-23, the DEIR states that new wells in the Salinas Valley are typically drilled to a depth of 1,000 feet or more due to nitrate contamination. This statement is incomplete. The depth to which production wells are drilled depends on the depth of water bearing formations (aquifers) and the degree to which various aquifers in different subbasins within the Salinas Valley Groundwater basin are contaminated. Well yield 5

goals and the hydrogeology of particular locations also determine how deep wells are drilled and what aquifers are screened for supply. Well depths range from 600 feet to more than 1,200 feet. 5

6. The Water Resources Section of the DEIR contains some confusing statements with respect to current and future water supply conditions in the Salinas Valley. Further discussion and analysis is warranted to clarify these statements. The DEIR offers the Salinas Valley Water Project (SVWP) as evidence that sufficient supplies will be available for both urban and agricultural users through 2030. For example:

Page 4.3-1: "Supply in the Salinas Valley provided by the Salinas Valley Water Project is adequate to provide new water for new development up to 2030" The DEIR does not discuss evidence to support the assertion that the SVWP will support planned urban development through 2030. Cal Water believes that additional analysis and discussion is required. Phase I of the SVWP does not provide a direct water supply for urban customers in the Salinas Valley. In addition, the DEIR does not discuss specific information and analysis for Phase 2 of the SVWP. MCWRA's goal for Phase 2 is 10,000 acre-ft/year for urban users. To further support that the SVWP Phase 2 would meet these needs requires a summation of all the projected demands to 2030 of all urban users in the Salinas Valley. A quantitative summary of their current supplies and an assessment of how much of them will be available in 2030 would be helpful. A quantitative summary of planned "realistic" new supplies would also be helpful. A determination of what can be realistically provided by Phase 2 and an allocation to various urban users should be made. Finally, a comparison of demands and supplies to determine whether there are sufficient, reliable, high quality supplies to meet projected demand would be helpful. 6

The DEIR lacks detail about the SVWP's ability to reverse overdraft and eliminate seawater intrusion in the following statements:

Page 4.3-130: "Within the Salinas Valley, the SVWP will provide sufficient supply to reverse existing overdraft and seawater intrusion problems and to provide water for new development."

Page 4.3-116: "With implementation of the SVWP and CSIP, the Salinas Valley will have sufficient supplies to 2030, and seawater intrusion will be effectively halted in the Castroville area."

However, the DEIR does not discuss supporting data, reasonable demand forecasts, or a quantitative analysis. These statements also appear contradictory to other parts of the DEIR, as seen in the following quotes.

Page 4.3-35: "Modeling undertaken by the MCWRA for the SVWP indicates that by 2030 seawater intrusion will be reduced to 2,300 AF with surface water deliveries only to the CISP. However, if an additional 14,300 AF of SVWP water is delivered outside the

CISP, modeling indicates that seawater intrusion would be halted." The DEIR should discuss how an additional 14,300 AFY of SVWP water would be obtained, and where and to whom it would be made available.

Page 4.3-38: "These components of the project are believed sufficient to halt seawater intrusion in the short term but may not be sufficient to meet water demand through the year 2030." 6

Page 4.3-113: "Impact WR-4: Land uses and development consistent with the 2007 General Plan would exceed the capacity of existing water supplies and necessitate the acquisition of new supplies to meet expected demands (Significant and Unavoidable Impact.)"

7. The SVWP was originally designed as means to alleviate seawater intrusion in coastal areas caused mainly be agricultural pumping. The SVWP as it is currently being implemented (Phase 1) will use the existing Castroville Seawater Intrusion Project (CSIP) distribution system. The CSIP delivers water to agricultural customers only and is not available directly to urban users. 7

8. The DEIR claims that seawater intrusion will be halted through construction of the SVWP. However, MCWRA modeling suggests that intrusion of 2,300 AFY will still exist when the SVWP is complete. A conceptual design of a second phase of the SVWP has been discussed. Under this scenario the SVWP would divert additional instream flows during the winter months and deliver it in a newly constructed distribution system to users in the northern Salinas Valley. However, at this point the planning and design for second phase has not been initiated. It will also require another voter-approved measure for funding and is not currently part of the SVWP. Therefore, it is unclear if this additional water will be available, especially for future urban development, and the DEIR should address the implementation of the second phase. 8

9. The SVWP and CSIP are good first steps to reduce seawater intrusion; however, there are still several issues that have not been addressed. The freshwater barrier in Castroville may reduce the amount of additional sea water that intrudes into the 180 and 400 foot aquifers, but the sea water that has been and will be in these aquifers has not been addressed. It is possible that the existing seawater plume will spread as seawater contaminated wells are taken out of service, and nearby freshwater wells continue in service to draw intruded seawater into a wider area. Such a scenario would have a negative impact on the additional groundwater that is supposed to be made available by these projects. 9

10. The SVWP will provide groundwater recharge along the entire Salinas Valley during the summer months as releases are made from Nacimiento Reservoir. However, the amount of recharge projected to be provided has not been quantified or discussed in detail in the DEIR, although it claims that overdraft will be eliminated. 10

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11. For calculating future projected urban demand the DEIR uses a value of 181 gallons per capita per day (gpcpd), which was taken from the California Water Plan 2005 Update (4.3-114). The average total per capita water use for the years from 2000 to 2007 for Cal Water's Salinas District is 146 gpcpd, Our experience with smaller communities in Monterey County is that per capita water use is even lower because use is preponderantly residential and per capita use for single and multi -family residences is significantly lower than overall per capita use. By using 181 gpcpd, the DEIR is likely over projecting water demands for 2030. 11

We appreciate the opportunity to review the DEIR, and we look forward to working with you to address the serious water quality and supply issues in the county. If you have any questions regarding this letter please contact Dana Jacobson at djacobson@calwater.com or Tarrah Henrie at thenrie@calwater.com.

Sincerely,

Michael L. Jones
Assistant District Manager

Cc: Alana Knaster-Monterey County
Todd Peters-Cal Water
James Smith-Cal Water