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July 24, 2012
Santa Margarita Water District
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To Whom it May Concern,

On March 13th, 2012, the Pacific Institute, a non-profit and non-partisan research organization, prepared and submitted comments on the Draft Environmental Impact Report (DEIR) of the Cadiz Valley Water Conservation, Recovery, and Storage Project. In our comment we raised the following concerns and limitations with the DEIR.

- There are considerable, unresolved uncertainties about the natural recharge and evaporation rates, which undermine the viability of the project.
- The project relies on overdrafting the groundwater basin.
- The cumulative net water savings of the project are over-estimated.
- Alternative pumping scenarios may lead to irreversible perturbation of the groundwater basin.
- The DEIR fails to adequately demonstrate that the springs and groundwater basin are not connected.
- The groundwater pumping could have significant impacts on the springs and critical desert habitat.
- The groundwater management plan will miss significant impacts after project completion.
- DEIR ignores the potential impacts of a long-term drought or climate change on recharge and evaporation rates.

On July 13th, 2012 the Santa Margarita Water District (SMWD) released the Final Environmental Impact Report (FEIR), which responded to the comments and concerns raised by various organizations and individuals about the DEIR. After review, however, we found the responses to our comments insufficient and lacking information that would address or clarify our concerns. Most of the responses referred us back to the original text of the DEIR, simply summarily discounted our concerns as being unlikely, or were not addressed at all. Below are the points we would like to raise regarding our comments and the responses presented in the FEIR:

- The entire project has been built on a shaky and uncertain foundation that can fall apart at any time.** The project is designed based on considerable, unresolved uncertainties about natural recharge and evaporation rates, which calls into question the viability of the project. The prepared Master Response 3.1 does not introduce new information to address this concern. The problem with this approach is that the project is designed considering the highest recharge and evaporation rate possible. This approach maximizes profit for the project proponents but fails to adequately protect the long-term environmental health of the area.
- The groundwater management plan will miss significant impacts after project completion.** Cadiz has developed a Groundwater Management, Monitoring, and Mitigation Plan (GMMMP) that proposes to manage some of the impacts to the groundwater basin and the surrounding environment through careful monitoring of the watershed. However, as the model results show, serious impacts may be delayed until many years after the project is completed. Real-time and early warning signs may be subtle. As a result, monitoring during the project term may not lead to effective and timely impact management and mitigation.
- The Cumulative Net Water Savings (NWS) of the Project Are Over-Estimated.** The table below demonstrates the NWS at the end of the project term, i.e., 50 years. It is clear in the table that at the end of the project term that under the 16,000 and 5,000 acre-ft/yr natural recharge scenarios, there will be no cumulative net water saving, rather a significant depletion of storage. Cadiz Inc. will deliberately mine the groundwater for profit and the State of California will be left to absorb the likely environmental impacts, including some of the irreversible perturbation of the groundwater basin.

Natural Recharge	Time	Pumping Rate [acre-ft/yr]	Cumulative Evaporative Losses at the end of the project term [acre-ft]	Cumulative Depletion of Storage at the end of the project term [acre-ft]	Cumulative Net Water Saving at the end of the project term [acre-ft]
32,000 acre-ft/yr	At the end of the project term (50 years)	50,000	1,360,000	1,100,000 (base on Cadiz project EIR)	260,000
16,000 acre-ft/yr	At the end of the project term (50 years)	50,000	745,000	1,700,000	-955,000
5000 acre-ft/yr	At the end of the project term (50 years)	50,000	220,000	2,250,000	-2,030,000

I have attached our comments on the DEIR that were submitted to the Santa Margarita Water District's Governing Board. We find that this project has very limited scientific merit and the responses presented in the FEIR fail to address or clarify any of the concerns raised in our earlier comments. The project relies on unsustainable mining of groundwater, designed to extract groundwater at a rate exceeding natural recharge. In other words, it uses water in excess of the estimates of the water lost to evaporation, which is both a non-renewable use of water and unsustainable in the long term. According to the Draft Environmental Impacts Report, the project will deplete groundwater storage in the valleys by one-to-two million acre-feet. It will take between 50 to several hundred years for the basin to recover and refill after the project is terminated. If, in that period, the recharge rate decreases considerably or the evaporation rates increase under a long-term drought or more permanent climatic changes, then the long-term deleterious effects of the project might be even greater and recovery period much longer, if ever. Cadiz will make its profit for 50 years and the public will be left to handle possible negative environmental and ecological consequences of this project for years to come.

Should you have any questions, please do not hesitate to contact me at najami@pacinst.org or 510-251-1600.

Sincerely



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