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RE: Cadiz Valley Water Conservation, Recovery and Storage Project

I have had the opportunity to independently review the groundwater model developed for the proposed project by Cadiz's consultants, which include Geoscience Groundwater Consultants, and CH2M Hill. I also reviewed data prepared by the Desert Research Institute on evaporation monitoring of the Bristol and Cadiz Dry Lakes, as well as technical discussion reports prepared by Lawrence Livermore National Laboratory. My comments and opinions are presented below.

1. The groundwater modeling approach is reasonable. Paying particular attention to the Fenner Gap area, model calibration and sensitivity analysis to parameter estimates is also reasonable and consistent with industry practice. Considered in conjunction with available data, including dry lake evaporation rates, predictions developed from the groundwater model and impact analysis are reasonable and supportable.
2. Evaporation rate data from the Bristol and Cadiz Dry Lakes, independently affirm prior natural recharge estimates on the order of 30,000 acre-feet per year.
3. The conservation and storage project as proposed is feasible. It is unique, considering that the project area is unencumbered by institutional constraints. I was impressed to see the depth and scope of an adaptive Groundwater Management, Monitoring and Mitigation Plan.
4. The conservation and conjunctive use storage elements of the Cadiz Valley Project will increase the dry year reliability of its project participants who are largely within the 5800 square mile service area of the Metropolitan Water District. Once implemented, it will benefit the rest of Southern California by freeing up additional surface water supplies during dry years or emergencies.

Regards,



Donald R. Kendall, Ph.D., P.E.

Documents Reviewed

Geosciences Support Services Inc., *Cadiz Groundwater Modeling and Impact Analysis Volumes 1, 2 and 3*, September 1, 2011

CH2M Hill, *Cadiz Groundwater and Storage Project*, 2010

CH2M Hill, *Technical Memorandum; Estimated Evaporation from Bristol and Cadiz Dry Lakes*, February 2012

Desert Research Institute, *Quantifying Evaporative Discharge from Bristol and Cadiz Dry Lakes*, February 2012

Davisson, M.L., *Discussion Regarding Sources and Ages of Groundwater in Southeastern California*, Lawrence Livermore National Laboratory, March 3, 2000.

Davisson, M.L., *Summary of Age-Dating Analysis in the Fenner Basin, Eastern Mojave Desert, California*, Lawrence Livermore National Laboratory, June 1, 2000

Groundwater Management, Monitoring, and Mitigation Plan for the Cadiz Groundwater Conservation, Recovery and Storage Project, Volume 2, Appendix B in DEIR.