

- Ayers, R.S., and D.W. Westcot. 1985. Water Quality for Agriculture. FAO Irrigation and Drainage Paper 29. Food and Agriculture Organization of the United Nations.
- Bull, W.B. 1975. Land Subsidence Due to Ground-Water Withdrawal in the Los Banos-Kettleman City Area, California, Part 2. Subsidence and Compaction of Deposits. U.S. Geological Survey Professional Paper 437-F. Washington, D.C.
- Browning, G. 2001. Personal communication. Luhdorff and Scalmanini, Consulting Engineers.
- Bryner, J. 2001. Personal communication. Bryner Consulting.
- Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Geological Survey, Bureau of Indian Affairs. 1998. Guidelines for Interpretation of the Biological Effects of Selected Constituents in Biota, Water, and Sediment: Salinity. United States Department of the Interior, National Irrigation Water Quality Program, Information Report No. 3.
- Central Valley Regional Water Quality Control Board (CVRWQCB). 1995. Water Quality Control Plan (Basin Plan) for the Tulare Lake Basin.
- Central Valley Regional Water Quality Control Board (CVRWQCB). 1998. Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins.
- Central Valley Regional Water Quality Control Board (CVRWQCB). 2002. Total Maximum Daily Load for Salinity and Boron in the Lower San Joaquin River. Regional Water Quality Control Board, Central Valley Region. January 2002.
http://www.swrcb.ca.gov/~rwqcb5/programs/tmdl/Salt_Boron.htm.
Page 32.
- Crader, P. 2002. Summary of monitoring efforts in the San Joaquin River/Delta area. E-mail correspondence to Dr. T.E. Donn, ENTRIX, 10/4/02: 09:49 a.m. from Phillip Crader, Central Valley Regional Water Quality Control Board (CraderP@rb5.swrcb.ca.gov).

- Crader, P., J. Eppinger, and J. Chilcott. 2002. Agricultural Drainage Contribution to Water Quality in the Grassland Watershed of Western Merced County, California: October 1998 – September 2000 (Water Years 1999 and 2000). Staff report to the Regional Water Quality Control Board Central Valley Region.
- Department of Water Resources (DWR). 1994. California Water Plan Update. Volume 1. Sacramento, CA.
- Department of Water Resources (DWR). 2000. Water Quality Assessment of the State Water Project, 1998-99. July 2000.
- Department of Water Resources (DWR). 2002a. Chronological Sacramento and San Joaquin Valley Water Year Hydrologic Classification Indices; updated 12/7/2001. <http://cdec.water.ca.gov/cgi-progs/iodir/wsihist>. Accessed 4/15/2002.
- Department of Water Resources (DWR). 2002b. California Irrigation Management Information System. <http://www.cimis.water.ca.gov>. Accessed 5/24/2002.
- Department of Water Resources (DWR). 2002c. Reservoir information. <http://cdec.water.ca.gov/misc/resinfo.html>. Accessed September 20, 2002.
- Department of Water Resources (DWR). 2002d. San Luis Reservoir (Federal) (SLF). Monthly reservoir storage data for 1981 through 2002. <http://cdec.water.ca.gov/cgi-progs/>. Accessed September 20, 2002.
- Economic Insights, M.Cubed, Lawrence Berkeley National Laboratory, Golden Gate Economics, R.T. Mott, S. Msangi, and CONCUR, Inc. 2003. Analysis of Economic Impacts of Proposed Land Retirement in Westlands Water District. Final report to Westlands Water District, May 2003.
- Field, J. 2002. Personal communication between J. Field (USBR) and T. Donn (ENTRIX) regarding Reclamation monitoring programs. September 19, 2002.
- Fresno County. 2000. Fresno County General Plan. Background Report.
- Fresno County. 2000. Fresno County General Plan. Environmental Impact Report.
- Fresno County. 2000. Fresno County General Plan. Policy Document.

- Gomez-Mestre, I., and M. Tejedo. 2003. Local adaptation of an anuran amphibian to osmotically stressful environment. *Evolution* 57(8): 1889-1899.
- Gordus, A. 2001. Personal communication. California Department of Fish and Game.
- Green, R.H. 1979. Sampling Design and Statistical Methods for Environmental Biologists. John Wiley & Sons, New York.
- Green, S. 2002. Tranquillity Irrigation District groundwater and surface water monitoring program. Personal communication between Sarge Green (Tranquillity ID) and T.E. Donn (ENTRIX). October 10, 2002.
- Hepworth, T.D. 2003. Response to Mendota Pool 10-Year Exchange Pumping Draft EIS on behalf of the City of Mendota. Comment letter dated September 26, 2003. Prepared by Giersch & Associates, Inc. Madera, CA.
- Huddleston, R. 2001. Personal communication. Manager, Mendota Wildlife Refuge.
- Huddleston, R. 2002. Letter to R. Sundermeyer (ENTRIX) regarding waterfowl use of Mendota Wildlife Area. Dated February 6, 2002.
- Interior, 1999. *Central Valley Improvement Act, Final Programmatic Environmental Impact Statement*. United States Department of the Interior, Bureau of Reclamation, U.S. Fish and Wildlife Service, Sacramento, CA. October 1999.
- Ireland, R.L. 1986. Land Subsidence in the San Joaquin Valley, California, as of 1983. U.S. Geological Survey Water-Resources Investigation Report 85-4196. Sacramento, CA.
- Ireland, R.L., J.F. Poland, and F.S. Riley. 1984. Land Subsidence in the San Joaquin Valley, California, as of 1980. U.S. Geological Survey Professional Paper 437-I. Washington, D.C.
- Johnson, L.W. 2001. Personal communication. Bryner Consulting.
- Jones and Stokes Associates, Inc. 1995. Environmental Impact Report on Conveyance of Nonproject Groundwater from the Mendota Pool Area Using the California Aqueduct. Draft. October (JSA 94-145) Sacramento, CA. Prepared for: Westlands Water District and Mendota Pool Group, Fresno, CA.

- Jones and Stokes Associates, Inc., and Luhdorff & Scalmanini Consulting Engineers (LSCE). 1998. Final Environmental Impact Report on Conveyance of Nonproject Groundwater from the Mendota Pool Area Using the California Aqueduct. Prepared for: Westlands Water District and Mendota Pool Group, Fresno, CA.
- Kenneth D. Schmidt and Associates (KDSA). 1989. Results of 14-Day Aquifer test Near Mendota. Prepared for San Joaquin Valley Drainage Program. Fresno, CA.
- Kenneth D. Schmidt and Associates (KDSA). 1999. Groundwater Conditions in the Vicinity of the City of the City of Mendota. Prepared for CCID and City of Mendota. Fresno, CA.
- Kenneth D. Schmidt and Associates (KDSA), and Luhdorff and Scalmanini Consulting Engineers (LSCE). 2000a. Results of 1999 Test Pumping Program for Mendota Pool Group Wells. Prepared for San Joaquin River Exchange Contractors Water Authority, Newhall Land and Farming Co., and Mendota Pool Group. Woodland, CA.
- Kenneth D. Schmidt and Associates (KDSA), and Luhdorff and Scalmanini Consulting Engineers (LSCE). 2000b. Long-Term Impacts of Transfer Pumping by the Mendota Pool Group. Prepared for San Joaquin River Exchange Contractors Water Authority, Newhall Land and Farming Co., and Mendota Pool Group. Woodland, CA.
- Kiteck, E. 2002. Data on monthly average flows (total and federalshare) at Dos Amigos Pumping Plant for the years 1981-2002. E-mail correspondence to Dr. T.E. Donn, ENTRIX, 10/4/02: 07:41 a.m. from Elizabeth Kiteck, U.S. Bureau of Reclamation (ekiteck@mp.usbr.gov).
- Luhdorff and Scalmanini Consulting Engineers (LSCE), and Kenneth D. Schmidt and Associates (KDSA). 2001. Mendota Pool Group Pumping and Monitoring Program: 2000 Annual Report. Prepared for San Joaquin River Exchange Contractors Water Authority, Newhall Land and Farming Co., and Mendota Pool Group. Woodland, CA.
- Luhdorff and Scalmanini Consulting Engineers (LSCE), and Kenneth D. Schmidt and Associates (KDSA). 2002. Mendota Pool Group Pumping and Monitoring Program: 2001 Annual Report. Prepared for San Joaquin River Exchange Contractors Water Authority, Newhall Land and Farming Co., and Mendota Pool Group. Woodland, CA.

- Luhdorff and Scalmanini Consulting Engineers (LSCE), and Kenneth D. Schmidt and Associates (KDSA). 2003. Mendota Pool Group Pumping and Monitoring Program: 2002 Annual Report. Prepared for San Joaquin River Exchange Contractors Water Authority, Newhall Land and Farming Co., and Mendota Pool Group. Woodland, CA.
- Mallyon, J. 2002. James Irrigation District groundwater and surface water monitoring program. Personal communication between John Mallyon (James ID) and T.E. Donn (ENTRIX). October 10, 2002.
- Mann, R.M., and J.R. Bidwell. 1997. Toxicological issues for amphibians in Australia. Appendix 2 in Declines and Disappearances of Australian Frogs: Proceedings of the National Threatened Frog Workshop, Canberra, November 1997.
- Marshack, J.B., 2000. A Compilation of Water Quality Goals. California Environmental Protection Agency, Regional Water Quality Control Board, Central Valley Region. Sacramento, CA.
- Martin, J. 2001. Personal Communication. San Luis Delta Mendota Water Authority.
- Robb, G. 2001. E-mail communication to T. Donn (ENTRIX) regarding tailwater reuse practices. November 28, 2001.
- Stromberg, L.K. undated. Water Quality for Irrigation. Leaflet prepared by the Farm Advisor, Fresno County Cooperative Extension, University of California.
- United States Department of the Interior, Bureau of Reclamation (Reclamation). 2000. Finding of No Significant Impact. Conveyance of Nonproject Groundwater from the Mendota Pool Area, Fall 2000 Pumping. FONSI No. 75.
- United States Department of the Interior, Bureau of Reclamation (Reclamation). 2001a. Environmental Assessment (Number 01-24) Mendota Pool 2001 Exchange Agreement. Prepared by ENTRIX, Inc. and Luhdorff & Scalmanini, Consulting Engineers. August 1, 2001.
- United States Department of the Interior, Bureau of Reclamation (Reclamation). 2001b. San Luis Drainage Feature Re-Evaluation: Preliminary Alternatives Report. U.S.B.R., Mid-Pacific Region, December 2001.

- United States Department of the Interior, Bureau of Reclamation (Reclamation). 2002. Environmental Assessment (Number 01-83) Mendota Pool 2002 Exchange Agreements. Prepared by ENTRIX, Inc. and Luhdorff & Scalmanini, Consulting Engineers. May 3, 2002.
- United States Fish and Wildlife Service (USFWS). 1993. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Giant Garter Snake. Federal Register 54053.
- United States Fish and Wildlife Service (USFWS). 2000. Appendix E.2. Selenium Ecological Risk Assessment. In: Grassland Bypass Project Environmental Impact Statement and Environmental Impact Report (draft) Volume II – Appendices. Prepared for: U.S. Bureau of Reclamation and the San Luis & Delta-Mendota Water Authority. Prepared by URS, Oakland, California.
- Western Regional Climate Center (WRCC). 2002. NCDC 1961-1990 Monthly Normals: Five Points 5 SSW, California. <http://www.wrcc.dri.edu/narratives/CALIFORNIA.htm>. Accessed 5/24/2002.
- Westlands Water District (WWD). 1996. Groundwater Management Plan – 1996. <http://www.westlandswater.org/wtrsupply/gwmp.htm>
- Westlands Water District (WWD). 1999. Water Management Plan – 1999. Westlands Water District, P.O. Box 6056, Fresno, CA 93703. September 30.
- Westlands Water District (WWD). 2001a. Water Conservation. Internet web address: <http://www.westlandswater.org/WaterCon.htm>.
- Westlands Water District (WWD). 2001b. Deep Groundwater Conditions December 2000. February 2001. <http://www.westlandswater.org/ftp/DGW2000.pdf>
- Westlands Water District (WWD). 2002. Deep Groundwater Conditions Report: December 2001. Report date: February 2002.
- White, C. 2001. Personal communication. Central California Irrigation District.
- Woodward-Clyde Consultants. 1994. Groundwater Study of Mendota Pool and Vicinity. Prepared for: U.S. Department of the Interior, Bureau of Reclamation, Sacramento, CA 95825.

6.0 LIST OF PREPARERS AND REVIEWERS

This EIS was prepared by ENTRIX, Inc., Tetra Tech, Inc., and Luhdorff and Scalmanini Consulting Engineers under the direction of U.S. Bureau of Reclamation staff. The following individuals were instrumental in preparing this document or in providing review comments.

Mendota Pool Group

William Pipes – MPG agent

Marc Carpenter – MPG agent

Tetra Tech, Inc.

Theodore E. Donn, Jr., Ph.D. – Project Manager

Luhdorff and Scalmanini, Consulting Engineers

Glenn Browning – Lead hydrologist

Vicki Kretsinger

Till Angermann

ENTRIX, Inc.

James D. Tull – sponsor

Judy Nedoff

Tula Economou, R.G.

Teresa Fung

Richard McCartney, R.G.

Chelsea Ayala

Ruth Sundermeyer

Term	Definition
A-Clay	A discontinuous clay layer about 10 to 30 feet thick that underlies portions of the western side of the San Joaquin Valley at a depth of between 70 and 130 feet below ground surface. The A-clay pinches out east of San Mateo Road and west of the Mendota Airport.
Corcoran Clay	A clay layer that underlies much the San Joaquin Valley. In the Mendota area, it is about 50 feet thick and about 350 to 450 feet below ground surface.
Deep groundwater	Groundwater that is present between the A-clay (or its equivalent depth) and the Corcoran Clay. Wells penetrating this stratum are generally between 130 and 400 feet deep.
Electrical conductivity	A measure of the ability of a liquid to conduct electricity. Electrical conductivity increases with the amount of dissolved salts in the liquid. Electrical conductivity is often used to estimate salinity. Electrical conductivity can be empirically related to total dissolved solids as described below.
Exchange	A regulatory term referring to the trade, with the U.S. Bureau of Reclamation, of water in one location for an equivalent amount of water from some other source or location.
Fallow land	Agricultural lands that have been temporarily taken out of production (< 2 years) and will be returned to production as part of normal crop rotation. Lands are subject to weed control and disking. Fallow lands can be brought back into production immediately.
Idle land	Agricultural lands that have been removed from production for a period of greater than 2 years. Idle lands are not subjected to weed control. Idle lands would require significant amendments to make

	them suitable for agriculture.
Retired land	Agricultural lands that have been permanently removed from production.
Salinity	A measure of the amount of dissolved salts in water. As used in this document, salinity is a general term referring to the concentration of salts as measured by either electrical conductivity or total dissolved solids.
Shallow groundwater	Groundwater that is found above the A-Clay (or its equivalent depth). Wells penetrating this stratum are generally less than 130 feet deep.
Total dissolved solids	A measure of the mass of dissolved salts and minerals in a given volume of water, expressed as mg/L, and often used as a measure of salinity. Because of the variable mixture of salts in water, a theoretical relationship between TDS and EC cannot be derived. Based on direct measurements of TDS and EC in Mendota Pool surface waters, the following empirical relationship has been developed: $\text{TDS} = 0.6426 * (\text{EC}) - 14.46.$
Transfer pumping	A term of convenience referring to all water pumped into the Mendota Pool by the MPG for exchange with U.S. Bureau of Reclamation (i.e., the proposed action), delivery to Westlands Water District, and/or trade or sale to others. Transfer pumping does not include water pumped into Mendota Pool for use on “adjacent” lands.