

1 KAMALA D. HARRIS
Attorney General of California
2 ERIC M. KATZ
Supervising Deputy Attorney General
3 MARILYN H. LEVIN (SBN 92800)
NOAH GOLDEN-KRASNER (SBN 217556)
4 300 South Spring Street, Suite 1702
Los Angeles, CA 90013
5 Telephone: (213) 897-2614
Fax: (213) 897-2802
6 E-mail: Noah.Goldenkrasner@doj.ca.gov
Attorneys for State of California, Santa Monica
7 Mountains Conservancy, and 50th District
Agricultural Association

EXEMPT FROM FILING FEES
[Gov. Code, § 6103]

8 SUPERIOR COURT OF THE STATE OF CALIFORNIA
9
10 CLERK OF THE COURT
11

12
13 **Coordination Proceeding**
14 **Special Title (Rule 3.550(c))**

15 **ANTELOPE VALLEY GROUNDWATER**
16 **CASES**
17 **Included Actions:**

18 **Los Angeles County Waterworks District**
19 **No. 40 v. Diamond Farming Co.**
20 **Superior Court of California County of Los**
21 **Angeles, Case No. BC 325 201**

22 **Los Angeles County Waterworks District**
23 **No. 40 v. Diamond Farming Co.**
24 **Superior Court of California County of**
25 **Kern, Case No. S-1500-CV-254-348**

26 **Wm. Bolthouse Farms, Inc. v. City of**
27 **Lancaster, Diamond Farming Co. v. City of**
28 **Lancaster, Diamond Farming Co. v.**
Palmdale Water Dist. Superior Court of
California, County of Riverside,
consolidated Actions, Case Nos. RIC 353
840, RIC 344 436, RIC 344 668

29 **AND RELATED ACTIONS.**

Judicial Council Coordination
Proceeding No. 4408

Santa Clara Case No. 1-05-CV-049053

STATE OF CALIFORNIA, SANTA
MONICA MOUNTAINS CONSERVANCY,
AND STATE OF CALIFORNIA 50TH
DISTRICT AGRICULTURAL
ASSOCIATION'S SUPPLEMENT TO
DESIGNATION OF NON-EXPERT AND
EXPERT WITNESSES AND
DECLARATION

[Assigned for All Purposes to the Honorable
Jack Komar]

Date: February 11, 2013
Time: 9:00 a.m.
Dept: 1

Action Filed: October 26, 2005

1 PLEASE TAKE NOTICE that the STATE OF CALIFORNIA, ON BEHALF OF SANTA
2 MONICA MOUNTAINS CONSERVANCY, STATE OF CALIFORNIA 50TH DISTRICT
3 AGRICULTURAL ASSOCIATION, AND ALL OTHER STATE AGENCIES OWNING LAND
4 WITHIN THE ANTELOPE VALLEY ADJUDICATION AREA (hereafter referred to as "State
5 of California") submits the following supplement to its designation of witnesses dated January 4,
6 2012 including a supplement to its non-expert witness disclosure and an expert witness disclosure
7 for the Phase 4 Trial.

8 The State of California reserves its right to later name experts before trial, to call experts
9 designated by other parties, to call supplemental experts, and to supplement this designation. The
10 State of California, through the Attorney General's Office, will work with all parties to make its
11 witnesses available for deposition at the best possible date and time for all involved if necessary.

12 Noah Golden-Krasner, attorney of record for Cross-Defendant State of California, hereby
13 declares that the State of California designates the following as expert witnesses:

14 **Retained Experts:**

15 1. W. Greg Hamer, Senior Associate Hydrogeologist, AMEC Environment & Infrastructure,
16 Inc.

17 a. Qualifications: Mr. Hamer is a Certified Hydrogeologist, Engineering Geologist and
18 Professional Geologist in the State of California. He has performed and managed water-resources
19 investigations and environmental studies for more than 30 years. A copy of his resume is
20 attached as Exhibit A.

21 b. Substance of Testimony: Depending upon further clarification of the scope of the
22 Phase IV Trial and if required for this Phase of Trial, Mr. Hamer has been asked to testify
23 concerning the amount of groundwater production and use for state owned, operated and/or
24 controlled property overlying the Antelope Valley Groundwater Basin, including the reasonable
25 and beneficial use of the water and the amount of water purchased in lieu of pumping. Mr.
26 Hamer will be testifying concerning these issues as related to numerous state agencies, including
27 the California Department of Water Resources, the California Department of Transportation, and
28 the California Department of Parks and Recreation.

- 1 c. Agreement to Testify: Mr. Hamer has agreed to testify at the Phase IV trial.
- 2 d. Familiarity with action: Mr. Hamer is sufficiently familiar with this pending action to
- 3 submit to a meaningful oral deposition concerning the specific testimony, including any opinion
- 4 and its basis.
- 5 e. Deposition availability: Mr. Hamer is available for deposition on January 31, 2013.
- 6 f. Rates: Mr. Hamer's rate is \$430 hour with a four hour minimum per day for
- 7 deposition and 8 hour minimum per day for court appearances. Mr. Hamer's travel is billed at the
- 8 rate of \$215 per hour and cost plus 15%.
- 9 2. Harold Leverenz, P.E., PhD. UC, Davis
- 10 a. Qualifications: Mr. Leverenz is a Registered Civil Engineer in California, License
- 11 No. C 71328. Between 2006-2008, he worked with California Department of Transportation
- 12 Water and Wastewater staff to develop onsite wastewater treatment systems for safety roadside
- 13 rest areas including collection and analysis of data, development of design criteria, models,
- 14 process design and selection reports. A copy of his resume is attached as Exhibit B.
- 15 b. Substance of Testimony: Mr. Leverenz has been asked to testify concerning the
- 16 amount of groundwater production and use for state owned, operated and/or controlled property
- 17 of the California Department of Transportation overlying the Antelope Valley Groundwater
- 18 Basin, including the reasonable and beneficial use of the water.
- 19 c. Agreement to Testify: Mr. Leverenz has agreed to testify at the Phase IV trial.
- 20 d. Familiarity with action: Mr. Leverenz is sufficiently familiar with this pending action
- 21 to submit to a meaningful oral deposition concerning the specific testimony, including any opinion
- 22 and its basis.
- 23 e. Deposition availability: Mr. Leverenz is available for deposition on January 31, 2013.
- 24 f. Rates: Mr. Leverenz will provide his rate schedule upon request.

25 **Non-retained Experts:**

- 26 1. Mr. Robert Pierotti, Supervising Engineering Geologist with the California Department of
- 27 Water Resources (DWR), Southern Region Office.
- 28

1 a. Qualifications: Mr. Pierotti is a California Professional Geologist, a California
2 Certified Engineering Geologist and a California Certified Hydrogeologist. Mr. Pierotti testified
3 previously regarding the State of California's position on Antelope Valley Groundwater Basin
4 Boundaries.

5 b. Substance of Testimony: Mr. Pierotti has been asked to testify regarding location of
6 state owned, operated and/or controlled property overlying the Antelope Valley Groundwater
7 Basin.

8 c. Agreement to testify: Mr. Pierotti has agreed to testify at the Phase IV trial.

9 d. Familiarity with action: Mr. Pierotti is sufficiently familiar with this pending action
10 to submit to a meaningful oral deposition concerning the specific testimony.

11 e. Deposition availability: Mr. Pierotti is available for deposition on January 31, 2013.

12 2. Mr. Blaine Laumbach, Hydroelectric Plant Operations Superintendent, Southern Field
13 Division, California Department of Water Resources.

14 a. Qualifications: Mr. Laumbach is the Lead Planner/Scheduler for the Southern Field
15 Division and the Hydroelectric Plant Operations Superintendent. He has 33 years of experience
16 with the Department of Water Resources and is responsible for leading a team of operations,
17 maintenance and support employees. He is familiar with the Oso Pumping Plant and the Alamo
18 Powerplant and is responsible for the operational activities of facilities supplying water and/or
19 power to various contractors in and out of the Southern Field Division.

20 b. Substance of Testimony: Mr. Laumbach has been asked to testify regarding the
21 amount of groundwater production and use on state owned, operated or controlled property of the
22 California Department of Water Resources overlying the Antelope Valley Groundwater Basin,
23 including the reasonable and beneficial use of the water, and the importance of aqueduct liner
24 protection pumping and the consequences of not pumping that water.

25 c. Agreement to testify: Mr. Laumbach has agreed to testify at the Phase IV trial.

26 d. Familiarity with action: Mr. Laumbach is sufficiently familiar with this pending
27 action to submit to a meaningful oral deposition concerning the specific testimony.
28

- 1 e. Deposition availability: Mr. Laumbach is available for deposition on January 31,
2 2013.
- 3 3. Nancy Escallier, Senior Right of Way Agent, District 9 Office Chief, California
4 Department of Transportation.
- 5 a. Qualifications: Ms. Escallier has a BS Degree in Managerial Economics from UC
6 Davis and has 23 years of experience as a Right of Way Agent for the California Department of
7 Transportation, including 13 years as the District 9 Office Chief of Right of Way.
- 8 b. Substance of Testimony: Ms. Escallier has been asked to testify regarding ownership
9 and location of state owned, operated and/or controlled property of the California Department of
10 Transportation overlying the Antelope Valley Groundwater Basin.
- 11 c. Agreement to testify: Ms. Escallier has agreed to testify at the Phase IV trial.
- 12 d. Familiarity with action: Ms. Escallier is sufficiently familiar with this pending action
13 to submit to a meaningful oral deposition concerning the specific testimony.
- 14 e. Deposition availability: Ms. Escallier is available for deposition on January 31, 2013.
- 15 4. Jerome Marcotte, Senior Sanitary Engineer, California Department of Transportation.
- 16 a. Qualifications: Mr. Marcotte is a Senior Sanitary Engineer, Division of Engineering
17 Services, Water and Wastewater Branch. He is a Professional Engineer in Civil Engineering, CA
18 36844, July 22, 1983. He has been engaged in the planning and design of water and wastewater
19 facilities for the last 34 years. A copy of his resume is attached as Exhibit C.
- 20 b. Substance of Testimony: Mr. Marcotte has been asked to testify regarding the
21 amount of groundwater production and use on state owned, operated or controlled property of the
22 California Department of Transportation overlying the Antelope Valley Groundwater Basin,
23 including the reasonable and beneficial use of the water.
- 24 c. Agreement to testify: Mr. Marcotte has agreed to testify at the Phase IV trial.
- 25 d. Familiarity with action: Mr. Marcotte is sufficiently familiar with this pending action
26 to submit to a meaningful oral deposition concerning the specific testimony.
- 27 e. Deposition availability: Mr. Marcotte is available for deposition on January 31, 2013.
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1 **Non-expert witnesses**

2 The State also designates the following additional persons as non-expert witnesses:

3 1. California Department of Water Resources: Reed Barnes, Utility Craftworker
4 Supervisor, Water Resources, Southern Field Division, Department of Water Resources;
5 Availability for deposition-January 28-31, 2013.


6 2. California Highway Patrol: Captain Steve Urrea, Commander, Antelope Valley
7 California Highway Patrol, Bishop; Availability TBD.

8 I declare under penalty of perjury that the foregoing is true and correct and that this
9 Declaration of Expert Witness Designation was executed on January 11, 2013, at Los Angeles,
10 California.

11 Dated: January 11, 2013

Respectfully Submitted,

12
13 KAMALA D. HARRIS
Attorney General of California
14 ERIC M. KATZ
Supervising Deputy Attorney General
15 MARILYN H. LEVIN
NOAH GOLDEN-KRASNER
16 Deputy Attorneys General

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18 
19 NOAH GOLDEN-KRASNER
Deputy Attorney General
20 *Attorneys for State of California, Santa*
21 *Monica Mountains Conservancy, and State*
of California 50th District Agricultural
Association

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EXHIBIT A

W. Greg Hamer, PG, CHg, CEG

Senior Associate Hydrogeologist

Professional summary

Mr. Hamer has performed and managed water-resources investigations and environmental studies for more than 30 years. His water-resources expertise includes basin studies, conjunctive use evaluations, water-quality studies, production well field analysis, litigation support for water rights issues, and geologic and hydrogeologic studies. His environmental experience includes site characterizations and assessments, remediation of contaminated soil and groundwater, and regional screening and siting studies.

Mr. Hamer has managed and performed groundwater investigations throughout Southern California, including studies of both coastal and inland basins. He has performed hydrogeologic and environmental evaluations of more than 20 groundwater basins in the eastern and northern Mojave Desert, and in Mono and Shasta Counties. His work experience also includes development of detailed groundwater basin water balances for water supply.

Additionally, Mr. Hamer has designed and overseen the construction of hundreds of wells using multiple drilling and sampling techniques including mud-rotary, air-rotary, reverse rotary, dual-wall air hammer, and cable tool. He has managed numerous projects to evaluate and rehabilitate production wells, including design of disinfection and chemical treatment programs. He has prepared and given numerous presentations for technical advisory committees, public meetings, and regulatory agency meetings. Many of his projects have involved the development of detailed models for evaluating groundwater quality, contaminant transport, and water supply options.

Professional qualifications/registration(s)

Certified Hydrogeologist, CA No. 634, 1999

Certified Engineering Geologist, CA No. 1211, 1984

Professional Geologist, CA No. 3878, 1984

Education

M.S., Geology/Hydrogeology, California State University, Los Angeles, 1986

B.S., Geology/Hydrogeology, California State University, Los Angeles, 1978

Memberships/Affiliations

National Association of Groundwater Scientists and Engineers

California Groundwater Resources Association

American Water Works Association

Employment history

AMEC, Senior Associate Hydrogeologist, Newport Beach, CA, 2008 to present

Geomatrix Consultants, Senior Hydrogeologist, Newport Beach, CA, 2002 to 2008

URS (Dames & Moore, Radian), Senior Project Manager, Hydrogeologist, 1988 to 2002

Radian Limited, Principal Hydrogeologist, London, England, 1994 to 1995

Radian GmbH, Geology Group Leader, Hannover, Germany, 1993

Harding Lawson Associates, Associate Hydrogeologist, 1983 to 1988

P.R.C. Engineering, Staff Hydrogeologist, 1981 to 1983

LeRoy Crandall & Associates, Geologist, 1977 to 1981

Representative projects

Water resources (U.S.)

Groundwater Basin Water Balance and Supply Study, San Luis Obispo County, CA

Senior technical advisor and reviewer for a basin-wide water balance study. Work included evaluation of domestic and agricultural water uses and demands and evaluation of current and historical groundwater pumpage.

Groundwater Conjunctive Use Study, Verdugo Basin, Los Angeles County, CA

Managed a basin hydrogeologic feasibility study for groundwater storage and artificial recharge. This project included consideration of water quality (including nitrate levels) and development of a MODFLOW groundwater flow model for use in evaluating possible recharge scenarios. Evaluated existing geologic and hydrogeologic data and developed a conceptual model and water balance including a detailed review of the water balance calculations as presented in the Report of Referee for the basin. Evaluated groundwater pumping and water demand for the basin. Worked closely throughout the project with a Technical Advisory Committee (TAC) that included the Upper Los Angeles River Area Watermaster, the City of Glendale, the California Department of Health Services, and the Regional Water Quality Control Board. The project was funded by Department of Water Resources under AB 303, and was selected in 2004 as a highlight project for the AB 303 annual report. The study provided an important framework for management of the basin and the project team received a commendation letter from the Watermaster's office.

Groundwater Basin Power Plant Water Supply Evaluation, Upper Coachella Valley, CA

Task manager for groundwater basin evaluation and environmental studies for a power plant. Work included development of a basin water balance including evaluation of groundwater pumping rates, evaluation of environmental impacts from groundwater pumping, artificial recharge of groundwater using Colorado River Aqueduct water, and use of reclaimed water for power plant cooling. Prepared environmental reports for the Regional Water Quality Control Board (RWQCB) and the California Energy Commission (CEC). The CEC report was functionally equivalent to an Environmental Impact Report (EIR).

Water Supply Well Evaluation, Imperial County, CA

Project Manager and technical lead for evaluation of a agricultural supply well and pump performance. Provided support to the California Department of Water Resources (DWR) by reviewing well and pump data and evaluating changes in well and pump performance over time and degree of wear on the pump. Findings of this study were used by DWR to support a legal position regarding the well.

Conjunctive Use Study, Upper Mojave River Basin, CA

Project Manager. Responsible for the development and use of a groundwater flow model for a large portion of the Upper Mojave River Basin (Victorville area). Reviewed and evaluated existing hydrogeologic data and produced a conceptual basin model and water balance. The model was reviewed by the U.S. Geological Survey, and with their input, a multi-layer MODFLOW groundwater flow model was prepared for the basin area. The model was used to evaluate groundwater flow volumes in specific areas, to estimate the amount of available groundwater storage capacity, to determine future impacts of pumping under various growth scenarios, and to evaluate groundwater mounding from artificial recharge. The model was also used to estimate groundwater flow paths and travel times for recharged water.

Power Plant Water Supply Evaluation, Shasta County, CA

Hydrogeologist for groundwater basin evaluation for power plant water supply in basalt aquifer. Developed basin water balance, performed detailed review and analysis of oxygen 18 and carbon isotope data for regional groundwater evaluation. Worked closely with biologists to present

information to state and federal agencies. Prepared reports and presented testimony before the California Energy Commission.

Water Supply MTBE Impacts Consultation, Crescenta Valley Water District, Verdugo Basin, CA
Hydrogeologic consultant to the Crescenta Valley Water District regarding MTBE impacts to local water supply wells in the Verdugo Basin. Project work has focused on developing solutions for maintaining water supply reliability during possible contamination-related shutdown of area wells.

Water Well Siting, Design Studies, and Pilot Hole Drilling Program, Glendale Water & Power, Los Angeles County, CA

Project Manager. Responsible for evaluating hydrogeologic and water supply system conditions for the selection of sites for new water supply wells in the Verdugo Basin. This project includes evaluation of basin hydrogeology and local groundwater conditions, as well as construction of monitoring wells in the basin. Also evaluated the condition of older water wells in the basin.

Basin-Wide Geophysical Study, Verdugo Basin, Los Angeles County, CA

Managed a basin-wide geophysical study, including a micro-gravity survey, to estimate the depth to bedrock and the thickness of the alluvial aquifer system in the basin. This first-of-its-kind study for southern California included micro-seismic and resistivity surveys at specific locations to evaluate aquifer materials and their suitability for artificial recharge. Worked closely throughout the project with a Technical Advisory Committee including the ULARA Watermaster and former Watermaster. Project was funded by California Department of Water Resources under AB 303.

Basin-Wide Groundwater Monitoring Program; San Fernando Valley, CA

Project Manager and Basin Characterization Lead. Responsible for overseeing the development of a large groundwater monitoring program for water supply well fields in the San Fernando Valley. Project includes development of plans and specifications for installation of approximately 25 deep multi-port monitoring wells, and preparations for a large multi-year well drilling program.

Water Balance Evaluation, Cabazon, CA

Project Manager. Responsible for producing a white paper describing the water balance for the local groundwater basin. Also managed an initial CEQA study for water supply development in the Cabazon County Water District. Reviewed various water balances for the surrounding groundwater basin and evaluated surface and groundwater components.

Basin-Wide Water Resources Data Base, Bunker Hill Groundwater Basin, Southern CA

Project Manager. Oversaw development of a large well and hydrogeologic database for the Bunker Hill Groundwater Basin. Collected water-quality and water-level records and well logs for more than 3,000 wells. Interpreted logs for more than 1,000 wells and entered lithologic and well-construction data into the database. Also developed a detailed Quality Assurance Project Plan for sampling of selected wells to further populate the database. The project also included ranking of wells for verification of field locations and well head elevations.

The database was used to generate 3-dimensional geologic views of portions of the groundwater basin using EarthVision software. A Web interface was developed as part of the project so that interested parties, including local water purveyors and water regulators, could query the data. The interface included a graphic, map-based display as well as the capability to plot charts of water level and chemical data for single or multiple wells. Made numerous presentations of the database and Web interface to local water agencies and industry groups.

Municipal Water Supply Well and Recharge Facilities, Los Angeles County, CA

Project Manager. Responsible for siting and designing a new well and 42-inch diameter water pipeline and recharge facilities. The project will allow for artificial recharge and spreading of surplus imported water from northern California and for extraction of the water for potable use. This project also included preparation of well and pipeline bid packages, construction management and contract

administration services, and meeting California Department of Health Services permitting requirements for a municipal supply well.

Design and Construction of Water Supply Wells, Bunker Hill Basin, CA

Project Manager. Responsible for siting, engineering design, and construction of two deep dewatering and supply wells. Prepared a Preliminary Design Report (PDR), engineering plans, and specifications for the wells, pump and packer systems, control systems, and several thousand feet of water discharge piping. Also provided construction oversight for the project.

The wells, producing 1,600 gallons per minute each, include a unique throttling packer system to regulate flow from multiple aquifers. The wells are 20-inch diameter and more than 400 feet deep. As the wells extract and dewater high-total dissolved solids (TDS) water from a shallow aquifer, the packer system automatically adjusts the flow of low-TDS water from a deeper aquifer so that the well discharges water that meets regulatory requirements. The project included innovative down-hole water quality sampling and aquifer pumping during drilling.

Conjunctive Use Recharge Studies, Hayfield Basin, CA

Hydrogeologist for original Metropolitan Water District conjunctive use studies for underground storage of Colorado River Aqueduct water. Collected and evaluated available hydrogeologic data for the basin and performed groundwater recharge mound modeling.

Spring Water Supply Studies; Benton Valley, San Bernardino Mountains, and Palomar Mountain, CA

Managing Hydrogeologist. Provided oversight for installation of stainless steel boreholes and spring water catchment facilities. Performed detailed water quality evaluations to confirm the hydraulic connection between springs and bore holes. Also prepared spring water supply reports for regulators and CEQA initial studies.

Salt Removal Well Design and Operation, Metropolitan Water District of Southern California, Bunker Hill Basin, CA

Project Manager. Conducted a pilot study to address high TDS groundwater. The project included installation of a production well to remove salt-laden shallow groundwater from the basin.

Water System Review, City of Loma Linda, CA

Task Manager. Responsible for review of city water system operations and development of alternative approaches including water transfers, well pumping modifications, and system modifications to reduce perchlorate concentrations.

High Groundwater Study, Rialto-Colton Basin, CA

Project Manager and Hydrogeologist. Reviewed historic data for the basin including the relationship between groundwater levels and the 1969 basin judgment.

Dewatering Study, Colton Quarry, CA

Hydrogeologist for a dewatering study for a proposed quarry extension. Responsible for limestone and alluvial aquifer testing and evaluating potential drawdown during dewatering.

Water Resource Evaluation, MolyCorp Mine, San Bernardino County, CA

Project Hydrogeologist. Evaluated and designed a new well field to supply a source of low fluoride water to the MolyCorp Mine. Included design and construction of three water wells.

Alamitos Seawater Intrusion Barrier, CA

Hydrogeologist for evaluation of the west end of the Alamitos seawater intrusion barrier. Reviewed water quality, inspection, and geologic data to determine rate of intrusion and possible mitigation measures. Evaluated grout sealing problems and performance problems with several injection wells.

Water Quality Studies, Orange County, CA

Hydrogeologist for various basin water quality studies. Evaluated hydrologic and water quality conditions in the Irvine basin and seawater intrusion in Bolsa and Sunset gaps.

San Bernardino Mountains, CA

Hydrogeologist for evaluation of the impact of spring water harvesting on surface water flows. Helped develop detailed analytical model for the relationship between the rate of surface water flow and the velocity and wetted perimeter of surface streams. Work supported an EIR.

Well Siting, Design, and Construction, San Bernardino, CA

Project Manager. Oversaw siting, design, and construction of two production wells and pipelines. Water quality concerns at each site included TDS and nitrate in groundwater. Prepared plans and specifications for wells, testing, pipelines, pumps, and tie-ins to existing water piping. Construction observation included contractor oversight, review of submittals, invoices, and other related tasks.

Well Siting and Conveyance Facilities, Benton, Mono County, CA

Project Manager. Responsible for well siting, design, construction oversight, and testing. Supervised and assisted in the design of wellhead facilities and piping. Project included installation of three water supply wells and several monitoring wells.

Water Supply Well Design and Installation, Desert Hot Springs, CA

Task advisor for design, installation, and testing of a water supply well for the Indigo power plant. Project included selection of drilling site and method, well design, borehole logging, testing, and selection of pumping equipment and controls.

Water Supply Well Evaluation, Beaumont, CA

Project Manager and Hydrogeologist. Responsible for evaluating and ameliorating water supply well encrustation problems. Work included high pressure water jetting, acid washing, biofouling treatment, high-pressure carbon dioxide treatment, videologging of wells, and other well rehabilitation methods.

Gauge Well Field, Riverside, CA

Task leader for evaluation of pump efficiency for the Gauge Well Field. Performed pump efficiency tests to assess costs for upgrading pumps and pump motors in city supply wells.

Environmental investigation, remediation, and engineering geologic studies (U.S.)

Project Manager and hydrogeologist for a variety of environmental investigations and remediations for contaminant-impacted sites in Southern California. Work includes projects at Edwards Air Force Base in the Antelope Valley.

Publications and presentations

- "The Cost of Water and Water Markets in Southern California, USA." G. Hamer. International Water Association 2nd International Conference on Water Economics, Statistics, and Finance, Alexandroupolis, Thrace, Greece. July 3–5, 2009.
- "An Innovative Down-Hole Packer System for In-Well Water Quality Blending." G. Hamer. National Ground Water Association 2006 Ground Water Summit, San Antonio, TX. April 22–27, 2006.
- Water Well Drilling in Developing Countries: Only One Piece in the Community Development Puzzle." G. Hamer. National Ground Water Association 2006 Ground Water Summit, San Antonio, TX. April 22–27, 2006.
- "How a Basin-Wide Micro Gravity Survey Helped Better Define Ground Water Conditions in the Verdugo Basin in Southern California." G. Hamer. National Ground Water Association 2006 Ground Water Summit, San Antonio, TX. April 22–27, 2006.
- "Managing Basin-wide Groundwater Quality Changes Resulting from Enhanced Groundwater Recharge Programs." N.T. Sheahan, W.G. Hamer, and D.E. Gould. Groundwater Quality 2004, 4th International Conference, University of Waterloo, Waterloo, Ontario, Canada. July 19–22, 2004.

- "Water Supply Tunnels or 'Qanats' in Southern California." G. Hamer. International Fontinus-Symposium, Walferdange/Luxembourg. 2003.
- "Managing Water Demand for the Intensively Used Mojave Aquifer System." G. Hamer. American Institute of Hydrology 2003 Annual Meeting & Conference, Atlanta, GA. October 19–22, 2003.
- "Meeting Water Quality and Quantity Objectives with an Innovative Well Design and Control System." G. Hamer. American Water Resources Association. Fall 2003.
- "The Cost of Water in Southern California." G. Hamer. California Groundwater Resources Association 11th Annual Meeting & Conference, Sustaining Groundwater Resources: The Critical Vision. September 2002.
- "Managing Water Demand for the Intensively Used Mojave Aquifer System." G. Hamer. Symposium on Intensive Use of Groundwater, Challenges and Opportunities (SINEX), Valencia, Spain. December 10–14, 2002.
- "Historical Improvements in Groundwater-Pumping Equipment and Effects on Farming in the United States." G. Hamer. Darcy Symposium on the History of Hydraulics. June 2002.
- "Appropriate Technology Application: An American/Romanian Well Drilling Program." G. Hamer. International Symposium on Environmental Contamination in Central and Eastern Europe. October 1992.
- "Regional Screening and Selection of Candidate Sites for California's Low-Level Radioactive Waste Disposal Facility." G. Hamer. Association of Engineering Geologists 35th Annual Conference. 1991.
- "Regional Screening and Selection of Candidate Sites for California's Low-Level Radioactive Waste Disposal Facility." G. Hamer. *U.S. Geological Survey Circular 1036: Safe Disposal of Radionuclides in Low-Level Radioactive-Waste Repository Sites: Low-Level Radioactive Waste Disposal Workshop*. July 11–16, 1987.

EXHIBIT B

HAROLD LEVERENZ, P.E., Ph.D.

Asst. Proj. Scientist / Research Engineer
Department of Civil and Environmental Engineering
University of California, Davis 95616
hlleverenz@ucdavis.edu
mobile 530.220.3911

EDUCATION

Ph.D., Civil & Environmental Engineering, University of California, Davis	2008
M.S., Civil & Environmental Engineering, University of California, Davis	2001
B.S., Biosystems Engineering, Michigan State University	1998

PROFESSIONAL REGISTRATION

Registered Civil Engineer in California, License No. C 71328

PROJECT EXPERIENCE

Wastewater system design, Caltrans, San Luis Obispo and Imperial Counties, CA 2006 - 2008
Worked with Caltrans Water and Wastewater staff to develop onsite wastewater treatment systems for safety roadside rest areas with challenging discharge requirements. Work included collection and analysis of data, development of design criteria, spreadsheet models, process design and selection reports, and review of specs and plans.

Vehicle washrack system design, Caltrans 2008 - present
Project consists of development of multiple research programs focused on the development of passive systems for removal of hydrocarbons and metals from vehicle washwater, techniques for reuse of water from equipment cleaning and servicing, and management strategies for street sweeping and drain inlet waste streams.

SRRA wastewater system design, Caltrans 2009 - present
Consists of pilot studies, data analysis, and development of design manuals for roadside rest areas operated by Caltrans throughout California. Projects include evaluations and development of passive systems for removal of nitrogen from restroom wastewater, development of systems for restricted and unrestricted water reuse at rest areas, development of anoxic constructed wetland technology, and urine separation systems for nitrogen control.

Measurement of greenhouse gas emissions from onsite wastewater systems, Davis, CA 2009
Project funded by Water Environment Research Federation to measure and model greenhouse gas emissions, including methane, carbon dioxide, and nitrous oxide from onsite wastewater systems.

Wastewater system greenhouse gas emission models, San Francisco, CA 2009
Developed process based greenhouse emissions models for several urban wastewater treatment systems in California, including assessment of process modifications to reduce GHG emissions, benefits of collecting waste grease for conversion to biodiesel fuel, and strategies for development of sustainable wastewater systems.

Wastewater Treatment Energy Efficiency Evaluation, El Paso, TX 2011
Conducted process based simulation modeling and analysis of operational and performance data to develop energy baseline. Evaluated facility energy efficiency and identified potential energy savings exceeding 50 percent of current usage. Automatic control of dissolved oxygen was identified as a key technology to reduce energy consumption.

Greenhouse Gas Management Plan and Alternative Energy Study, Martinez, CA 2009 - 2012
Assisted with the development of a spreadsheet model used for a mass and energy balance analysis of multiple wastewater management operating scenarios, including greenhouse gas emissions and utilization of alternative energy supplies.

GHG Emissions Comparison Between Multiple Scenarios, San Francisco, CA 2009
Assisted with the development of a spreadsheet model used for a mass balance analysis of grease resources, potential energy recovery, and carbon emissions associated with grease recovery in the Bay Area.

Fats, Oils and Grease to Biodiesel Research & Demonstration Project, San Francisco, CA 2009
Assisted with the preparation of background document on review of case studies where brown grease has been recovered for energy production in anaerobic digestion and biodiesel systems.

Trinity Knolls Water System Evaluation, Trinity Center, CA 2012
Prepared Preliminary Engineering Assessment for drinking water system at Trinity Knolls Mutual Water Company, including distribution system modeling and recommendations for improved water quality.

PAPERS

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EXHIBIT C

JEROME R. MARCOTTE P.E.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Senior Sanitary Engineer, July 2005 - Present

The Water and Wastewater Branch Chief for the Division of Engineering Services responsible for the design of water and wastewater facilities at maintenance stations, safety roadside rest areas, and truck inspection buildings. Design duties typically consist of conducting site visits to determine existing field conditions to supplement using engineering principals, methods, codes, design guides, publications, equipment and computers to create engineering plans, specifications and estimates showing the information necessary for constructing facilities requested by the customer. These drawings include layouts, typical sections, cross-sections, elevations, details and schematics. Customers include public and internal contacts. Typical facilities include drinking water wells and treatment facilities and sewage treatment and disposal systems. In addition, responsible for the design of some industrial wastewater facilities at maintenance stations.

Performs construction engineering for transportation facilities that includes providing technical engineering consultation for Caltrans construction field personnel, reviewing contractor shop plans and submittals and conducting field inspections and tests of completed work to ensure compliance with contract documents.

Conducts routine and emergency maintenance investigations for water and wastewater equipment used at transportation facilities. Investigations are performed to ensure the safety, reliability and proper operation of the facility and its systems and to preserve and protect the investment in the facility and its systems. Investigations consist of field inspections, troubleshooting, testing and providing technical engineering consultation for Caltrans maintenance personnel.

Senior Transportation Engineer, March 2000-June 2005

Caltrans statewide Construction coordinator for environmental engineering responsible for establishing and managing the Construction Division's compliance with State and Federal environmental laws and permits. Construction's lead negotiator with the SWRCB and RWQCBs regarding Caltrans's 2001 Storm Water Plan. Directed the preparation of Caltrans "Construction Best Management Practices (BMP) and Storm Water Pollution Prevention Manuals" in 2000 and 2003 and development of four other environmental guidance manuals. Peer reviewer of California's Storm Water BMP Manual. Prepared budgeting and requested additional funding and resources for new programs. Ensured compliance and developed contract provisions for water pollution, air, migratory bird, endangered species, and naturally occurring asbestos. Responsible for the development and conducting of five different water pollution training classes attended by over 3,000 Caltrans, local agency, and contractor staff. Directed the preparation of four other Department construction and environmental guidance manuals.

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Senior Environmental Engineer, 1986-March 2000

Managed and oversaw the investigation, characterization and cleanup of active and abandoned industrial sites contaminated with hazardous substances. Ensured compliance with cleanup requirements pursuant to federal CERCLA ("Superfund") and state Hazardous Substances Account Act. Supervised engineers and scientists managing environmental monitoring, risk assessments, remedial action plans, construction activities and issuance of final certifications. Responsibilities included budgeting funds and resources of up to 2.5 million dollars a year. Negotiated with industry representatives to establish environmental investigation and cleanup requirements. Managed State procurement and oversight of all contracts for hazardous waste services support. Ensured compliance with requirements of the California Environmental Quality Act (CEQA). Coordinated with representatives of Regional Water Quality Control Board in order to implement requirements of Porter-Cologne Act. Conducted training and implementation of total quality improvement program.

Facilitated public meetings with community groups, prepared fact sheets and community relations plans.

Associate Environmental Engineer, 1983-1986

Directed State contractors and corporations in the investigation and implementation of cleanup actions at contaminated industrial sites. Reviewed and approved groundwater investigations. Established cleanup levels for soil and groundwater. Other responsibilities included: negotiation and preparation of enforcement orders and agreements; conducted public meetings; and negotiation of contractor work assignments and costs.

Assistant Environmental Engineer, 1982-1983

Completed the technical evaluation and issuance of hazardous waste storage and treatment permits pursuant to state law and the federal Resource Conservation and Recovery Act (RCRA). Conducted technical evaluations including the determination of treatment standards, storage requirements, personnel health and safety training plan and emergency response requirements.

U.S. ENVIRONMENTAL PROTECTION AGENCY

Environmental Engineer, 1978-1982

Reviewed and approved the planning and design documents for wastewater treatment facilities for technical adequacy, effectiveness and compliance with Clean Water Act (CWA) requirements. Oversaw the Federal approval of planning, design, construction, and operation and maintenance of regional wastewater treatment plants for the State of Hawaii and the Trust Territories of the United States in Micronesia. Prepared and issued federal environmental documents for these regional wastewater treatment facilities. Conducted inspections of operating and the construction of wastewater treatment facilities. Reviewed and approved construction change orders.

College Education

Worcester Polytechnic Institute, Worcester MA. Bachelors of Science, Civil Engineering 1978

CERTIFICATE OF SERVICE

Case Name: Antelope Valley Groundwater
Cases

No. JCCP4408

I hereby certify that on January 11, 2013, I served the following document(s)

**STATE OF CALIFORNIA, SANTA MONICA MOUNTAINS CONSERVANCY, AND
STATE OF CALIFORNIA 50TH DISTRICT AGRICULTURAL ASSOCIATION'S
SUPPLEMENT TO DESIGNATION OF NON-EXPERT AND EXPERT WITNESSES
AND DECLARATION**

on the interested parties in this action, by posting the document(s) listed above to the Santa Clara County Superior Court e-filing website (<http://www.sceffiling.org>) under the Antelope Valley Groundwater matter pursuant to the Court's Order dated October 27, 2005.

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on January 11, 2013, at Los Angeles, California.

Gwen Blanchard
Declarant


Signature