| Page 1 | of | 2 |
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Proposed Cease and Desist Order Hearing

| Check one of the following: | Gallo Vineyards, Inc. |
|-----------------------------|------------------------|
| | Mark and Valla Dunkel |
| | X Mussi et al. |
| | Yong Pak and Sun Young |

scheduled to commence May 5, 2010

Exhibit Identification Index

Modesto Irrigation District, State Water Contractors,

PARTICIPANT: and San Luis & Delta-Mendota Water Authority

| Exhibit Identification Number | Exhibit Description | Status of Evidence | | ence |
|-------------------------------------|-------------------------------------|--------------------|----------|-----------------------|
| | | Introduced | Accepted | By Official Notice |
| MSS 1 | Testimony of Stephen R. Wee | | | |
| MSS 1A | Wee Statement of Qualifications | | | |
| MSS 1B | Chain of Title Summary | | | |
| MSS 1C | Map #131-170-03-C | | | |
| MSS 1D | Map #131-170-03-E | | | |
| MSS 1E | Map #131-170-03-F | | | |
| MSS 1F | April 28, 1891, Deed | | | |
| MSS 1G | Map #131-170-03-G | | | |
| MSS 1H | November 18, 1925, Agreement | | | |
| MSS 1I | January 20, 1925, Deed | | | |
| MSS 2A | Sequencing Map 1 | | | |
| MSS 2B | Sequencing Map 2 | | | |
| MSS 2C | Sequencing Map 3 | | | |
| MSS 2D | Sequencing Map 4 | 81 | | |
| MSS 3 | Testimony of Philip Johnson | | | |
| MSS 3A | Johnson Statement of Qualifications | | | |
| MSS 3B | August 1937 aerial photograph | | | |

| Page | 2 | of | 2 |
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Proposed Cease and Desist Order Hearing

| Check one of the following: | Gallo Vineyards, Inc. |
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| | Mark and Valla Dunkel |
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Exhibit Identification Index

Modesto Irrigation District, State Water Contractors,

PARTICIPANT: and San Luis & Delta-Mendota Water Authority

| Exhibit Identification Number | Exhibit Description | Star | tus of Evide | ence |
|-------------------------------------|---------------------------------------|------------|--------------|-----------------------|
| | | Introduced | Accepted | By Official Notice |
| MSS 3C | May 1940 aerial photograph | | Hij | |
| MSS 3D | July 1957 aerial photograph | | | |
| MSS 3E | June 1963 aerial photograph | | | |
| MSS 3F | August 1963 aerial photograph | | | |
| MSS 3G | May 1968 aerial photograph | | | |
| MSS 3H | April 1985 aerial photograph | | | |
| MSS 3I | June 1987 aerial photograph | | | |
| MSS 3J | March 1993 aerial photograph | | | |
| MSS 3K | Sept. 2000 aerial photograph | | | |
| MSS 4 | Testimony of David A. Goldhamer, Ph.D | | | |
| MSS 4A | Goldhamer Statement of Qualifications | | | |
| MSS 4B | Consumptive Use Chart | | | |
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PROOF OF SERVICE

∠ DIEPENBROCK

HARRISON

I Gilberto J. Castro declare as follows:

I am over 18 years of age and not a party to the within action; my business address is 400 Capitol Mall, Suite 1800, Sacramento, California, I am employed in Sacramento County, California.

On April 1, 2010, I served a copy of the following documents:

EXHIBIT IDENTIFICATION INDEX AND EXHIBITS FOR HEARING REGARDING ADOPTION OF DRAFT CEASE AND DESIST ORDER AGAINST: RUDY MUSSI, TONI MUSSI AND LORY C. MUSSI INVESTMENT LP (MIDDLE RIVER) - SAN JOAQUIN COUNTY - SCHEDULED TO COMMENCE ON MAY 5, 2010

On the following interested parties in the above-referenced case number to the following:

SEE ATTACHED SERVICE LIST

[X] BY MAIL

By following ordinary business practice, placing a true copy thereof enclosed in a sealed envelope, for collection and mailing with the United States Postal Service where it would be deposited for first class delivery, postage fully prepaid, in the United States Postal Service that same day in the ordinary course of business.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration was executed on April 1, 2010, at Sacramento, California.

Gilberto J. Castro

- 1 -

Service List

| <u>.</u> | | |
|----------|--|--|
| | RUDY MUSSI, TONI MUSSI AND LORY C. MUSSI INVESTMENT LP c/o John Herrick, Esq. 4255 Pacific Avenue, Suite 2 Stockton, CA 95207 jherrlaw@aol.com c/o Dean Ruiz, Esq. | DIVISION OF WATER RIGHTS PROSECUTION TEAM c/o David Rose State Water Resources Control Board 1001 I Street Sacramento, CA 95814 DRose@waterboards.ca.gov |
| | Harris, Perisho & Ruiz 3439 Brookside Road, Suite 210 Stockton, CA 95219 dean@hpllp.com | |
| | CENTRAL DELTA WATER AGENCY c/o Dean Ruiz, Esq. | SOUTH DELTA WATER AGENCY c/o John Herrick |
| | Harris, Perisho & Ruiz 3439 Brookside Road, Suite 210 Stockton, CA 95219 dean@hpllp.com | Attorney at Law 4255 Pacific Avenue, Suite 2 Stockton, CA 95207 jherrlaw@aol.com |
| | 5 | c/o Dean Ruiz, Esq. Harris, Perisho & Ruiz 3439 Brookside Road, Suite 210 Stockton, CA 95219 |
| | | dean@hpllp.com |
| | SAN JOAQUIN COUNTY AND THE SAN JOAQUIN COUNTY FLOOD CONTROL & | STATE WATER CONTRACTORS c/o Stanley C. Powell |
| | WATER CONSERVATION DISTRICT c/o DeeAnne M. Gillick Neumiller & Beardslee | Kronick, Moskovitz, Tiedemann & Girard 400 Capitol Mall, 27th Floor Sacramento, CA 95814 spowell@kmtg.com |
| | P.O. Box 20 Stockton, CA 95201-3020 dgillick@neumiller.com | SPO WORKERS.COM |
| | tshepard@neumiller.com | |
| | MODESTO IRRIGATION DISTRICT c/o Tim 0'Laughlin | SAN JOAQUIN FARM BUREAU c/o Bruce Blodgett |
| | Ken Petruzzelli O'Laughlin & Paris LLP 117 Meyers St., Suite 110 P.O. Box 9259 | 3290 North Ad Art Road Stockton, CA 95215-2296 director@sjfb.org |
| | P.O. Box 9259 Chico, CA 95927-9259 towater@olaughlinparis.com kpetruzzelli@olaughlinparis.com | |

DIEPENBROCK HARRISON

Proof of Service

MSS Exhibit 1

| 2 | Timothy O'Laughlin, State Bar No. 116807 Kenneth Petruzzelli, State Bar No. 227192 O'LAUGHLIN & PARIS LLP P.O. Box 9259 |
|----|--|
| 3 | Chico, California 95927 |
| 4 | Telephone: (530) 899-9755 Facsimile: (530) 899-1367 |
| 5 | Attorneys for MODESTO IRRIGATION DISTRICT |
| 6 | Clifford W. Schulz, State Bar No. 039381 |
| 7 | Stanley C. Powell, State Bar No. 254057 KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD |
| 8 | A Professional Corporation 400 Capitol Mall, 27th Floor |
| | Sacramento, California 95814 |
| 9 | Telephone: (916) 321-4500 Facsimile: (916) 321-4555 |
| 10 | Attorneys for STATE WATER CONTRACTORS |
| 11 | Jon D. Rubin, State Bar No. 196944 |
| 12 | Valerie C. Kincaid, State Bar No. 231815 DIEPENBROCK HARRISON |
| 13 | A Professional Corporation 400 Capitol Mall, Suite 1800 |
| 14 | Sacramento, CA 95814-4413 |
| 15 | Telephone: (916) 492-5000 Facsimile: (916) 446-4535 |
| 16 | Attorneys for SAN LUIS & DELTA-MENDOTA WATER AUTHORITY |
| 17 | WATER AUTHORITI |
| 18 | BEFORE THE CALIFORNIA |
| 19 | STATE WATER RESOURCES CONTROL BOARD |
| 20 | |
| 21 | In the Matter of Draft Cease and Desist TESTIMONY OF STEPHEN R. WEE |
| 22 | Order No. 2009-00XX-DWR Against Rudi Mussi, Toni Mussi and Lory C. Mussi |
| 23 | Investment LP |
| 24 | |
| 25 | My name is Stephen R. Wee and I am a principal with JRP Historical Consulting, LLC. |
| 26 | In this position, I have served as a consulting historian for major historical research investigations |
| 27 | covering a wide range of topics, including services as an expert historian in legal cases involving |
| 28 | pre-1914 appropriative water rights, riparian water rights, historic inland navigation, and other |
| | -1- |

environmental issues. My Statement of Qualifications is marked as MSS Exhibit 1A.

I, and other historians employed by JRP Historical Consulting, LLC working under my direct supervision, obtained the chain of title documents for San Joaquin County Assessor's Parcel Number (APN) 131-170-03 (Parcel) from the San Joaquin County Recorder's office in Stockton, the San Joaquin County Historical Society Museum in Micke Grove, Lodi, and the California State Lands Commission, in Sacramento. I reviewed each document for the chain of title and present a summary of each document in MSS Exhibit 1B. MSS Exhibit 1B includes information on: (1) instrument date; (2) date recorded; (3) grantor; (4) grantee; (5) document type; (6) document number; and (7) map number.

The documents for the chain of title for the Parcel indicate that on July 26, 1869 the State of California issued to G. D. Roberts Certificate of Purchase No. 2864 and that Certificate of Purchase No. 2864 issued pursuant to the "Swamp and Overflow Land Act of September 28, 1850" (9 Stats. 519). See MSS Exhibit 1C. At the time the State of California issued Certificate of Purchase No. 2864, the Parcel was part of a larger tract that was contiguous to Burns Cutoff, the San Joaquin River, Whiskey Slough, and the Middle River. CP 2864 was transferred from Roberts to Tideland Reclamation Company in 1871 and from Tideland Reclamation Company to J.P. Whitney in 1875.

On November 24, 1876, the United States of America and California issued a patent to J.P. Whitney. That patent included approximately 40,213 acres, including and all of the lands in Certificate of Purchase No. 2864 on Roberts Island, including the Parcel.

On January 15, 1877, J.P. Whitney transferred the Parcel to Morton C. Fisher as part of a tract of land in Upper and Middle Roberts Island ("1877 Tract"). *See* MSS Exhibit 1D. As a result of that transfer, the 1877 Tract remained contiguous to Burns Cutoff, the San Joaquin River, and the Middle River, but was no longer contiguous to Whiskey Slough.

On April 28, 1891, J.R. the Parcel was transferred to Joseph Vasquez as part of a 149.5 acre piece of land ("1891 Tract"). *See* MSS Exhibit 1E. As a result of that transfer, the 1891 Tract was no longer contiguous to Burns Cutoff, the San Joaquin River, and the Middle River. The deed for the transfer of the 1891 Tract contains no language that preserved riparian water

rights. See SMS Exhibit 1F. The deed for the transfer of the 1891 Tract states that the transfer is made "together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof."

From about April 28, 1891, to March 16, 1916, the 1891 Tract changed ownership multiple times.

The Parcel's current boundaries result from a transaction dated November 6, 1930. MSS Exhibit 1G. The Parcel changed ownership multiple times between 1930 and 2010. According to records of the San Joaquin County Recorder, the current ownership of the Parcel is Rudy Mussi (22.5 percent), Toni Mussi (22.5 percent), Lory C. Mussi (22.5 percent), Victoria Mussi (22.5 percent), Ann Marie Lagno (3.33 percent), Wendy Lagno (3.33 percent), and Jessica Sandelius (3.33 percent).

The changes reflected in the chain of title described above are depicted graphically in MSS Exhibits 2A-D.

I, and other historians employed by JRP Historical Consulting, LLC working under my direct supervision, reviewed files of the San Joaquin County Recorder's office in Stockton, the San Joaquin County Historical Society Museum in Micke Grove, Lodi, and the California State Lands Commission, in Sacramento, to identify evidence of water use on the Parcel prior to 1914. We found no notices of appropriation for water diversion and use filed pursuant to the 1872 Civil Code for the Parcel or any evidence indicating the Parcel had been irrigated prior to 1914. The title chain includes a November 18, 1925, agreement between Alice M. Woods, I.N. Robinson, Josephine V. Jones, and John Vazquez (as owner of the 149.5 acre parcel). *See* MSS Exhibit 1H. On January 20, 1925, a deed was recorded for land that was the subject of that agreement. *See* MSS Exhibit 1I.

MSS Exhibit 1A

STEPHEN R. WEE

PRESIDENT, JRP HISTORICAL CONSULTING LLC

EDUCATION

M.A., History (United States), University of California, Davis

Emphasis on Environmental History, California and the American West

B.A., History, University of Washington, Seattle

Graduated *Magna Cum Laude*Emphasis on United States History

BUSINESS AND PROFESSIONAL CREDENTIALS

President, JRP Historical Consulting, LLC, 2006-present

Founding Partner and Principal, JRP Historical Consulting, 1981 - 2006

Superior Accomplishment Award in Recognition of Exceptional Performance, Director, California Department of Transportation, June 2002.

Information Center Procedural Advisory Committee, Standing Committee of the California Historic Resources Commission, 1999-2002

Political Action Committee/CHA Editorial Board (1986-1994), Board of Directors/ Executive Board (1997-1999), California Council for the Promotion of History

Commissioner, City of Davis Historical Resources Management Commission, 1990-1993

Historic Resources Subcommittee, California Heritage Resource Data Management Advisory Committee, California Office of Historic Preservation, 1987

Registered Professional Historian, California Council for the Promotion of History, 1985-present

Founding Partner, California-Pacific Research Associates, 1978-1980

Interagency Research Coordinator (Historical Studies), California State Lands Commission / Land Law Division, California Department of Justice, Office of the Attorney General, Sacramento, 1976-77

EXPERT WITNESS TESTIMONY AND REPORTS

Robert M. Harding, Plaintiff v. City of Elsinore; Santa Ana Watershed Project Authority, Case No. RIC 445294, Superior Court, State of California, County of Riverside, Western Division. Expert Historian deposition on behalf of defendants regarding history of public roads and trails and their dedication for public uses in Elsinore township and the townsite of Lake Elsinore, 1840s-1920s (October 21, 2009).

In Re the General Adjudication of Rights to the Use of Water from the Snake River Drainage Basin Water System, State of Idaho v. United States; State of Idaho; and all unknown claimants to the use of water from the Snake River Drainage Basin Water System, Subcase Nos. 63-30978 & 63-31973,

- District Court of the Fifth Judicial District of the State of Idaho, Twin Falls, ID. Submission of Expert Report regarding the U. S. Forest Service's Claims to groundwater on Idaho National Forests as a Federal Reserved Water Rights under the Organic Act of 1897, Boise: State of Idaho, Office of the Attorney General, 2008-present.
- Summary Report: Roberts Island and Union Island Riparian Water Rights Investigation, San Joaquin County, CA (June 2008), Appendix C to the San Joaquin River Group Authority, South Delta Hydrology and Water Rights, Report to the State Water Rights Control Board, Bay-Delta Strategic Workplan (2008).
- State Water Resources Control Board, Division of Water Rights, Lake Arrowhead Administrative Civil Liability Enforcement Hearing (CDO No. 262.31-18; ACL No. 262.5-40). Expert Report and Testimony before the SWRCB regarding pre-1914 consumptive water rights of the Lake Arrowhead Community Services District and Lake Arrowhead Country Club, November 8-9, 2005. Sacramento: Ellison, Schneider & Harris, LLP, Attorneys at Law, 2005.
- In Re the General Adjudication of Rights to the Use of Water from the Snake River Drainage Basin Water System, State of Idaho v. United States; State of Idaho; and all unknown claimants to the use of water from the Snake River Drainage Basin Water System, Case No. 39576, District Court of the Fifth Judicial District of the State of Idaho, Twin Falls, ID. Submission of Expert report and deposition testimony before US Attorney for Shoshone-Paiute Tribe related to Federal Reserved Water Right Claims for the Duck Valley Indian Reservation, Idaho and Nevada, based upon the purposes for the creation of the Duck Valley Indian Reservation. Boise: State of Idaho, Office of the Attorney General, 2004 2006.
- In the Matter of the Determination of the Relative Rights of the Waters the Klamath River a Tributary of the Pacific Ocean. Lead Case No. 003. Before the Hearing Office Panel for the State of Oregon Water Resources Department. Expert Report on behalf of Klamath Water Users Association and others regarding pre-1909 appropriative water rights claims for certain claimants under the U.S. Bureau of Reclamation's Klamath Irrigation Project, Upper Klamath River Basin, OR and CA. Sacramento: Somach, Simmons & Dunn, Sacramento, Attorneys at Law, 1997-2005.
- State Water Resources Control Board, Administrative Civil Liability Complaint Hearings Against Lloyd L. Phelps, Jr., Joey P. Ratto, Jr., and Ronald D. Conn and Ron Silva, et al. (Complaint Nos. 262.5-28 through 30; Water Right Order No. 2004-0004) regarding Riparian Water Right Claims on Roberts Island, San Joaquin County, CA. Testimony for South San Joaquin Water Users Association and O'Laughlin & Paris, Attorneys at Law, February 25, 2003.
- California Historic Resources Commission Hearing, Re. Coronado Belt Railroad Eligibility for Listing in the California Register of Historical Resources, Riverside Hearing, November 8, 2002. San Diego: Cities of San Diego, National City, Chula Vista and Imperial Beach, 2002. Provided an expert report and oral testimony before the Commission regarding the eligibility of the Coronado Belt Railroad for listing in the California Register of Historical Resources.
- Orradre v. Monterey County Water Resources Agency. Water Right Hearing State Water Resources Control Board: Application No. 30532 by Monterey County Water Resources Agency. Submission of declarations on behalf of the applicant relating to pre-1914 water claims for agricultural purposes in the Salinas Valley. Sacramento: Downey Brand Seymour & Rohwer, 2000 2001.

- In Re the General Adjudication of Rights to the Use of Water from the Snake River Drainage Basin Water System, State of Idaho v. United States; State of Idaho; and all unknown claimants to the use of water from the Snake River Drainage Basin Water System, Case No. 63-25243, District Court of the Fifth Judicial District of the State of Idaho, Twin Falls, ID. Submission of Expert Report and deposition testimony before US Attorneys for Department of Justice, Environmental and Natural Resources Division related to the U. S. Forest Service's Claims to Federal Reserved Water Rights under the Organic Act of 1897, Boise: State of Idaho, Office of the Attorney General, 1998.
- Putah Creek Water Cases. Solano Irrigation District v. The Names of All Appropriative Water Rights Holders in Upper Basin, et al., Solano Superior Court No. 108552 and Putah Creek Council v. Solano Irrigation District and Solano County Water Agency, Sacramento Superior Court No. 515766, 1996. Testimony for Solano Irrigation District and Solano County Water Agency.
- Nickel Enterprises v. State of California, Kern County Superior Court, 1993. Testimony for California Department of Justice, Office of the Attorney General. Historic navigation on the Kern River.

LITIGATION RESEARCH SERVICES

- Historical Water Use on the Coeur D'Alene Indian Reservation, Idaho. Northern Idaho Stream Adjudication: Coeur D'Alene Lake, Idaho. Boise: State of Idaho, Office of the Attorney General, 2010-present.
- History of Groundwater Development and Use in Antelope Valley to fulfill the changing military missions of Edwards Air Force Base, Kern, San Bernardino and Los Angeles Counties, CA. Historical research related to federal reserved water right claims for military purposes at Edwards AFB. Washington, D.C.: U. S. Department of Justice, 2008 to present.
- History of Fontana Union Water Company's Lytle Creek Diversion on the San Bernardino National Forest. Research and prepare a report documenting water diversion and intake facilities on Lytle Creek prior to the establishment of the national forest reserve in 1893. Prepared for Fontana Union Water Company, Cucamonga Valley Water District and San Gabriel Water District for submission to the Chief Counsel for Natural Resources, U. S. Department of Agriculture, 2009.
- Historical Research regarding history of public roads and trails and their dedication for public uses in Elsinore township and the townsite of Lake Elsinore, San Diego and Riverside Counties, CA, 1840s-1920s Riverside: Aklufi & Wysoki, Attorneys at Law, 2006-2009.
- Groundwater and Federal Reserved Water Rights Under the Organic Act of 1897. In Re the General Adjudication of Rights to the Use of Water from the Snake River Drainage Basin Water System, State of Idaho v. United States; State of Idaho; and all unknown claimants to the use of water from the Snake River Drainage Basin Water System. District Court of the Fifth Judicial District of the State of Idaho, Twin Falls, ID. Boise: State of Idaho, Office of the Attorney General, 2008-present.
- Due Diligence Research on Appropriative and Riparian Water Rights Associated with a large historic ranch in Madera County, CA, 2009 Present.
- Pre-1914 Water Rights Investigation: Merced County, CA, 2008 Present.

- Historic Meandering of the Blackfoot River within a U. S Army Corps of Engineers Flood Control Project Area involving Shoshone-Bannock Indian Lands within the Fort Hall Reservation, Idaho. Boise: Idaho Attorney General's Office, 2008.
- Historic Meandering of the River Bend Section of the Russian River, Sonoma County, CA. Sacramento: Lennihan Law, APC, 2008.
- Pre-1914 Water Rights Investigation, for a historic ditch on Sheridan Creek, near Inwood, Shasta County, CA. Sacramento: Lennihan Law, APC, 2007-2008.
- Historical Water Rights Investigation related to Federal Reserved Water Rights Claim to the Fort Boise Military Reservation, Boise, Idaho. In Re the General Adjudication of Rights to the Use of Water from the Snake River Drainage Basin Water System, State of Idaho v. United States; State of Idaho; and all unknown claimants to the use of water from the Snake River Drainage Basin Water System. District Court of the Fifth Judicial District of the State of Idaho, Twin Falls, ID. Boise: State of Idaho, Office of the Attorney General, 2007 2008.
- Riparian Lands and Agricultural Land Uses Investigation for Roberts and Union Islands, southern San Joaquin Delta, San Joaquin County, CA. Chico: O'Laughlin & Paris LLP, 2007 2009.
- Pre-1914 Water Rights Investigation for Idyllwild Water District regarding Strawberry Creek, a tributary to the San Jacinto River. SWRCB Complaint No. 33-05-01 In Re. Strawberry Creek, Riverside County, CA. Sacramento: Ellison, Schneider & Harris, Attorneys at Law, LLP, 2007 2008.
- Historical Water Rights Investigation: Upper and Middle Snake River Basin Water Development for Agriculture vs. Hydroelectric Power Uses, Idaho. In Re the General Adjudication of Rights to the Use of Water from the Snake River Drainage Basin Water System, State of Idaho v. United States; State of Idaho; and all unknown claimants to the use of water from the Snake River Drainage Basin Water System, Idaho Power Company Sub-cases. District Court of the Fifth Judicial District of the State of Idaho, Twin Falls, ID. Boise: State of Idaho, Office of the Attorney General, 2006 Present.
- Pre-1914 Water Rights Investigation: White Mallard Duck Club Property, Butte Creek, Colusa, Sutter and Butte Counties, CA. Sacramento: Lennihan Law, APC, 2006-2007.
- Historical Investigation of Pre-1914 and Riparian Water Rights to Big Springs (aka, Bass Springs), a Tributary of Montgomery Creek, Shasta County, CA. Chico: O'Laughlin & Paris, Attorneys at Law, 2005-2007.
- Historical Investigation and Expert Testimony on Pre-1914 Water Rights of the Lake Arrowhead Community Services District and Lake Arrowhead Country Club, Lake Arrowhead, San Bernardino County, CA. Sacramento: Ellison, Schneider & Harris, LLP, Attorneys at Law, 2004 2005.
- Historical Investigations on Water Quality of Upper Klamath Lake, Klamath County, Oregon, California. Sacramento: Ellison, Schneider & Harris, LLP, Attorneys at Law, 2004 2005.
- Historic Research related to the Federal Reserved Water Right Claims for the Duck Valley Indian Reservation, Idaho and Nevada, In Re the General Adjudication of Rights to the Use of Water from the Snake River Drainage Basin Water System, State of Idaho v. United States; State of Idaho; and all unknown claimants to the use of water from the Snake River Drainage Basin

- *Water System,* Case No. 39576, District Court of the Fifth Judicial District of the State of Idaho, Twin Falls, ID. Boise: State of Idaho, Office of the Attorney General, 2004 2007.
- Historical Investigations on the Klamath River Fishery, Klamath County, Oregon, and Siskiyou and Humboldt Counties, California. Sacramento: Ellison, Schneider & Harris, LLP, Attorneys at Law, 2004 2005.
- Riparian Water Rights Investigation, City of Santa Cruz, Santa Cruz County, CA. Sacramento: Lennihan Law, APC and City of Santa Cruz, 2004 2006.
- Research Related to Santa Clara Valley Water District's Water Rights Under the Central Valley Project and State Water Project and Related Matters, Duane, Morris & Heckscher, LLP, Attorneys at Law, 2004 2005.
- Historic Research related to the Federal Reserved Water Right Claims of the City of Pocatello (Claim No. 29-11609), In Re the General Adjudication of Rights to the Use of Water from the Snake River Drainage Basin Water System, State of Idaho v. United States; State of Idaho; and all unknown claimants to the use of water from the Snake River Drainage Basin Water System, Case No. 39576, District Court of the Fifth Judicial District of the State of Idaho, Twin Falls, ID. Boise: State of Idaho, Office of the Attorney General, 2004.
- Pre-1914 Water Rights Investigation for a Tract of Agricultural Land located on the Sacramento River above Knights Landing, Yolo County, CA. Downey Brand Seymour & Rohwer, Attorneys at Law, 2004-2005.
- Historical Investigation regarding Oroville Dam, Hydroelectric Power Production, and the California State Water Project. Metropolitan Water District of Los Angeles, 2003 2004.
- Pre-1914 Water Rights Investigation and Jurisdictional Water Rights History of Mathews Reservoir on Cajalco Creek, Riverside County, CA. Sacramento: Ellison, Schneider & Harris, LLP, Attorneys at Law for Metropolitan Water District of Los Angeles, 2003 2004.
- Pre-1914 Water Rights Investigation, Santa Cruz County, CA. Sacramento: Lennihan Law, APC and City of Santa Cruz, 2003 2004.
- Pre-1914 Water Rights Investigation: El Dorado Canal, South Fork of the American River Canyon, El Dorado County. Sacramento: Ellison, Schneider & Harris, LLP, Attorneys at Law, 2003 2004.
- Pre-1914 and Riparian Water Rights Investigation on 1,000 acres near Tracy, San Joaquin County. Sacramento: Lennihan Law, APC, and the City of Tracy, Public Works Department, 2003.
- Riparian Water Rights Investigation for Hearing before State Water Resources Control Board regarding Water Claims on Roberts Island, San Joaquin County, CA. Chico: O'Laughlin & Paris, Attorneys at Law, 2003.
- Water Rights Investigation for a Coastal Ranch in Monterey County, CA. Sacramento: Kronick, Moskovitz, Tiedemann & Girard, Attorneys at Law August 2002 2007.
- Legislative History of Selected Provisions of the California Water Code relating to Areas of Origin. Sacramento: Somach, Simmons & Dunn, Attorneys at Law, 2002-2003.
- Pre-1914 Water Right Investigation for Water Appropriations on the North Fork of the American River, Sacramento County. Sacramento: Ellison, Schneider & Harris, LLP, Attorneys at Law, 2002.

- Historical Occurrences of Salmon and Steelhead Migrations in Solano County Streams. Fairfield: Solano County Water Agency. September 2000 April 2001.
- Legislative History of Selected Provisions of the 1914 Water Code. Sacramento: Ellison & Schneider, LLP, Attorneys at Law, 2000-2001.
- Orradre v. Monterey County Water Resources Agency. Monterey County, CA. Research regarding pre-1914 and riparian water rights claims in the Salinas Valley. Sacramento: Downey Brand Seymour & Rohwer, Attorneys at Law, 2000 – 2001.
- State of California v. Schoendorf. Monterey County, CA. Research on land ownership, water rights and domestic water uses of springs located on a section of the Big Sur Coast. Sacramento: Downey Brand Seymour & Rohwer, Attorneys at Law, 2000 2001.
- Bovin Trust Claim Klamath River Adjudication. Research on pre-1909 water rights claim on the Link River, Klamath Falls, Oregon. Portland, OR: Davis Wright Tremaine, LLP, Attorneys at Law, 2000.
- Historical Research and expert witness services re. claims by the United States for Federal Reserved Water Rights under the Organic Act of 1897 for National Forests within the Snake River Basin. In Re the General Adjudication of Rights to the Use of Water from the Snake River Drainage Basin Water System, State of Idaho v. United States; State of Idaho; and all unknown claimants to the use of water from the Snake River Drainage Basin Water System, District Court of the Fifth Judicial District of the State of Idaho. Boise, ID: State Of Idaho, Office of the Attorney General, 1997-2000.
- Klamath River Basin Adjudication. Research services for a water rights adjudication on the Klamath River in Oregon. Historical research and expert witness services regarding land and water use, reclamation project development, and the California Oregon Interstate Compact. Sacramento: DeCuir & Somach (Somach, Simmons & Dunn), Sacramento, Attorneys at Law, 1997 2005.
- Salinas River Adjudication Hearings, Monterey County, California. State Water Resources Control Board Hearings, Pre-1914 Appropriative Water Rights Investigations for various irrigated properties in the upper and lower Salinas River Basin. Sacramento: Ellison & Schneider, Attorneys at Law, 1996-2000.
- Research on the legislative history of the Boulder Canyon Act for Metropolitan Water District of Southern California. Sacramento: Ellison & Schneider, Attorneys at Law, 1999.
- Riparian Water Rights Investigation. Research on riparian water rights claims in the Sacramento-San Joaquin Delta for the Bay-Delta Hearings before the State Water Resources Control Board. Chico, CA: O'Laughlin & Paris, et al., 1999 -2001.
- Pre-1914 and Riparian Water Rights Investigation. Land and Water Use history on a 5,400 acre ranch/vineyard in Alexander Valley, Sonoma County, CA. Sacramento: Ellison, Schneider & Harris, Attorneys at Law, 1998-2001.
- Stanislaus River Water Rights Adjudication. Research into the history of the State Water Commission adjudication (1923-26) of the waters of the Stanislaus River, Sacramento: Ellison & Schneider, Attorneys at Law, 1999.
- Pre-1914 and Riparian Water Rights Investigation. Land and Water Use history on a 1,400 acre vineyard in Knights Valley, Sonoma County, CA. Sacramento: Ellison, Schneider & Harris, Attorneys at Law, 1998-2001.

- Pre-1914 and Riparian Water Rights Investigation. Land and Water Use history on a 900 acre vineyard in West Fork Gualala River Valley, Sonoma County, CA. Sacramento: Ellison & Schneider, Attorneys at Law, 1999.
- Carmel River Adjudication, Monterey County, California. State Water Resources Control Board, Pre-1914 Appropriative Water Rights Investigation for lands in the Carmel River Basin. Sacramento: Ellison & Schneider, Attorneys at Law, 1995-1997.
- Blankenship v. California Coastal Commission. Investigation of Historical Uses of Roads and Trails in Escondido Canyon, Santa Monica Mountains, Los Angeles County, CA. Los Angeles: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General and the California Coastal Commission, 1995-1997.
- Solano Irrigation District v. The Names of All Appropriative Water Rights Holders in Upper Basin, et al., and Putah Creek Council v. Solano Irrigation District and Solano County Water Agency Putah Creek Water Adjudication: Historical research and expert witness testimony regarding Mexican Land Titles, Land Ownership and Agricultural Uses in the Putah Creek Riparian Corridor, and Historic Navigation on Putah Creek. Oroville: Minasian, Minasian, Minasian, Spruance, Baber, Meith & Soares, Attorneys at Law and Solano Irrigation District and Solano County Water Agency, 1994-1996.
- Pre-1914 Appropriative Water Rights Investigation: Bar X Ranch Irrigation System, Lake County, CA. Report prepared in support of State Water Resources Control Board, Division of Water Rights, "Statement of Water Diversion and Use." Oakland: Fitzgerald, Abbott & Beardsley, Attorneys at Law, 1996.
- Historical research and analysis of land and water rights for municipal water projects, City and County of San Francisco Public Utilities Commission and Water Department, City and County of San Francisco, 1988-present.
- Historical Research on the Presidio of San Francisco's Reserved Water Rights and the City of San Francisco's Water Claims under Spanish and Mexican Law, City and County of San Francisco Public Utilities Commission and Water Department, City and County of San Francisco, 1988-1990.
- Ziomek v. City and County of San Francisco. Research and declaration on a Right of Way over Public Lands and a Homestead in Tuolumne County. San Francisco: City Attorney's Office, 1995.
- Historical background of *Dana v. Jackson Street Wharf Co.* (1866), a California State Supreme Court decision regarding land formation and land ownership on San Francisco Bay. Sacramento: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1994.
- California Coastal Commission Enforcement Action. Historic Coastal Shorezone Erosion in the Vicinity of Fariah Beach, Ventura County. Oakland: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General and Los Angeles: California Coastal Commission, 1994.
- Smith v. California. Historic Research on Reclamation of Tidelands and Swamp & Overflowed Lands in Alameda County, CA. Oakland: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1993-1994.

- Tidewater v. California. Historic Research on Swamp & Overflowed lands, Tidelands, and Submerged Lands and Navigation of Tidal Inlets and Rivers on Suisun Bay, Contra Costa County, CA. Oakland: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1993-1994.
- Nickel Enterprises v. California. Land Uses and Inland Navigation on the Lower Kern River, Kern County, California. Oakland: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1992-1993.
- Pre-1914 Water Rights Investigation: Water and Land Uses on the San Gregorio Rancho, San Mateo County, CA. San Francisco: City Attorney's Office, 1992.
- Pre-1914 and Riparian Water Rights Investigation: Lytle Creek Basin, San Bernardino County, CA. Investigation included analysis of appropriative and riparian claims, mutual water company rights and transfers of water stock, underground flows in defined channels, and Mexican water rights. Fontana Union Water Company, Fontana, CA and Lagerlof, Senecal, Drescher & Swift, Attorneys at Law, Pasadena, CA, 1990-91.
- Walt Harvey (Lovelace) v. California. Historical Research Regarding Causes of River Bar Formation in the Lower Sacramento River in the Vicinity of Chicory Bend, CA, 1840-1960. Sacramento: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1989-1991.
- San Pedro Gila River Adjudication. Federal Reserved Water Rights Investigation: Historical water use on federal reserved and acquired lands located within the Fort Huachuca Military Reservation, San Pedro River Basin, Arizona. U. S. Army Garrison, Fort Huachuca and U. S. Attorney's Office, Washington, D.C., 1990.
- Lighthouse Marina v. California. Historical Research Regarding Causes of River Bar Scouring in the Lower Sacramento River in the Vicinity of West Sacramento, CA, 1840-1960. Sacramento: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1990.
- Sarah Court v. California. Inland Commercial Navigation on the American River, CA, 1825-1913. Sacramento: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1984-1990.
- In the Matter of State Water Resources Control Board Application No. 28468. Pre-1914 Water Rights Investigation: Pacific Gas & Electric Company's completion of the ultimate plan for a stepped hydroelectric power development system on the North Fork of Feather River, Plumas and Butte Counties, CA, Part II: 1930-1988. San Francisco: Pacific Gas & Electric Company, 1984-1989.
- New Mexico v. United States. Federal Reserved Water Rights Investigation, San Juan River Basin: history of treaty negotiations, land settlement, water uses, reclamation projects, and Indian reserved water rights on the Navajo Indian Reservation, San Juan Basin, New Mexico. Santa Fe: New Mexico State Engineers Office, 1985-88.
- New Mexico v. United States. Federal Reserved Water Rights Investigation, San Juan River Basin: Jicarilla Apache Reservation, history of treaty negotiations, boundary changes, land uses, water development, and Indian reserved water rights. Santa Fe: New Mexico State Engineers Office, 1985-1987.

- In the Matter of State Water Resources Control Board Application No. 28468. Pre-1914 Appropriative Water Rights Investigation: History of Great Western Power Company's plans for and initial construction phases of a multi-staged hydroelectric power development project on the North Fork of the Feather River, Part I: 1902-1930. San Francisco: Pacific Gas & Electric Company, 1986-87.
- Investigation of Historic Navigation on Upper and Lower Alkali Lakes, Modoc County California.

 Sacramento: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1985.
- Investigation of Inland Commercial Navigation on the Upper San Joaquin River, CA, 1825-1900.

 Sacramento: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1985.
- New Mexico v. United States. Federal Reserved Water Rights Investigation, San Juan River Basin: Ute Mountain Ute Reservation, history of treaty negotiations, boundary changes, land uses, water development, and Indian reserved water rights. Santa Fe: New Mexico State Engineers Office, 1985.
- Pre-1914 Appropriative Water Rights Investigation: history of agricultural, mining, power and municipal water diversions from Butte Creek, Butte County California. San Francisco: Pacific Gas & Electric Company, 1984-85.
- Pre-1914 Appropriative Water Rights Investigation: history of agricultural, mining, power and municipal water diversions from West Branch of the North Fork Feather River, Butte and Plumas Counties California. San Francisco: Pacific Gas & Electric Company, 1985-86.
- Brandenberger v. California. History of commercial and recreational navigation on Donner Lake, Nevada County, California, 1844-1900. Sacramento: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1980-1983.
- Investigation of Commercial and Recreational Navigation on Independence and Webber Lakes in the Sierra Nevada region, California, 1849-1900. Sacramento: Lands and Natural Resources Division, California Department of Justice, Office of the Attorney General, 1980-1983
- People v. Wallace et al. Historical land status report on swamp & overflowed lands in the Colusa Basin, Yolo and Colusa Counties, CA. Los Angeles: Land Law Division, California Department of Justice, 1982.
- Anchor Estates v. United States. Historical report on meandering of the Missouri River in its floodplain in the vicinity of Bismarck, North Dakota. Omaha: U.S. Army Corps of Engineers, December 30, 1982.
- Forest Access Road Histories: Utah. History of public uses of selected National Forest access roads in six National Forests in Utah. Ogden, UT: U.S. Forest Service, Intermountain Regional Office, 1980.
- Forgerty v. California. Historical study of natural and artificial high and low water levels at Lake Tahoe, CA and NV, 1840-1902. Sacramento: California State Lands Commission, 1976-77.
- Lyons v. California. Historical study of natural and artificial high / low water levels at Clear Lake, CA, 1850-1920. Sacramento: California State Lands Commission, 1976-77.

OTHER HISTORICAL LAND USE AND WATER RESOURCES STUDIES

- History of the State Plan of Flood Control, Sacramento and San Joaquin River Systems. Prepared for the California Deaprtment of Water Resources with MWH Global, Inc., 2010-present.
- Central Valley Flood Protection Plan: Preparation of Historic Resources technical studies for the Programmatic Environmental Impact Report. Prepared for the California Deaprtment of Water Resources with MWH Global, Inc., 2010-present.
- Historic Property Survey and Engineering Significance Evaluation of the concrete multiple arch dam at Lake Eleanor, constructed in 1918 as the first storage reservoir on the Hetch Hetchy Water and Power System of the City and County of San Francisco, Tuolumne County, CA. San Francisco Public Utilities Commission, 2009 2010.
- Historic Resources Context and Site Sensitivity Analysis: San Joaquin River Restoration Program, San Joaquin, Madera and Stanislaus counties, CA. Historical resources technical studies for Programmitic EIR for the U. S. Bureau of Reclamation. Sacramento: MWH, Global, Inc., 2007-2009.
- Planning, Construction, Modification and Performance Histories of Levees within Selective Portions of the the Sacramento River Flood Control Project. Prepared for the California Department of Water Resources with URS Corporation, Sacramento, 2009.
- Planning, Construction, Modification and Performance Histories of Levees within the Stockton Urban Area and the San Joaquin River Flood Control Project. Prepared for the California Department of Water Resources with Kleinfelder, Inc., Sacramento, 2008-09.
- Historic of Military-Related Land Use on San Miguel Island, Channel Islands, CA. NAVFAC, SWDIV, 2008-present.
- Historic Research on the Establishment of a Public Right of Way and Adoption of Various Alignments of the Old Coast Road, Big Sur Coastline, Monterey County, CA. James Hill, III, 2007.
- Historic Resources Context and Site Sensitivity Analysis: Raising of Shasta Dam and Reservoir Enlargement Alternatives, Shasta County, CA. Historical resources technical studies for Programmitic EIR for the U. S. Bureau of Reclamation. Sacramento: Montgomery, Watson, Herzogg, 2007-2008.
- Historic Context Development for the San Francisco Municipal Water System and Review of Historic Resources Technical Studies in support of San Francisco Public Utilities Commission and San Francisco Planning Department, Major Environmental Analyses Branch on proposed projects funded under the \$4.6 Billion Bond Act for Water System Improvement Projects. JRP serves as special staff to San Francisco Planning Department, Major Environmental Analysis branch to ensure adequacy of reports evaluating the historical significance of water system facilities. San Francisco: SFPUC, 2007 present.
- Cultural Resources Study: Washington County Water District Water Main Replacement Project, Washington, Nevada County, CA. Sacramento: Kleinfelder, Engineering, 2007.

- White Paper on Evaluation of Historic Resources for the San Francisco Water System Improvement Project. San Francisco: San Francisco Public Utilities Commission and URS Corporation, 2006-2007.
- Delta Risk Management Study Team Documentary Research Using Aerial Photography to Ascertain Historical Levees Conditions on Franks Tract, Contra Costa County, CA. Prepared for Benjamin & Association. 2007.
- Historic Resources Context and Site Sensitivity Analysis: Upper San Joaquin Basin Storage Alternatives above Friant Dam. San Joaquin / Madera Counties, CA. Historical resources technical studies for Programmitic EIR for the U. S. Bureau of Reclamation. Prepared with Far Western for U. S. Bureau of Reclamation, 2006-2007.
- History of the Holman Ranch, Carmel Valley, Monterey County, CA. 2006.
- Historic Resources Evaluation: Aloha Dam, Desolation Wilderness, El Dorado County, CA. Placerville: Prepared for El Dorado Irrigation District, 2004-2006.
- Historic Resources Evaluation: Echo Lake Conduit, El Dorado County, CA. Placerville: Prepared for El Dorado Irrigation District, 2004.
- Historic Resources Evaluation Report: Historic Drainage Ditch for Reclamation District No. 1665, Monterey County California. San Luis Obispo: California Department of Transportation, District 5, 2003.
- Historic Property Management Plan: FERC Project 184 Relicensing for the El Dorado Canal, El Dorado County, CA. Prepared for El Dorado Irrigation District, 2003.
- History of Ranching and Agricultural Land Uses on the Big Sur Coastline, Southern Monterey County Coastline, Sacramento: Kronick, Moskovitz, Tiedemann & Girard, 2002 2006.
- Historic Property Evaluation Report: El Dorado Powerhouse, El Dorado County, CA. Placerville: El Dorado Irrigation District, 2002.
- History of Bloomfield Ranch (Miller & Lux Ranch Headquarters), Santa Clara County, CA. San Luis Obispo: Caltrans, District 5, San Luis Obispo. July 2001-2002.
- Historic Resources Recordation: Bull Creek Tunnel on El Dorado Canal. Placerville: El Dorado Irrigation District, El Dorado County, CA, 2001.
- Water Conveyance Systems in California: Historic Context Development and Evaluation Procedures.

 Sacramento: California Department of Transportation Environmental Program/Cultural Studies
 Office, December 2000.
- Historic Study Report: Highway 299: The La Grange Hydraulic Gold Mine, Historic Water Conveyance Systems, and Oregon Summit Hydraulic Road Cut, Trinity County, CA. Redding: Caltrans District 2, 2000.
- National Register Evaluation: Tahoe Fish Hatchery, Tahoe City, Placer County, CA. Davis: Office of Budget and Planning, University of California, Davis. 1998-1999.
- Historic Properties Survey and Evaluation of Sacramento River Water Treatment Plant and E. A. Fairbairne Water Treatment Plant, Sacramento County, CA. Sacramento: Prepared for SWRI and the City of Sacramento, 1998.

- Historic Mining, Hydroelectric, Irrigation and Multi-purpose Canals of California. Volume 1: Historic Overview, Typology and Discussion of Previously Recorded Canals, and Volume 2: Canal Inventory and Evaluation Methods. Sacramento: California Department of Transportation, Headquarters Office, Sacramento, 1994-1995.
- Identification and evaluation of the historic significance of 89 historic water conveyance systems crossed by the proposed Mojave Gas Pipeline in Kern, Tulare, Kings, Fresno, Madera, Merced, Stanislaus, San Joaquin, Sacramento, Alameda, and Contra Costa counties, California. San Francisco: Woodward-Clyde Consultants for the Federal Energy Regulatory Commission, 1993.
- Identification and evaluation of the historic significance of six irrigation canals in Fresno County, CA. Fresno: California Department of Transportation, Fresno District Office, for the Federal Highway Administration, 1992.
- Identification and Evaluation of the Historic Significance of the 1873 El Dorado Water & Deep Gravel Mining Company Canal (El Dorado Canal), El Dorado County California. San Francisco: Pacific Gas & Electric Company for the El Dorado National Forest, July 1991.
- Engineers and Irrigation: Report of the Board of Commissioners on the Irrigation of the San Joaquin, Tulare, and Sacramento Valleys of the State of California, 1873, Engineer Historical Studies Number 5 Virginia: Office of History, U. S. Army Corps of Engineers, Fort Belvoir, Virginia, 1990.

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MSS Exhibit 1B

TRACT 131-170-03

| MAP# | 9 | |
|------------|---|--|
| DOCUMENT# | A:273:346 | |
| DOCUMENT | Deed | |
| GRANTEE | Josephine Vasquez Jones and John E. Vasquez | |
| GRANTOR | Joseph B. Ruiz | |
| DATE | 3/16/1916 | |
| INSTRUMENT | 3/16/1916 | |

MAP#

| INSTRUMENT | DATE | GRANTOR | GRANTEE | DOCUMENT | DOCUMENT# | MAP# |
|------------|-----------|--|--|---------------------------------|-------------|--------------|
| 11/6/1930 | 11/6/1930 | Josephine Vasquez 6/1930 Jones and Warren Jones (husband) | John E. Vasquez and Anna T. Vasquez (wife) | Deed | OR:337:496 | 131-170-03-6 |
| 12/8/1970 | 12/9/1970 | Estate of Anna T. Vasquez, deceased by Bernadette V. Phillips, administratrix | Rosario E. Patterson | Decree of Final Distribution | OR:3466:160 | |

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| IENT# MAP# | 9488 | 1489 |
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| DOCUMENT# | 90040488 | 90040489 |
| DOCUMENT | Decree of Distribution | Decree of Distribution |
| GRANTEE | Milton Welser (1/2); John Lagno (1/10); Bill Lagno (1/10); Paul Lagno (1/10); Ann Lagno (1/10); Dixeen Lagno (1/10) | Milton Welser (1/2); John Lagno (1/10); Bill Lagno (1/10); Paul Lagno (1/10); Ann Lagno (1/10); Dixeen Lagno (1/10) |
| GRANTOR | Estate of Rosario E. Patterson, deceased | Estate of George R. Patterson, deceased |
| DATE RECORDED | 4/24/1990 | 4/24/1990 |
| INSTRUMENT DATE | 4/24/1990 | 4/24/1990 |

TRACT 131-170-03

| William J. Lagno |
|--------------------|
| John Phillip Lagno |
| Paul Lagno |

TRACT 131-170-03

| NSTRUMENT | DATE | GRANTOR | GRANTEE | DOCUMENT | DOCUMENT# | MAP# |
|-----------|------------|---|---|---|-------------|------|
| 6/7/1999 | 6/16/1999 | Milton Joseph Welser Revocable Trust, Milton Joseph Welser, Trustee | Rudy M. Mussi and Toni Mussi (husband and wife) and Lory C. Mussi and Victorian Mussi (husband and wife) | Grant Deed | 99078329 | |
| 1/3/2001 | 1/19/2001 | John Phillip Lagno | Wendy Lagno | Court Order Determining Succession to Real Propery | 2001-007744 | |
| 4/2/2003 | 12/14/2005 | Paul Lagno | Jessica Sandelius | Order | 2005-311706 | |

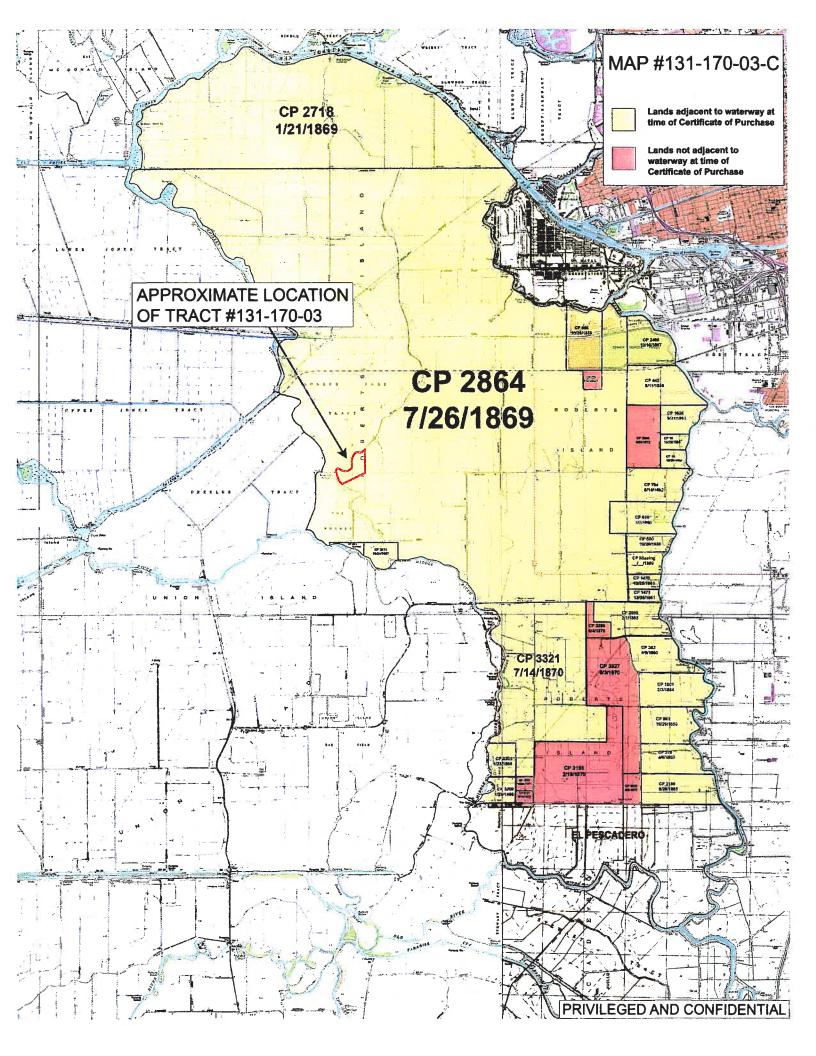
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| DOCUMENT | sarch at the San 6), Toni Mussi Aussi (22.5%), %), and Jessica | | |
| GRANTEE | cording to a computer se order: Rudy Mussi (22.5% Mussi (22.5%), Victoria Mussi, Wendy Lagno (3.33%), Sandelius (3.33%). | | |
| GRANTOR | Current Ownership according to a computer search at the San Joaquin County Recorder: Rudy Mussi (22.5%), Toni Mussi (22.5%), and Lory C. Mussi (22.5%), Victoria Mussi (22.5%), Ann Marie Lagno (3.33%), Wendy Lagno (3.33%), and Jessica Sandelius (3.33%). | | |
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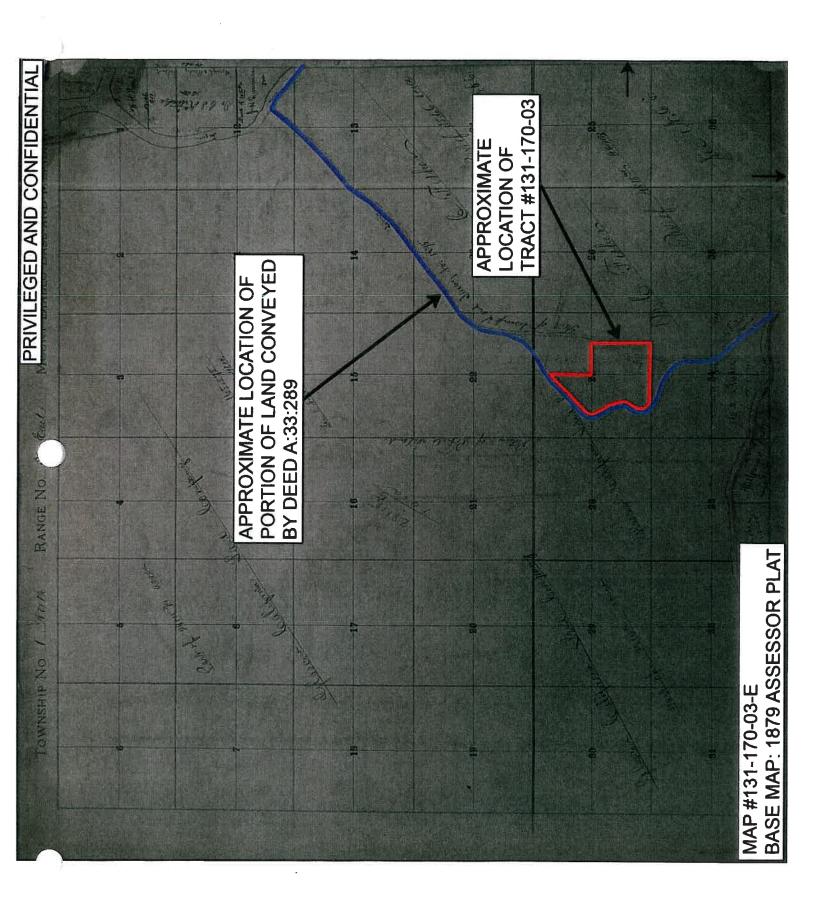
TRACT 131-170-03

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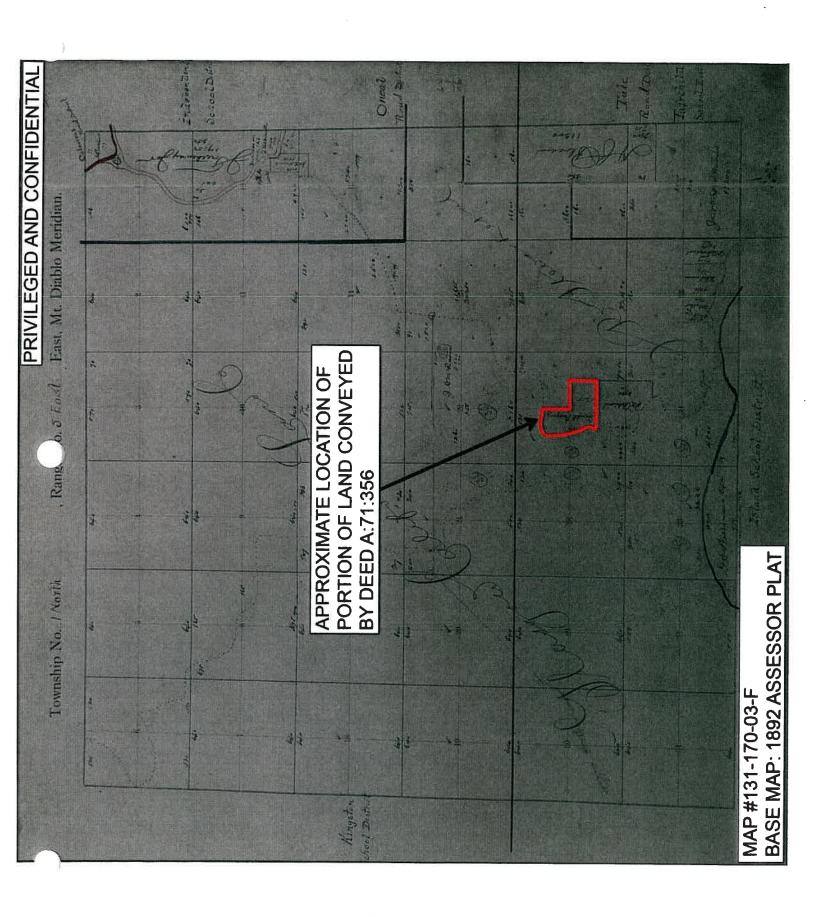
MSS Exhibit 1C



MSS Exhibit 1D



MSS Exhibit 1E



MSS Exhibit 1F

This Indenture, some mas deventy or ght worm in the year of our Lord one thousand eight hundred Jas Clark Bunter and na no Tay o nos gas. King Between for med bleid stormat former blook Bunton and fames King all of Maryow of the United Kingdom of Great Britain and Infand the to it is of the finet part and freeph Vagguer of the les in was Joseph Carains The part so of the second part mitnessells: That the said partice so of the first part, for and in consideration of the spin of Sulty state of the native of and law only expension. Dollars. Dollars. Dollars of the second part, the receipt whereof is states of America, to the second part, the receipt whereof is hereby acknowledged. At they there is presently given it, to one or, seek, consert ond constant CERLEURIT unto the said marity of the second part, and to free heirs and assigns porecer, lel thous certain lots prices and kareels of land eiterate riging and being in Hoberts Jaland in Country of Nonjoaquin, State of waithornes and bounded and as follows Touris 5. E. > 1/ 1/1 and containing one hundred and facty rine and one hast V49/2) acresmore or less according to axherito no resurvey of the middle avvisor of Roberto Together with all and singular the tenements, heredilaments and appartenances thereunto belonging, or in any wise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof. To have and to hold, all and singular the said premises, together with the appurtenances, unto the suid part of of the second part, and to see a heirs and a signs porece, subject to the spect the frage street, 2. Alexander of the first part have a herewater to the hand and scaled the day and year first above written. Jas Reid Ttement Signed, Sealed und Delivered in the Presence of / Jas Clark Bunton · Nonce Morne Gice Jan Kinghefierd Pernis there attorney in port State of California, County personally appeared folm Wakefield Terris James blank Burner de authorited to the within instrument, as the atterney in fact of James Red Hawart fames blank Burner and fames bling and he the said form Walesfield Forris acknowledge to me that he sugged the names of James Red Hewart, fames blank Bunken and former that he eigned the names of james new own rame as their attorney in fact.

Jan Witness Whereof, I have hereinto est my hand and affined my

Official deal at my office in earl laty and bounty the day and year last above written

(day). Diended at request of Joseph Varguez May 4 1891 at 30 min part & h. P. m.

MSS Exhibit 1G

MSS Exhibit 1H

#1855 Recorded at the Request of McNOBIE & PARKINGCH FEB. 6, 1934 at 25 min. past 2 o'clock P. M., in Book of Official Records Vol. 444 page 434 San Joaquin County Records.

Fees: \$1.70

John D. Finney, Recorder.

AJ

THIS AGREEMENT, made and entered into this 18th day of November, 1925, by and between ALICE M. ECCES, of the County of San Josquin, State of California, the party of the first part, and I. N. ROMINSON, JOHN VASQUEZ and JOSEPHINE V. JOHNS, all of the County of San Josquin, State of California, the parties of the second part.

WITHESSETH:

That whereas the party of the first part did heretofore purchase from Christina Belluomini certain real property situate in the County of San Joaquin, State of California, described as follows, to-wit:

A strip of land 44 feet wide situated in the County of San Josquin, State of California, in the Southeast Quarter of Section 34, Township 1 North, Range 5 East, E. D. B. & M. and lying east of and adjacent to the center of the Cross Levee forming the dividing line between the properties of F. Bruse, et al, and W. Jones and extending from the south side of the County Road along the north line of the Southeust Quarter of said Section 34, southerly along said Cross Levee, 1725 feet more or less, to the inside base or levee on the north bank of Middle River, the east line of said 44 foot strip being described as follows: commencing at an iron pipe in the south line of the County Road along the said north line of the Southeast Querter of said Section 34, said pipe being 44 feet east of the conter of said Cross Leves and 1179 feet west of the east line of said Section 34, and bein also 25 feet south of the north line of the Southeast Quarter of said Section 34; thence along the east line of said 44 foot strip as follows: S. 1° 03' W. 104.7 feat; S. 10° 33' W. 83 feet; S. 19° 50' W. 93 feat; S. 27° 50° W. 272 feet; S. 20° 46° W. 95 feet; S. 10° 50° W. 08 feet; S. 13° 45° E. 28 feet; S. 47° 46' E. 38 feet; S. 70° 42' E. 56 feet; S. 79° 47' E. 149 feet; S. 74° 20' E. 92 fcet; S. 61° 38° E. 100 fcet; S. 52° 05° E. 133 fcet; S. 43° 27° E. 62 fcet; S. 38° 44° E. 79 feet; S. 33° 54° E. 158 feet to an iron pipe in the northerly base of Middle River

Also a strip of land 25 feet wide and 102 feet long, more or less, lying east of and adjacent to the center of the shove described Gross Leves and south of and adjacent to the above described 44 foot strip of land, and extending from the inside base of leves on the north bank of Middle River southerly to the soid north bank of Middle River, the west line of said 25 foot strip being marked on the ground by an iron pipe in the northerly base of Middle River Leves and y an iron pipe on the north bank of Middle River and the west line of above mentioned 25 foot strip being more purticularly described as follows; commencing at the iron pipe at the southwest corner of the above described 44 foot strip, thence southerly across Middle River Leves 102 feet more or less to the north bank of Middle River.

And whereas the record title to said real property now stands in the name of the party of the first part; and

Wherea the said real property was purchased for the purpose of installing a pumping plant and an irrigation ditch for the purpose of irrigating lands belonging to all of the perties to this agreement; and

Whereas since the purchase of the said real property by the perty of the first part there has been installed thereon a pumping plant and irrigation ditch for the purpose of irrigating lands belonging to the parties to this agreement; and

Whereas the cost of said land and the cost of installing the said irrigation system has been peid and borne by all the parties of this agreement in the manner hereinafter set forth;

Therees the said Alice M. Woods acknowledges that she holds the record title to said real property but that nevertheless the parties of the second part are in fact the owners of certain interests therein hereinofter described and that as to said interests said party of the first part holds said title in trust for the parties of the second part; and

Thereus the parties hereto desire to have a fixed and permanent understanding as to the respective ownerships of said parties in and to said strip of lend so acquired from Christina Bellucmini end in and to said irrigation ditch and said pumping plant;

Now, therefore, it is mutually understood and agreed by end between the parties hereto as follows, to-wit:

That the soid strip of land was acquired and said pump and ditch constructed for the purpose of irrigating 1000 acres of land belonging to the party of the first part, soid 1000 acres being situate in Township 1 North, Range 5 East, K. D. B. & K.; and for irrigating 150 acres of land belonging to John Vasquez and Josephine V. Jones, said 150 acres being situate in Section 27.

Township 1 North, Range 5 East, E. D. B. & E.; and for the purpose of irrigating 108 acres of land belonging to I. M. Robinson, said 106 acres being situate in Sections 27 and 34, Township 1 North, Range 5 East, M. D. B. & M.

That in the construction of said irrigation ditch and the installation of said pump the parties hereto have paid for the same in the following proportions, to-wit: Alice M. Woods 1000/1258ths; John Vasquez and Josephine V. Jones 150/1258ths; and I. M. Holinson 106/1258ths.

The party of the first part acknowledges that the parties to this agreement are the owners of soid piece of land so acquired from Christine Belluomini, or said pump and of soid ditch in the proportions above set forth, and that as to the proportions of the parties of the second part, the seid party of the first part holds the title thereto in trust for the seid parties of the second part in the said proportions.

It is further agreed between the parties hereto that in order to irrigate the lands of I.R. Robinson the said irrigation ditch has been constructed over a portion of the lands belonging to the party of the first part and that the said I.R. Robinson, his heirs, successors and assigns, shall forever have the right to use the said ditch so constructed over the land of the party of the first part for the purpose of irrigating his said lands.

It is further understood and agreed that in order to irrigate the lands of John Vasquez and Josephine V. Jones the said irrigation ditch has been constructed over a portion of land belonging to Alice M. Woods and also over a portion of land belonging to I. N. Rollinson and it is agreed between the purties hereto that the said John Vasquez and Josephine V. Jones, their heirs, successors and assisms, shall forever have the right to use the said irrigation ditch so constructed over the lands of Alice M. Woods and I. N. Robinson for the purpose of irrigating the said lands of John Vasquez and Josephine V. Jones.

It is further understood and agreed that in order to irrigate the lands of the party of the first part the said irrigation ditch has been constructed over a portion of land belonging to I. N. Robinson and also a portion thereof on land belonging to John Vasquez and Josephine V. Jones and that the said party of the first part, her heirs, successors and assigns, shall forever have the right to use said irrigation ditch so constructed for irrighting the said 1000 acres hereinbefore referred to.

It is the intention of this agreement that the said pumping plant and irrigation system has been constructed for the purpose of irrigating the lands of the respective parties hereto in the respective acreage above set forth and each of the parties hereto agrees with all of the other parties that said irrigation system shall forever be used by the respective parties hereto for the purpose of irrigating the lands of said parties in the amount as to acres above set forth.

It is further agreed between the parties hereto that all of the parties to this agreement seems contributed their respective proportions to the installation of said pumping system and to

the construction of said irrigation ditch and that the expenses of maintaining the same shall in the future be borne by the parties hereto in the proportions hereinbefore setforth; that is to say, Alice M. Woods shall pay 1000/1258th of the cost of maintenance and operation of said irrigation system; John Vasquez and Josephine V. Jones shall pay 150/1258ths of said cost of maintenance and operation of suid irrigation system; and I N. Robinson shall pay 106/1258ths of said cost of maintenance and operation of said irrigation system.

Opportunity of irrigating their respective lands and, if the occasion requires, a flooding of said lands, and in view of the large per centage of acreage belonging to the party of the first part as compared with the acreage of the parties of the second part, it is anticipated between the parties hereto that the party of the first part will use said irrigation eiten and said pumping plant to a much greater extent than the parties of the second part, and in order that the parties of the second part shall have the opportunity of flooding their said lands it is agreed that should I. N. Robinson or John Vesquez and Josephine V. Jones desire to flood their respective parcels of land, the party so desiring to flood his said land shall give notice to the party of the first part in writing at least twenty days before the time that said party desires to flood his said land and in the event the said parties of the second part or any of them should give to the party of the first part notice in writing of their desire to flood said land, then after the expiration of said twenty days the party so giving said notice shall have the right to use the entire flow of said irrigation witch for a period of not to exceed ten days, for the purpose of flooding said lands.

In view of the fact that the parties hereto have not since the installation of said pump and said irrigation ditch attempted to irrigate said lands during the same season, it cannot now be forseen whether or not the flow from said pumps so installed will be sufficient to irrigate the lands of the respective parties at the same time and it is agreed between the perties hereto that in the event said flowage from said pumps and said ditch is not sufficient for all the parties to irrigate their said lands at the same time, then and in such event the parties of the second part or any or them, should they or any or them desire the exclusive use of said water for irrigating their said lands at any time, shall give to the party of the first part written notice at least ten days before the time they so desire to irrigate their said lands, and, at the expiration of said ten days, the party so giving said notice shall have the use of said water for the purpose of irrigating his said lands for a period not exceeding ten days.

It is the intention of this agreement that all of the parties hereto shall at all times co-operate with each and all of the other parties, in order that the lands of each of the parties to this agreement may be irrigated or flooded, as required, in a manner that will do no injustice and work no hardship to any of the varties hereto, and in the distribution of said water so used for irrigation or flooding, the parties hereto agree at all times to co-operate with each other, to the end that each and all of the parties hereto may receive as much benefit from said irrigation system as is possible.

It is further agreed between all or the parties hereto that said parties will establish auch drainege system as may be necessary to drain said lands and that they will bear said expenses of constructing such drainage system in the following proportions: the party of the first part shall pay 600/658ths thereof; I. N. Robinson shall pay 108/858ths thereof; and John Vasques and Josephine V. Jones shall pay 150/858ths thereof. It is further understood and agreed that as to the land owned by the party of the first part and known as Henker Lake and aggregating approximately 400 acres, it will be necessary for the party of the first part to establish some other system of draining said property and that the cost of installing frainege on said Henker Lake property shall be borne by the party of the first part solely.

The party of the first part further agrees that in the drainage of the lands of the parties hereto it may be necessary to drain a part or all of said irrigation waters through what is known as the Woods Irrigation District System and in such event the party of the first part will arrange so that the parties of the second part may so drain their lands through said Woods Irrigation District System; the parties of the second part agreeing to pay the proportionate cost that their lands may bear to the cost of drainage of the entire ecreage of the Woods Irrigation System; that is to say, the cost of drainage as to the parties of the second part through the Goods Irrigation District System shell be the same amount per acre as that paid by owners of property for drainage in said Woods Irrigation District System.

It is agreed between the parties hereto that the drainage ditch and system shall be constructed so soon as is practicable in order that it may be completed not later than Earch 1,1926; and it is further agreed by all the parties that Charles Walsh shall act for all the parties hereto in directing the construction of said ditch.

IN WITHERS WHEREOF, the parties hereto have hereunto set their hands and seeks the day and year first above written.

Alice M. Woods (SEAL)

John Vasquez (SEAL)

Josephine V. Jones (SEAL)

I. M. Rooinson (SEAL)

STATE OF CALLWINE.

County of San Josephin

On this lat day of February in the year one thousand nine hundred and thirty-four before me. Della Ilgenfritz, a Rotory Public in and for the County of San Josquin, State of California. residing therein, duly commissioned and sworn, personally appeared I. N. Rotinson known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHERE CF. I have hereunto set my bond and affixed my official seal, in the County of San Josquin the day and year in this certificate first above written.

(Notery Seal) Della Ilgenfritz Notery Inblic in and for the County of San Joaquin, State of California.

1878 Recorded at Request of STOCKTON ABSTRACT & TITLE CO. FRE. 6, 1934 at 18 min. past 4 o'clock P. M., in Book of Orricial Records Vol. 444 page 435 San Joaquin County Records.

Fees: \$3.60

John D. Finney, Recorder.

TAXARARAN SA ANIMADONAN SA ANIMADONAN SA ANIMAN SA ANIMAN SA ANIMANAN SA ANIMAN SA ANI

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN ANY FOR THE COUNTY OF SAN JOA WITH

In the matter of the estate of . JPO. B. CCRY,

No. 11,223
)
Decree of final distribution.

Deceased.

Nellie B. Cory, the duly appointed, qualified and acting executrix of the last will and testament of Jno. B. Cory, deceased, having heretofore rendered, presented and filed herein her petition, therein praying for the final distribution of said estate; and

Said matter coming on regularly for hearing on this day, in open Superior Court, it having been first proven to the satisfaction of this court that the clerk of the court by virtue of the so thority in him wested, appointed this day as the day for the hearing or said petition and gave due and legal notice of the time and place of hearing thereof, for the time, in the manner, and in all respects as required by law; and

The court having proceeded to the hearing of said petition and the proofs produced in support thereof, and it appearing to the satisfaction of the court that after the appointment and qualification of soid executrix and the issuance to her of letters testamentary in the matter of said estate, she caused notice to the creditors of and all persons having claims against the

MSS Exhibit 1I

RELLIGITUT, CHARTEA RELLIGITUT, VICC...).0

-90 -

WOODS, ALICE IL.

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WITHESSETH: That the said part 108 of the first part, he had in consideration of the sumble 200.

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lauful money of the Cuted States of America: them in high positive the subject To of the second man, the receipt whereas is berefunctioned at 00 by Toube presents front, burgetin, soll, convey and confirm unto the

said part Z of the second part and to Belt . here and assigns it over all That contain here gives to parcel to of tand, stante, lying and being in the . ---

County of San Juaquin, State of California, and bounded and particularly described as follows, to wit:

A strip of land 44 feet wide situated in the Jounty of S.m. Bocquin, State of California, in the Southeast quarter of Setion Sa. commanip 1 Forth, mange of gast, N.D.B. & it and lyin east of a.d adjacent to the center of the Cross Leves forming the dividing line between the properties of ... brase, et al, and lighter and exten ing from the south size of the jounty "out ulong the corta line of the contreast guarter of said Section 24, southerly of med said Gross name, 1725 feet more or less, to the inside base of levee on the porth bank of Middle River, the east line of said 44 foot strip being described as follows: commencing at an iron sipe in the south line of the County wood along the said north line of the Southeast parter of said Section 34, said pipe being 44 feet east of the center of said gross have and 1179 feet west of the east line of said Section 34, on a being clas 25 Test South of the north line of the northeast quarter of said section Sa; thence slows the east line of said ≠ foot strip as Idlions; S. 1º 05' 7. 104.7 feet; S. 10' 53' 7. 85 feet; S. 19' 50' 7. 93 feet; S.27' 50° T. 272 feet; S. 20° 40° T. 95 feet; S. 10° 50° T. 55 feet; S. 15° 48° 4. 58 feet; S. 47°46' 2. 38 foet; S. 70°42' 2. 55 feet; S. 79° 47' 2. 149 feet; S. 74°30' 2. 92 feet; S. 61° 38° S. 100 Feet; S. 52° 05° R. 165 feet; S. 43° 27° S. B. 1eet; S. 38° 46° 5. 79 feet; 5. 35° 54° 2. 158 feet to an iron mipe in the northerly base of middle River Leves:

Also a strip of land 25 feet wide and 102 feet long, more or less, lying seast of and adjacent to the center of the above described Gross Levee and much of and adjacent to the above described as fact strip of land, and extending from the inside base of levee on the north bank of middle giver southers; to the said north bank of middle giver, the seat line of said 25 feet utrip being middle mide ground by an iron pipe in the northerly base of middle giver Levee and dy an iron pipe on the north bank of middle giver and the seat line of spore continued 25 feet strip being more particularly described as fellows: Governoing at the iron pipe at the appropriate sermer of the above described 44 foot strip, thence south rly across "like giver Levee 102 feet note of less to the north bank of middle giver.

The above described nursels of land controls in the appreciate 1.81 seres. (52.70 13.5temp attached and came-lied)

acrests, with all and singular the tracments, hereditanens, and apportunance thereups belonging or disancters apportaining errores a mel recercions, remainder and remainders, relats, issues and profits illevel. TO BASE ASIO TO BOLD, all and singular, the said premises a getter with the appartmances, unlessee said part 2 of the issoul arrand to hor here and a signs forever. BENTILES WHEREOF, the said part 100 of the distipant 2000 hereons set 12027, hand S. and sent S. the day and great diest alore written. Signot. Scaled and Delivered in the greeners of the greeners o Thristina Selunomini (Scal)
Fincenzo Belluomini (Scal) aSeal) (Seil) STATE OF CALIFORNIA,
County of San Josephia. Omities 20th dayof January 2.5. one the scand nine hundred and then ty-1178, before me. Alta Yatas,

a Notary Public in and for the toronty of San Jacquin, State of C County of San Joaquin, State of California, residing therein, duly commissioned and qualified, personally appeared Christian Belluomini of Tinconso Belluomini, for husband, they executed the same. HOR PURSES WHEREOF, I have hereunto seeing hand and afficied my official scal. the day and year in this certificate first above written. ilio Yates, Name Public "County of San Josephi, State of California,

30 1896

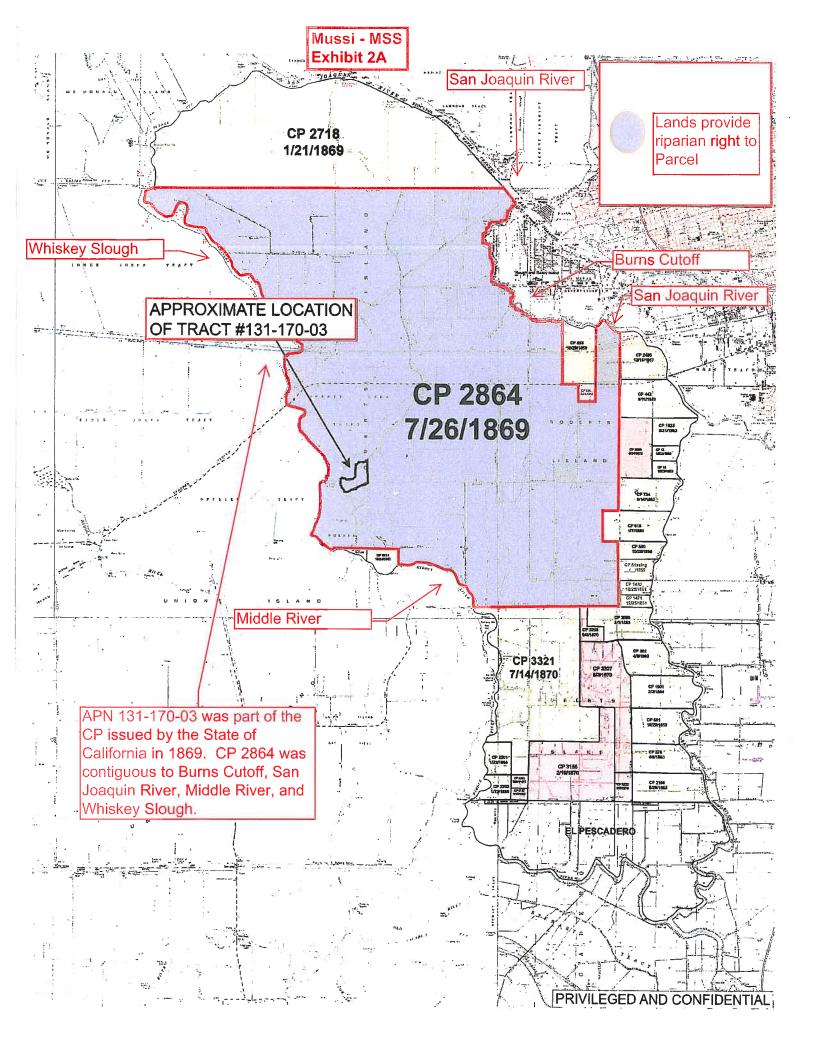
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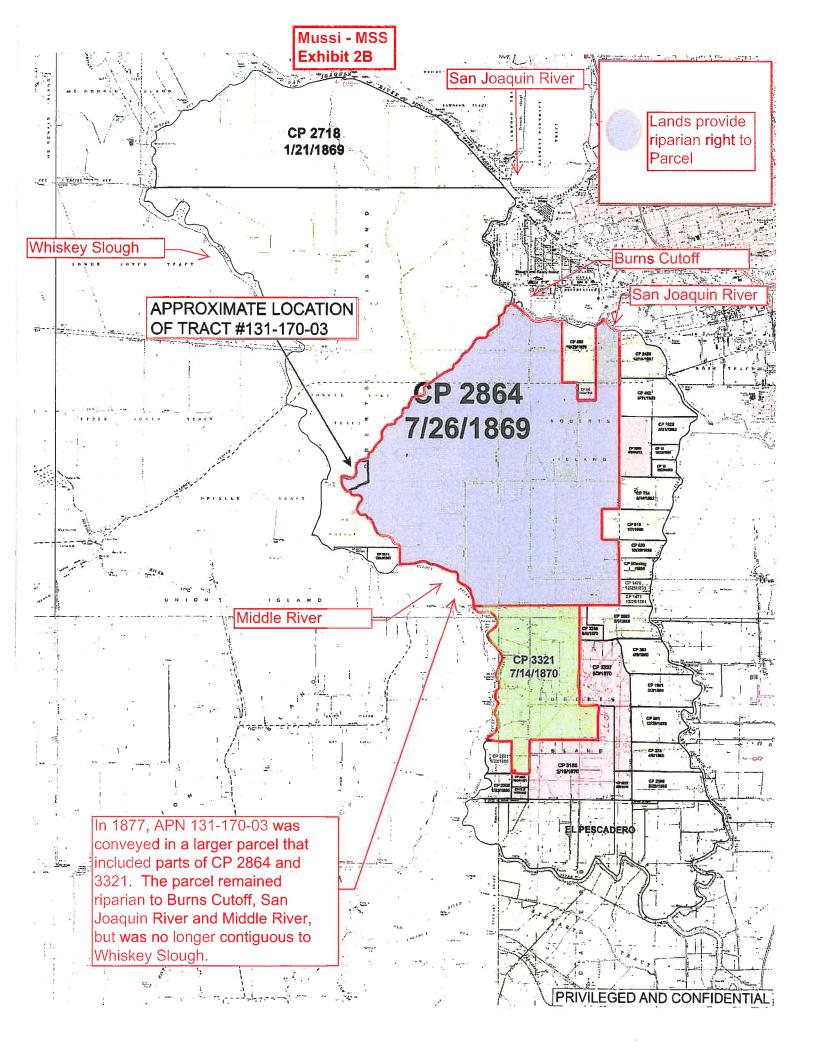
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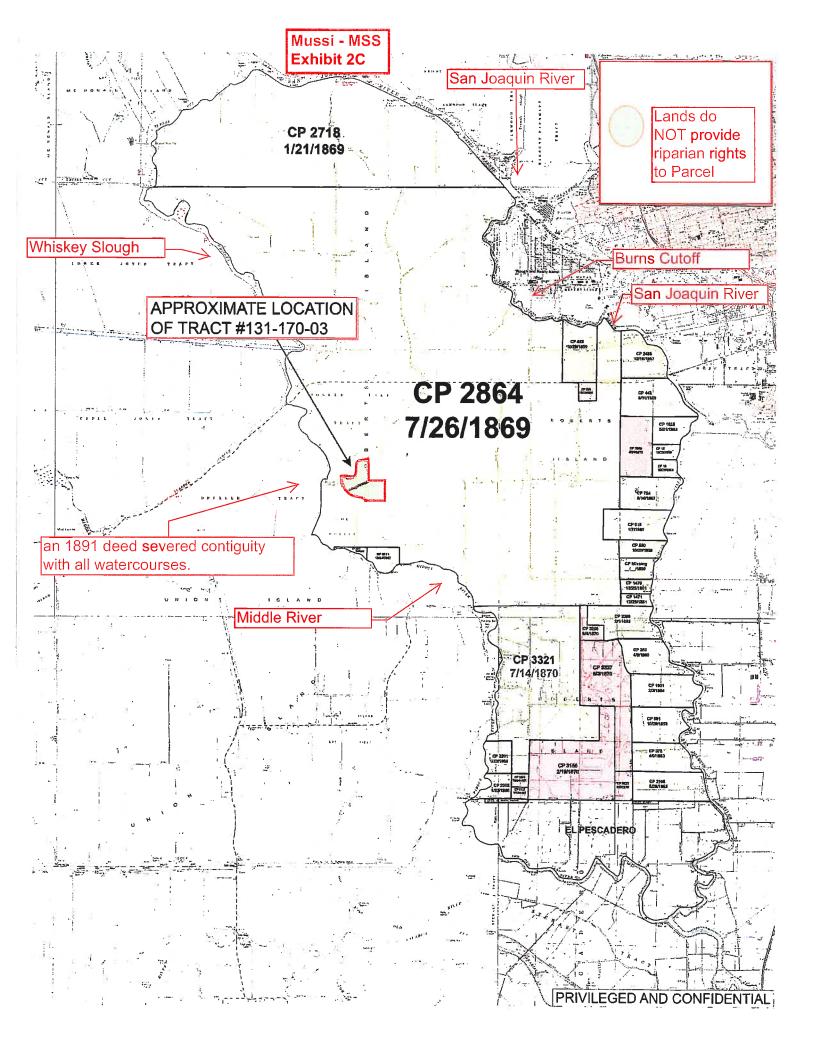
MSS Exhibit 2A



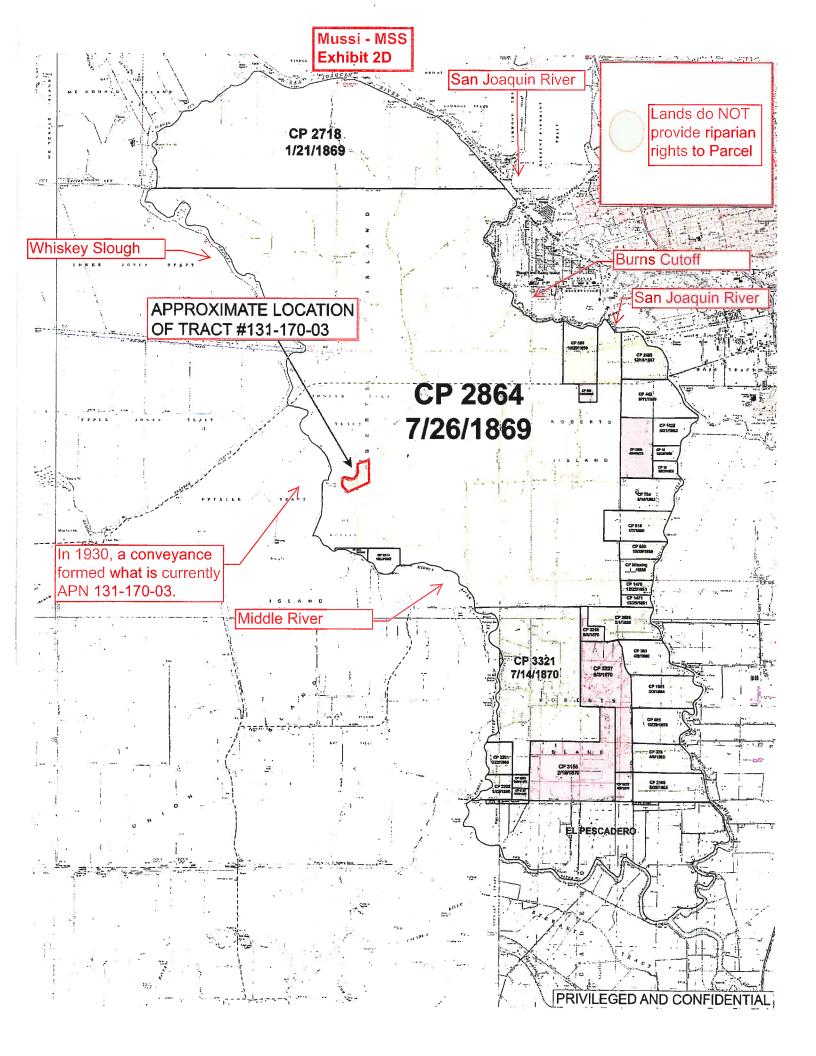
MSS Exhibit 2B



MSS Exhibit 2C



MSS Exhibit 2D



MSS Exhibit 3

| 12 | | | | | | | |
|----------|--|--|--|--|--|--|--|
| 1 | Timothy O'Laughlin, State Bar No. 116807 Kenneth Petruzzelli, State Bar No. 227192 | | | | | | |
| 2 | O'LAUGHLIN & PARIS LLP P.O. Box 9259 | | | | | | |
| 3 | Chico, California 95927 Telephone: (530) 899-9755 | | | | | | |
| 4 | Facsimile: (530) 899-1367 | | | | | | |
| 5 | Attorneys for MODESTO IRRIGATION DISTRICT | | | | | | |
| 6 | Clifford W. Schulz, State Bar No. 039381 Stanley C. Powell, State Bar No. 254057 | | | | | | |
| 7 | KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD A Professional Corporation | | | | | | |
| 8 | 400 Capitol Mall, 27th Floor Sacramento, California 95814 | | | | | | |
| 9 | Telephone: (916) 321-4500 Facsimile: (916) 321-4555 | | | | | | |
| 10 | Attorneys for STATE WATER CONTRACTORS | | | | | | |
| 11 | Jon D. Rubin, State Bar No. 196944 | | | | | | |
| 12 | Valerie C. Kincaid, State Bar No. 231815 DIEPENBROCK HARRISON | | | | | | |
| 13 | A Professional Corporation 400 Capitol Mall, Suite 1800 | | | | | | |
| 14 | Sacramento, CA 95814-4413 Telephone: (916) 492-5000 | | | | | | |
| 15 | Facsimile: (916) 446-4535 | | | | | | |
| 16 17 | Attorneys for SAN LUIS & DELTA-MENDOTA WATER AUTHORITY | | | | | | |
| 18 | BEFORE THE CALIFORNIA | | | | | | |
| 19 | STATE WATER RESOURCES CONTROL BOARD | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | In the Matter of Draft Cease and Desist Order No. 2009-00XX-DWR Against Rudi TESTIMONY OF PHILIP JOHNSON | | | | | | |
| 23 | Mussi, Toni Mussi and Lory C. Mussi Investment LP | | | | | | |
| 24 | | | | | | | |
| 25 | My name is Philip Johnson, Lam a supervising ancincering goals sist at Cattan, Shires and | | | | | | |
| 26 | My name is Philip Johnson, I am a supervising engineering geologist at Cotton, Shires and | | | | | | |
| 27 | Associates. I have over 19 years experience in the field of engineering geology, working on projects throughout California, including geologic investigations involving slope stability, | | | | | | |
| 28 | projects anoughout camorina, merading geologic investigations involving stope stability, | | | | | | |
| | -1- | | | | | | |

TESTIMONY OF PHILIP JOHNSON

seismic hazards, sea bluff retreat, groundwater, sedimentary geology, and other geotechnical issues. A component of this work includes field mapping and aerial photograph interpretation. My statement of qualifications is marked as MSS Exhibit 3A.

I reviewed ten historical, single-framed aerial photographs of APN No. 131-170-03, on Roberts Island in San Joaquin County, California ("Parcel") taken from 1937 to 2000.

The August 1937 aerial photograph shows that, at that time, 98.7 percent of the Parcel was idle agricultural land that was not irrigated; the remainder was disturbed land that was not cultivated. MSS Exhibit 3B.

The May 1940 and July 1957 aerial photographs show that at those times, 98.7 percent of the Parcel was planted with row crops and irrigated; the remaining 1.3 percent was disturbed but not cultivated. MSS Exhibits 3C and 3D.

The June 1963 aerial photograph shows that, at that time, 98.7 percent of the parcel was fallow and not irrigated. MSS Exhibit 3E.

The August 1963 and May 1968 aerial photographs show that, at those times, 98.7 percent of the Parcel was planted with row crops and irrigated; the remaining 1.3 percent was disturbed but not cultivated. MSS Exhibits 3F and 3G.

The April 1985 aerial photograph shows that, at that time, 96.7 percent of the Parcel was idle agricultural land that was not irrigated; the remaining 3.3 percent was disturbed, but not cultivated. MSS Exhibit 3H.

The June 1987 aerial photograph shows that, at that time, 96.7 percent of the Parcel was planted with row crops and irrigated; the remaining 3.3 percent was disturbed, but not cultivated. MSS Exhibit 3I.

The March 1993 aerial photograph shows that, at that time, 96.7 percent of the Parcel was idle agricultural land that was not irrigated; the remaining 3.3 percent was disturbed, but not cultivated. MSS Exhibit 3J.

The September 2000 aerial photograph shows that, at that time, 96.7 percent of the Parcel was planted with row crops which were recently harvested. MSS Exhibit 3K.

MSS Exhibit 3A

Philip L. Johnson

Supervising Engineering Geologist

Registration

Registered Geologist in California, RG 6196 Certified Engineering Geologist in California, CEG 2019

Education

M.S., Geology: San Jose State University, San Jose, California, 1990 B.A., Geology: San Francisco State University, San Francisco, California, 1987

Areas of Specialty

Investigation and repair of landslides; landslide mapping and aerial photograph interpretation; subsurface investigation of landslides; geotechnical construction defect litigation support; dam site investigations; seismic hazard assessment; and sedimentary geology

Representative Experience

Mr. Johnson has over 19 years of experience in the field of engineering geology, working on projects throughout California. He has been involved with numerous geologic investigations involving slope stability, seismic hazards, sea bluff retreat, groundwater, and other geotechnical issues. He also regularly participates in peer review for communities in the San Francisco bay area. He has a variety of areas of expertise including:

- Geologic characterization of landslides for design of mitigation measures. He has investigated numerous landslides ranging from large, deep-seated landslide complexes to shallow colluvial landslides and debris flows.
- Landslide mapping and aerial photograph interpretation. He has mapped landslides in a wide variety of terrain utilizing both field mapping and aerial photograph interpretation.
- Subsurface investigation utilizing downhole logging of large-diameter boreholes, core logging, and trench logging methods.
- Engineering geologic aspects of surface mine reclamation with emphasis on stability of former mine slopes.
- Assessment of seismic ground shaking and fault rupture hazards for large engineered structures as well as light construction. Projects include fault rupture hazard and paleoseismic investigations on the San Andreas, Las Positas, and Valley Side faults.
- Investigation of geotechnical construction defect and building distress related to expansive soils, fill settlement, incipient slope deformation, and landsliding.
- Engineering geologic investigation of dam sites. He was Project Geologist for two potential dam sites for East Bay Municipal Utility District. He also participated in a seismic hazard investigation of

the Foothills fault system for the New Hogan Dam in the Sierra Nevada foothills. He also mapped the geology exposed during construction of a soft ground tunnel at Crystal Springs Reservoir. Recently, he conducted subsurface investigation, field mapping, and permeability testing at an existing dam on the Stanislaus River.

- Fluvial sedimentology with particular emphasis on the use of detailed fluvial architecture to evaluate tectonic basin subsidence and basin history.
- Hydrostratigraphic investigations utilizing core samples, borehole geophysical, and hydrogeologic data

Recent projects include photogeologic and field mapping of landslides in the Ridge Basin in Los Angeles County; photogeologic mapping of fluvial geomorphic features in the San Joaquin River delta; downhole logging of large-diameter borings during investigation of landslides in the City of Richmond; inspection and evaluation of quarry slopes in Santa Clara County; investigation of an incipient landslide in Clayton; evaluation of fault rupture hazards on the east side of the Coast Ranges; investigation of debris flows in Pacifica, Lafayette, and Orinda; photogeologic evaluation of landslide and fault rupture hazards in Santa Rosa; subsurface investigation of a large, deep-seated landslide in Santa Barbara; a fault rupture hazard investigation along the San Andreas fault in Pacifica; investigation of a large, deep-seated coastal bluff failure in Daly City; subsurface investigation of a gravel quarry slope failure in alluvial and lacustrine sediments in Livermore; photogeologic and field mapping to evaluate geologic constraints to a proposed bicycle trail alignment adjacent to a large landslide complex in San Jose.

As a graduate student, Mr. Johnson studied Tertiary fluvial rocks exposed on the flanks of the Rock Springs Uplift in southwest Wyoming. Based on the spacing of fluvial channels within overbank deposits and thickening of synorogenic sedimentary packages, he was able to evaluate the timing and pattern of Paleocene to early Eocene subsidence across the southern Greater Green River Basin and relate this to thrust faulting within the Uinta and Rock Springs uplifts.

Professional History

Supervising Engineering Geologist, 1995-Present; Cotton, Shires and Associates, Los Gatos, California Staff Geologist, 1992-1995; Dames & Moore, San Francisco, California Staff Geologist, 1990-1992; Earth Sciences Associates, Palo Alto, California

Professional Affiliations

American Geophysical Union Association of Engineering Geologists Geological Society of America International Association of Sedimentologists Society for Sedimentary Geology (SEPM)

Publications

Johnson, Philip L. 2009, Landslides and geomorphic mapping along the Rodgers Creek - Healdsburg fault, Sonoma County, California: in *Proceedings of the 52nd Annual Meeting of the Association of Engineering and Environmental Geologists*, Lake Tahoe, California, p. 81

Johnson, Philip L. and David W. Andersen, 2009, Concurrent growth of uplifts with dissimilar orientations in the southern Green River Basin, Wyoming: implications for Paleocene-Eocene patterns of foreland shortening: *Rocky Mountain Geology*, v. 44, p. 1-16

Johnson, Philip L., Marcum, Dale R. 2007, The Northridge Bluff Landslide: rapid bluff retreat associated with a major coastal landslide in Daly City, California: in Schaefer, V. R., Schuster, R. L., and Turner, A. K., eds., Conference *Presentations, First North American Landslide Conference*, Association of Environmental and Engineering Geologists Special Publication No. 23, p. 1694-1706

Johnson, Philip L., Shires, Patrick, O., 2007, Engineering geologic evaluation of quarry slopes and compliance with California's Surface Mining and Reclamation Act: in *Proceedings of the 50th Annual Meeting of the Association of Engineering Geologists*, Los Angeles, California p. 94

Johnson, Philip L., 2005, The Glen Creek Landslide: a case study in the misuse of the Jahnsian steps during hillslope development: in Ehlen, J., Haneberg, W.C., and Larson, R. (eds.) *Humans as Geologic Agents*, Geological Society of America, Reviews in Engineering Geology, v.11, no. 1, p. 111-121.

Johnson, Philip L., and Cotton, William L., 2005, The Santiago landslide and associated ridge-top graben: implications for paleoseismic landslide studies: *Environmental and Engineering Geoscience* v. 11, no. 1, p. 5-16

Johnson, Philip L. and Cotton, William R., 2003, An alluvium-buttressed landslide complex and the impact of late Quaternary sea level change on landslide topography [abs.]: in *Proceedings of the 46st Annual Meeting of the Association of Engineering Geologists*, Vail, Colorado, p. 62.

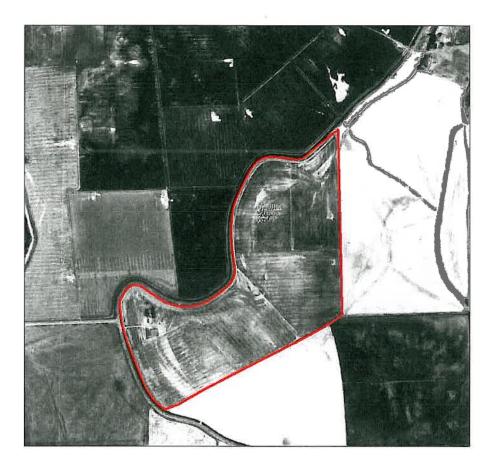
Johnson, Philip L. and Cotton, William R., 2002, The Santiago Landslide and associated ridge-top graben: implications for paleoseismic landslide studies [abs.]: in *Proceedings of the 45nd Annual Meeting of the Association of Engineering Geologists*, Reno, Nevada, p. 70-71.

Johnson, Philip L. and Cole, William F., 2001, The use of large-diameter boreholes and downhole logging in landslide investigations: in Horacio Ferriz (ed.) *Engineering Geology in Northern California*, California Department of Conservation, Division of Mines and Geology, Bulletin 210, p. 95-106.

Wallace, J.M. and Johnson, Philip L., 1999, The use of large-diameter boreholes and downhole logging techniques in landslide investigations [abs.]: in *Proceedings of the 42nd Annual Meeting of the Association of Engineering Geologists*, Salt Lake City, Utah, p. 88.

Johnson, P.L., 1990, Laramide basin subsidence and fluvial architecture of the Fort Union and Wasatch Formations in the southern greater Green River basin [abs.]: *American Association of Petroleum Geologists Bulletin*, v. 74, p. 687.

MSS Exhibit 3B



Mussi Investment APN 131-170-03 August 1937

MSS Exhibit 3C



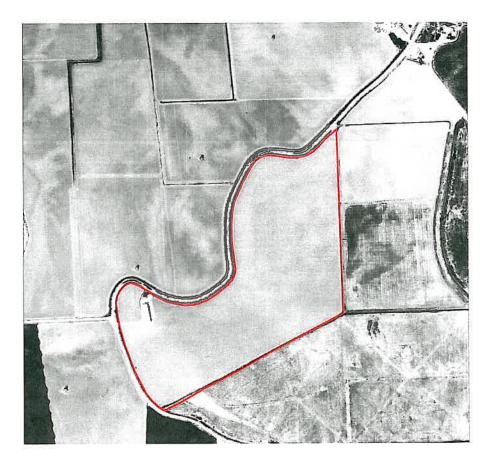
Mussi Investment APN 131-170-03 May 1940

MSS Exhibit 3D



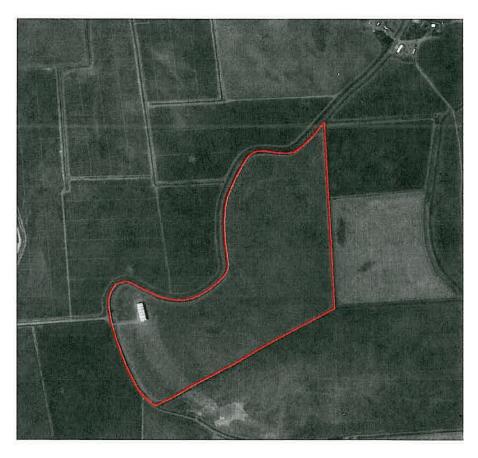
Mussi Investment APN 131-170-03 July 1957

MSS Exhibit 3E



Mussi Investment APN 131-170-03 June 1963

MSS Exhibit 3F



Mussi Investment APN 131-170-03 August 1963

MSS Exhibit 3G



Mussi Investment APN 131-170-03 May 1968

MSS Exhibit 3H



Mussi Investment APN 131-170-03 April 1985

MSS Exhibit 3I



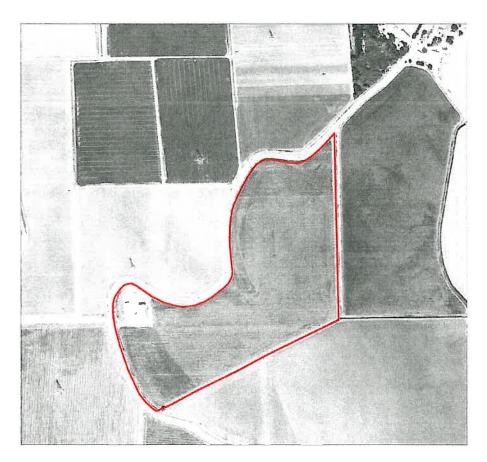
Mussi Investment APN 131-170-03 June 1987

MSS Exhibit 3J



Mussi Investment APN 131-170-03 March 1993

MSS Exhibit 3K



Mussi Investment APN 131-170-03 September 2000

MSS Exhibit 4

| 1 | Timothy O'Laughlin, State Bar No. 116807 Kenneth Petruzzelli, State Bar No. 227192 | |
|----|---|---|
| 2 | O'LAUGHLIN & PARIS LLP P.O. Box 9259 | |
| 3 | Chico, California 95927 Telephone: (530) 899-9755 | |
| 4 | Facsimile: (530) 899-1367 | |
| 5 | Attorneys for MODESTO IRRIGATION DISTI | RICT |
| 6 | Clifford W. Schulz, State Bar No. 039381 Stanley C. Powell, State Bar No. 254057 | |
| 7 | KRONICK, MOSKOVITZ, TIEDEMANN & C A Professional Corporation | IRARD |
| 8 | 400 Capitol Mall, 27th Floor | |
| 9 | Sacramento, California 95814 Telephone: (916) 321-4500 | |
| 10 | Facsimile: (916) 321-4555 | ng. |
| 11 | Attorneys for STATE WATER CONTRACTOR | (2) |
| 12 | Jon D. Rubin, State Bar No. 196944 Valerie C. Kincaid, State Bar No. 231815 | |
| 13 | DIEPENBROCK HARRISON A Professional Corporation | |
| 14 | 400 Capitol Mall, Suite 1800 Sacramento, California 95814-4413 | |
| 15 | Telephone: (916) 492-5000 Facsimile: (916) 446-4535 | |
| 16 | Attorneys for SAN LUIS & DELTA-MENDOT WATER AUTHORITY | A |
| 17 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| 18 | BEFORE THI | E CALIFORNIA |
| 19 | STATE WATER RESOU | RCES CONTROL BOARD |
| 20 | | |
| 21 | In the Matter of Draft Cease and Desist | TESTIMONY OF DAVID A. |
| 22 | Order No. 2009-00XX-DWR Against Rudi Mussi, Toni Mussi and Lory C. Mussi | GOLDHAMER, Ph.D |
| 23 | Investment LP | |
| 24 | | |
| 25 | My name is David Goldhamer, I am a re | tired Water Management Specialist and |
| 26 | previously worked in the Department of Land, A | Air, and Water Resources at the University of |
| 27 | California at Davis. I have over 30 years experi | ence in the fields of soil and water science. My |
| 28 | work includes investigating water management | for crops, plant-water relations, regulated deficit |
| | | -1- |

2.7

irrigation in California, water use requirements in response to sustained water deficits, and irrigation scheduling. My curriculum vitae is marked as MSS Exhibit 4A.

My testimony calculates the net irrigation requirements for Assessor Parcel Number 131-180-07, in San Joaquin County, California (Parcel) in the three years for which crop information was provided in the December 14, 2009, Draft Cease and Desist Order No. 2009-00XX-DWR Against Yong Pak and Sun Young (Draft CDO) – 2006 and 2007. My calculations are summarized in MSS Exhibit 4B.

I calculated the net irrigation requirements to be 187.2 acre-feet of water in 2006 and 2007 for corn and alfalfa.

The net irrigation requirements are based on estimates of total crop consumptive uses plus the leaching requirements, minus the total contribution of perched water and effective rainfall.

My calculation of net irrigation requirements are based on the following:

<u>The Crops</u>: In the Draft CDO, it states the Parcel was planted with corn and alfalfa in 2006 and 2007. I assumed the Parcel was planted in equal parts corn and alfalfa.

Total Crop Consumptive Uses: Total crop consumptive uses are based upon (1) the 10-year mean reference crop water use values from the Manteca weather station available through the California Irrigation Management Information System ("CIMIS) program¹, and (2) crop coefficient values.

Effective Rainfall: Effective rainfall is 50 percent of the 10 year mean (2000-2009) of total seasonal rainfall provided by the Manteca CIMIS weather station.

<u>Perched Water</u>: Contribution of perched water is based upon an assumed depth of 4 feet and root zones depths published by the United States Bureau of Reclamation's Pacific Northwest Cooperative Agricultural Weather Network,² and information on root zone depth published by the University of Tennessee Agricultural Extension Service.³

<u>Leaching Requirements</u>: The leaching requirement was estimated assuming a desired leaching fraction of 20 percent, based on *Salt Tolerance of Crops in the Southern Sacramento-*

¹CIMIS data is available online at: http://www.imis.water.ca.gov/cimis/welcome.jsp.

² Data available from the United States Bureau of Reclamation, Pacific Northwest Cooperative Agricultural Weather Network, at http://www.usbr.gov/pn/agrimet/irrigation.html#Root.

³ Rutledge, Alvin D., James B. Will, Steve Bost. *Commercial Tomato Production*. Agricultural Production Service, University of Tennessee PB737 (available at http://www.utextension.utk.edu/publications/pbfiles/pb737.pdf).

San Joaquin Delta, by Glenn Hoffman.⁴ ⁴ Hoffman, Glenn. J. 2010. Salt Tolerance of Crops in the Southern Sacramento-San Joaquin Delta. Pp. 51-56. -3-

TESTIMONY OF DAVID A. GOLDHAMER, PH.D

MSS Exhibit 4A

Curriculum vitae

Name:

David Goldhamer

Title:

Water Management Specialist

Department of Land, Air, and Water Resources

University of California, Davis

Contact Information: Kearney Agricultural Center

9240 South Riverbend Avenue

Parlier, CA 93648 Phone: 559-903-3355 Fax 559-646-6593

Email: dagoldhamer@ucdavis.edu

Degrees:

B.S., Soil and Water Science, UC Davis, 1971

M.S., Water Science, UC Davis, 1974 Ph.D., Soil Science, UC Davis, 1980

Institution/Location: Kearney Ag. Center, 9240 S. Riverbend Ave. Parlier, CA 93648

Research Statement:

There continues to be high demand for information on optimizing irrigation for California's horticultural and agronomic crops. It's clear that while weather-induced droughts will continue to be a periodic problem, institutional-related restrictions in water supply due to demand from municipal and environmental interests must also be addressed. My applied research program deals with developing information on regulated deficit irrigation (RDI). This technique purposely stresses plants at stress-tolerant periods of the season in order to both reduce the consumptive use of water and not lessen but rather possibly enhance grower profit by improved fruit quality. It is a true savings of water. Additionally, I've developed information on using plant-based electronic sensors and thermal data from aerial images to detect water stress in order that RDI be more precisely imposed.

International Experience:

TURKMENISTAN

1998 Flood Irrigation/Water Control/Water Users Groups. Charchow, Turkmenistan, USAID/ACDI.

MACEDONIA

1994 Potential of Drip Irrigation in Macedonia. Skopje, Macedonia, USAID/ACDI. 1996 Adoption of Drip Irrigation in Macedonia. Bitola, Macedonia, USAID/ACDI.

International Invited Presentations

- 1995 Curso International de Riego. Chillan, Chile.
- 1995 Curso International de Suelo, Riego, y Nutricion. General Roca, Argentina.
- 1996 Agritech. Tel Aviv, Israel
- 1997 El Gran Debat de L'Augua. Lleida, Spain
- 1998 Olives Australia Expo. Hunter Valley, NSW, Australia.
- 1999 El Cultivo del Olivo in el Norte de Mexico. Caborca, Mexico.
- 1999 3rd International Symposium on Irrigation of Horticultural Crops. Lisbon, Portugal
- 1999 International Olive Congress. Sevilla, Spain.
- 2003 Australia Fresh Fruit Growing Company Workshop, Melbourne, Australia
- 2005 5th International Symposium on Irrigation of Horticultural Crops. Mildura, Australia

PUBLICATIONS RELEVANT TO IRRIGATION AND WATER MANAGEMENT

- Goldhamer, D.A. and B. Faber. Irrigation in UC Citrus Production Manual. L. Ferguson (ed.). (In Press)
- Goldhamer, D.A. 2008. Irrigation management <u>in</u> UC Pistachio Production Manual. L. Ferguson (ed.). 5th edition. Chapter 13 pages 108-123.
- Iniesta, F., L. Testi, D.A. Goldhamer and E. Fereres. 2008. Quantifying reductions in consumptive water use under regulated deficit irrigation in pistachio (Pistacia vera L.). Agricultural Water Management 95(7): 877-886
- Testi, L., D. A. Goldhamer, F. Iniesta and M. Salinas. 2008. Crop water stress index is a sensitive water stress indicator in pistachio trees. Irrigation Science 26(5): 395-405.
- Goldhamer, D.A., M. Viveros, and M. Salinas. 2006. Regulated deficit irrigation in almonds: effects of variations in applied water and stress timing on yield and yield components. Irrigation Science 24:101-114.
- Goldhamer, D.A. and Beede, R.H. 2005. Effects of water stress on olive tree performance in Olive Production Manual. (2nd edition). S. Sibbett and L. Ferguson (eds.). UC-DANR Publication 3353, pp. 71-74.
- Beede, R.H. and D.A. Goldhamer. 2005. Olive Irrigation Management in Olive Production Manual (2nd edition). S. Sibbett and L. Ferguson (eds.). UC-DANR Publication 3353, pp. 61-69.
- Goldhamer, D.A. 2005. Irrigation management <u>in</u> Pistachio Production Manual. L. Ferguson (ed.). 4th edition. Pages 103-128.
- Goldhamer, D.A. and E. Fereres. 2004. Irrigation scheduling of almond trees with trunk diameter sensors. Irrigation Science 23:11-19.

- Goldhamer, D. A. and R.H. Beede. 2004. Regulated deficit irrigation effects on yield, nut quality and water-use efficiency of mature pistachio trees. J. Hort. Sci. and Biotech. 79(4):538-545.
- Fereres, E. and D.A. Goldhamer, D. A. 2003. Suitability of stem diameter variations and water potential as indicators for irrigation scheduling of almond trees. J. Hort Sci and Biotech. 78(2):139-144.
- Goldhamer, D.A., E. Fereres, and M. Salinas. 2003. Can almond trees directly dictate their irrigation needs? California Agriculture 57(4):138-144.
- Goldhamer, D.A. 2003. Irrigation Scheduling with Plant Indicators: Field Applications in Encyclopedia of Water Science. Marcel Dekker, Inc. pp. 512-518.
- Goldhamer, D.A. 2003. Irrigation Scheduling with Plant Indicators: Measurement <u>in</u> Encyclopedia of Water Science. Marcel Dekker, Inc. pp. 519-522.
- Fereres, E., D. A. Goldhamer, L. R. Parsons. 2003. Irrigation water management of horticultural crops. HortSci. 38(5): 1036-1042.
- Girona, J, M. Mata, E. Fereres, D. A. Goldhamer, and M. Cohen. 2002. Evapotranspiration and soil water dynamics of peach trees under water deficits. Agricultural Water Management 54:107-122.
- Goldhamer, D.A., T.J. Michailides, and D.P. Morgan. 2002. Buried drip irrigation reduces fungal disease in pistachio orchards. California Agriculture 56(4):133-138.
- Goldhamer, D.A., M. Salinas, C. Crisosto, K.R. Day, M. Soler, and A. Moriana. 2002. Effects of regulated deficit irrigation and partial root zone drying on late harvest peach tree performance in Proceedings of the 5th International Society on Peach. Acta Hort 592, p. 343-350.
- Goldhamer, D. A., M. Salinas, M. S. Anaya, and A. M. Elvira. 2001. Peach trees perform similarly despite different irrigation scheduling methods. California Agriculture 55(1):25-29.
- Doster, M. A. T. J. Michailides, D. A. Goldhamer, and D. P. Morgan. 2001. Insufficient spring irrigation increases abnormal splitting of pistachio nuts. California Agriculture 55(3): 28-31.
- Goldhamer, D. A. and E. Fereres. 2001. Simplified tree water status measurements can aid almond irrigation. California Agriculture 55(3): 32-37.
- Teviotdale, B. L. D. A. Goldhamer, and M. Viveros. 2001. Effects of deficit irrigation on hull rot disease of almond trees caused by *Monilinia fructicola* and *Rhizopus stolonifer*. Plant Disease 85(4):399-403.
- M. Cohen, D. A. Goldhamer, E. Fereres, J. Girona, and M. Mata. 2001. Assessment of peach tree responses to irrigation water deficits by continuous monitoring of trunk diameter changes. J. Hort. Sci. and Biotech 76(1):55-60.
- Goldhamer, D. A. and E. Fereres. 2001. Irrigation scheduling protocols using continuously recorded trunk diameter measurements. Irrig. Sci. 20:115-125.
- Goldhamer, D. A. and M. Viveros. 2000. Effects of preharvest irrigation cutoff durations and

- postharvest water deprivation on almond tree performance. Irrig. Sci. 19:125-131.
- Fereres, E. and D. A. Goldhamer. 2000. Avances recientes en la programacion de los riegos. Ingenieria del Agua 7(1):47-53.
- Goldhamer, D. A., E. Fereres, M. Cohen, J. Girona, and M. Mata. 2000. Comparison of continuous and discrete plant-based monitoring for detecting tree water deficits and barriers to grower adoption for irrigation management. Acta. Hort. 537:431-445.
- Goldhamer, D. A. and M. Salinas. 2000. Evaluation of regulated deficit irrigation on mature orange trees grown under high evaporative demand. Proceedings of the International Society of Citriculture IX Congress. Orlando, FL. December 3-7, 2000: 227-231.
- Goldhamer, D.A. 1999. Regulated deficit irrigation for California canning olives. Acta Horticulturae 474(1):369-372.
- Goldhamer, D.A., E. Fereres, M. Mata, J. Girona, and M. Cohen. 1999. Sensitivity of continuous and discrete plant and soil water status monitoring in peach trees subjected to deficit irrigation. J. Amer. Soc. Hort. Sci. 124(4):437-444.
- Mata, M., J. Girona, D. Goldhamer, E. Fereres, M. Cohen, and S. Johnson. 1999. Water relations of lysimeter-grown peach trees are sensitive to deficit irrigation. California Agriculture 53(4):17-21.
- Fereres, E., D. Goldhamer, M. Cohen, J. Girona, and M. Mata. 1999. Continuous trunk diameter recording can reveal water stress in peach trees. California Agriculture 53(4):21-25.
- Goldhamer, D.A. and M. Salinas. 1999. Black Mission fig production responds favorably to relatively heavy irrigation. California Agriculture 53(6).
- Goldhamer, D. A. 1998. Chapter 20 Irrigation scheduling for walnut orchards <u>In</u> Walnut Production Manual. D. E. Ramos (ed.). University of California Publication No. 3373. pp.159-166.
- Hanson, B.R., A.E. Fulton, and D.A. Goldhamer. 1998. Cracks affect infiltration of furrow crop irrigation. California Agriculture 52(2):38-42.
- Goldhamer, D.A., T. J. Michailides, and D. P. Morgan. 1997. Buried drip irrigation reduces alternaria late blight in pistachio. Acta Horticulturae 449(1):335-340.
- Shackel, K., H. Ahmadi, W. Biasi, R. Buchner, D. Goldhamer, S. Gurusinghe, J. Hasey, D. Kester, B. Krueger, B. Lampinen, G. McGourty, W. Micke, E. Mitcham, B. Olson, K. Pelletrau, H. Philips, D. Ramos, L. Schwankl, S. Sibbett, R. Snyder, S. Southwick, M. Stevenson, M. Thorpe, S. Weinbaum, and J. Yeager. 1997. Plant water status as an index of irrigation need in deciduous fruit trees. HorTechnology Jan.-Mar.:23-29.
- Goldhamer, D. A. 1995. Water Management of Almond Trees, In Almond Production Manual. W. Micke (ed.). University of California Publication No. 3364. pp. 171-178.
- Goldhamer, D. A. and T. Smith. 1995. Single season drought irrigation strategies influence almond production. California Agriculture, Vol. 49, No. 1, pp. 19-22.

- Goldhamer, D. A., R. H. Beede, G. S. Sibbett, R. K. Kjelgren, R. C. Phene, and D. E. Ramos. 1995. Hedgerows use more water but increase efficiency and profit in developing walnuts. California Agriculture, Vol. 49, No. 4, pp. 24-28.
- Lampinen, B. D., K. A. Shackel, S. M. Southwick, D. A. Goldhamer, W. Olson, and J. T. Yeager. 1995. Sensitivity of yield and fruit quality of French prune to water deprivation at different fruit growth stages. J. Amer. Soc. Hort. Sci. 120(2):139-147.
- Teviotdale, B. L., T. J. Michailides, D. A. Goldhamer, and M. Viveros. 1995. Reduction of almond hull rot disease caused by <u>Rhizopus stolonifer</u> by early termination of preharvest irrigation. Plant Disease 79(4):402-405.
- Goldhamer, D. A., G. S. Sibbett, R. C. Phene, and D. G. Katayama. 1994. Early irrigation cutoff has little effect on French prune production. California Agriculture. Vol. 48, No. 4, pp. 13-17.
- Gulick, S. H., D. W. Grimes, D. S. Munk, and D. A. Goldhamer. 1994. Cover-crop-enhanced water infiltration of a slowly permeable fine sandy loam. Soil Soc. Am. J. 58:1539-1546.
- Teviotdale, B. L., T. Michailides, D. A. Goldhamer, M. Viveros, L. Schmidt, and V. Hines. 1994. Cutting off irrigation early may reduce almond hull rot. California Agriculture. Vol. 48, No. 3, pp. 33-36.
- Goldhamer, D. A., J. Dunai, and L. Ferguson. 1994. Irrigation requirements of olive trees and responses to sustained deficit irrigation. Acta Horticulturae 356, pp. 172-175.
- Beede, R. H. and D. A. Goldhamer. 1994. Olive irrigation management In <u>Olive Production Manual</u>, L. Ferguson, G. S. Sibbett, and G. C. Martin, eds. University of California Publication 3353. pp. 61-68.
- Metheney, P. D., L. Ferguson, D. A. Goldhamer, and J. Dunai. 1994. Effects of irrigation on Manzanillo olive flowering and shoot growth. Acta Horticulturae 356, pp. 168-171
- Buchner, R. P., D. A. Goldhamer, and D. A. Shaw. 1994. Irrigation scheduling In <u>Kiwifruit Growing and Handling</u>, J. K. Hasey, R. S. Johnson, J. A. Grant, and W. O. Reil, eds. University of California Publication 3344. pp. 43-49.
- Goldhamer, D. A., J. Dunai, and L. Ferguson. 1993. Water use requirements of Manzanillo olives and responses to sustained deficit irrigation. Acta Horticulturae 335, pp. 365-371.
- Girona, J., M. Mata, D. A. Goldhamer, R. S. Johnson, and T. M. DeJong. 1993. Patterns of soil and tree water status and leaf functioning during regulated deficit irrigation scheduling in peach. J. Amer. Soc. Hort. Sci. 118(5):580-586
- Fulton, A. E., J. D. Oster, B. R. Hanson, C. J. Phene and D. A. Goldhamer. 1991. Reducing drainwater: Furrow vs. subsurface drip irrigation. Calif. Ag. 45(2):4-8.
- Fereres, E. and D. A. Goldhamer. 1991. Plastic mulch increases cotton yield, reduces need for preseason irrigation. Calif. Ag. 45(3):25-28.
- Fereres, E. and D. A. Goldhamer. 1990. Irrigation of deciduous fruit and nut trees. <u>ASA Monograph</u>
 No. 11 Irrigation of Agricultural Crops. B. A. Stewart and D. R. Nielsen, (eds.). American Society

- of Agronomy, Madison, WI. pp. 987-1017.
- Grimes, D. W., D. S. Munk, and D. A. Goldhamer. 1990. Drip irrigation emitter depth placement in a slowly permeable soil. <u>In Visions of the Future</u>. Proc. 3rd Nat'l Irrig. Sym. Am. Soc. Ag. Engr. Pub. 04-90, pp. 248-254.
- Goldhamer, D. A. 1989. Drought Irrigation Strategies for Deciduous Orchards. University of California Division of Agricultural and Natural Resources. Publication No. 21453. 15 p.
- Goldhamer, D. A. and R. L. Snyder (eds). 1989. Irrigation Scheduling -- A Guide for Efficient On-farm Water Management. University of California Division of Agricultural and Natural Resources. Publication No. 21454. 67 p.
- Grimes, D. W. and D. A. Goldhamer. 1989. Irrigating with plant-based monitoring: pressure bomb.

 <u>Irrigation Scheduling</u>. D. A. Goldhamer and R. L. Snyder (eds.). University of California Division of Agricultural and Natural Resources Publication No. 21454. pp. 19-21.
- Goldhamer, D. A., R. L. Snyder, and R. M. Hagan. 1989. Implementing an irrigation strategy on the farm. <u>Irrigation Scheduling</u>. D. A. Goldhamer and R. L. Snyder (eds.). University of California Division of Agricultural and Natural Resources Publication No. 21454. pp. 51-53.
- Post, S. E. C., T. L. Prichard, and D. A. Goldhamer. 1989. Soil moisture sampling -- gravimetric. <u>Irrigation Scheduling</u>. University of California Division of Agricultural and Natural Resources Publication No. 21454. pp. 10-11.
- Goldhamer, D. A. 1989. Irrigation scheduling with the water budget. <u>Peaches, Plums, and Nectarines-Growing and Handling for Fresh Market</u>. J. H. LaRue and R. S. Johnson (eds.). University of California Division of Agriculture and Natural Sciences Publication No. 3331. pp. 85-91.
- Alemi, M. H. and D. A. Goldhamer. 1988. Surge irrigation optimization model. TRANSACTIONS of the ASAE 31(2):519-526.
- Alemi, M. H., D. A. Goldhamer, and D. R. Nielsen. 1988. Selenate transport in steady-state, water-saturated soil columns. Journal of Environmental Quality 17(4):608-613.
- Alemi, M. H., D. A. Goldhamer, M. E. Grismer, and D. R. Nielsen. 1988. Elution of selenium from contaminated evaporation pond sediments. Journal of Environmental Quality 17(4):613-618.
- Goldhamer, D. A., M. H. Alemi, and R. C. Phene. 1987. Surge vs. continuous flow irrigation. California Agriculture 41(9&10):29-32.
- Howell, T. A., D. A. Bucks, D. A. Goldhamer, and J. Lima. 1986. Management principles irrigation scheduling. <u>Trickle Irrigation for Crop Production</u>. F. S. Nakayama and D. A. Bucks, (eds.). Elsevier Publishing Co. Amsterdam, Netherlands. pp. 241-279.
- Hanson, B., D. Lancaster, and D. A. Goldhamer. 1986. Evaluating continuous move sprinkler machines using time series statistics. Agricultural Water Management 12:87-97.
- Goldhamer, D. A. 1985. Irrigation Scheduling in <u>Walnut Orchard Management</u>. University of California Division of Agriculture and Natural Resources Publication No. 21410. pp. 102-108.

- Fischer, B. B., D. A. Goldhamer, T. Babb, and R. Kjelgren. 1985. Weed control under drip and low-volume sprinkler irrigation. California Agriculture 39(11&12):24-25. Nov.-Dec. 1985.
- Goldhamer, D. A. and C. M. Peterson. 1984. Comparison of Furrow and Linear Move Sprinkler Irrigation on Cotton Case Study. Land, Air and Water Resources Paper No. 10012. Dept. of LAWR, Univ. of Calif., Davis, CA. February 1984.

MSS Exhibit 4B

| | | | | | | | | | | | Assuming | | Assuming |
|---------------------|-------------|----------|---------|-------------|-----------|--------------|-------------|-------------------|-----------|-------------|--------------|-----------------|--------------|
| | | | | | | | | | | | May 1 to | | May 1 to |
| | | | | Seasonal | Yearly | Contribution | Suggested | Net | Acreage | Seasonal | Sep 2 Silage | Net | Sep 2 Silage |
| Grower; Parcel Crop | Crop | Planting | Harvest | Potential | Effective | of o | Leaching | Irrigation | in Crop | Potential | Total | Irrigation | Total |
| Acreage SJC | | Date | Date | Consumptive | Rainfall | Perched | Requirement | : Requirement**** | Estimated | Consumptive | Potential | Requirement**** | Irrigation |
| | | | | Use* | Corn** | Water*** | Corn*** | | from DWR | Use* | 5 | | Requirement |
| | | | | (inches) | (inches) | (inches) | (inches) | (inches) | (acres) | (acre ft) | (acre ft) | (acre ft) | (acre ft) |
| Mussi | Silage Corn | | | | 9 | 0. 1.7 | 3.3 | 12.3 | 1 | | | 33.2 | |
| | Silage Corn | | | | ý | .0 2.3 | 4.6 | 19.5 | | | | 52.7 | |
| 70.2 ac | Silage Corn | May 1 | Sep 2 | 22.9 | 9 | .0 2.3 | 4.6 | 19.2 | 32.4 | 1 61.8 | | 51.8 | |
| | Grain Corn | | | | ý | .0 2.6 | 5.1 | | | | 206.1 | 9.69 | 187.2 |
| | Aflalfa | | | | 9 | .0 8.0 | 10.7 | | | _ | | 135.4 | |

* Based on the daily 10 year mean (2000-2009) of reference crop water use (ETo) provided by the Manteca (No. 70) automated CIMIS weather station and published crop coefficient values (Kc). See individual crop sheets.

**Based on the 10 year mean (2000-2009) of total seasonal rainfall provided by the Manteca (No. 70) automated CIMIS weather station and then assuming that effective rainfall is 50% of total.

***Estimated from published root zone depths for different crops and assuming perched water located at about 4 ft depth.

****Stannated assuming faction of 20%.

****Stunn of potential consumptive use minus effective rainfall minus the contribution of perched water plus the leaching requirement.

****Stunn of potential consumptive use minus effective rainfall minus the contribution of perched water plus the leaching requirement.