State of California
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterrights.ca.gov

PETITION FOR CHANGE

(WATER CODE 1700)

_X_ Completion Schedule,
_____ Point of Diversion, _____ Point of Rediversion, _X_ Place of Use, _____ Purpose of Use,
_X_ Place of Storage

Application 29066 Permit _____ License _____ Statement or Other _____

I (we) hereby petition for change(s) noted above and shown on the accompanying map and described as follows:

Point of Diversion or Rediversion (Give coordinate distances from section corner or other ties as allowed by Cal CR 715, and the 40-acre subdivision in which the present & proposed points lie.)

Present See Attachment 1

Proposed No change

Place of Use (If irrigation then state number of acres to be irrigated within each 40-acre tract.)

Present See Attachment 1

Proposed See Attachment 1

Purpose of Use

Present See Attachment 1

Proposed No change

Does the proposed use serve to preserve or enhance wetlands habitat, fish and wildlife resources, or recreation in or on the water (See WC 1707)? _____ (yes/no)

- GIVE REASON FOR PROPOSED CHANGE: Updating completion schedule, refinement of place of use, and addition of places of underground storage.
- WILL THE OLD POINT OF DIVERSION OR PLACE OF USE BE ABANDONED? no (yes/no)
- WATER WILL BE USED FOR See Attachment 1 PURPOSES.

I(we) have access to the proposed point of diversion or control the proposed place of use by virtue of? ownership (ownership, lease verbal or written agreement)

Are there any persons taking water from the stream between the old point of return flow and the new point of return flow? N/A (yes/no)

If by lease or agreement, state the name and address of party(s) from whom access has been obtained.

N/A

Give name and address of any person(s) taking water from the stream between the present point of diversion or rediversion and the proposed point of diversion or rediversion, as well as any other person(s) known to you who may be affected by the proposed change.

No change in point of diversion or rediversion

THIS CHANGE DOES NOT INVOLVE AN INCREASE IN THE AMOUNT OF THE APPROPRIATION OR SEASON OF USE.

I (we) declare under penalty of perjury that the above is true and correct to the best of my (our) knowledge and belief.

Dated March 18, 20 09 at Sacramento, California

Anson Moran, General Manager for DELTA WETLANDS PROPERTIES — Signature(s)

(415) 730-5637 — Telephone No.

NOTE: A $1,000 fee, for each Application listed, made payable to the State Water Resources Control Board and an **$850 fee** made payable to the Department of Fish and Game must accompany a petition for change.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demands and cut your energy costs, see our web-site at: http://waterrights.ca.gov.

ATTACHMENT 1
Application 29062
Webb Tract

Completion Schedule

Present Completion Schedule: Original Application 29062 anticipated that work would start in 1988 and would be completed in 1990, with water being used to the full extent intended in 2000. These dates were modified in Decision 1643, which required that work be completed by 12/31/2011 and that water be used to the full extent by 12/31/2011.

Proposed Completion Schedule: Work is anticipated to start in 2010 and will be completed by 2020. Water will be used to the full extent intended by 2025.

Points of Diversion and Rediversion

Present Point of Diversion: The original Application 29062 provided for a single high-volume Intake Siphon Station ("A") coupled with the use of existing siphons along Points A-D to divert water. The 1993 Petition for Change to Application 29062 added a second high–volume Intake Siphon Station ("B").

Point of Diversion	Source	Diversion Reference Points	California Coordinate Zone 3 (or as otherwise noted)	Point is within (40 acre subd.)	Project Section	Township	Range	Base & Meridian
One existing siphon between Point A and Point B	Old River	Point A (Old River and San Joaquin River)	N 574,750 E 1,691,450	NW ¼ SE ¼	30	3N	4E	MD
		Point B (False River)	N 571,100 E 1,688,350	SW ¼ NW ¼	31	3N	4E	MD
Six existing siphons between Point B and Point C[1]	False River	Point B (above)						
		Point C (Fisherman's Cut)	N 569,050 E 1,669,950	SW ¼ SE ¼	33	3N	3E	MD
Eleven existing siphons between Point D and Point A[2]	San Joaquin River	Point D (San Joaquin River)	N 578,850 E 1,670,550	NW ¼ NE ¼	28	3N	3E	MD
		Point A (above)						

[1] D 1643 notes there are two points of diversion between Point B and Point C.
[2] D 1643 notes there are four points of diversion between Point D and Point A.

ATTACHMENT 1
Applications 29062

Intake Siphon Station "A"	False River	"A"	N 571,400 E 1,685,900	SW ¼ NE ¼	36	3N	3E	MD
Intake Siphon Station "B"	San Joaquin River	"B"	N 581,300 E 1,689,900	NE ¼ SW ¼	19	3N	4E	MD

Present Point of Rediversion:

Point of Diversion	Source	Diversion Reference Points	California Coordinate Zone 3 (or as otherwise noted)	Point is within (40 acre subd.)	Project Section	Township	Range	Base & Meridian
State Water Project Banks Pumping Plant			N 486,035 E 1,695,057	NW ¼ of SE ¼	20	1S	4E	MD
Central Valley Project Jones (Tracy) Pumping Plant			S 76 degrees 39 minutes E, 2674.53 feet from West ¼ Corner of Section 29 T 1 South R 4 East, M D B & M	NE ¼ of SW ¼	29	1S	4E	MD
Central Valley Project Entrance to Contra Costa Canal at Rock Slough			N 89 degrees 52 minutes W, 8.9 feet from East ¼ Corner of Section 33, T 2 North R 3 East, M D B & M	SE ¼ of NE ¼	33	2N	3E	MD
All PODs in Applications 29066 and 30270 (Bacon Island)			See Applications 29066 and 30270					

Proposed Point of Diversion and Rediversion: **No change**

Place of Use

Present Place of Use: Central Valley Project Service Area (as shown on maps filed with Applications 5626, 9363, 9364, 9366, 9367, 9368, 13370, 13371, 22316); State Water Project Service Area (as shown on maps filed for Application 5630); and the Bay/Delta Estuary.

ATTACHMENT 1
Applications 29062

Proposed Place of Use: (a) Semitropic Water Storage District service area, (b) Golden State Water Company service areas, and (c) Valley Mutual Water Company service area (as shown on maps filed with this Petition titled "Maps to Accompany Petition for Change in Place of Use for Applications 29062, 29066, 30268, and 30270 by Delta Wetlands"); (d) San Bernardino Valley Municipal Water District service area and (e) Western Municipal Water District of Riverside County (as shown on maps filed with Applications 31165 and 31370); (f) The Metropolitan Water District of Southern California (as shown on maps filed with this Petition titled "The Metropolitan Water District of Southern California Service Area" dated March 9, 2009); and (g) the San Francisco Bay/Sacramento–San Joaquin Delta Estuary (**no change**).

Purpose of Use

Present Purpose of Use: Irrigation, domestic, municipal and industrial, fish and wildlife preservation and enhancement, water quality.

Proposed Purpose of Use: **No change**. (a) Irrigation (within Semitropic Water Storage District and Valley Mutual Water Company); (b) municipal (within Golden State Water Company, San Bernardino Valley Municipal Water District, Western Municipal Water District of Riverside County, and The Metropolitan Water District of Southern California); (c) industrial (within Golden State Water Company, San Bernardino Valley Municipal Water District, Western Municipal Water District of Riverside County, and The Metropolitan Water District of Southern California); (d) domestic (within Golden State Water Company, and The Metropolitan Water District of Southern California); (e) water quality and fish and wildlife preservation and enhancement (within the San Francisco Bay/Sacramento–San Joaquin Delta Estuary).

Place of Underground Storage

Present Place of Underground Storage: None.

Proposed Place of Underground Storage: (a) Semitropic Groundwater Storage Bank; (b) Antelope Valley Water Bank.

California Environmental Protection Agency

State Water Resources Control Board
DIVISION OF WATER RIGHTS
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ENVIRONMENTAL INFORMATION FOR PETITIONS

☒ **Petition for Change** ☐ **Petition for Extension of Time**

Before the State Water Resources Control Board (SWRCB) can approve a petition to change your water right permit or a petition for extension of time to complete use, the SWRCB must consider the information contained in an environmental document prepared in compliance with the California Environmental Quality Act (CEQA). This form is not a CEQA document. If a CEQA document has not yet been prepared, a determination must be made of who is responsible for its preparation. As the petitioner, you are responsible for all costs associated with the environmental evaluation and preparation of the required CEQA documents. Please answer the following questions to the best of your ability and submit any studies that have been conducted regarding the environmental evaluation of your project. If you need more space to completely answer the questions, please number and attach additional sheets.

1. DESCRIPTION OF PROPOSED CHANGES OR WORK REMAINING TO BE COMPLETED

For a petition to change, provide a description of the proposed changes to your project including, but not limited to, type of construction activity, structures existing or to be built, area to be graded or excavated, increase in water diversion and use (up to the amount authorized by the permit), changes in land use, and project operational changes, including changes in how the water will be used. For a petition for extension of time, provide a description of what work has been completed and what remains to be done. Include in your description any of the above elements that will occur during the requested extension period.

☒ *See Attachment No.* 2

2. COUNTY PERMITS

a. Contact your county planning or public works department and provide the following information:

Person contacted: _____ Date of contact: _____

Department: _____ Telephone: (_____) _____

County Zoning Designation: _____

Are any county permits required for your project? ☐ YES ☐ NO If YES, check appropriate box below:
☐ Grading permit ☐ Use permit ☐ Watercourse ☐ Obstruction permit ☐ Change of zoning
☐ General plan change ☐ Other (explain):

See Attachment 3

b. Have you obtained any of the required permits described above? ☐ YES ☐ NO
If YES, provide a complete copy of each permit obtained.
☒ *See Attachment No.* 3

3. STATE/FEDERAL PERMITS AND REQUIREMENTS

a. Check any additional state or federal permits required for your project:
☐ Federal Energy Regulatory Commission ☐ U.S. Forest Service ☐ Bureau of Land Management
☐ Soil Conservation Service ☐ Dept. of Water Resources (Div. of Safety of Dams) ☐ Reclamation Board
☐ Coastal Commission ☐ State Lands Commission ☐ Other (specify) _____

b. For each agency from which a permit is required, provide the following information:

AGENCY	PERMIT TYPE	PERSON(S) CONTACTED	CONTACT DATE	TELEPHONE NO.

☒ *See Attachment No.* 3

c. Does your proposed project involve any construction or grading-related activity that has significantly altered or would significantly alter the bed or bank of any stream or lake? ☐ YES ☐ NO
If YES, explain: _____

☒ *See Attachment No.* 3

d. Have you contacted the California Department of Fish and Game concerning your project? ☐ YES ☐ NO
If YES, name and telephone number of contact: See Attachment 3

4. ENVIRONMENTAL DOCUMENTS

a. Has any California public agency prepared an environmental document for your project? ☐ YES ☒ NO
If YES, submit a copy of the latest environmental document(s) prepared, including a copy of the notice of determination adopted by the California public agency. Public agency: _____

b. If NO, check the appropriate box and explain below, if necessary:
☐ The petitioner is a California public agency and will be preparing the environmental document.*
☐ I expect that the SWRCB will be preparing the environmental document.**
☒ I expect that a California public agency other than the State Water Resources Control Board will be preparing the environmental document.* Public agency: Semitropic Water Storage District

☒ *See Attachment No.* 3

* Note: When completed, submit a copy of the final environmental document (including notice of determination) or notice of exemption to the SWRCB, Division of Water Rights. Processing of your petition cannot proceed until these documents are submitted.

** Note: CEQA requires that the SWRCB, as Lead Agency, prepare the environmental document. The information contained in the environmental document must be developed by the petitioner and at the petitioner's expense under the direction of the SWRCB, Division of Water Rights.

5. WASTE/WASTEWATER

a. Will your project, during construction or operation, (1) generate waste or wastewater containing such things as sewage, industrial chemicals, metals, or agricultural chemicals, or (2) cause erosion, turbidity or sedimentation?
☐ YES ☒ NO
If YES, or you are unsure of your answer, explain below and contact your local Regional Water Quality Control Board for the following information (See instruction booklet for address and telephone no.):

☐ *See Attachment No.* ___

b. Will a waste discharge permit be required for your project? ☐ YES ☒ NO

Person contacted: _____ Date of contact: _____

c. What method of treatment and disposal will be used? _____

☐ *See Attachment No.* ___

6. ARCHEOLOGY

a. Have any archeological reports been prepared on this project? ☐ YES ☐ NO
b. Will you be preparing an archeological report to satisfy another public agency? ☐ YES ☐ NO
c. Do you know of any archeological or historic sites located within the general project area? ☐ YES ☐ NO

If YES, explain: _____

☒ *See Attachment No.* 3

7. ENVIRONMENTAL SETTING

Attach **three complete sets of color photographs**, clearly dated and labeled, showing the vegetation that exists at the below-listed three locations. For time extension petitions, the photographs should document only those areas of the project that will be impacted during the requested extension period.

- ☐ Along the stream channel immediately downstream from the proposed point(s) of diversion.
- ☐ Along the stream channel immediately upstream from the proposed point(s) of diversion.
- ☐ At the place(s) where the water is to be used.

8. CERTIFICATION

I hereby certify that the statements I have furnished above and in the attachments are complete to the best of my ability and that the facts, statements, and information presented are true and correct to the best of my knowledge.

Date: March 18, 2009 Signature: [signature]

ATTACHMENT 2
Applications 29062, 29066, 30268 and 30270

Description of Proposed Changes to Project

Application 29062, 29066, 30268, 30270 History

Petitioner, Delta Wetlands Properties (successor to Bedford Properties, hereinafter "Delta Wetlands"), filed Applications 29062 and 29066 on July 9, 1987, to appropriate water to storage on Webb Tract and Bacon Island. Under these applications, Delta Wetlands originally proposed to maintain seasonal wetlands on the islands during the autumn, fill the islands with water from the channels of the Delta during the winter, and release the water for sale and export in the spring. The requested season of diversion was December 15 to May 1. Applications 29062 and 29066 were publicly noticed on December 4, 1987.

On July 21, 1993, Delta Wetlands filed Applications 30268 and 30270 for (1) direct diversion rights on Webb Tract and Bacon Island, (2) a year-round season of diversion, and (3) additional storage rights. Also on July 21, 1993, Delta Wetlands filed petitions for change of Applications 29062 and 29066. The petitions for change included changes in points of diversion and rediversion, places of use and purposes of use. Applications 30268 and 30270 and petitions for change of Applications 29062 and 29066 were publicly noticed on July 21, 1993.

On November 28, 1994, Delta Wetlands filed petitions for change of Applications 30268 and 30270. These petitions requested additional on-island points of diversion to allow for a new appropriation of water already diverted onto the islands under existing water right licenses held by Delta Wetlands. These petitions requested that water diverted earlier in the year under the existing rights could be retained in storage on the islands under the new applications and subsequently discharged for export or outflow. The petitions for change of Applications 30268 and 30270 were publicly noticed on April 7, 1995.

In July and August 1997, the State Water Board convened a water right hearing to consider Delta Wetlands' applications and petitions for change. The 1997 hearing was resumed and completed in October 2000.

The places of use for the applications were the Central Valley Project and State Water Project service areas and the San Francisco Bay/Sacramento–San Joaquin Delta Estuary (Bay-Delta Estuary). Delta Wetlands had proposed to provide water to any potential user within these broad service areas.

In February 2001, the State Water Resources Control Board (SWRCB) issued Water Right Decision 1643 approving water right Application Nos. 29062, 29066, 30268 and 30270, and certifying the Final Environmental Impact Report. Decision 1643 and the Final EIR were challenged by Central Delta Water Agency (CDWA) in Sacramento County Superior Court, which rejected CDWA's claims. The Third District Court of Appeal in *Central Delta Water Agency v. State Water Resources Control Board* (2004) 124 Cal. App. 4th 245 approved the Superior Court's judgment in many respects but concluded that the SWRCB could not issue

permits to provide water to potential, not-yet-identified users. The Court of Appeal directed the SWRCB to set aside Decision 1643 and the Final EIR for failure of the SWRCB "to specify an actual use of and the amounts of water to be appropriated" in the water rights permits issued to Delta Wetlands. In accordance with the Court of Appeal decision, the SWRCB in Order WR 2005-0023-EXEC set aside Decision 1643 issuing water right permits. Delta Wetlands now petitions to amend its applications to identify the specific, intended places of use which the SWRCB must evaluate before reissuing water right permits.

Summary of Petitions to Change Applications 29062, 29066, 30268 and 30270

This petition for change proposes the following changes to the Delta Wetlands Project applications 29062, 29066, 30268 and 30270:

- Revision to the Project Completion Schedule.

- Refinement of the places of use to Semitropic Water Storage District, Valley Mutual Water Company, Golden State Water Company, San Bernardino Valley Municipal Water District, Western Municipal Water District of Riverside County, and The Metropolitan Water District of Southern California. There is no change to the applications regarding fish and wildlife enhancement and water quality for the Bay-Delta Estuary.

- Addition of the Semitropic Groundwater Storage Bank and Antelope Valley Water Bank as places of underground storage. Project water will be banked water within the Semitropic and Antelope Valley banks for later use by Semitropic, Valley Mutual, and Golden State Water Company, San Bernardino Valley Municipal Water District, Western Municipal Water District of Riverside County, and The Metropolitan Water District of Southern California.

Overview of the Delta Wetlands Project

The Delta Wetlands Project (Project) description is substantially unchanged since 2001. The purpose of the Project is to divert surplus Delta inflows, transferred water, or banked water on two Delta islands (Bacon Island and Webb Tract, or "reservoir islands") for later discharge for export to south-of-Delta users and/or release for Delta export or to enhance water quality or flow for the Bay-Delta Estuary. Additionally, the Project includes managed wetlands and wildlife habitat areas on two Delta islands (Bouldin Island and most of Holland Tract, or "habitat islands").

The levees on all four islands will be improved and strengthened. Delta Wetlands would divert water into the two reservoirs using two intake siphon stations on each island. Each station would include 16 screened siphons utilizing state-of-the-art self-cleaning brushed cylinder intake screens, with supplemental pumps in the siphons to complete the filling process. The fish screens will prevent the impingement and entrainment of the most sensitive special-status fish

species including the delta smelt and Chinook salmon juveniles. Stored water would be discharged at one pump station on each island.

Delta Wetlands would operate the habitat islands under a Habitat Management Plan (HMP) for the benefit of state-listed threatened or endangered wildlife species and other special-status species and to provide other wetlands and wildlife habitat in the Delta. Delta Wetlands would divert water onto the habitat islands using some of the existing siphons, retrofitted with fish screens. Delta Wetlands plans to divert water to the habitat islands under its existing water rights. The HMP was prepared by Delta Wetlands in consultation with staff of SWRCB, the California Department of Fish and Game, the U.S. Army Corps of Engineers, California Waterfowl Association, Ducks Unlimited, and Contra Costa County Fish and Wildlife Committee.

The Project water diversion, storage, and export operating parameters are essentially unchanged from the 2001 Project description, except that the Project shall be operated in conjunction with the Semitropic Groundwater Storage Bank and Antelope Valley Water Bank to maximize export of water to Semitropic, Valley Mutual Water Company, Golden State Water Company, San Bernardino Valley Municipal Water District, Western Municipal Water District of Riverside County, The Metropolitan Water District of Southern California, and other likely places of use. The Project will operate in accordance with all applicable regulatory requirements including, but not limited to, the Bay-Delta Water Quality Control Plan and Water Right Decision 1641 (Revised), the Final Operating Criteria, and other terms and conditions imposed by water right protest dismissal agreements and Decision 1643. Project water will be conveyed to the proposed places of use using existing State, federal and/or local water conveyance facilities.

Project water will be conveyed to, stored in, and recovered from the Semitropic Groundwater Storage Bank proposed place of underground storage using existing State, federal and/or local water conveyance facilities. The Semitropic Groundwater Storage Bank has been operating since the early 1990s. Project water banked in the Semitropic Groundwater Storage Bank will utilize existing pipelines currently being used for agricultural irrigation. Water from the main pipeline turnout will flow into gated irrigation pipes and the gate system used to distribute the water to the recharge area. Water flowing across each cell will be regulated to match the cell recharge rates. Water depth will be shallow, similar to current irrigation levels. Recharge will be limited to the months of the year that are most beneficial for optimum recharge. These months are generally the winter months but may extend beyond this timeframe due to unusual weather patterns or increased State Water Project or Delta Wetlands Project water availability. Recharge will typically not occur during dry and critical dry years. Semitropic Groundwater Storage Bank has a guaranteed put capacity of 140,500 acre-feet per year and a guaranteed take capacity of 290,000 acre-feet per year. Please see the attached Underground Storage Supplement for the Semitropic Groundwater Storage Bank for more information.

Project water will be conveyed to, stored in, and recovered from the Antelope Valley Water Bank using existing and approved future State, federal and/or local water conveyance facilities. A portion of the first phase of the Antelope Valley Water Bank is complete and a quarter section of the recharge basin is fully operational at this time. Future phases of the Antelope Valley

ATTACHMENT 2
Applications 29062, 29066, 30268 and 30270

Water Bank will be constructed as additional recharge and recovery capacity is required. The construction and operation of the Antelope Valley Water Bank has been approved and is not a part of the Delta Wetlands Project. Water would be delivered to the recharge basins via the East Branch of the California Aqueduct, the AVEK West Feeder and the distribution/recovery pipeline installed from the Van Dam Turnout to the northwest corner of the recharge basin area. Three earthen canals extending southward from the distribution pipeline would deliver water to the 11 recharge basins. The Antelope Valley Water Bank is designed to receive water at a rate of up to 350 cfs and to recharge up to 100,000 acre-feet per year. Surface water recharged into the basins would percolate through the subsurface for storage into dewatered portions of the underlying aquifer. The total storage capacity of the Antelope Valley Water Bank is 500,000 acre-feet. Recharge activities would occur primarily during the winter and early spring. Please see the attached Underground Storage Supplement for the Antelope Valley Water Bank for more information.

Proposed Changes Covered by Petitions for Change to Application Nos. 29062, 29066, 30268 and 30270

Consistent with *Central Delta Water Agency v. State Water Resources Control Board*, 124 Cal. App. 4th 245 (2004), Delta Wetlands files Petitions for Change to Application Nos. 29062, 29066, 30268 and 30270 to further refine the applications as follows:

- Revision to the Project Completion Schedule as follows: construction of works to begin in 2009; completion of works by 2019; water to be used to the full extent intended by 2019.
- Delete the "Central Valley Project and State Water Project service areas" places of use and add the following as authorized places of use: the Semitropic Water Storage District service area, Golden State Water Company service area and Valley Mutual Water Company service area (as shown on maps filed with this Petition titled "Maps to Accompany Petition for Change in Place of use for Applications 29062, 29066, 30268, and 30270 by Delta Wetlands"); the San Bernardino Valley Municipal Water District service area and the Western Municipal Water District of Riverside County (as shown on maps filed with Applications 31165 and 31370); and The Metropolitan Water District of Southern California (as shown on maps filed with this Petition titled "The Metropolitan Water District of Southern California Service Area" dated March 9, 2009);
- There is no change to the purposes of use in Applications 29062, 29066, 30268, and 30270; however, the specific purposes of use for the new proposed places of use are as follows: irrigation use (within Semitropic Water Storage District, Valley Mutual Water Company, and The Metropolitan Water District of Southern California); municipal use (within Golden State Water Company, San Bernardino Valley Municipal Water District, Western Municipal Water District of Riverside County, and The Metropolitan Water District of Southern California); industrial use (within Golden State Water Company, San Bernardino Valley Municipal Water District, and Western Municipal Water District of Riverside County, and The Metropolitan Water District of Southern California); and

domestic use (within Golden State Water Company, and The Metropolitan Water District of Southern California); and

- Addition of the Semitropic Groundwater Storage Bank and Antelope Valley Water Bank as places of underground storage. Project water will be banked water within the Semitropic and Antelope Valley banks for later use by Semitropic, Valley Mutual, and Golden State Water Company, San Bernardino Valley Municipal Water District, Western Municipal Water District of Riverside County, and The Metropolitan Water District of Southern California.

Other aspects of Applications 29062, 29066, 30268, and 30270 have been publicly noticed and considered in the 1997 and 2000 water right hearings. Any protest filed to these Petitions for Change to Applications 29062, 29066, 30268 and 30270 should be limited to the proposed change of places of use and addition of places of underground storage.

Delta Wetlands proposes to operate the Project as described in accordance with the terms of SWRCB Decision 1643 and the DFG Incidental Take Permit (ITP) 2081-2000-061-2 issued on June 6, 2001 to Delta Wetlands pursuant to Fish and Game Code section 2050 *et. seq*. The ITP includes, among other things:

- inclusion of the "Final Operations Criteria" (FOC) developed by the SWRCB, the Corps, NMFS, and DFG in 1997.
- a requirement of a grant of a conservation easement for Habitat Management Lands on Bouldin Island and Holland Tract to the DFG
- a terrestrial resources HMP.

These Petitions for Change do not propose new construction activities, grading or excavation.

ATTACHMENT 3
Applications 29062, 29066, 30268 and 30270

Item 2 - County Permits

No new county approvals are required for the proposed change in places of use and addition of places of underground storage to Applications 29062, 29066, 30268 and 30270. The Antelope Valley Water Bank and Semitropic Groundwater Storage Bank have obtained all necessary county approvals. Delta Wetlands will obtain all the necessary county approvals. The San Joaquin County approvals related to the construction and operation of the Delta Wetlands Project on Bacon Island and Bouldin Island and Contra Costa County approvals related to construction and operation of the Project on Holland Tract and Webb Tract are discussed in the 1995 Delta Wetlands Project Draft EIR/EIS, 2000 Revised Draft EIR/EIS, 2001 Final EIR, and 2001 Final EIS. Updates to those approvals will be analyzed in the Delta Wetlands Project Places of Use Environmental Impact Report being prepared by the Semitropic Water Storage District.

Item 3 – State/Federal Permits and Requirements

No new state or federal permits or approvals are required for the proposed change in places of use and addition of places of underground storage to Applications 29062, 29066, 30268 and 30270. All necessary state and federal approvals have been obtained for the Antelope Valley Water Bank and Semitropic Groundwater Storage Bank. The state and federal approvals related to the construction and operation of the Delta Wetlands Project are discussed in the 1995 Delta Wetlands Project Draft EIR/EIS, 2000 Revised Draft EIR/EIS, 2001 Final EIR, and 2001 Final EIS. Updates to those approvals will be analyzed in the Delta Wetlands Project Places of Use Environmental Impact Report being prepared by the Semitropic Water Storage District. The following is the list of state and federal approvals likely required for the Delta Wetlands Project:

- Encroachment agreements regarding levee improvements on all four islands from Reclamation Districts 756 (Bouldin Island), 2025 (Holland Tract), 2026 (Webb Tract), and 2028 (Bacon Island) and regarding reservoir construction and operation on Webb Tract and Bacon Island from Reclamation Districts 2026 (Webb Tract) and 2028 (Bacon Island) .

- A land use lease and dredging permit from the State Lands Commission.

- U.S. Fish and Wildlife Service Endangered Species Act Section 7 consultation and a Biological Opinion.

- The National Oceanic and Atmospheric Administration Fisheries Service Endangered Species Act Section 7 consultation and a Biological Opinion.

- California Department of Fish and Game California Endangered Species Act consultation and an "incidental take" permit.

ATTACHMENT 3
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- A Clean Water Act Section 404 permit and a Rivers and Harbors Act Section 10 permit from the U.S. Army Corps of Engineers.

- National Historic Preservation Act/State Historic Preservation Officer Section 106 consultation.

Item 4 – Environmental Documents

Multiple environmental impact documents have been prepared for this Project. A Final Environmental Impact Report has been certified for the Antelope Valley Water Bank (SCH # 2005091117). A Final EIR has been prepared for the Semitropic Groundwater Banking Project (SCH # 1993072024) and a Final Supplemental EIR has been prepared for the Semitropic Groundwater Bank Stored Water Recovery Unit (SCH # 1999031100). The Antelope Valley Water Bank and Semitropic Groundwater Bank environmental documents are available upon request.

The environmental impacts related to the construction and operation of the Delta Wetlands Project are discussed in the 1995 Delta Wetlands Project Draft EIR/EIS, 2000 Revised Draft EIR/EIS, 2001 Final EIS, and 2001 Final EIR (SCH # 1995093022). The Delta Wetlands Project environmental documents are available in the State Water Board's files for Applications 29062, 29066, 30268 and 30270. The Semitropic Water Storage District is preparing an Environmental Impact Report (SCH # 1988020824) to analyze the potential environmental effects associated with the petitions to change the places of use and to add places of underground storage to Applications 29062, 29066, 30268 and 30270.

Item 6 – Archeology

An archeological report titled "Cultural Context of the Delta Wetlands Project Islands" and a "Cultural Resource Survey Information for the Delta Wetlands Project Islands" was prepared for the 1995 Draft EIR (1995 Draft EIR, Appendices M1, M2).

On December 22, 1997, the California State Historic Preservation Officer, along with the U.S. Army Corps of Engineers, the State Water Resources Control Board, and the Advisory Council on Historic Preservation issued a Programmatic Agreement Regarding Implementation of the Delta Wetlands Properties Project under Section 106 of the National Historic Preservation Act, as amended, and with its implementing regulations, 36 CFR 800 (1995 Draft EIR, Appendix M3).

The archeological report is currently being updated for any changed circumstances and will be included in the Environmental Impact Report being prepared by Semitropic Water Storage District for this project.

State Water Resources Control Board

Division of Water Rights
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Alan C. Lloyd, Ph.D.
Agency Secretary

Arnold Schwarzenegger
Governor

APPLICATION NO. _____
(Leave blank)

UNDERGROUND STORAGE SUPPLEMENT FOR SEMITROPIC GROUNDWATER STORAGE BANK to APPLICATION TO APPROPRIATE WATER BY PERMIT

1. State amount of water to be diverted to underground storage from each point of diversion in item 3b of form APP.

   The Delta Wetlands Project proposes diversion of surplus Delta flows onto two Delta islands for later rediversion to multiple places of use south of the Delta and to underground storage in the Semitropic Groundwater Storage Bank. Up to 140,500 acre-feet annually of the water diverted by the Delta Wetlands Project will be delivered at the following rates to the Stored Water Recovery Unit of the Semitropic Water Storage District via the California Aqueduct: (i) 1,000 cfs at Turnout #1 (Aqueduct Milepost 209.78); (ii) 300 cfs at Turnout #2 (Aqueduct Milepost 209.80); and 640 cfs at Turnout #3 (Aqueduct Milepost 206.99).

   a. Maximum Rate of diversions (1) _____ (2) _____ (3) _____ cfs
   b. Maximum Annual Amount (1) _____ (2) _____ (3) _____ acre-feet

2. Describe any works used to divert to offstream spreading grounds or injection wells not identified in item 7 of form APP.

   The turnouts referenced in Item 1 will be used to divert water from the California Aqueduct into Semitropic's main conveyance system, which largely consists of open canal. From the main canal system, water will be diverted (typically by pumping) to spreading grounds and/or farm turnouts via a system of buried pipelines.

3. Describe spreading grounds and identify its location and number of acres or location of upstream and downstream limits if onstream.

   Spreading and surface delivery totals approximately 1,440 acres, about 800 of which will be developed to ponds. The spreading grounds are described in #2. Water is also recharged by in lieu delivery to approximately 101,400 acres, with an additional 17,200 acres planned, for a total of 118,600 acres (see map attached hereto as Exhibit A).

4. State depth of groundwater table in spreading grounds or immediate vicinity:
   _____ feet below ground surface on _____ 19 __ measured at a point located within the _____ ¼ of _____ ¼ of Section _____, T _____, R _____, _____ B&M

Additional copies of this form and water right information can be obtained at www.waterrights.ca.gov.

Spring 2006; DWR water-level contour maps for unconfined aquifer

Direct Recharge - Spreading Grounds: 195 feet +/-

Indirect Recharge - Service Area: 210 to 225 feet +/-

5. Give any historic maximum and or minimum depths to the groundwater table in the area.
   Location _____ Maximum _____ feet below ground surface on _____ (date)
   Location _____ Maximum _____ feet below ground surface on _____ (date)

Spring 1958; DWR water-level contour maps for unconfined aquifer

Direct Recharge - Spreading Grounds: 95 feet +/-

Indirect Recharge - Service Area: 30 to 95 feet +/-

6. Describe proposed spreading operation.

Water recharged by (i) Semitropic's spreading grounds described above in #2 and (ii) by in lieu deliveries described in #3 at such times as applicant has water for delivery into storage and capacity is available in the California Aqueduct to delivery such water. Deliveries for indirect recharge will be made through Semitropic's irrigation distribution system, which consists of main conveyance canals, pumping plants, buried pipeline distribution laterals, and farm turnouts. Direct recharge would rely on the same main conveyance facilities as for indirect recharge, excepting that deliveries would be made to spreading ponds for percolation to groundwater storage.

7. Describe location, capacity and features of proposed pretreatment facilities and/or injected wells.

There are no new facilities not already contemplated in the Supplemental EIR for the Stored Water Recovery Unit or the Negative Declaration for the construction of Semitropic's spreading ponds.

8. Reference any available engineering reports, studies, or data on the aquifer involved.

(1) California Department of Water Resources, California's Groundwater, Bulletin 118 - Update 2003 (2003).

(2) United States Geological Survey, Hydrologic Investigations Atlas 730-B, Ground Water Atlas of the United States, Segment 1, California and Nevada, (1995).

(3) United States Geological Survey, Professional Paper 1401-C, Geology of the Fresh Ground-Water Basin of the Central Valley, California, with Texture Maps and Sections, (1986).

(4) California Department of Water Resources, Ground Water Basins in California, Bulletin 118-80, (1980).

(5) California Department of Water Resources, California's Ground Water, Bulletin No. 118, (1975).

(6) United States Geological Survey, Hydrologic Investigations Atlas HA-489, Base of Fresh Ground Water in the San Joaquin Valley, California, (1973).

(7) United States Geological Survey, Water Supply Paper 1999-H, Subsurface Geology of the Late Tertiary and Quaternary Water-Bearing Deposits of the Southern Part of the San Joaquin Valley, California, (1972).

(8) United States Geological Survey, Water Supply Paper 1618, Use of Ground-Water Reservoirs for Storage of Surface Water in the San Joaquin Valley, California, (1964).

(9) United States Geological Survey, Water Supply Paper 1469, Groundwater Conditions and Storage Capacity in the San Joaquin Valley, California, (1959).

9. Describe underground reservoir and attach a map or sketch of its location.

The Semitropic Groundwater Storage Bank is located in the San Joaquin Valley-portion of Kern County, which is within the extensive Central Valley aquifer system -- an aquifer that primarily consists of sands and gravels, with significant amounts of silts and clays. The depth to the base of fresh water varies from several hundred feet to over 1,000 feet. With regard to DWR's Bulletin No. 118, the Semitropic Groundwater Storage Bank is located in the northwest portion of the Kern County subbasin (No.5-22.14), which is part of the larger San Joaquin Valley basin (No. 5-22), all as shown on the map attached hereto as Exhibit B.

10. State estimated storage capacity of underground reservoir.

The defined capacity of the Semitropic Groundwater Storage Bank is 1.65 million acre feet, but the overall capacity of the entire aquifer is much greater as described in Bulletin 118.

11. Describe existing use of the underground storage reservoir and any proposed change in its use.

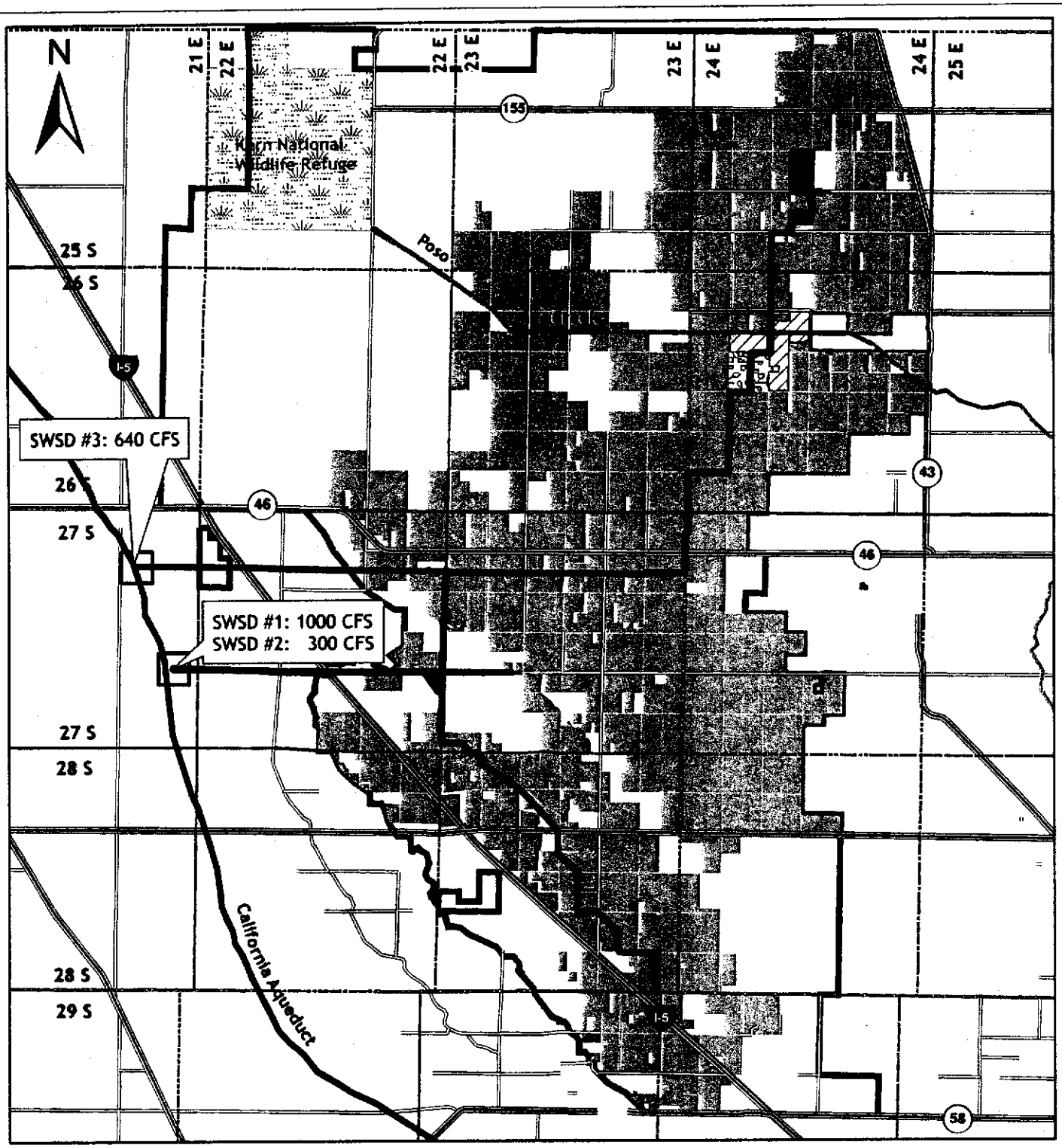
Semitropic Water Storage District provides the water supply for overlying agricultural uses. There will be no change of use to the groundwater basin associated with the Semitropic Water Storage District resulting from the operation of the Stored Water Recovery Unit or Applicant's project.

12. Describe the proposed method and location of measurement of water placed into and withdrawn from underground storage.

For indirect recharge, water placed into storage will be measured with existing flow meters located at each farm turnout. Water withdrawn from storage will be measured with flow meters located at each well site.

For direct recharge, water placed into storage will be measured with flow meters located at the canal-side pumping plant which will be used to divert water from the Pond-Poso Canal into the spreading grounds. Water withdrawn from storage will be measured with flow meters located at each well site.

ATTACHMENT A



SEMITROPIC WATER STORAGE DISTRICT
Underground Storage Supplement

November 2008

Indirect Recharge

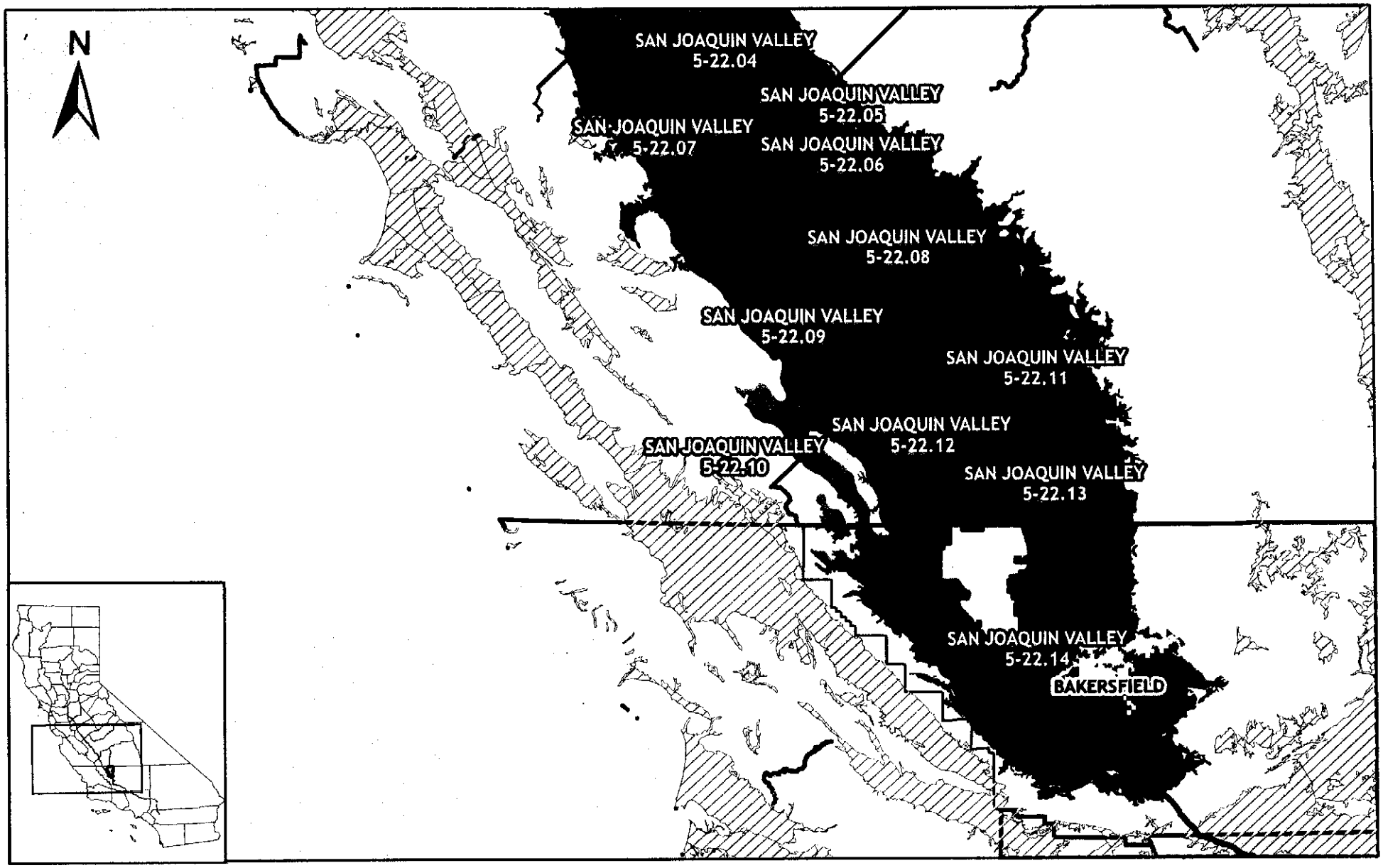
- Service Area
- Future Service Area

Direct Recharge

- Recharge Ponds
- Future Recharge Ponds
- Canal System
- Turnout from CA Aqueduct with Maximum Diversion Capacity noted.

27 October 2008 /Basemap/SWRBoardApplication L.L. Pajuelo

ATTACHMENT B



Groundwater Basin and Sub-basins

California Department of Water Resources, California's Groundwater, Bulletin 118 - Update 2003 (2003).

California Aqueduct

Semitropic W.S.D. Boundary

Other Groundwater Basins

SAN JOAQUIN VALLEY BASIN, and sub-basins

27 October 2008 /GISProjects/Regional/Groundwater Basins :L.L.Painelo

State Water Resources Control Board

Division of Water Rights
1001 I Street, 14th Floor ♦ Sacramento, California 95814 ♦ 916.341.5300
Mailing Address: P.O. Box 2000 ♦ Sacramento, California 95812-2000
FAX: 916.341.5400 ♦ www.waterrights.ca.gov

Alan C. Lloyd, Ph.D.
Agency Secretary

Arnold Schwarzenegger
Governor

APPLICATION NO. _____
(Leave blank)

UNDERGROUND STORAGE SUPPLEMENT OF ANTELOPE VALLEY WATER BANK to APPLICATION TO APPROPRIATE WATER BY PERMIT

1. State amount of water to be diverted to underground storage from each point of diversion in item 3b of form APP.

The Delta Wetlands Project proposes diversion of surplus Delta flows onto two Delta islands for later rediversion to multiple places of use south of the Delta and to underground storage in the Antelope Valley Water Bank. Up to 100,000 acre-feet annually of the water diverted by the Delta Wetlands Project will be delivered at a maximum rate of 350 cfs to the Antelope Valley Water Bank via the Banks Pumping Plant or Jones (Tracy) Pumping Plant (points of rediversion 1 and 2 in Applications 29061, 29066, 30268 and 30270) to two turnouts off of the East Branch of the California Aqueduct.

a. Maximum Rate of diversions (1) _____ (2) _____ (3) _____ cfs
b. Maximum Annual Amount (1) _____ (2) _____ (3) _____ acre-feet

2. Describe any works used to divert to offstream spreading grounds or injection wells not identified in item 7 of form APP.

In Phase 1 of the Antelope Valley Water Bank (AVWB), a new 4-mile pipeline will be constructed to distribute water between the AVEK West Feeder and the recharge and recovery facilities; in Phase 2, a new 8.75-mile pipeline will be constructed between the California Aqueduct East Branch and the recharge and recovery facilities. Please see Antelope Valley Water Bank Project Final Environmental Impact Report (SCH #2005091117) for more information. The AVWB has an existing turnout from the AVEK West Feeder and existing (recently upgraded) piping that feeds a series of 10 recharge ponds that are in-place. A quarter section of the recharge basin is fully operational at this time.

3. Describe spreading grounds and identify its location and number of acres or location of upstream and downstream limits if onstream.

Recharge facilities will be constructed within an approximately 1,600-acre area of farmland in southeastern Kern County and in the Antelope Valley. Approximately 11 recharge basins will be constructed to store water in currently dewatered portions of the underlying aquifer, the Antelope Valley Groundwater Basin. The recharge basins will be approximately 160 acres each, totaling approximately 1,482 acres. The recharge basins will be further divided into subbasins ranging from 1 to 50 acres, with an average area of approximately 20 acres each. Berms will be constructed on the periphery of the recharge basins. The area

proposed for recharge facilities is bounded by: Holiday Avenue to the north, Avenue A to the south (Kern County/Los Angeles County line), 170th Street West to the west, and 150th Street West to the east.

4. State depth of groundwater table in spreading grounds or immediate vicinity:

The depth to the groundwater table is annually and seasonally variable. Depth to groundwater table at twelve wells within the recharge and recovery area is provided in Attachment A.

_____ feet below ground surface on _____ 19 __ measured at a point located within the _____ ¼ of _____ ¼ of Section _____, T _____, R _____, _____ B&M

5. Give any historic maximum and or minimum depths to the groundwater table in the area.
   Location _____ Maximum 150 feet below ground surface on 1900 (date)
   Location _____ Maximum 358 feet below ground surface on 1977 (date)

6. Describe proposed spreading operation.

Surface water delivered to the basins would percolate through the subsurface of the basins to be stored in the dewatered portions of the underlying aquifer. During recharge periods, temporary aluminum, gated irrigation piping will be connected to the turnouts to distribute water across the uphill sides of each recharge basin. Basins will be equipped with flash board overflow boxes to allow water to spill from one basin to the next. Water depth in a basin can be adjusted by adding or taking out flash boards. In addition, each basin will be equipped with overflow culverts on their uphill sides as a protection against overfilling.

During recharge operations, AVWB will on a daily basis (seven days a week):

- Perform drive-by security inspections to verify that water is not spilling outside of recharge areas, level monitoring stations appear intact, the weather station is intact and to determine if basin berms require repair;
- Inspect flash board boxes and culverts and remove debris as required;
- Adjust inflow rates to basins so that the staff gage readings in all active basins are between 12 and 24 inches and so that some water is spilling from each active basin to the next through flash board boxes (flowing water reduces mosquito production);
- Reduce inflow to a basin if water is spilling through overflow culverts;
- Record basin staff gage levels, instantaneous and volumetric flow meter readings on turnouts.

Recharge activities would occur primarily during the winter and early spring.

7. Describe location, capacity and features of proposed pretreatment facilities and/or injected wells.

No pretreatment facilities or injection wells are proposed for the Antelope Valley Water Bank.

8. Reference any available engineering reports, studies, or data on the aquifer involved.

Antelope Valley-East Kern Water Agency (AVEK). 2005. 2005 Urban Water Management Plan, Draft. April 2005.

Bloyd, R.M. 1967. Water resources of the Antelope Valley-East Kern Water Agency area, California. U.S. Geological Survey Open-File Report. Washington DC.

Leighton, D.A. and S. Phillips. 2003. Simulation of ground-water flow and land subsidence in the Antelope Valley ground-water basin, California. U.S. Geological Survey Water Resource Investigation Report 03-4016. Washington, DC.

Western Development and Storage. 2005. Water banking feasibility determination – Antelope Valley Water Bank. Los Angeles, CA.

Metropolitan Water District, 1988. Background Information for an Antelope Valley Basin Groundwater Storage Program.

United States Geological Survey, 1911. Water Resources of Antelope Valley, California. Water Supply Paper 278. By Johnson, H.R.

California Department of Water Resources. 2003. *California's Groundwater,Bulletin 118, Update 2003.* Sacramento, CA

California Department of Water Resources, Ground Water Basins in California, Bulletin 118-80, (1980).

California Department of Water Resources, California's Ground Water, Bulletin No. 118, (1975).

9. Describe underground reservoir and attach a map or sketch of its location.

The Antelope Valley Water Bank underground reservoir is within the Antelope Valley Groundwater Basin. The Antelope Valley Groundwater Basin is described in California Department of Water Resources Bulletin 118-2003, and has been the subject of the Antelope Valley Groundwater basin adjudication, *Antelope Valley Groundwater Cases*, Judicial Council Coordination Proceeding No. 4408, Los Angeles Superior Court Case No. BC 325 201. The Los Angeles County Superior Court has found in Phase I of *Antelope Valley Groundwater Cases* trial that the alluvial basin defined in Bulletin 118-2003 should be the basic jurisdictional boundary for purposes of the basin adjudication. (See *Revised Order After Hearing on Jurisdictional Boundaries*, dated March 12, 2007, *available at http://www.scefiling.org/document/document.jsp?documentId=2778.*) A narrative description and map of the Antelope Valley Groundwater Basin (Exhibit A to Revised Order After Hearing) are provided in Attachment B.

10. State estimated storage capacity of underground reservoir.

The Antelope Valley Groundwater Basin is estimated to have a capacity of 68 million acre-feet (Planert, Michael and John S. Williams. 1995. Ground Water Atlas of the United States – Segment 1 California Nevada. U.S. Geological Survey Hydrologic Investigations Atlas 730-B) and 70 million acre-feet (California Department of Water Resources. 1975. California's Ground Water. Bulletin 118. 135 p.). The Antelope Valley Water Bank has been approved by Kern County to store up to 500,000 acre-feet within the Antelope Valley Water Bank.

11. Describe existing use of the underground storage reservoir and any proposed change in its use.

The Antelope Valley Groundwater Basin provides the water supply for overlying agricultural uses as well as a portion of the municipal water supplies for approximately 475,000 residents. There will be no change of use to the Antelope Valley Groundwater Basin resulting from the operation of the Antelope Valley Water Bank.

12. Describe the proposed method and location of measurement of water placed into and withdrawn from underground storage.

Recharge flows would be monitored where water enters and leaves the Antelope Valley Water Bank (e.g., the Van Dam turnout from the AVEK West Feeder). In addition, the AVWB will monitor flows to specific recharge areas and from individual recovery wells for operational purposes. Each turnout will be equipped with a flow meter that reads both instantaneous (cfs) flow and total volume (acre-feet, AF). Precipitation, wind, pan evaporation, and temperature would be monitored to calculate net precipitation and evaporation effects. Taken together, the data and estimates from all of these systems would be used for estimating losses, recharge into the Antelope Valley Water Bank, and recovery. Water flowing into recharge areas would be monitored to see how much water was stored (while taking into account estimated loss due to evaporation and evapotranspiration). Water withdrawn from underground storage will be measured at the recovery wellhead. Flow from recovery wells, minus recharge during conveyance, is considered recovered water. Ten (10) percent of the stored water has been committed to be left in the Water Bank to ensure that there is no "overrecovery."

ATTACHMENT A

Table 7: Well Details

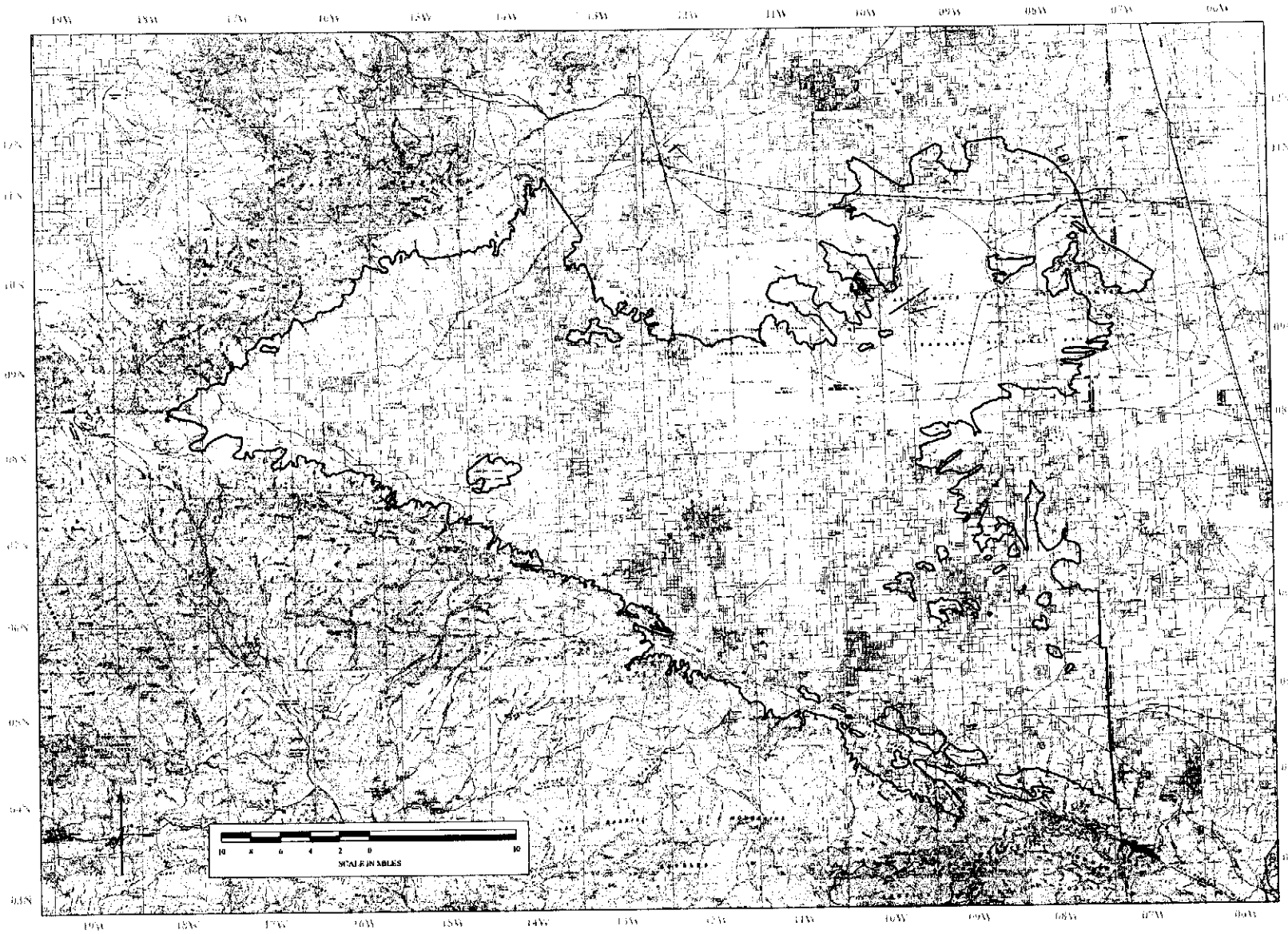
USGS Well Number	Installation Date	Depth (feet) Diameter (in)	Yield	Water Levels (ft, bgs)	Driller Log
T9NR15W-25D (Destroyed)	1946	148'(?) 8" Perf: 153-344'		227' in 1948 264' in 1956 Dry in 1957 Dry in 1962	70': sand 100': sand & gravel 130': sand and boulders 160': gravel 190': sand & gravel 220': boulders & gravel 245': sand & gravel 275': gravel & clay 300': clay 344': gravel & clay Log by F Rottman Drilling
"Field Well" T9NR15W-25F Sampled 06/03	1977 Rehabilitated in 1998	850' 14"	94' drawdown @ 800 gpm 112' drawdown @ 1,000 gpm	358' in 1977	10': clay w/ silt 60': sand w/ gravel 95': sand 250': sand w/ clay
T9NR15W-25R	1965 Rehabilitated in 1998	780' 14"	28' drawdown @ 1,500 gpm 35' drawdown @ 1,700 gpm 37' drawdown @ 1,850 gpm 45' drawdown @ 2,150 gpm	280' in 1965	Not available
T9NR14W-31D May be tracked as T9N14W-30N in DWR database	Unknown, rehabilitated in 1998	14"	At least 1,000 gpm	342' in 1986	Not available
T9NR14W-31M	1963 Rehabilitated in 1998	713' 14" Perf: 347-713'	50' drawdown @ 1,200 gpm	204' in 1963 240' in 1968	20': sand & silty clay 95': sand & gravel 218': sand, gravel & streaks of clay 225': sand 518': sand w/ clay streaks 580': sand w/ clay streaks 694': sand w/ clay streaks 713': clay Log by Evans Brothers Drilling
T9NR14W-31L	Unknown, rehabilitated in 1998	Unknown	At least 1,100 gpm	Unknown	Not available
"Station Well" T9NR14W-30K Sampled 06/03	1891, replaced in 1960, rehabilitated in 1998	255' deepened to 703' 7" increased to 14" Perf: 340-703'	56' drawdown at 1,170 gpm	180' in 1908 267' in 1961	10': soil 15: sand & gravel 29:sand & gravel 35': sand & gravel w/ streaks of clay 68': sand & boulders 109': sand, gravel, clay, rocks 182': sand & gravel w/ streaks of clay 190: sand 204': sand with thin streaks of sandy

5700 Wilshire Blvd., Ste 330
Los Angeles, CA 90036
Phone: 323.936.9303
Fax: 323.930.9114

USGS Well Number	Installation Date	Depth (feet) Diameter (in)	Yield	Water Levels (ft, bgs)	Driller Log
					clay 230': gravel & sand 247': clay 300': sand & clay 352': Clay w/ sand 356': sand 440': clay w/ sand 445': sand 495': sand w/ streaks of clay 550': clay w/ sand 590': clay w/ sand 598': Clay, sandy 600': boulders 610': clay, sandy 703': clay w/ sand streaks Log by Evans Brothers Drilling
T9NR14W-30R	Unknown, rehabilitated in 1998	Unknown	At least 1,100 gpm	Unknown	Not available
T9NR15W-36C	Unknown, rehabilitated in 1998	Unknown	At least 1,300 gpm	Unknown	Not available
T9NR15W-36E	Unknown, rehabilitated in 1998	811'	8' drawdown at 2,000 gpm	224' in 1969	Not available
T9NR15W-36K	Unknown, rehabilitated in 1998	850'	5' drawdown at 1,800 gpm	290' in 1974	Not available
T9NR14W-30H No longer present	Unknown, was observed in 1962	Unknown	Unknown	Unknown	Unknown

5700 Wilshire Blvd., Ste 330
Los Angeles, CA 90036
Phone: 323.936.9303
Fax: 323.930.9114

ATTACHMENT B



Jurisdictional Boundary
Antelope Valley Groundwater Adjudication

Jurisdictional Boundary Description
Antelope Valley Groundwater Adjudication

Beginning in the southeast corner of the basin (where "basin" is intended to mean adjudication area), and proceeding clockwise around the area, the southerly boundary is largely comprised of the mapped extent of bedrock contact to the north of, and generally parallel to the San Andreas Fault. Along the entire southerly boundary, it cuts across two locations where surface drainage occurs above alluvium that is narrowly connected to the main Antelope Valley and/or is known or thought to be very thin or limited in extent. Those two locations are at the mouth of Soledad Canyon and the mouth of Leona Valley.

From the southwesterly corner of the basin, the westerly boundary is entirely comprised of the mapped extent of bedrock contact to the southeast of, and roughly parallel to the Garlock Fault complex. The northwesterly corner of the basin is along that bedrock contact near the mouth of Oak Creek Canyon. From that northwesterly corner, the basin is bounded on the north by a southeasterly trending line to Middle Butte; the basin boundary follows the westerly side of that bedrock contact and then crosses an alluvial gap to bedrock outcrop of Gem Hill and the Rosamond Hills, which it then follows to the northwest corner of the dry Rosamond Lake bed.

From the northwest corner of Rosamond Lake (dry), the basin predominately follows bedrock contact along the Rosamond and Bissell Hills, generally on the west side of Edwards Air Force Base, to the Muroc Fault where it follows the Fault/bedrock contact. The boundary arbitrarily crosses some narrow gaps between rock outcrops in the Rosamond and Bissell Hills, where the gaps represent small connections with the Fremont Valley Groundwater Basin to the west. Similarly, to the north of Edwards AFB and on the east side of Rogers Dry Lake, the boundary arbitrarily crosses some narrow gaps between rock outcrops, the most notable of which is a narrow neck that isolates the Peerless Valley to the north.

On the east side of the Antelope Valley, the basin is bounded by bedrock contacts along the entire so-called Hi-Vista area of bedrock outcrops. Where that contact reaches the Los Angeles-San Bernardino County line along the southeast side of the basin, the groundwater basin is arbitrarily bounded by the County line, which is recognized to be the western boundary of the adjudicated Mojave Water Agency area in San Bernardino County.