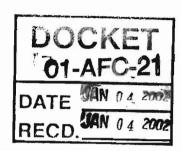
GRATTAN & GALATI COUNSELORS & ADVOCATES

RENAISSANCE TOWER 801 K STREET PENTHOUSE SUITE SACRAMENTO, CA 95814 OFFICES ALSO IN GLENDALE, CA

January 4, 2002

Ms. Theresa Epps Dockets Unit California Energy Commission 1516 9th Street Sacramento, CA 95814



RE: The Tesla Power Project (01-AFC-21)

Dear Ms. Epps:

Enclosed for filing with the California Energy Commission are one original and 12 (Twelve) copies of Attachment B of the Tesla Power Project's Responses to the CEC Staff's list of Data Inadequacies.

Sincerely,

Scott A. Galati on behalf of

Midway Power LLC

SAG/cw Enclosures

TESLA POWER PROJECT ATTACHMENT B

I. Introduction:

The proposed Tesla Power Project ("TPP") consists of a natural gas-fired combined cycle power plant and associated linear facilities. The project will have a nominal electrical output of 1,140 MW with commercial operation planned to begin in the 2nd quarter of 2004. The TPP site which includes the power generation facility, switchyard and a storm water sedimentation/detention pond will be located on a 60 acre parcel (Assessor's Parcel Number 099B-7825-001-04) in Section 30, Township 25, Range 4E, approximately 0.5 miles north of the Tesla Substation. The project will be fueled with natural gas that will be delivered to the TPP site via a new 2.8 mile pipeline. The TPP will be connected to the Pacific Gas & Electric Company Tesla Substation with a new 0.5 mile long transmission line. Water for the TPP will be obtained from the California Aqueduct via a new 20-inch, 1.7 mile pipeline adjacent to Midway Road. Wastewater will be processed by a zero liquid discharge system.

II. Water Source and Rationale for Selection

The water supply provider for the proposed TPP will be Zone 7 of the Alameda County Flood Control and Water Conservation District ("Zone 7"). The TPP site is located in the eastern portion of Alameda County. The eastern portion of Alameda County lies within the service area of Zone 7. At the present time, Zone 7 does not have transmission facilities or other infrastructure in the TPP area and does not provide any water service to customers in the area of the TPP. Due in part to Zone 7's lack of delivery facilities in the TPP area, the few local residents, agriculture, and other users obtain their water from private wells. The nearest Zone 7 facilities are located in the area of the City of Livermore, which is approximately 8 miles from the TPP site. As part of the construction of the TPP, a new turnout facility will be constructed on the California Aqueduct near Zone 7 (the "turnout") under the supervision of the California Department of Water Resources ("DWR").

Under the terms of a long-term lease agreement to be executed for the benefit of the project applicant Midway Power LLC ("MPL") the Rosedale-Rio Bravo Water Storage District ("Rosedale"), Rosedale will supply Zone 7 with a firm, reliable annual supply of six thousand four hundred (6,400) acre-feet of water of local and exportable groundwater and/or surface water supplies. Rosedale will deliver exportable local groundwater and surface water to the turnout. No State Water Project ("SWP") entitlement water will be transferred and no additional annual diversion into the California Aqueduct shall occur. Delivery to the turnout shall be accomplished through an exchange of SWP delivery entitlements under a "Point of Diversion" agreement between Zone 7 and the Kern County Water Agency ("KCWA") with the consent of the California Department of Water Resources ("DWR").

As a member of the KCWA, Rosedale has a contractual entitlement for SWP water of 29,900 AF annually. Water supplies available to Rosedale also include an annual block of 10,000 acre-feet from the Kern River under a contract with the City of Bakersfield. In addition, Rosedale has historically received one-third of the City's miscellaneous Kern River water, which averages 22,000 acre-feet per year. Rosedale also periodically receives water from the federally operated Central Valley Project ("CVP") from the CVP's Friant-Kern Division.

Rosedale acquires water for recharge purposes from the Kern River through a water service agreement with the City of Bakersfield, from the Friant-Kern Canal of the Central Valley Project as available, and from the State Water Project through a water supply contract with the Kern County Water Agency. Water supplies from these three sources have averaged about 62,000 AF/year for the years from 1962 through 1999, or about 79% of the cumulative consumptive use during those years.

Rosedale recently certified a "Master Environmental Impact Report – Groundwater Storage, Banking, Exchange, Extraction Conjunctive Use Program." The groundwater banking program identified in the Master EIR will include projects that involve the conjunctive use of the surface and groundwater resources of Rosedale and others for the purpose of increasing water supplies and generating revenue for the benefit of Rosedale's landowners. Rosedale's groundwater banking program is intended to provide the means by which Rosedale can maintain and enhance a balanced water supply.

It is anticipated that Rosedale's projects under this program, when completed, could include over 300,000 acre-feet of stored water for the purposes of extraction during water short or drought periods. It is estimated that the storage of 300,000 acre-feet would occupy a depth of approximately 50 feet in the groundwater basin underlying the 43,000 acres of the district, based on an average specific yield of 14 percent. Currently, the depth to groundwater in Rosedale averages about 140 feet.

Because water supplies available to Rosedale include an average of 32,000 acre-feet per year of Kern River water, Rosedale has accumulated approximately 170,000 acre-feet of locally developed exportable banked water. This water has been obtained by Rosedale during the years 1995 through 2000 through water purchases and exchanges with other entities. However, this water will remain in storage to assist Rosedale's groundwater banking program to remain in balance. As part of its agreement to supply the TPP, Rosedale will enter into an agreement with the Buena Vista Water Storage District ("Buena Vista") for the acquisition and placement into storage of 40,000 AF of existing groundwater and 6,400 AFY of Buena Vista's supply of Kern River flood waters.

The purpose of the agreement between Rosedale and Buena Vista will be to create and maintain a groundwater bank account whereby Buena Vista will provide Rosedale with approximately 11,657 AFY in a manner that will allow Rosedale to make approximately 6,400 AFY of said supply available to the TPP. The source of the first 6,400 AFY provided to Rosedale shall be from Buena Vista's supply of Kern River flood water. The Rosedale/Buena Vista agreement will also provide for the sale and transfer of 40,000 AF of previously banked "preconsolidation water" derived from pre-1914 Kern River diversions. This water creates a start-up banked account to assist supply reliability to the TPP and allow further allow Rosedale's groundwater banking program to remain in balance during the initial years of the TPP.

III. Existing Site Conditions of the Rosedale Groundwater Bank

Rosedale, located westerly of Bakersfield, California, has a gross area of approximately 43,000 acres. The present net developed area is estimated to be about

34,500 acres, with about 28,500 acres utilized for irrigated agriculture and about 6,000 acres dedicated to urban uses. Plate 1 presents a map of the District and it's groundwater recharge facilities. The groundwater recharge facilities include facilities to divert waters from the Kern River and the joint use Cross Valley Canal into the Goose Lake Slough channel, the channel itself and recharge basins.

Rosedale is one of several water districts that are member agencies of the Kern County Water Agency. The county water agency is a primary responsible party for managing the Kern Water Bank located in the county. The Kern Water Bank's primary source of recharge water comes from the Kern Fan Element (KFE), a large, deep, asymmetrical sedimentary basin. Rosedale is located within the KFE and specifically overlies areas of both unconfined and semi-confined aquifers. Wells within Rosedale pump groundwater from both water bearing zones. There are no continuous clay layers.

Groundwater bodies in the Kern Fan Element are represented on the attached map entitled "Depth to Groundwater – Spring 1999" taken form the Mater EIR referred to above. This figure maps the entire county groundwater basin including Rosedale. Geologic structures, including the groundwater table, are represented in two attached cross-sections (Figures 3 and 4) taken from a recent report for the Buena Vista Water Storage District which neighbors Rosedale. The geology beneath Rosedale is as shown in these figures.

V. Description of Facilities

Rosedale operates recharge facilities, including channels and basins, that have a total recharge area of about 720 acres and an average long-term recharge capacity of about 255 cubic feet per second (cfs). Rosedale is in the process of developing approximately 100 additional acres as groundwater recharge basins on property that it currently owns. It is anticipated that this will increase Rosedale's average long-term recharge capacity by about 50 cfs.

As part of the groundwater storage agreement between Rosedale and Buena Vista, Rosedale will construct sufficient wells, pipelines and plumbing to recover

a minimum of 3,200 AFY of water from within Rosedale and deliver the same to Buena Vista at a mutually agreeable delivery point or points within Buena Vista. All other required facilities are as identified in the Data Responses provided on December 6, 2001, and prior responses.

VI. Source Water Physical and Chemical Characteristics

The attached table entitled "Water Quality Table Q-2 – Source Water for Rosedale-Rio Bravo WSD Recharge Operations" presents the physical and chemical characteristics of the Kern River water source. This table was taken from the Master EIR referred to above.

TPP has commissioned sampling and testing of the water quality in Patterson Creek which may receive runoff from the project site. This analysis will be transmitted to the CEC under separate cover when available.

VII. Rationale for the Selection of the Proposed Water Source

Prior to selecting Zone 7 and Rosedale as the source of water for use at the TPP, MPL conducted the required analysis under the State Water Resources Control Board's Policy 75-58 for the reuse of water to the extent practicable. The following alternative sources of water were analyzed:

Zone 7 is the nearest purveyor of water in the area of the TPP. At the present time, Zone 7 does not have any recycled or potable water available for use by the TPP. Additionally, Zone 7 does not have any transmission facilities in the area of the TPP that could be utilized to transport a recycled water supply. In the AFC, MPL identified the closest supply of recycled water - the Mountain House Community Services District (MHCSD) wastewater treatment plant. Unfortunately, MHCSD also does not have any recycled water available for use by the TPP. First, there does not appear to be a sufficient supply of recycled water available from MHCSD. MHCSD and its developer estimate that at full build-out in approximately 2020, recycled water availability will be 5.4 mgd, average dry weather flow (approximately 5,000 to 7,000).

acre-feet/year). Phase 1 is now under construction, and will represent a flow in the range of only 0.5 mgd (500 to 800 acre-feet/year). With build-out scheduled by 2020, the developer estimates development and flow generation in a roughly linear basis from now to 2020 (personal communication between Christopher Hansmeyer, Allen Matkins, and Lynn Sutton of MHCSD and Michael Hitchcock of the San Joaquin County Community Development Department). Taking into account the use of recycled water to meet MHCSD needs first (e.g., watering green belts and golf courses), and then turning to MHCSD's prior commitments of recycled water to other projects, such as the proposed East Altamont Energy Center, 01-AFC-4, MHCSD does not have a sufficient supply of recycled water to supply the TPP. Based upon the schedule for estimated annual utilization of recycled water from MHCSD to the BBID for use at the East Altamont Energy Center contained in Table B-1, below, MHCSD will not have any additional recycled water available through 2020.

Second, MHCSD is located within the service area of the Byron Bethany Irrigation District (BBID). Even if recycled water from MHCSD was available to the TPP, BBID currently does not have the ability to sell water in the Zone 7 service territory. In order for the TPP to use water from MHCSD, it would be necessary for Zone 7 to contract with MHCS and BBID to develop the potential recycled water supply and deliver it to the TPP.

Table B-1. Estimated Minimum Annual Water Supply of MHCSD for the East Altamont Energy Center under typical year operations through the BBID (Acre-feet/year) Water Source by Year 2000 2005 2010 2015 2020 0 4,448 5.930 Projected Recycled 1.483 2.965 Water Available from MHCSD 0 2,884 Average Recycled 500 to 800 1.810 2,495 Water Available to BBID, net of Local MHCSD Needs 0 Minimum Recycled 500 1,465 2,197 2.861 Water Projected to be Utilized by the East Altamont Energy Center

MPL has not identified the cities of Livermore and Tracy or the Discovery Bay Community Services District as feasible sources of recycled water for use at the TPP. MPL has some awareness of the supply, institutional, and cost issues associated with obtaining recycled water from these other sources, and has addressed these issues below.

Availability of supply as well as costs will prohibit the import of recycled water from the City of Livermore for use at the TPP. The City of Livermore currently operates a wastewater treatment plant providing advanced treatment (Title 22, unrestricted reuse) and has the capability to remove salts for the water slated for groundwater injection or percolation recharge. According to the City's Department of Public Services, it is the policy of the City that all recycled water supplies produced by the City be used within city limits, and current and future users within the City have been identified. This includes planned use in the North Livermore area. There is, therefore, no available supply for the TPP from the City of Livermore (personal communication, Mike Miller, Director of Public Services and Christopher Hansmeyer, Allen Matkins). If

there were supplies available, costs of building a pipeline to transport the water from Livermore to the TPP site would be prohibitive. Livermore is located approximately 8 miles from the TPP. AT \$325/linear foot (lf), the capital cost of a pipeline to transport recycled water over those 9 miles would be approximately \$15.6 million. The unit cost of \$325/lf is based on a 24-inch diameter pipeline, including pump stations and appurtenances. Further, to export recycled water from Livermore to the TPP would require pumping over the Altamont Pass, an elevation of approximately 1,000 feet. Pumping from the Livermore Valley over this pass would imply considerable costs and energy consumption, and would make the prospect even less economically feasible.

The City of Tracy does not currently produce any tertiary treated recycled water. The City produces 8.5 million gallons per day (MGD) of secondary treated effluent. The City has just completed facility planning, in anticipation of its new NPDES discharge permit, for a tertiary treatment facility that would be capable of producing water quality meeting Title 22, unrestricted reuse criteria. Hence, capital cost estimates for the upgrade are available. The plan is awaiting environmental review, so the City has not yet committed to the upgrade (personal communication between Christopher Hansmeyer, Allen Matkins, and Erich Delmas and Bob Sagaser of the City of Tracy). Even if Title 22 quality water were produced, the City currently does not have the ability to sell water in the Zone 7 service territory. In order for MPL to use water from the City of Tracy, it would be necessary for Zone 7 to contract with the City of Tracy to develop the potential recycled water supply and deliver it to the TPP. However, this source was evaluated by MPL as a potential recycled water supply, and MPL determined that due to institutional considerations, cost, and water quality factors, use of water from Tracy is infeasible at this time. The potential costs involved in using recycled water from the City of Tracy appear to be prohibitive. The estimated capital cost of upgrading the City's wastewater treatment plant to produce to tertiary treated effluent meeting Title 22 requirements is a minimum of \$11.3 million, including engineering and construction contingency, assuming the project was done as part of the overall plant upgrade and expansion. If done on its own, the cost would potentially reach \$15 million, or \$3 million/mgd. The cost for building a pipeline to convey the recycled water 8 miles from the City's wastewater treatment plant to the TPP would be approximately \$13.9 million.

Based upon these estimated costs, this potential water supply appears to be infeasible. In addition, the poor quality of Tracy's recycled water would impose considerable costs on the development of the TPP itself. The high salt content of Tracy's recycled water (900-100 mg/l of total dissolved solids) would necessitate a proportionately larger zero liquid discharge system, including the reactor/clarifier, filter, high TDS reverse osmosis system, brine concentrator, and evaporation ponds, thus increasing costs for equipment, mitigation, chemicals, energy, and sludge disposal. Lastly, the City of Tracy currently discharges the entire 8.5 MGD into the Old River just North of the City of Tracy and there may be negative environmental impacts to the Delta should the discharge be discontinued

The potential for obtaining recycled water supplies from the Discovery Bay Community Services District (Discovery Bay) also would be prohibited by the same institutional difficulties and cost barriers discussed above for the City of Tracy. Discovery Bay is located outside of Zone 7's service area, and Zone 7 has no supplier relationships with Discovery Bay. Establishing a contractual relationship to supply recycled water to the TPP would require additional institutional and business arrangements. Further, the capital cost to build a pipeline, pump station and appurtenances the 12 miles (minimum) from Discovery Bay to the TPP is estimated to cost approximately \$20.8 million. This assumes a relatively simple pipeline construction corridor and no right-of-way costs. The treatment plant would also need to be upgraded to tertiary treatment to meet Title 22 requirements for use as cooling tower makeup, for a capital cost of at least \$5 million, using standard cost curve criteria, such as \$2 million/mgd. Depending upon the level of treatment currently provided at Discovery Bay, this cost could be lower or higher. The investment in conveyance infrastructure alone would not be justified in comparison to the amount of recycled water supply it would make available. Operating costs to treat the water to Title 22 standards and to pump the water to the TPP would further increase the total costs of this water supply. Total potential recycled water supply available from Discovery Bay is currently 1,300 AF/yr, with a projected 2,500 AF/yr to be available in the future (Source: East County Water Supply Study, CH2M HILL, 1998). The TPP will require approximately 6,400 AF/yr, so the supply Discovery Bay could potentially provide would be expected to be

less than 40 percent of the ultimate supply for the TPP, and potentially much less, depending upon the recycled water needs of the Discovery Bay community.

In addition, before supplying the recycled water to Zone 7 or the TPP, the cities of Livermore and Tracy and the Discovery Bay Community Services District would have to fully evaluate the potential for supplying users closer to their treatment facilities. It is likely that it would prove more efficient and cost effective for these entities to distribute their recycled water closer to its source rather than conveying it to the TPP, the costs paid by MPL would certainly reflect those economic parameters.

Table B-2 below summarizes the above analysis of water alternatives.

TABLE OF B-2 – SUMMARY OF EVALUATION OF POTENTIAL RECYCLED WATER SUPPLIES

Potential Water Supply	Economic Impacts	Potential Supply	Institutional Barriers	Changes in plant infrastructure/efficiency	Environmental Impacts
Livermore	\$15.6 M for pipeline, plus considerable pumping costs.	None available – all supplies are already allocated within City's service area.	Zone 7 does not have contracting arrangements with City.	N/A	Considerable disturbance due to longer pipeline, limited pipeline corridors, excessive energy use.
Tracy	\$11.3 M for Title 22 upgrade, plus \$13.9 M for pipeline, plus additional costs due to effects of poor water quality.	Currently 8.5 mgd secondary effluent with potential to upgrade to tertiary (ammonia removal and filtration).	Zone 7 does not have contracting arrangements with City.	Poor water quality (900-100 mg/l of total dissolved solids) will necessitate larger zero liquid discharge system, including brine concentrator and additional chemicals.	Disturbance due to longer pipeline; poor quality water yields; potentially greater discharge impacts; Bay Delta flow disruption.
Discovery Bay	\$5 M for Title 22 upgrade, plus \$20.8	Currently 1.4 mgd of secondary effluent with	Zone 7 does not have contracting arrangements	N/A	Disturbance due to pipeline construction.

	M for pipeline and pump station.	potential to upgrade.	with the Discovery Bay Community Services District.		
Mountain House Community Service District	\$7 M for pipeline and pump station.	3.8 mgd (2,900 acre-feet/year) – all supplies are already allocated.	Zone 7 does not have contracting arrangements with Mountain House Community Services District.	N/A	Disturbance due to pipeline construction.

VI. Effects of project demand on the water supply and other users

If the TPP receives CEC approval and is constructed and operated, its water use would be an estimated 6,400 AF per year. Zone 7 would divert water from the California Aqueduct and deliver it to the TPP at the turnout. However, because of the exchange under a "Point of Delivery Agreement" between Zone 7 and KCWA, such surface water delivery would cause a like release of banked groundwater by Rosedale. The TPP will not require any additional allocations of SWP water to either Zone 7 or KCWA. The TPP will not use local groundwater at the TPP site and therefore would cause no adverse impacts to groundwater resources in the area of the TPP site. Therefore, no mitigation measures relating to groundwater resources in the vicinity of the TPP site are necessary.

The water available for storage, banking, exchange, transfer, extraction, and conjunctive use under Rosedale's banking program would be used beneficially with or without the TPP's purchase from the banking program. The water would come from the existing sources, and under the banking program, transfer and exchange of this water would occur with Rosedale's contractors. Because water supplies available to Rosedale include an average of 32,000 acre-feet per year of Kern River water and Rosedale has accumulated approximately 170,000 acre-feet of locally developed exportable banked

water, no significant cumulative impacts to either surface water or groundwater are expected. Use of water from Rosedale at the TPP site, therefore, does not represent an increase in water withdrawals from the natural environment and water would remain available in the groundwater aquifer, wetlands, riparian corridors, and to habitat communities and species as under current conditions and therefore would cause no adverse impacts to groundwater resources. Therefore, no mitigation measures related to groundwater resources within the Rosedale area are necessary.

The TPP will be supplied with water from Buena Vista's supply of Kern River flood water placed into storage in the Rosedale groundwater banking program. Rosedale has designated 40,000 AF of previously banked Kern River water for the TPP's benefit. This start-up volume will be augmented with an additional 6,400 AFY of Kern River flood water on an annual basis throughout the lifetime of the TPP. There will be no impact to the existing users of water from the Rosedale aquifer because the supply of water to be transferred will come from outside the aquifer and be placed into storage for the benefit of the TPP. This arrangement allows Rosedale's groundwater banking program and aquifer to remain in balance. Rosedale's groundwater banking program is intended to provide the means by which Rosedale can maintain a balanced water supply. As a result of Rosedale's historical banking of water, Rosedale's groundwater banking program is currently in balance. As the Rosedale Master Environmental Impact Report (Rosedale, 2000) shows, Rosedale's supplies consistently exceed use.

There will be no impact to other users of water within Buena Vista due to the source of water coming from Kern River flood waters which are not presently being captured by Buena Vista and are therefore not relied upon by users within the District. Without the benefit of capture by Buena Vista, the Kern River flood water would remain in the river channel during periods of high flows resulting in downstream flooding and property damage. The diversion of this flood water will result in an environmental benefit due to the avoidance of damage as a result flooding on the Kern River.

Rosedale is currently analyzing whether there will be any significant environmental impacts upon the local area and the waterbank as a result of the TPP

transfer. The Master EIR addresses the program level environmental impacts associated with Rosedale's groundwater banking program. Project level environmental review is being commenced. Rosedale does not anticipate any significant impacts as a result of their agreement to provide a source of cooling water for the TPP. If significant impacts are identified, Rosedale intends to prepare either a Mitigated Negative Declaration or use the Master EIR to tier from for the TPP. If required, Rosedale anticipates that the project specific environmental analysis will be completed during the next 60 to 90 days. TPP encourages the CEC to incorporate Rosedale's environmental review into its preliminary Staff Assessment. Although no mitigation measures are anticipated, any mitigation measures identified by Rosedale should be incorporated into the CEC's review of the TPP.

VII. Laws, Regulations, Ordinances, Standards, Permits (

Laws:

(a) California Environmental Quality Act

The California Energy Commission will be the lead agency for evaluation of the TPP. Rosedale will perform environmental review of the local effects of its action to approve TPP's use of its groundwater as its source as it relates to its groundwater banking and recharge program. Rosedale's environmental review will further analyze, at a project specific level, the transfer using the Master EIR prepared for its groundwater banking program.

The Department of Water Resources (DWR) will be a party to two agreements relating to the transfer (see discussion below) and has indicated it would rely on the CEC CEQA-equivalent process to support its decision. Therefore, the CEC should incorporate into its review Rosedale's environmental review. DWR has indicated

that therefore the CEC documents will have analyzed the "whole of the action" and therefore it can consider all of the potential impacts and mitigation measures prior to entering into the exchange agreements as a party.

In this way the CEC will have analyzed the potential environmental consequences of the full water transfer as well as the effects of the power plant itself.

(b) <u>California Water Code sections 1732 and 1745.11.</u>

• Section 1732: "Compliance with Sections 1745.10, 1745.10 and 1745.11"

Provides that the petitioner shall not initiate or increase the use of groundwater to replace surface water transferred pursuant to this article, except in compliance with Sections 1745.10 and 1745.11.

• Section 1745.10: "Transferred surface water; replacement with groundwater; restrictions"

Provides that a water user that transfers surface water pursuant to this article may not replace that water with groundwater unless the groundwater use is either of the following: (a) Consistent with a groundwater management plan adopted pursuant to state law for the affected area; (b) Approved by the water supplier from whose service area the water is to be transferred and that water supplier, if a groundwater management plan has not been adopted, determines that the transfer will not create, or contribute to, conditions of long-term overdraft in the affected groundwater basin.

Rosedale and Buena Vista will not create or contribute to conditions of overdraft because Rosedale's groundwater program is already in balance and therefore, TPP's use of this water source will be in compliance with this section

 Section 1745.11: "Previously recharged groundwater from overdrafted groundwater basin, transfer of or replacement of transferred surface water"

Provides the following "Nothing in this article prohibits the transfer of previously recharged groundwater from an overdrafted groundwater basin or the replacement of transferred surface water with groundwater previously recharged into an overdrafted groundwater basin, if the recharge was part of a groundwater banking operation carried out by direct recharge, by delivery of surface water in lieu of groundwater pumping, or by other means, for storage and extraction.

Schedule of Approvals or Necessary Permits: No schedule of approvals or permits is being provided because there are no approvals or permits required for TPP's use of this water source. However, the following is a brief description and schedule of the various agreements and related board approvals necessary to supply the TPP with a reliable source of cooling water:

Agreements:

(a) Long-Term Lease Agreement between MPL and

Rosedale: MPL and Rosedale are involved in ongoing negotiations towards the execution of a "Long-Term Lease Agreement" to supply the TPP with a reliable source of cooling water. Under this agreement, Rosedale will supply Zone 7 with a firm, reliable annual supply of six thousand four hundred (6,400) acre-feet of water from Rosedale's supply of local and exportable groundwater and/or surface water supplies. Rosedale will deliver exportable local groundwater and surface water to a new turnout facility to be constructed on the California Aqueduct just south of the Bethany Reservoir. No State Water Project ("SWP") entitlement water will be transferred and no additional annual diversion into the California Aqueduct shall occur. Rosedale has initiated the project specific environmental review for this agreement and will have the review completed prior to seeking approval from the Rosedale Board of Directors, currently scheduled for April 2002. At the present time, MPL and Rosedale have executed a "Letter of Intent" and are working towards the execution of a "Memorandum of Understanding" later this month, January 2002. Once these agreements are executed, MPL will make them available to the CEC staff.

(b) Rosedale/Buena Vista Water Supply Agreement:

Rosedale and Buena Vista are involved in ongoing negotiations towards the execution of a "Water Storage Agreement" the purpose of which is to create and maintain a

groundwater bank account whereby Buena Vista will provide Rosedale with approximately 11,657 AFY in a manner that will allow Rosedale to make approximately 6,400 AFY of said supply available to the TPP. The source of the first 6,400 AFY provided to Rosedale shall be from Buena Vista's supply of Kern River flood water. The Rosedale/Buena Vista agreement shall also provide for the sale and transfer of 40,000 AF of previously stored "preconsolidation water" derived from pre-1914 Kern River rights. This water will serve to provide the start-up supply in order to provide additional supply reliability to the TPP and allow Rosedale's groundwater banking program to remain in balance during the initial years of the TPP. Rosedale anticipates execution of this agreement in January of 2002. Any environmental review required in order to make this water available to the TPP will be included in the project specific environmental review prepared for the Long-Term Lease Agreement between Rosedale and MPL.

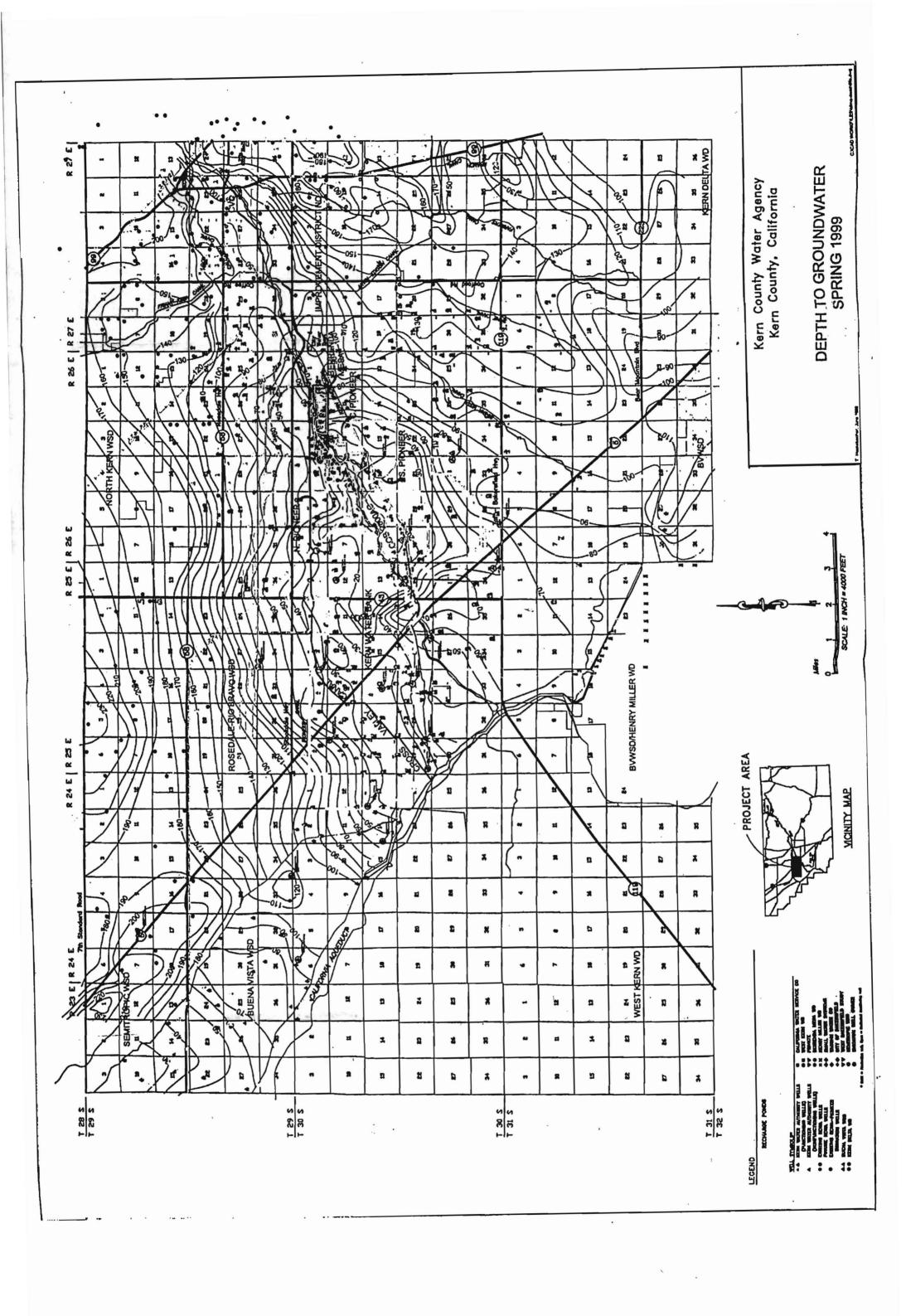
(c) Standard Form SWP Contractor Exchange "Point of Delivery Agreement" between Zone 7 and KCWA, with the consent of DWR: Delivery to the

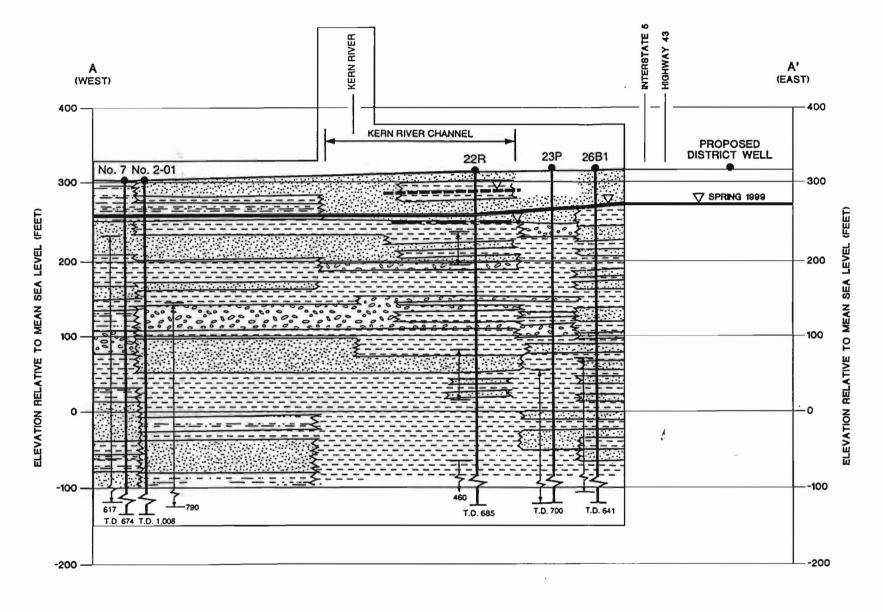
turnout shall be accomplished through an exchange of SWP delivery entitlements under a "Point of Delivery Agreement" to be executed by Zone 7 and the Kern County Water Agency ("KCWA") with the consent of DWR. MPL anticipates that this agreement will be executed within 60 to 90 days following certification of the TPP. Environmental review for this agreement will be provided for by the California Energy Commission during the AFC approval process.

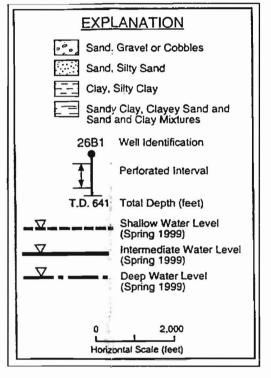
(d) <u>Turnout Construction and Maintenance Agreement</u>

between Zone 7 and DWR: MPL has provided Zone 7 with an advance payment of \$62,000 for the purpose of Zone 7 initiating discussions with DWR for the design and construction of a new turnout to be constructed off the California Aqueduct just south the Bethany Reservoir. Zone 7 and MPL will work within the design criteria specified by DWR. MPL anticipates that this agreement will be executed within 60 to 90 days following certification of the TPP. Environmental review

for this agreement will be provided for by the California Energy Commission during the AFC approval process.







BUENA VISTA WATER STORAGE DISTRICT VERIFY SCALES BOYLE ENSINEERING CORPOREMON DTG SUBSURFACE GEOLOGIC CROSS SECTION A-A' ORIGINAL DRAWING 8001 E COMMERCENTER DR. SLITE 100 - P.O. BOX 12030 - BAKERSFIELD, CA 83309 1869 326-7253 - FAX 1869 396-0359 FOR REDUCED DRAWING ADJUST SCALES ACCORDINGLY

FIGURE 3

Water Quality Table Q-2

SOURCE WATER FOR ROSEDALE-RIO BRAVO WSD RECHARGE OPERATIONS

Constituent	Maximum Contaminant Level A California Public Health Goal		Street William	Source	J 3 1450
A - 1	(MCL applies to treated water only)	(PHG applies to treated water only)	Friant Kern	Aqueduct	Kern River
CLASS CHANGE MEDICAL CONTROL OF THE	Primary Ino	rganic Chemicals	MARK HAR	FRANKS;	Solar Street
Aluminum	1 mg/L	0.06 mg/L	0.076	0.064	ND
Antimony	0.006 mg/L	0.02 mg/L	ND	ND	ND
Arsenic	0.05 mg/L		ND	ND	0.003
Asbestos	7 MFL		<0.2	<0.2	<0.2
Barium	1 mg/L		ND	ND	ND
Beryllium	0.004 mg/L		ND	ND	ND
Cadmium	0.005 mg/L	0.00007 mg/L	ND	ND	ND
Chromium	0.05 mg/L	0.0025 mg/L	ND	ND	ND
Cyanide	0.2 mg/L	0.15 mg/L	ND	ND	ND
Fluoride	2 mg/L (temp. dependent)	1 mg/L	ND	ND	0.26
Lead	Lead Rule	0.002 mg/L	ND	ND	ND
Mercury	0.002 mg/L	0.0012 mg/L	ND	ND .	ND
Nickel	0.1 mg/L	0.003 mg/L	ND	ND	ND
Nitrate (as NO ₃)	45 mg/L	45 mg/L	ND	2.77	ND
Nitrite (as Nitrogen, N)	1 mg/L	1 mg/L	ND	ND	ND
Nitrate + Nitrite (sum as Nitrogen, N)	10 mg/L	10 mg/L	ND	0.625	ND
Selenium	0.05 mg/L		ND	ND	ND
Thallium	0.002 mg/L	0.0001 mg/L	ND	ND	ND
		ary Standards		2	25
Aluminum	0.2 mg/L		0.076	0.064	ND
Color	15 Units		25	30	15
Copper	1 mg/L	0.17 mg/L	ND I	ND	ND
Foaming Agents(MBAS)	0.5 mg/L	<u> </u>	ND	0.13	0.1
Iron	0.3 mg/L		0,118	0.170	ND
Manganese	0.05 mg/L		ND	ND	ND
Methyl tert-butyl ether	0.005 mg/L		ND	ND	ND
Odor	3 Units		3	8	3
Silver	0.1 mg/L		ND	ND	ND
Thiobencarb	0.001 mg/L		1		
Turbidity	5 Units		6.43	11.10	3.7
Zinc	5 mg/L		ND ND	ND	ND
2.110	Recommended-Upper-Short Term		1		- 110
Total Dissolved Solids	500 1000 1500 mg/L		36	230	135
Specific Conductance	900 - 1600 2200 micromhos		48	307	180
Chloride	250 500 600 mg/L		2.8	31.0	5.4
Sulfate	250 500 600 mg/L		2.05	39.6	10.9
Surate		al Minerals	2.03	33.0	10.3
Bicarbonate	N/A	ai mindidia	21.96	64.66	85.4
Carbonate	N/A N/A		21.96 ND	ND	ND ND
Hydroxide Alkalinity	N/A N/A		ND ND	ND	ND
Calcium	N. 1310,0094		5.2	19.2	18.4
	N/A		33355	5/27/7/7	75 (752)
Magnesium	N/A		0.7	7.9 32.8	2.8 14.8
Sodium	N/A		4.8		
Total Hardness	N/A		16	79	56
pH	6.8 8.5	<u> </u>	7.43	7.72	8.16
		nal Analyses	, i		
Silica	N/A		4.58	5.38	2.56
Boron	N/A		0.15	0.19	0.15
Potassium	N/A	MCC - The Share Have MOD In facility	0.8	1.8	1.7

mg/L = milligrams per liter (parts per million)

pCi/L = pico Curries per liter

MFL = million fibers per liter: MCL is for fibers exceeding 10 micometers in length

ND = Monitored for but Not Detected

Water Quality Table Q-2

SOURCE WATER FOR ROSEDALE-RIO BRAVO WSD RECHARGE OPERATIONS

Constituent	Maximum Contaminant Level (MCL applies to treated water only)	California Public Health Goal (PHG applies to treated water only)	Friant Kern	SOURCE	Kern River
The state of the s	The state of the s	anic Chemicals			2.1. S. 7.36
Benzene	0.001 mg/L	0.00014 mg/L	ND	ND	ND
Carbon Tetrachloride	0.0005 mg/L	0.0001 mg/L	ND	ND	ND
1,2-Dichlorobenzene	0.6 mg/L	0.6 mg/L	ND	ND	ND
1,4-Dichlorobenzene	0.005 mg/L	0.006 mg/L	ND	ND	ND
1,1-Dichloroethane	0.005 mg/L		ND	ND	ND
1,2-Dichloroethane	0.0005 mg/L	0.0004 mg/L	ND	ND	ND
1,1-Dichloroethylene	0.006 mg/L	0.01 mg/L	ND	ND	ND
cis-1,2-Dichloroethylene	0.006 mg/L	0	ND	ND	ND
trans-1,2-Dichloroethylene	0.01 mg/L		ND	ND	ND
Dichloromethane	0.005 mg/L	0.004 mg/L	ND	ND	ND
1,2-Dichloropropane	0.005 mg/L	0.0005 mg/L	ND	ND	ND
1,3-Dichlorpropene	0.0005 mg/L	0.0002 mg/L	ND	ND	ND
Ethylbenzene	0.7 mg/L	0.3 mg/L	ND	ND	ND
Methyl tert-butyl ether	0.013 mg/L	0.013 mg/L	ND	ND	ND
Monochlorobenzene	0.07 mg/L		ND	ND	ND
Styrene	0.1 mg/L		ND	ND	ND
1,1,2,2-Tetrachloroethane	0.001 mg/L	J 3	ND	ND	ND
Tetrachloroethylene	0.005 mg/L	0.000056 mg/L	ND	ND	ND
Toluene	0.15 mg/L	0.15 mg/L	ND	ND	ND
Total Trihalomethanes	0.1 mg/L		ND	ND	ND
1,2,4-Trichlorobenzene	0.07 mg/L	0.005 mg/L	ND	ND	ND
1,1,1-Trichloroethane	0.2 mg/L	100	ND	ND	ND
1,1,2-Trichloroethane	0.005 mg/L		ND	ND	ND
Trichlorethylene	0.005 mg/L	0.0008 mg/L	ND	ND	ND
Trichlorofluoromethane	0.15 mg/L	0.7 mg/L	ND	ND	ND
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2 mg/L	4 mg/L	ND	ND	ND
Vinyl Chloride	0.0005 mg/L	0,00005 mg/L	ND	ND	ND
Xylenes (total)	1.75 mg/L	1.8 mg/L	ND	ND	ND
野学型1. 5. 2000 (新大教后和 J. 200)	Synthetic Org	ganic Chemicals	[-21] A.	0.1490513	H 180
Alachlor	0.002 mg/L	0.004 mg/L	ND	ND	ND
Atrazine	0.003 mg/L	0.00015 mg/l	ND	ND	ND
Bentazon	0.018 mg/L	0.2 mg/L	ND	ND	ND
Benzo(a)pryene	0.0002 mg/L	0.000004 mg/L	ND	ND	ND
Carbofuran	0.018 mg/L	0.0017 mg/L	ND	ND	ND
Chlordane	0,0001 mg/L	0.00003 mg/L	ND	ND	ND
2,4-Dichlorophenoxyacetic acid	0.07 mg/L	0.07 mg/L	ND	ND	ND
Dalapon	0.2 mg/L	0.79 mg/L	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.0002 mg/L	0.0000017 mg/L	ND	ND	ND
Di(2-ethyhexyl)adipate	0.4 mg/L		ND	ND	ND
Di(2-ethyhexyl)phthalate	0.004 mg/L	0.012 mg/L	ND	ND	ND
Dioseb	0.007 mg/L	0.014 mg/L	ND	ND	ND
Diquat	0.02 mg/L	0.015 mg/L	ND	ND	ND
Endothall	0.1 mg/L	0.58 mg/L	ND	ND	ND
Endrin	0.002 mg/L	0.0018 mg/L	ND	ND	ND
Ethylene Dibromide	0.00005 mg/L		ND	ND	ND
Glyphosate	0.7 mg/L	1 mg/L	ND	ND	ND
Heptachlor	0.00001 mg/L	0.000008 mg/L	ND	ND	ND
Heptachior Epoxide	0.00001 mg/L	0.000006 mg/L	ND	ND	ND
Hexachlorobenzene	0.001 mg/L		ND	ND	ND
Hexachlorocyclopentadiene	0.05 mg/L	0.05 mg/L	ND	ND	ND
Lindane	0.0002 mg/L	0.000032 mg/L	ND	ND	ND
Methoxychlor	0.04 mg/L	0.03 mg/L	ND	ND	ND
Molinate	0.2 mg/L		ND	ND	ND
Oxamyl	0.2 mg/L	0.05 mg/L	ND	ND	ND
Pentachlorophenol	0.001 mg/L	0.0004 mg/L	ND	ND	ND
Picloram	0.5 mg/L	0.5 mg/L	DN	ND	ND
Polychlorinated Biphenyls	0.0005 mg/L	-	ND	ND	ND
Simazine	0.004 mg/L	0.0004 mg/L	ND	ND	ND
Thiobencarb	0.07 mg/L	0.07 mg/L	ND	ND	ND
Toxaphene	0.003 mg/L		ND	ND	ND
2,3,7,8-TCDD (Dioxin)	0.00000003 mg/L		ND	ND	ND
2,4,5-TP (Silvex)	0.05 mg/L		ND	ND	ND
AND THE RESERVE THE PARTY OF TH			81.000	10 -1	

mg/L = milligrams per liter (parts per million)

pCi/L = pico Curries per liter

MFL = million fibers per liter: MCL is for fibers exceeding 10 micometers in length ND = Monitored for but Not Detected

Water Quality Table Q-2

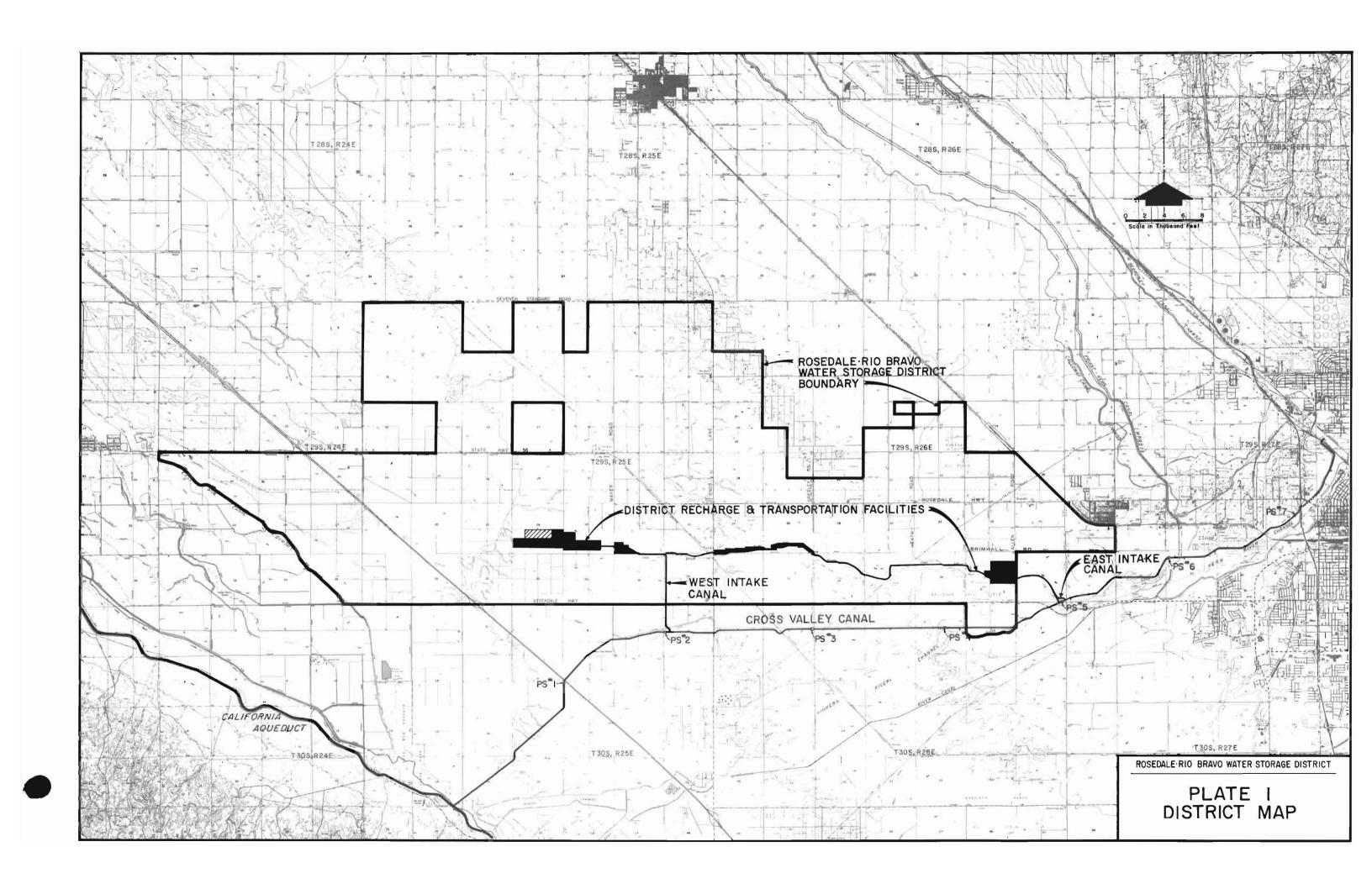
SOURCE WATER FOR ROSEDALE-RIO BRAVO WSD RECHARGE OPERATIONS

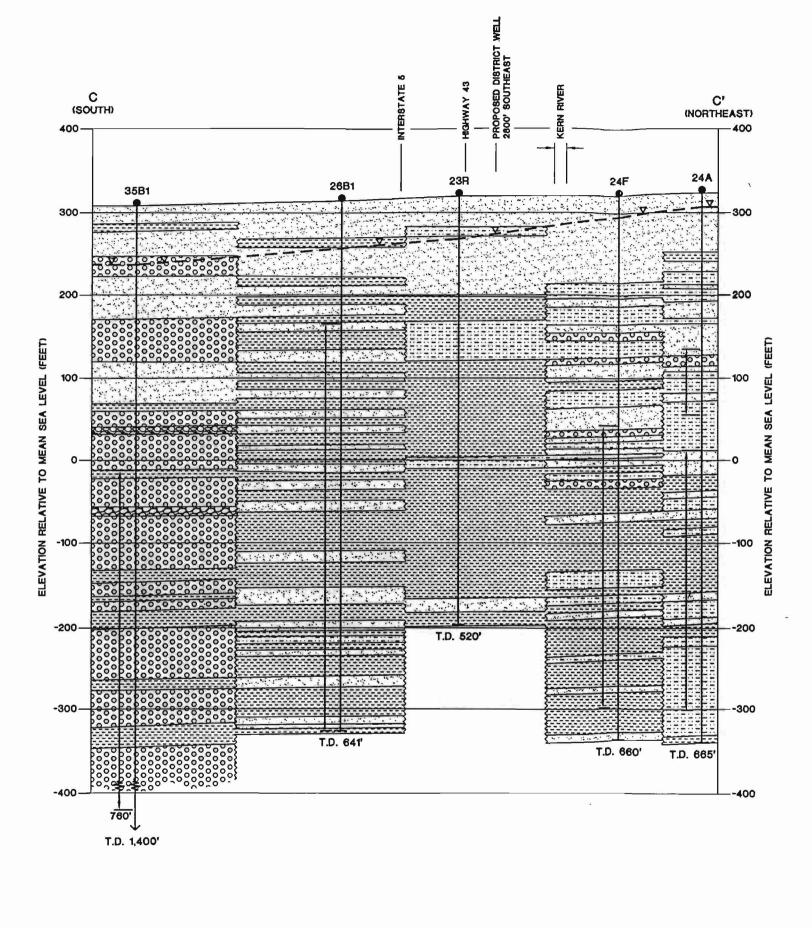
Constituent	Maximum Contaminant Level (MCL applies to treated water only)	California Public Health Goal (PHG applies to treated water only)	Friant Kern	SOURCE Aqueduct	Kern River
The state of the s	Unregulated Vola	ile Organic Chemicals	8, Lt. 350 P 273	SCOPPER :	E colora KE
Bromobenzene	N/A		ND	ND	ND
Bromodichloromethane	N/A		ND	ND	ND
Bromoform	N/A		ND	ND	ND
Bromomethane	N/A	-	ND	ND	ND
Chlorodibromomethane	N/A	<u>-</u>	ND	ND	ND
Chloroethane	N/A		ND	ND	ND
Chloroform	N/A		ND	ND	ND
Chloromethane	N/A	-	ND	ND	ND
2-Chlorotoluene	N/A		ND	ND	ND
4-Chlorotoluene	N/A		ND	ND	ND
Dibromomethane	N/A		ND	ND	ND
1,3-Dichlorobenzene	N/A		ND	ND	ND
Dichlorodifluoromethane	N/A		ND	ND:	ND
1,3-Dichloropropane	N/A		ND	ND	ND
2,2-Dichloropropane	N/A		ND	ND	ND
1,1-Dichloropropene	N/A		ND	ND	ND
· · ·		icals and Synthetic Organic Chemicals	11 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	sign of	
Bromocil	N/A		ND I	ND	ND
Bromochloromethane	N/A		ND ND	ND	ND
n-Butylbenzene	N/A		ND	ND	ND
sec-Butylbenzene	N/A		ND ND	ND	ND
tert-Butylbenzene	N/A		ND ND	ND	ND
Chlorothalonil	N/A		ND	ND	ND
Dimethoate	N/A	_	ND	ND	ND
Diuron	N/A		ND	ND	ND ND
Hexachlorobutadiene					
	N/A		ND	ND	ND
sopropylbenzene	N/A		ND	ND	ND
p-isopropyttoluene	N/A		ND	ND	ND
Napthalene	N/A		ND	ND	ND
1-Phenylpropane	N/A		ND	ND	ND
Prometryn	N/A		ND	ND	ND
1,2,3-Trichiorobenzene	N/A		ND	ND	ND
1,2,4-Trimethylbenzene	N/A		ND	ND	ND
1,3,5-Trimethylbenzene	N/A	2 <u></u>	ND	ND	ND
1,8 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0	Unregulated Synthe	etic Organic Chemicals		自己主题是 型写	24-1-45
Aldicarb	N/A	<u> </u>	ND	ND	ND
Aldicarb Sulfone	N/A		ND	ND	ND
Aldicarb Sulfoxide	N/A		ND	ND	ND
Aldrin	N/A		ND	ND	ND
Butachlor	N/A		ND	ND	ND
Carbaryl	N/A	-	ND	ND	ND
Diazinon	N/A		ND	ND	ND
Dicamba	N/A		ND	ND	ND
Dieldrin	N/A		ND	ND	ND
3-Hydroxycarbofuran	N/A	-	ND	ND	ND
Methomyl	N/A		ND ND	ND	ND
Metolachlor	N/A		ND ND	ND	ND
Metribuzin	N/A	_	ND	ND	ND
Propachlor	N/A N/A			ND	ND
			ND -		
1,3,4-Trichlorobenzene	N/A	41 - 14	ND	ND	ND
3		oactivity		die" .	
Gross Alpha	15 pCi/L		2.12	1.60	4.17
Gross Beta	50 pCi/L		3.92	2.90	1.59
Jranium	20 pCi/L	2 pCi/L	5.30	0.86	1.44
Fritium	20,000 pCi/L	200	0.00	62.30	31.20
Strontium-90	8 pCi/L		0.00	0.00	0.00
	5 pCi/L				

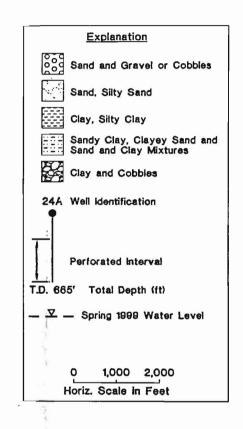
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VERIFY SCALES

ORIGINAL DRAWING
FOR REDUCED DRAWING
FOR REDUCED DRAWING
DEC. 2001 IN IN IN IN INC. DEC. 2001 IN IN IN INC. DEC. 2001 IN IN IN INC. DEC. 2001 INC. DEC. 2001 IN INC.

- FIGURE 4