CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

ADMINISTRATIVE CIVIL LIABILITY ORDER NO. R6V-2007-(PROPOSED)

ADMINISTRATIVE CIVIL LIABILITY

COUNTY SANITATION DISTRICT NO. 14 OF LOS ANGELES COUNTY
LANCASTER WATER RECLAMATION PLANT,
FOR VIOLATION OF WASTE DISCHARGE REQUIREMENTS SPECIFIED BY BOARD ORDER NO. R6V-2002-053 AND CEASE AND DESIST ORDER NO.R6V-2004-0038,
LANCASTER, LOS ANGELES COUNTY, WDID NO.6B190107017

AND

COUNTY SANITATION DISTRICT NO. 20 OF LOS ANGELES COUNTY
PALMDALE WATER RECLAMATION PLANT,
FOR VIOLATION OF WASTE DISCHARGE REQUIREMENTS SPECIFIED BY BOARD ORDER NO. 6-00-57, AS AMENDED, CLEANUP AND ABATEMENT ORDER NO. R6V-2003-056, AND CEASE AND DESIST ORDER NO. R6V-2004-0039
PALMDALE, LOS ANGELES COUNTY, WDID 6B190107069

The California Regional Water Quality Control Board, Lahontan Region (Water Board) has been presented with a proposed settlement of claims for administrative liability against County Sanitation District No. 14 of Los Angeles County (District 14), and County Sanitation District No. 20 of Los Angeles County (District 20) (hereinafter Districts or Dischargers) and litigation between the Districts and the Water Board (Riverside County Superior Court Case Nos. 434672 and 434677). The settlement was developed during negotiations between the Water Board's prosecution team and the Districts. This Order represents a component of the proposed settlement to resolve the claims listed in this Order and the litigation through the payment of an administrative civil liability in the amount of $4,000,000 ($3,800,000 of which will be suspended provided the Districts' proposed Supplemental Environmental Project (SEP) is implemented. The Districts and the Water Board prosecution team recommend that the Water Board adopt this Order to accomplish the proposed settlement.

The Districts have represented and warranted that the contributions to the projects that would serve as SEPs under this Order are not and were not previously being contemplated, in whole or in part, by the Districts, for any purpose other than to partially satisfy the Districts' obligations in this Order, and that the Districts contributions to the projects that serve as SEPs would not be made in the absence of this enforcement action.

In accepting the proposed settlement, the Water Board has considered each of the factors prescribed in California Water Code section 13327, as set out more fully below. The Water Board's consideration of these factors is based upon information obtained by the Water

Board in investigating the claims or otherwise provided to the Water Board, including the information presented at the noticed agenda item for this matter. In addition to these factors, the administrative civil liability recovers the costs incurred by the staff of the Water Board in evaluating the claims and responding to the litigation. It also repays money spent for an independent consultant to analyze the time needed for the Districts to achieve compliance with waste discharge requirements.

A notice of the settlement and assessment of civil liability will be published in the Antelope Valley Press notifying the public of the review period and soliciting public comments on the terms of the settlement. The proposed settlement supports the assessment of administrative civil liability in the amount of $4,000,000 for the claims and is in the public interest. This settlement and assessment of administrative civil liability provides for the full and final resolution of each of the claims set out herein.

Having provided public notice of the proposed settlement for public comment, the California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Dischargers

District 14 collects and treats municipal wastewater from the majority of the City of Lancaster, portions of the City of Palmdale, and nearby unincorporated areas of Los Angeles County. District 14's wastewater treatment operations produce disinfected secondary-treated wastewater, which is discharged to Paiute Ponds. Undisinfected secondary-treated wastewater is made available for agricultural irrigation. A portion of the secondary-treated wastewater also receives additional treatment at District 14's Antelope Valley Tertiary Treatment Plant (AVTTP), and is then made available for use at neighboring public properties such as Apollo Lakes Regional Park. Waste Discharge Requirements (WDRs) specified by Water Board Order No. R6V-2002-053, as amended, identify District 14 as the "Discharger" responsible for the above-referenced wastewater treatment and disposal operations.

District 20 collects and treats municipal wastewater from the City of Palmdale and nearby unincorporated areas of Los Angeles County. District 20's wastewater treatment operations produce disinfected secondary-treated wastewater, which is discharged to the Effluent Management Site (Site), where it is used for agricultural irrigation. The Site is located on property owned by the Los Angeles World Airport (LAWA). Waste Discharge Requirements specified by Water Board Order No. 6-00-57, as amended, identify District 20 as the "Discharger" responsible for wastewater treatment and disposal operations.

2. Facilities

District 14 - District 14 wastewater treatment facilities are located approximately five miles north of central Lancaster, in the Lancaster Hydrologic Area of the Antelope Hydrologic Unit. All wastewater receives primary treatment by sedimentation tanks followed by secondary treatment in oxidation ponds. The primary treatment facilities have a treatment capacity of 17 million gallons per day (MGD) and the secondary

treatment facilities have a treatment capacity of 16 MGD. The source of influent flow for the AVTTP is secondary effluent from District 14's last oxidation pond. The AVTTP has a maximum treatment capacity 0.6 million gallons during a 24-hour period. For periods greater than 24 hours the treatment capacity is limited to 0.5 MGD. The AVTTP Plant includes chemical addition for coagulation/flocculation and phosphorus removal, followed by sedimentation, filtration, and disinfection with hypochlorite. District 14 has recently been authorized to dispose of effluent from a membrane bioreactor tertiary treatment plant, which will produce disinfected tertiary-treated wastewater for agricultural reuse at the Eastern Agricultural Site No. 1 (regulated by Water Board Order No. R6V-2006-0035). District 14 is also authorized to dispose of effluent from the AVTTP at the Eastern Agricultural Site No. 1 for agricultural reuse.

Secondary wastewater effluent that is not discharged to the agricultural reuse site (Nebeker Ranch) or Apollo Lakes Regional County Park is disinfected by injection of hypochlorite and ammonia prior to discharge to the receiving waters of Amargosa Creek/Paiute Ponds. The receiving waters are effluent dominated, where wastewater effluent commingles with seasonal storm waters. District 14 is authorized to discharge treated wastewater effluent to Amargosa Creek/Paiute Ponds.

Paiute Ponds were originally created (1961) by constructing a dike across Amargosa Creek near its mouth to Rosamond Dry Lake. The original designated wastewater disposal/impoundment area of Paiute Ponds was approximately 200 acres in size. Paiute Ponds were eventually expanded by constructing additional dikes that created approximately 400 acres of wastewater disposal/impoundment area.

District 20 - District 20 wastewater treatment facilities are located approximately two miles northeast of central Palmdale. All wastewater receives primary treatment by sedimentation tanks followed by secondary treatment in oxidation ponds. The wastewater treatment facilities were originally built in 1953 with a capacity of 0.75 MGD. The facilities currently have a capacity of 15.0 MGD, average daily flow. All wastewater is disinfected using chlorination before it is discharged to the Site. The Site is located within portions of Sections 9, 10, 11, 14, 15, and 16, and covers 2,680 acres. Historically, the Site has been smaller in size, and has varied in configuration. Treated wastewater has been applied to the Site through land spreading (no agricultural crop), crop irrigation at a rate that exceeds water and nutrient agronomic rates (crop application), and crop irrigation at water agronomic rates (agricultural reuse). Crop application results in some uptake of nitrate by the crop, but application rates exceed the crop's capacity to use all of the applied nitrogen. As of 2005, District 20 ceased land-spreading operations at the Site.

3. Facts – District 14

The Water Board adopted Revised Waste Discharge Requirements, Board Order No. R6V-2002-053, on September 11, 2002. The revised WDRs regulated District 14's wastewater treatment operations and disposal to Nebeker Ranch, Apollo Lakes Regional County Park, and Paiute Ponds. The revised WDRs required District 14 to

eliminate the threatened nuisance condition created by effluent-induced overflows from Paiute Ponds to Rosamond Dry Lake by August 25, 2005. District 14 did not comply with the August 25, 2005 compliance date, as effluent-induced overflows to Rosamond Dry Lake have continued to occur. District 14 did not complete a project or projects to divert discharges that result in overflows from Paiute Ponds onto Rosamond Dry Lake by that date.

The Water Board adopted Cease and Desist Order (CDO-14) No. R6V-2004-0038 on October 13, 2004. CDO-14 established interim compliance dates intended to reduce the amount and duration of effluent-induced overflows from Paiute Ponds to Rosamond Dry Lake, thereby minimizing the threatened nuisance condition for Edwards Air Force Base until District 14 achieves final compliance. The Water Board anticipated that District 14 would comply with CDO-14 by diverting effluent to alternative legal points of discharge and by evaporation of effluent in storage impoundments. These actions were intended to divert effluent during the period of November through April, when secondary-treated wastewater flows cause effluent-induced overflows to Rosamond Dry Lake. CDO-14 required District 14 to eliminate effluent induced overflows by October 1, 2008.

Beginning in December 2002, District 14 initiated a multi-phase project that includes constructing upgraded, tertiary-treatment facilities, storage reservoirs, and associated infrastructure to supply recycled water to the Eastern Agricultural Site and municipal reuse sites, intended to reduce and eventually eliminate effluent-induced overflows. Despite District 14's efforts, it has not complied with the interim compliance dates specified in CDO-14, in part due to factors outside the District's control. District 14 has created the Eastern Agricultural Site to receive effluent for use in crop irrigation. Effluent flows to the Eastern Agricultural site began in December 2006.

4. Facts - District 20

The Water Board adopted Revised Waste Discharge Requirements (WDRs) in Water Board Order No. 6-89-31 on February 9, 1989. This Order regulated District 20's wastewater treatment and disposal operations. The Order included a prohibition against the creation of a condition of pollution. The Water Board rescinded Board Order No. 6-89-31 and adopted Revised WDRs in Board Order No. 6-93-31 on March 11, 1993. This Order regulated District 20's wastewater treatment and disposal operations. The Order included a prohibition against the creation of a condition of pollution.

The Water Board rescinded Board Order No. 6-93-18 and adopted Revised Waste Discharge Requirements (WDRs) in Water Board Order No. 6-00-57 on June 14, 2000. Water Board Order No. 6-00-57, as amended, combines WDRs with Water Recycling Requirements (WRRs), and regulates District 20's wastewater treatment and disposal operations. This order established nitrate-nitrogen (nitrate) receiving water limits for ground water. The limit was set at 10 milligrams per liter (mg/L), which is the primary maximum contaminant level (MCL) specified in provisions of

title 22, California Code of Regulations. District 20 contends, and has submitted data in support thereof, that agricultural practices have contributed to nitrogen concentrations in ground water. District 20's discharge has also caused or contributed and continues to cause or contribute to this receiving water limitation to be exceeded, resulting in a condition of pollution.

Starting in the mid-1950s, District 20 discharged treated wastewater effluent with total nitrogen concentrations above 20 mg/L to land. The total nitrogen concentration of the wastewater effluent has recently been near 40 mg/L. District 20's wastewater effluent has been discharged to various parcels in Sections 9, 10 and 11. Continuous land spreading to Section 9 has occurred since (at least) the 1980s, until it was stopped in 2005. Prior to 2002, only two percent (approximately) of the wastewater effluent was reused through crop irrigation, with the remainder disposed by land spreading.

The continuous and on-going discharge of wastewater with high total nitrogen concentrations has caused or contributed to elevated levels of nitrogen in the ground water beneath portions of the Site and immediately adjacent areas. The ground water beneath the Site is part of the Antelope Valley Ground Water Basin and is a water of the State. Nitrification processes in the unsaturated zone, and possibly in the ground water, converts the non-nitrate nitrogen species in the wastewater effluent to nitrates. As a result, in some areas beneath the Site and immediately adjacent, ground water nitrate concentrations exceed the receiving water limit of 10 mg/L (nitrate MCL). Between May 1990 and December 2006, ground water samples from at least one monitoring well at the Site has exceeded the nitrate MCL[1] (Attachment A). Since ground water sampling at the Site occurs quarterly, for the purposes of this Order, each sampling event is considered to reflect conditions for the entirety of the preceding quarter. The period identified above (excluding the 14 quarters listed in footnote 1) total 55 quarters or 13.75 years (4,950 days, based on 90 days per quarter) in which the nitrate MCL was exceeded.

Based on recent monitoring well data and samples collected from borings across the Site and adjacent areas, District 20 estimates that the upper 50 feet of ground water (approximately) in an area of two and one-half square miles (also approximately) exceeds the nitrate MCL.

The Water Board issued Cleanup and Abatement Order No. R6V-2003-056 (CAO) on November 12, 2003 in response to ground water monitoring data which demonstrated that ground water nitrate concentrations below portions of the Site

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[1] With the exception of samples collected in July 1991, May 1992, September 1993, September 1996, September 1998, September 1999, and March 2000 through December 2001. The District believes that data obtained from SW-10 is of questionable validity, as the well appears to be damaged; however, for the purposes of the Order, SW-10 is included as a data source in Attachment A, because removing this data obtained from SW-10 from consideration does not change the outcome of this Order.

exceed the MCL, a condition that violates Board Order No. 6-00-57, as amended. The CAO requires District 20 to actively and fully delineate, contain, and remediate the nitrate contamination and pollution in ground water.

The Water Board subsequently adopted Cease and Desist Order No.R6V-2004-0039 (CDO-20) on October 13, 2004, to establish both an interim and a long-term schedule for District 20 to reduce and eventually eliminate discharges that cause or contribute to the condition of pollution. CDO-20 also contains a time schedule by which District 20 must implement a project or projects that will ensure continued compliance with WDRs.

In response to a cleanup proposal by District 20, the Water Board adopted Resolution No. R6V-2005-0010 on April 13, 2005. The Resolution requires District 20 to initiate a remediation project reducing nitrate concentrations in the affected ground water to less than 10 mg/L in the shortest possible time. Additionally, District 20 must evaluate options for remediation designed to return the ground water to background nitrate concentrations (approximately 2 mg/L), or to levels consistent with State cleanup policies (State Water Resources Control Board Resolution No. 92-49). The Water Board resolution stated that the alternatives evaluated by District 20 should not exacerbate existing ground water overdraft conditions.

Beginning in 2004, District 20 initiated a multi-phase project that includes constructing upgraded, tertiary-treatment facilities, storage reservoirs, and associated infrastructure for waste recycling intended to reduce and eliminate discharges of nitrogen that cause or contribute to ground water pollution, as required by the WDRs. District 20 has initiated ground water cleanup efforts, and since 2002, District 20 has reconfigured agricultural operations at the Site to minimize, to the extent possible, nitrogen discharges until the treatment and storage facilities are complete and available. Despite District 20's efforts, it continues to discharge wastewater that contributes to the nitrate ground water pollution, and it has not been able to comply with the tasks and time schedules in CDO-20, in part, due to conditions beyond its control.

5. Violations – Cease and Desist Order - District 14

District 14 has violated the time schedule specified by CDO-14. These violations are summarized in Table No. 1 below.

Table No. 1 – Violations of CDO No. R6V-2004-0038

Reference to Regulatory Requirement	**Non-compliance Finding**
Interim Standard IA: "The Discharger must, between December 1, 2004 and March 31, 2005 divert 24 MG of effluent…at an alternative legal point of discharge."	District 14 diverted 7 MG over this time period. Violation: 17 MG
Interim Standard IB: "Beginning November 1, 2005 and annually thereafter until final compliance is achieved, the Discharger must, between November 1 and March 31 of the following year divert 150 MG of effluent…[to] an alternative legal point of disposal."	Between November 1, 2005 and March 31, 2006 no diversion occurred. Violation: 150 MG Beginning on February 23, 2007, District 14 began diverting at a rate that would result in a diversion of 33 MG by March 31, 2007. Violation: 117 MG
Interim Standard IC: "Beginning December 1, 2005 and annually thereafter until final compliance is achieved, the Discharger must, between December 1 and April 1 of the following year divert 48 MG that would otherwise be discharged to Paiute Ponds and dispose of this volume …at an alternative legal point of disposal."	Between December 1, 2005 and April 1, 2006, diverted 22.3 MG of effluent. Violation: 25.7 MG Since December 1, 2006 District 14 has been diverting at a rate that would result in compliance with this requirement.
Interim Standard ID: "Beginning April 1, 2006 and annually thereafter until final compliance is achieved, the Discharger must, between April 1 and October 31 increase the storage in its treatment and storage ponds and in Paiute Ponds by a total of 210 MG by discharging this wastewater at a legal point of disposal other than Paiute Ponds."	Between April 1 and October 31, 2006 no diversions occurred and District 14 did not increase storage. Violation: 210 MG
Total Gallons Discharged in Violation	519.7 MG

6. Violations – Waste Discharge Requirements - District 14

District 14 also violated the following Discharge Specification and Provision specified by Water Board Order No. R6V-2002-0053. The Provision and specific violation are described below:

II.B.4. *"By **August 25, 2005**, the Discharger shall complete a project to eliminate the threatened nuisance condition created by overflows from Paiute Ponds to Rosamond Dry Lake, as described in Finding No. 7, and achieve compliance with General Requirement and Prohibition No. I.E .6."*

Effluent-induced overflows from Paiute Ponds to Rosamond Dry Lake have occurred after August 25, 2005, due, in part, because District 14 has not yet completed a project or projects to eliminate discharges causing these overflows. These effluent-induced overflows have continued to create a threatened nuisance condition.

The Water Board adopted CDO-14 in response to District 14's threatened violations of its WDRs, as discussed above. District 14 violated the compliance dates in CDO-14, and it is District 14's violation of CDO-14 that, in part, is the basis for the liability assessed by this Order. While District 14 did not complete the facilities needed to eliminate effluent-induced overflows from Paiute Ponds to Rosamond Dry Lake by August 25, 2005, there is no evidence that these overflows created an actual condition of nuisance. Therefore, while discussed in this Order, the WDR-related violations are not the basis for determining the appropriate amount of liability to assess nor are they included in the calculation of the maximum potential liability.

7. Violations – Waste Discharge Requirements - District 20

District 20 violations that are, in part, the basis of the liability assessed by this Order are violations of the following Discharge Specifications and Provisions specified by Board Order No. 6-00-57, as amended and duplicative General Requirements and Prohibitions of Board Order Nos. 6-89-31 and 6-93-18 as noted:

a. I.C.3"*Ground waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in … provisions of Title 22 of the California Code of Regulations.*"

The Water Quality Control Plan for the Lahontan Region (Basin Plan) has designated the following beneficial uses for the ground waters of the Antelope Valley Ground Water Basin:

- Municipal and Domestic Supply (MUN)
- Agricultural Supply (AGR)
- Freshwater Replenishment (FRSH)

- Industrial Supply (IND)

The ground water below the Site and adjacent areas is part of the Antelope Valley Ground Water Basin. District 20's wastewater discharges have caused or contributed to nitrate concentrations in the ground water exceeding the nitrate MCL, as discussed in Finding No. 4, adversely affecting ground water for the MUN beneficial use. This condition has existed for at least 4,950 days, as detailed in Finding No. 4.

b. I.C.5 *"Waters shall not contain concentrations of chemical constituents that adversely affect the water for beneficial uses."*

District 20's wastewater discharges have caused or contributed to nitrate concentrations in the ground water below and adjacent to the Site that exceed the nitrate MCL, as discussed in Finding No. 4. The discharge has adversely affected the MUN beneficial use by exceeding the nitrate MCL, as shown in Attachment A. This condition has existed for at least 4,950 days (the same period as the violation of I.C.3, above), as detailed in Finding No. 4.

c. I.D.2 *"The discharge to waters of the State shall not contain substances in concentrations that are toxic to, or produce detrimental physiological responses in humans, plants, animals, or aquatic life."* (Also I.C.2. of Board Order No. 6-93-18)

District 20's wastewater discharges at the Site have caused or contributed to nitrate concentrations in the ground water that exceed the nitrate MCL, as discussed in Finding No. 4. The nitrate MCL was established to prevent the onset of methemoglobinemia, also known as "blue baby syndrome." This condition has existed for at least 4,950 days (the same period as the violation of I.C.3 and I.C.5, above), as detailed in Finding No. 4.

d. I.D.6 *"The discharge shall not cause a pollution as defined in Section 13050(l) of the California Water Code, or a threatened pollution."* (Also I.C.8. of Board Order No. 6-93-18 and I.C.5. of Board Order No. 6-89-31)

Pollution is defined by Water Code section 13050(l)(1) as,

> *"an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:*
>
> *(A) The waters for beneficial uses.*
> *(B) Facilities which serve these beneficial uses."*

District 20's wastewater discharges at rates above agronomic needs have caused or contributed to ground water nitrate concentrations that exceed the MCL, altering ground water quality to a degree that unreasonably affected the waters for the MUN beneficial use, creating a condition of pollution. This

condition has existed for at least 4,950 days (the same period as the violation of I.C.3, I.C.5, and I.D.2, above), as detailed in Finding No. 4.

8. Violations – Basin Plan Prohibition – District 20

District 20 violated the following prohibition specified in the Basin Plan, adopted pursuant to Water Code section 13243.

> *"Where any numeric or narrative water quality objective contained in this Plan is already being violated, the discharge of waste which causes further degradation or pollution is prohibited."*

District 20 monitoring data indicates that ground water nitrate concentration began to exceed the nitrate MCL below or adjacent to the Site as early as May 1990. District 20 continued to discharge wastewater to the Site, causing or contributing to further nitrate degradation and pollution of ground water quality. This constitutes a violation of the above-referenced Basin Plan prohibition. This condition has existed for at least 4,950 days, as detailed in Finding No. 4.

9. Violations – Cease and Desist Order – District 20

District 20 has also violated the compliance schedule specified by CDO-20. CDO-20 required (a) reducing wastewater effluent concentrations of total nitrogen; (b) reducing nitrogen loading at the Site; (c) eliminating nitrogen loading at the Site that causes a condition of pollution; and (d) implementation of a project or projects that ensure compliance with WDRs. Items (c) and (d) have compliance dates in the future. Violations of item (a) and (b) are summarized in Table No. 2, below:

Table No. 2 – Violations of CDO No. R6V-2004-0039

Reference to Regulatory Requirement	**Non-compliance finding**
Corrective Measure I.A.: "Beginning November 1, 2004 and thereafter until final compliance with the WDRs is achieved, the discharge of total nitrogen in the effluent to the disposal site above annual average total nitrogen of 28 mg/L is prohibited."	The average annual concentration of total nitrogen in the effluent for 2004 and 2005 was reported at 35.8 mg/L and 39.2 mg/L, respectively. The first 9 months total nitrogen concentration average for 2006 was calculated at 33.6 mg/L. District 20 implemented interim measures to reduce nitrogen at the treatment plant, but increasing nitrogen influent concentrations, over which District 20 had no control, overwhelmed the nitrogen reduction obtained from the interim measures.

Interim Standard IB: "The Discharger must take actions to limit the amount of nitrogen that it discharges to less than or equal to 188 tons during calendar year 2004."	District 20 discharged 215 tons of nitrogen by land spreading effluent in 2004.

The purpose of the actions specified in Table 2 was to reduce the effects of on-going discharges on the existing ground water pollution and to bring District 20 into compliance with its WDRs. This Order lists violations of the WDRs (the pollution of ground water resulting from the discharge of waste) that occurred during the same periods identified in Table 2 above. The violations of CDO-20 interim measures listed in Table 2 resulted in additional contributions of nitrogen to ground water exacerbating the pollution already cited as a violation in Finding No. 7 above. Therefore, while discussed in this Order, these CDO-20 violations are not the basis for determining the appropriate amount of liability to assess nor are they included in the calculation of the maximum potential liability.

10. Violations of Cleanup and Abatement Order – District 20

District 20 violations that are, in part, the basis of the liability assessed by this Order are violations of the following Provisions specified by CAO Board Order No. R6V-2003-056. The Provisions and specific violations are described below:

1.1.2. *"The Discharger must complete plume delineation by August 15, 2004."*

District 20 did not completely identify the full extent of the ground water pollution as required in the CAO. The major reason that District 20 was unable to completely delineate the plume is that it could not access adjacent land not under its control to complete this investigation. However, District 20 submitted a report on August 12, 2004 that Water Board staff found acceptable for the purposes of identifying the extent of the plume.

1.2.3. *"The Discharger must achieve plume containment by September 30, 2005."*

District 20 is sampling on a quarterly basis approximately 38 monitoring and supply wells to demonstrate it has achieved plume containment, and based on this data, District 20 believes that the plume is relatively stable. District 20 has proposed to install additional monitoring wells. District 20 has not yet installed these wells; thus District 20 has not yet demonstrated plume containment, and did not do so by September 30, 2005 as required in the CAO. This represents 438 days of violation.

1.3.2 *"The Discharger must by September 15, 2005, implement the plan proposed by the Discharger for extraction and application of ground water for irrigated agriculture, or an equally acceptable method for total nitrogen reduction in the ground water."*

The Discharger did not implement the proposed remedial measure nor did it implement an equally acceptable remedial method by September 15, 2005 due to delays in obtaining approval of the proposed project and gaining access to the drilling locations. The Discharge did begin operation of the extraction system on August 4, 2006. This represents 322 days of violation.

11. Administrative Civil Liability Authority

The Water Board may impose civil liability for the violations identified in Finding Nos. 5 – 10, pursuant to Water Code section 13350, subdivision (a)(1), and section 13350, subdivision (a)(2).

Water Code section 13350, subdivision (a) states:

> *"(a) Any person who (1) violates any cease and desist order or cleanup and abatement order hereafter issued, reissued, or amended by a regional board or the state board, or (2) in violation of any waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board or the state board, discharges waste, or causes or permits waste to be deposited where it is discharged, into the waters of the state…shall be liable civilly, and remedies may be proposed, in accordance with subdivision (d) or (e)."*

Water Code section 13050, subdivision (d) states:

> *"Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers or whatever nature prior to, and for purposes of, disposal."*

Treated wastewater constitutes a waste as defined by Water Code section 13050, subdivision (d).

District 14 discharged waste to waters of the state in violation of Cease and Desist Order No. R6V-2004-0038, as described in Finding No. 5 above. The Water Board is, therefore, authorized to impose civil liability pursuant to Water Code section 13350, subdivision (a)(1).

District 20 discharged waste to waters of the state in violation of waste discharge requirements, Basin Plan prohibitions, and Cease and Desist Order No. R6V-2004-0039, as described in Finding Nos. 7 – 9 above. In addition, District 20 violated Cleanup and Abatement Order No. R6V-2003-056, as described in Finding No. 10 above. The Water Board is, therefore, authorized to impose civil liability pursuant to Water Code section 13350, subdivision (a)(1), and section 13350, subdivision (a)(2).

12. Civil Liability – California Water Code

For District 14's discharge of waste to waters of the state in violation of CDO-14, the Water Board may impose civil liability pursuant to Water Code section 13350, subdivision (e)(1).

Water Code section 13350, subdivision (e)(1) states:

> *"The state board or a regional board may impose civil liability administratively pursuant to Article 2.5 (commencing with Section 13323) of Chapter 5 either on a daily basis or on a per gallon basis, but not both.*
>
> *(1) The civil liability on a daily basis may not exceed five thousand dollars ($5,000) for each day the violation occurs.*
>
> *(2) The civil liability on a per gallon basis may not exceed ten dollars ($10) for each gallon of waste discharged."*

For District 14, the maximum civil liability under Water Code section 13350, subdivision (e)(2) is $5.197 billion. This is based upon the discharge of 519.7 million gallons of wastewater in violation of CDO-14 as cited in Finding No. 5.

For District 20's discharge of waste to waters of the state in violation of waste discharge requirements and Basin Plan prohibitions, the Water Board may also impose civil liability pursuant to Water Code section 13350, subdivision (e)(1).

For District 20, the maximum civil liability under Water Code section 13350, subdivision (e)(1) is $26.94 million. This is based upon 4,950 days in which at least one provision in the waste discharge requirements or Basin Plan prohibition was violated and 438 days (September 15, 2005 through March 14, 2007) in which at least one provision in the CAO was violated.

The combined maximum potential civil liability for the Districts is $5,223,940,000.

13. Factors Affecting the Amount of Civil Liability

Water Code section 13327 requires the Water Board to consider enumerated factors when it determines the amount of civil liability pursuant to Water Code section 13350. The Water Board considered those factors in determining the amount of administrative civil liability:

a. Nature, circumstances, extent, and gravity of the violation

District 14 –District 14 did not divert the required wastewater effluent volumes as specified by CDO-14. These violations resulted in the discharge to Paiute Ponds the volume of effluent that should have been diverted. This volume of effluent may have contributed to effluent-induced overflows from

Paiute Ponds to Rosamond Dry Lake thereby contributing to conditions that threaten to create a nuisance condition. However, there is no evidence that nuisance conditions were actually created.

This factor justifies a lower liability.

District 20 – District 20's nitrogen-rich wastewater discharges have caused or contributed to violations of the nitrate receiving water limitation specified by Board Order No. 6-89-31, Board Order No. 6-93-18, and Board Order No. 6-00-57, as amended (MCL for nitrate, 10 mg/L). The violations began as early as the second quarter of 1990 and are within approximately two and one-half square miles of ground water beneath and adjacent to the Site. The data indicate, and District 20 estimates, that at least the upper 50 feet of this two and one-half square mile region contains nitrate concentrations of 10 mg/L or greater.

Although it was reported in 1999 by District 20, after completing a ground water study, that other sources of nitrogen contributed to the earlier localized ground water exceedances of the nitrate MCL, disposal of wastewater by land spreading continued after District 20 knew that nitrates in ground water were exceeding the receiving water limit. Until 2002, approximately 98 percent[2] of District 20's effluent was disposed by land spreading, with the remainder being reused through agricultural irrigation. A shift to agricultural reuse began in 2002, after District 20 renegotiated its contract with LAWA and obtained control of the effluent management activities. Simultaneously, District 20 initiated a multi-phase project described in Finding No. 4. However, the above-referenced condition of ground water pollution could have been avoided or at least significantly mitigated with earlier planning, financing, construction, and operation of treatment, storage and disposal facilities.

This factor justifies a significant liability.

b. Whether the discharge is susceptible to cleanup or abatement

District 14 –District 14's wastewater discharge was not subject to abatement once discharged. District 14 has begun to implement several projects intended to reduce and eventually eliminate flows to Paiute Ponds that cause effluent-induced overflows to Rosamond Dry Lake thereby reducing the potential to create nuisance conditions.

This is a neutral factor in determining the appropriate amount of liability.

District 20 – The polluted ground water is susceptible to cleanup. Nitrate is an advective contaminant and can be readily removed from ground water as part of a ground water treatment/cleanup program. District 20 has begun a

[2] p16. Quarterly Status Report – 3rd Quarter 2005. Palmdale Water Reclamation Plant, LACSD, October 2005.

ground water cleanup program. Additionally, District 20 has implemented and/or begun to implement a multi-phased project that has reduced and will eventually eliminate the discharge of nitrogen to ground water in violation of WDRs.

This factor justifies a lower liability.

c. Degree of toxicity of the discharge

District 14 – This factor is not relevant to determining the appropriate amount of liability.

District 20 – Nitrate is a potential human health toxicant especially to infants, which can cause the condition known as methemoglobinemia, also known as "blue baby syndrome." Infants younger than four months are more susceptible to nitrate toxicity than older children or adults.

This factor justifies a significant liability.

d. Ability to pay

This factor was not evaluated since this is a settlement.

e. Effect on ability to continue in business

This factor was not evaluated since this is a settlement.

f. Voluntary cleanup efforts undertaken

District 14 – While District 14 had already begun planning facility upgrades necessary to eliminate the threatened nuisance conditions caused by effluent-induced overflows from Paiute Ponds to Rosamond Dry Lake, the continued threatened nuisance condition could have been avoided or at least significantly mitigated with earlier planning, financing, construction, and operation of treatment, storage and disposal facilities.

This factor justifies a significant liability.

District 20 – While District 20 began planning for facility upgrades and changes to agricultural practices necessary to eliminate the discharges causing the pollution of ground water, the above referenced condition of ground water pollution could have been avoided or at least significantly mitigated with earlier planning, financing, construction, and operation of treatment, storage and disposal facilities.

This factor justifies a significant liability.

g. History of violations

District 14 – District 14 has violated its WDRs over the years it has been discharging. For example, District 14 recently submitted an incomplete monitoring well installation report, violated its flow limit at the Antelope Valley Tertiary Treatment Plant, and violated residual chlorine limit in its secondary plant. While there have been violations, other than those identified in this Order, the violations were minor.

This is a neutral factor in determining the appropriate amount of liability.

District 20 – District 20 has periodically violated its WDRs over the years it has been discharging. While there have been violations, none were significant.

This is a neutral factor in determining the appropriate amount of liability.

h. Degree of culpability

Districts 14 and 20 – The WDRs specified by Board Order Nos. R6V-2002-0053 and 6-00-57, as amended, identify District 14 and District 20, respectively, as the Dischargers responsible for wastewater treatment and disposal operations. Both Districts are responsible for the impacts associated with their wastewater treatment and disposal operations, and for complying with Water Board regulations and orders. Both Districts had the ability to maintain compliance with Water Board regulations and orders. It is through the Districts' delayed action that the current condition of ground water pollution (District 20), and condition of threatened nuisance (District 14) exist. Both Districts are responsible for achieving compliance with WDRs, and in the case of District 20, complying with the CAO.

This factor justifies a significant liability.

i. Economic benefit or savings

District 14 – The Water Board has not calculated District 14's economic benefit. The violation of CDO-14 has not caused an actual condition of nuisance.

District 20 – District 20 has realized significant economic benefit since at least June 2003. The economic benefit is attributable to avoided or delayed costs for construction of facilities to eliminate winter effluent land spreading and irrigation of crops at rates that exceed the agronomic rate. Board Order No. 6-00-57 (WDRs), Section II.B.4 states, in part, that District 20 was required to implement an Effluent Disposal Plan that would shift from land spreading to other means that would be protective of ground water quality by June 14, 2003.

Water Board staff requested the State Water Board's Compliance and Enforcement Unit to evaluate cost savings using the USEPA BEN model[3]. The evaluation is based upon the following assumption and conditions:

- Two lined storage reservoirs designed to contain winter effluent, along with the associated facilities (pump stations, pipelines) would be the minimum physical components necessary to prevent wastewater discharges from continuing to cause ground water contamination. The costs for design, permitting, and construction would have been incurred in June 2003, when the WDRs required implementation of the Effluent Disposal Plan.
- District 20 would have purchased the land to construct the two storage reservoirs.
- Construction cost estimates (September 2005 dollars) were taken from the Palmdale Water Reclamation Plant 2025 Facilities Plan & Environmental Impact Final Report,[4] and recently updated by District 20. That amount was then depreciated to reflect 2003 expenses.
- Time value of money was estimated at a 4.7 percent discount rate for the period spanning June 14, 2003 through November 1, 2010, the date at which District 20 was required to be in compliance.
- County Sanitation District Nos. 14 and 20 of Los Angeles County are government entities (special districts organized under the County Sanitation District Act) and are exempt from Federal and State taxes.
- Operating & Maintenance (O&M) Costs for these facilities would be $300,000 per year (September 2005 dollars).
- Life-cycle costs for replacing equipment such as pumps were not considered.
- The Site has sufficient capacity to accept effluent during the summer at agronomic rates. The Site (including Sections 14, 15 and 16) was fully operational, so costs to prepare this land for agricultural operations were excluded.
- The cost of compliance was delayed not avoided.
- Penalty payments are made in five annual payments beginning December 31, 2007 (see Finding 13.b, below).

Based on these assumptions, Water Board staff conservatively estimate that District 20, derived an economic benefit in the amount of slightly more than **$8.7 million** by delaying its implementation of a treatment and/or storage

[3] The USEPA BEN model is the process identified in the State Water Resources Control Board's Enforcement Policy that should be used to calculate the economic savings from the delayed or avoided costs of compliance.

[4] Draft Palmdale Water Reclamation Plant 2025 Facilities Plan & Environmental Impact Report, LACSD, April 2005.

system to prevent continued nitrate pollution of ground water and comply with the requirements established in Board Order No. 6-00-57.

While the Water Board can impose a liability that recovers the economic benefit enjoyed by the discharger as a result of non-compliance, in this situation, the calculated economic benefit is significant. Additionally, public entities do not enjoy the same economic benefit of delaying compliance as those enjoyed by private companies. The proposed liability assessment is significantly greater than any liability heretofore imposed by a regional water board against a public agency. It is not reasonable, under these circumstances, to impose a liability assessment that recovers the entire economic benefit in this case.

This factor justifies a liability that is significant but less than that that which would recover the entire economic benefit.

j. Other matters as justice may require

Lahontan Water Board staff estimates that staff resources worth at least $50,000 were expended in preparation of this complaint and tracking violations and Districts' actions associated with the violations in the last year. This effort has directed staff away from other water quality matters.

This factor justifies a significant liability.

14. Supplemental Environmental Project

The Districts, as a part of the Settlement Agreement, have proposed that a portion of the liability ($3,800,000) be suspended provided such sums are expended on construction of components of the Antelope Valley Recycled Water Project (Project) (Attachment B). This Project involves the construction of a regional recycled water distribution system linking water reclamation facilities with municipal and other reuse sites throughout the Antelope Valley. The Project will serve the Cities of Palmdale and Lancaster and unincorporated areas of northern Los Angeles County, and may, in the future, be extended to serve Rosamond and southern Kern County. This project will benefit the environment and the communities it serves by enhancing reuse of recycled water, facilitating ground water recharge projects, and relieving demand on ground water and other potable water supplies.

The Project will consist of a water conveyance system that will transport recycled water from the Palmdale, Lancaster and, eventually Rosamond, water reclamation plants to reuse sites. A backbone pipeline system will connect the three treatment plants and a network of smaller pipelines will convey the water to the reuse sites. Once completed, the overall Project will consist of more than 200,000 linear feet of piping, three storage reservoirs, two main pump stations and two booster pump stations. The total capital cost of the Project is estimated at approximately $119,000,000. As a component of this settlement, the Districts will fund $3,800,000 of the infrastructure (pipelines, pump stations) for either Phase IB or Phase 2.

The Districts' proposal includes the provision that it will fund components of the project only upon those components being completed and used for the delivery of recycled water. The trust account or other impoundment account must include the above success criteria as a condition of payment of funds from the account.

15. SEP Criteria

The SEP meets the criteria established by the State Water Board in its *Water Quality Enforcement Policy*, dated February 19, 2002 in that it (1) will enhance the beneficial uses of ground water and imported surface water by substituting reclaimed wastewater for appropriate uses, (2) will provide a benefit to the public at large by providing reclaimed wastewater for public and private uses in the Antelope Valley, (3) it will not directly benefit the Water Board functions or staff, and (4) it is not otherwise required of the Dischargers. The SEP also has a nexus with the violations (pollution of ground water), in that it funds construction of infrastructure to deliver reclaimed water to uses that, without this infrastructure, would typically be served by ground water or imported surface water.

16. Districts' Waiver of Right to Petition

The Districts agree that if the Water Board approves this Administrative Civil Liability Order as specified herein, as part of the settlement, including attachments, the Districts will not petition the State Water Board or otherwise challenge this Order. The Districts understand that failure to comply with the July 1, 1013 SEP implementation schedule specified below, or the schedule as modified by the Executive Officer or the Water Board, will result in the Districts having to pay the suspended portion ($3,800,000) of liability imposed by this Order, including interest earned thereon, to the State Water Board Waste Discharge Permit Fund, within 30 days of the relevant compliance date.

17. Other Parties' Right to Petition

Any aggrieved person may petition the State Water Board to review the action in accordance with Water Code section 13320 and the State Water Board's regulations. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions are available at http://www.swrcb.ca.gov/water_laws/cawtrcde/wqpetition_instr.html and will also be provided by the Lahontan Water Board upon request.

18. California Environmental Quality Act

This enforcement action is being taken by the Water Board to enforce provisions of the Water Code and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 210000 et seq.) in accordance with California Code of Regulations, Title 14, section 15321.

IT IS HEREBY ORDERED THAT:

1. The Water Board imposes administrative civil liability against the Districts in the amount of **$4,000,000**.

2. The Districts must provide payment in the amount of **$200,000,** of which **$152,000** will be to the State Water Board's Waste Discharge Permit Fund (WDPF) and **$48,000** of which will be to the California Department of Justice for non-personnel costs associated with representing the State Water Resources Control Board and the California Regional Water Quality Control Boards. These payments must be made **within 30 days** of receiving written notice from the Water Board that the State Water Board has not received any challenges to this Order, as well as the WDRs for the Lancaster WRP and Revised CDOs adopted prior to, or concurrently with, this Order, within the time provided in CWC section 13320 and that no judicial challenge has been made within the time provided in CWC section 13330.

3. The remaining **$3,800,000** will be permanently suspended upon the Districts' compliance with the SEP implementation schedule as specified in this Order below.

   a. The Districts will make five annual payments of **$760,000** to a trust account or other impoundment account. The trust account or other impoundment account must include the success criteria described in Finding No. 14 as a condition of payment of funds from the account. The details regarding establishing the account, maintaining the account and releasing funds from the account must be agreeable to the Water Board Executive Officer. The annual payments are due and payable according to the following schedule:

      i. December 31, 2007
      ii. December 31, 2008
      iii. December 31, 2009
      iv. December 31, 2010
      v. December 31, 2011

      The Districts must submit to the Water Board's South Lake Tahoe office, written documentation that the above-referenced payments have been made. The written documentation must be received at the Water Board office by **January 15th of the year following each year referenced above**.

   b. The Water Board' Executive Officer and Districts' Chief Engineer and General Manager will meet and confer between **July 2009 and September 2009** to discuss whether the Antelope Valley Recycled Water Project infrastructure is proceeding forward towards construction and completion of infrastructure improvements within the July 1, 2013 timeframe. If, at that time, the Water Board Executive Officer and the Districts' Chief Engineer and General Manager agree that the Antelope Valley Recycled Water Project is not expected to proceed, the Water Board's Executive Officer and the Districts' Chief Engineer and General

Manager will subsequently meet and confer to agree upon an alternative supplemental environmental project(s) for recommendation to the Water Board and Districts' Boards for approval. Funds deposited into the trust account or other impoundment account per the schedule above will be devoted to the newly identified project(s). Only in the event no alternative supplemental environmental project(s) can be identified and agreed upon by the Water Board's Executive Officer and the Districts' Chief Engineer and General Manager, and approved by the Water Board and the Districts' Boards, the funds in the trust account or other impoundment account will be deposited into the WDPF or the authorized fund that CWC section 13350 directs payments to at that time, by January 15, 2012.

c. All SEP funds shall be distributed by **July 1, 2013**. Any funds remaining in the trust account or other impoundment account as of **July 1, 2013**, will be paid to the WDPF (or other fund that CWC section 13350 directs payment to at that time) by **August 1, 2013**. The July 1, 2013 date may be extended up to one year by the Water Board Executive Officer upon request of the Districts consistent with provision 8 of the Settlement Agreement. The Water Board may agree to additional extensions.

d. Any interest paid into the trust account or other impoundment account will be allocated to the SEP, or otherwise allocated to the WDPF as specified in paragraph nos. 3b or 3c, above.

4. This Order settles all claims and/or liability for any and all existing violations of the following Water Board Orders:

a. District No. 14 – Waste Discharge Requirements, Water Board Order No. R6V-2002-053.
b. District No. 14 – Cease and Desist Order No. R6V-2004-0038.
c. District No. 20 – Waste Discharge Requirements, Water Board Order Nos. 6-89-31, 6-93-18, 6-00-57, 6-00-57A01, 6-00-57A02, and 6-00-57A03.
d. District No. 20 – Cease and Desist Order No. R6V-2004-0039
e. District No. 20 – Cleanup and Abatement Order No. R6V-2003-0056

In addition, this Order settles all claims and/or liability for on-going discharges of waste by District 14 that cause or create a threatened violation of the provisions of Waste Discharge Requirements, Water Board Order No. R6V-2002-053 described in Finding No. 6 of this Order through November 1, 2010. This Order does not settle any claims that the Water Board may have for prospective violations of Cease and Desist Order R6V-2004-0038A.

In addition, this Order settles all claims and/or liability for on-going discharges of waste by District 20 that cause a violation of the provisions of Waste Discharge Requirements, Water Board Order No. 6-00-057 as described in Finding No. 7 and Basin Plan Prohibitions as described in Finding No. 8 of this Order through November 1, 2010. This settlement does not preclude the Water Board from taking any administrative or judicial action to require District 20 to clean up and abate the

effects of such discharges, or to separately enforce the terms of that order. This order does not settle any claims that the Water Board may have for prospective violations of Cease and Desist Order R6V-2004-0039A.

5. If the Discharger fails to comply with any of the tasks by the dates specified in paragraph nos. 2 and/or 3a – 3c, the entire suspended amount of **$3,800,000** identified in paragraph 3 will become due and payable by the Districts to the WDPF **within 30 days of the relevant compliance date**, unless the Districts are relieved from this requirement in writing by the Water Board Executive Officer based on a finding that the Districts' failure to comply within the prescribed timeframe was for good cause and can be remedied within a reasonable time not to exceed 60 days.

6. If the Discharger fails to make the specified payments to the WDPF or to the approved trust account or other impoundment account within the time limits specified in this Order, the Water Board may enforce this Order as it sees fit, including application for a judgment pursuant to Water Code section 13328. The Water Board's Executive Officer is hereby authorized to pursue a judgment pursuant to Water Code section 13328 if the criteria specified in this paragraph are satisfied, or to take whatever action he or she deems necessary.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on xxx, 2007.

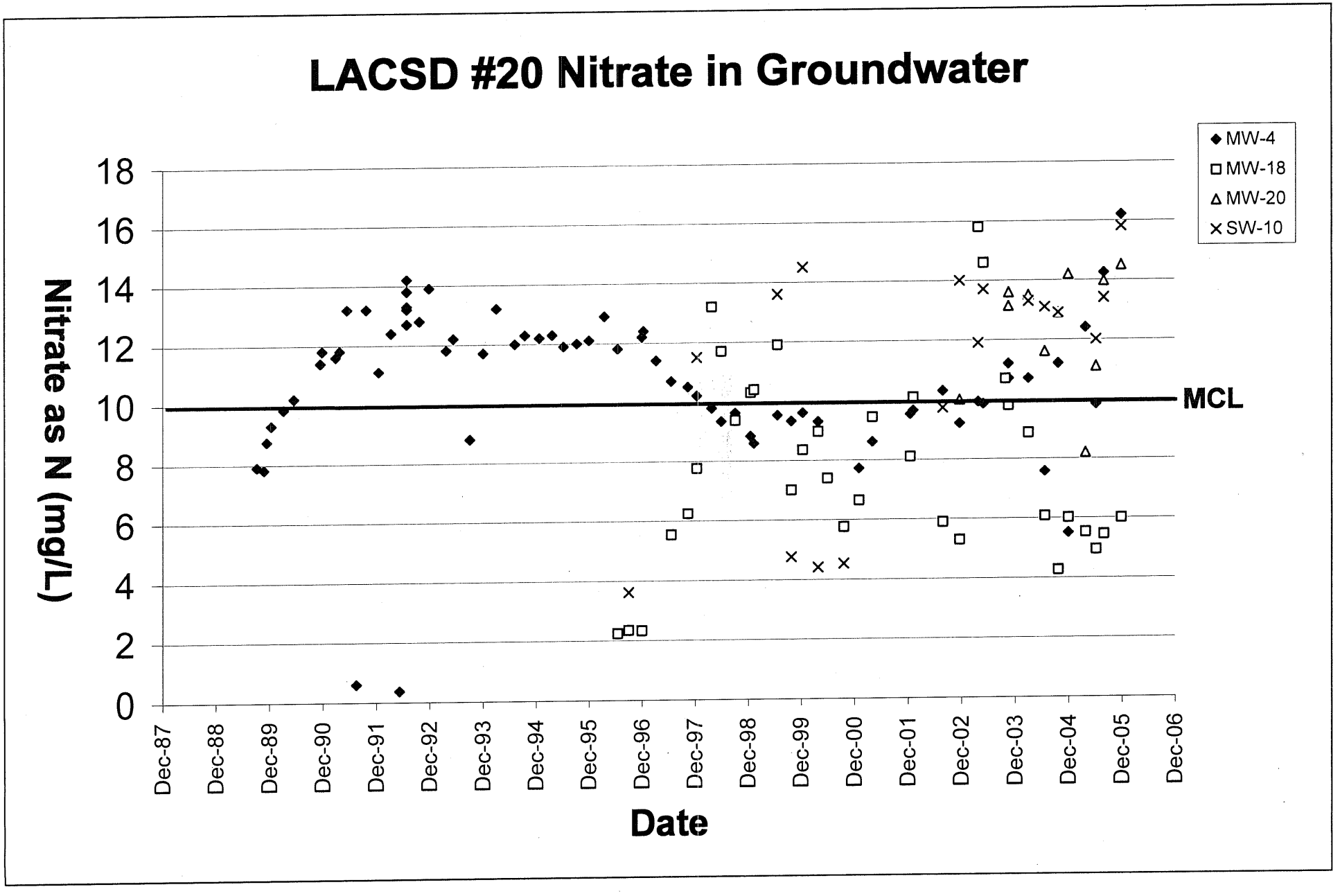
_____

HAROLD J. SINGER
EXECUTIVE OFFICER

Attachment A: County Sanitation District No. 20 of Los Angeles County – Nitrate in Ground Water
Attachment B: Supplemental Environmental Project Proposal

ATTACHMENT A
To Administrative Civil Liability Order

ATTACHMENT A – NO_3-N GROUND WATER CONCENTRATIONS



ATTACHMENT B
To Administrative Civil Liability Order

LOS ANGELES COUNTY SANITATION DISTRICT NOS. 14 AND 20
SUPPLEMENTAL ENVIRONMENTAL PROJECT PROPOSAL

Organization proposing the SEP: County Sanitation District Nos. 14 and 20 of Los Angeles County ("Districts"). Districts' Contact: Ray Tremblay, Monitoring Section, (562) 699-7411, ext. 2801

SEP Title: Antelope Valley Recycled Water Project

SEP Location: The Antelope Valley Recycled Water Project (the "Project") involves the construction of a regional recycled water distribution system linking water reclamation facilities with potential reuse sites throughout the Antelope Valley, located in north Los Angeles County and south Kern County. The Antelope Valley is an arid valley with limited groundwater and surface water supplies that are augmented by the importation of State Water Project water in order to serve the needs of rapidly growing communities. The Antelope Valley Recycled Water Project will serve the Cities of Paldmale, Lancaster, and Rosamond, and unincorporated areas of the counties.

SEP Project Description:

Background:

The California Urban Water Planning Act requires urban water suppliers to describe and evaluate sources of water supply for development of Urban Water Management Plans ("UWMPs"), submitted to the California Department of Water Resources (DWR) every five years. A review of the 2005 UWMPs for the various suppliers in the Antelope Valley indicates that approximately 20,000 acre feet ("AF") of recycled water per year will need to be used in the Antelope Valley by 2015 (*see* Attachment A – 2015 Water Supply in the Antelope Valley). This represents nearly 10% of the predicted water supply demand. More importantly, this component of water supply may be the most reliable portion, as it is less prone to decrease due to drought or the outcome of ongoing legal action over groundwater pumping and adjudication rights.

Recognizing that use of recycled water is integral to maintaining adequate water supply in the Antelope Valley, a group of interested agencies prepared the Antelope Valley Recycled Water Project Facilities Plan ("AV Facilities Plan") so as to develop the basic infrastructure necessary to develop this resource. These participants in the Plan and the Project, in addition to the Districts in an advisory role (due to the fact that the Districts produce recycled water), are:

1. Los Angeles County Waterworks District No. 40
2. Palmdale Water District
3. City of Palmdale
4. City of Lancaster.
5. Quartz Hill Water District
6. Rosamond Community Services District

The AV Facilities Plan describes the backbone distribution pump stations, pipelines, storage tanks, and other infrastructure necessary to accomplish the Project participants' long-term goals. The distribution system will link the Districts' Lancaster WRP, Palmdale WRP, and Rosamond

Community Services WRP with various potential reuse sites. Routing of pipelines was chosen to connect as many potential reuse sites as possible in an economical fashion. The AV Facilities Plan can be located at: http://www.ladpw.org/wwd/avirwmp/docs/19_AV%20Facilities%20Planning%20Report-2006-4-271.pdf, and additional description of the facilities is attached hereto as Attachment B.

Project participants are currently completing the necessary CEQA/NEPA analysis for the entire project, although Phase 1A of the project, jointly funded by Los Angeles County Waterworks District No. 40 and the City of Lancaster, is already under construction because the City of Lancaster independently conducted and concluded CEQA/NEPA review for Phase IA, prior to the larger project being defined. Furthermore, Project participants are also preparing an Integrated Regional Water Management Plan for purposes of securing state funds for the Project. Project participants, such as Los Angeles County Waterworks District No. 40, have also already implemented connection fees for recycled water with each new service connection to raise funds for the project.

Scope of SEP:

The Project will consist of a system that will convey recycled water from the Palmdale, Lancaster and Rosamond water reclamation plants to reuse sites. A backbone pipeline system will connect the three treatment plants and a network of smaller pipelines will convey the water to the reuse sites. Once completed, the project will consist of more than 200,000 linear feet of piping, three storage reservoirs and two main pump stations and two booster pump stations. Attachments C and D depict the project and the future intended recipients of the recycled water.

The Districts propose to provide the Project with funding in an amount of $3,800,000.00 to fund infrastructure (*i.e.*, pipelines, pump stations, etc.) for the distribution of recycled water for either Phase IB or Phase 2 of the project, whichever is completed earlier. The funds will not be used for planning documents or other non-infrastructure related purposes. Additional funding details are set forth below.

Project Qualification for a SEP:

This Project will benefit the environment and the community concurrently by enhancing reuse of recycled water, and relieving demand stress on groundwater and other potable water supplies. The environmental and community benefits from water reclamation are widely recognized by the State of California. *See* Water Code sections 13511, 13529, 13550 – 13576. More specifically, the Project has the following environmental, social, and economic benefits, which are also consistent with State policies:

1) The Project replaces potable water that would be used for non-potable purposes with high quality, recycled water. Therefore, the project contributes to the preservation and enhancement of the fresh groundwater supply, a valuable resource to the Antelope Valley.

2) The Project helps to avoid wasting potable State Water Project water on non-potable uses.

3) The Project creates beneficial uses of high quality recycled water that may not otherwise exist.

4) The Project is designed to accommodate future beneficial groundwater recharge projects, which will assist the feasibility of such projects by reducing need to construct new infrastructure.

5) It is more economically beneficial to the community to utilize recycled water than to secure additional supplies of potable water.

6) Implementation of a large-scale reuse project also contributes to public awareness and education regarding reuse of recycled water, and promotes reuse to the community consistent with State policy.

The SEP is a project that the Districts are not required to undertake to satisfy any obligations set forth in waste discharge requirements or other orders issued to the Districts by the Regional Board, and is not a project to which the Districts would otherwise be providing financial support.

Funding of SEP:

The Project participants are seeking funding for the project from federal and state grant funds, and through user fees. The total capital cost of the Project is estimated at approximately $119,000,000.00.

Through this SEP, the Districts will contribute a minimum of $3,800,000.00 towards infrastructure for Phases IB or 2, whichever is completed earlier. The total amount of funds provided for the Project may increase due to interest earned from escrow account, as noted below. The District will make five annual payments of $760,000.00 into an escrow account beginning July 1, 2007 for the infrastructure improvements. Any interest paid in the escrow account will be allocated to the SEP. Payment to the Project will not occur until the success criteria (described below) are met.

Since some level of uncertainty always exists for prospective projects, the Regional Board Executive Officer and Districts' staff will meet and confer between July and September 2009 to discuss whether the Project (Phases IB or 2) will be constructed as expected, the timeframes associated with construction, and any other associated issues. If the Project will not be constructed as expected, the Regional Board Executive Officer and Districts' staff will agree upon an alternative SEP(s), and all funds will be devoted to the newly identified project(s). In the event no alternative SEP(s) can be identified and agreed upon by the Regional Board Executive Officer and Districts' staff, the monies will be deposited into the Waste Discharge Permit Fund ("WDPF"). The money in the escrow account must either be distributed to the selected SEP project (whether the Antelope Valley Recycled Water Project, or alternative SEP)

by July 1, 2013, or all of the funds in the escrow account will be paid into the WDPF (or the authorized fund that Water Code section 13350 directs payments to at that time). The Regional Board Executive Officer and Districts' staff may agree in writing to extend the July 1, 2013 date, if necessary to accommodate the completion of the SEP.

SEP Implementation and Success Criteria:

The Project will be implemented in four main phases, Phases 1A/1B, 2, 3 and 4, for a period beginning in 2006 through 2015 and beyond, depending upon funding and other construction issues. The Districts' funds will be devoted to either Phase 1B or Phase 2 of the Project, whichever is completed earlier. Upon completion of the recycled water pipeline distribution infrastructure, Phase IB is expected to provide approximately 1.93 mgd of recycled water to the City of Lancaster area, and Phase 2 is expected to provide approximately 1.85 mgd of recycled water to the Cities of Lancaster and Palmdale areas (0.99 mgd for Lancaster and 0.86 mgd for Palmdale). Thus, the Districts' SEP will add approximately 1.85 – 1.93 mgd of additional recycled water supply to the community for municipal, recreational, and industrial beneficial use.

Funds held in escrow will be paid to the Project only upon the completion of operating infrastructure (*i.e.,* pipelines, pump stations, etc.) for either Phase 1B or Phase 2, whichever is completed earlier, such that Phase 1B or Phase 2 will be able to convey recycled water flows to end users. Prior to releasing funds, the Districts will secure confirmation from the Project participants that either Phase 1B or Phase 2 is complete and operational, and the Districts will provide such confirmation to the Regional Board's Executive Officer.

SEP Status Reporting:

The Districts will provide on July 1st of each year annual status reports to the Regional Board, reporting on the status of the Antelope Valley Recycled Water Project (including information relevant for the parties meet and confer in 2009), as well as a final report upon completion of the SEP.

Support for SEP:

This SEP is supported by all project participants.

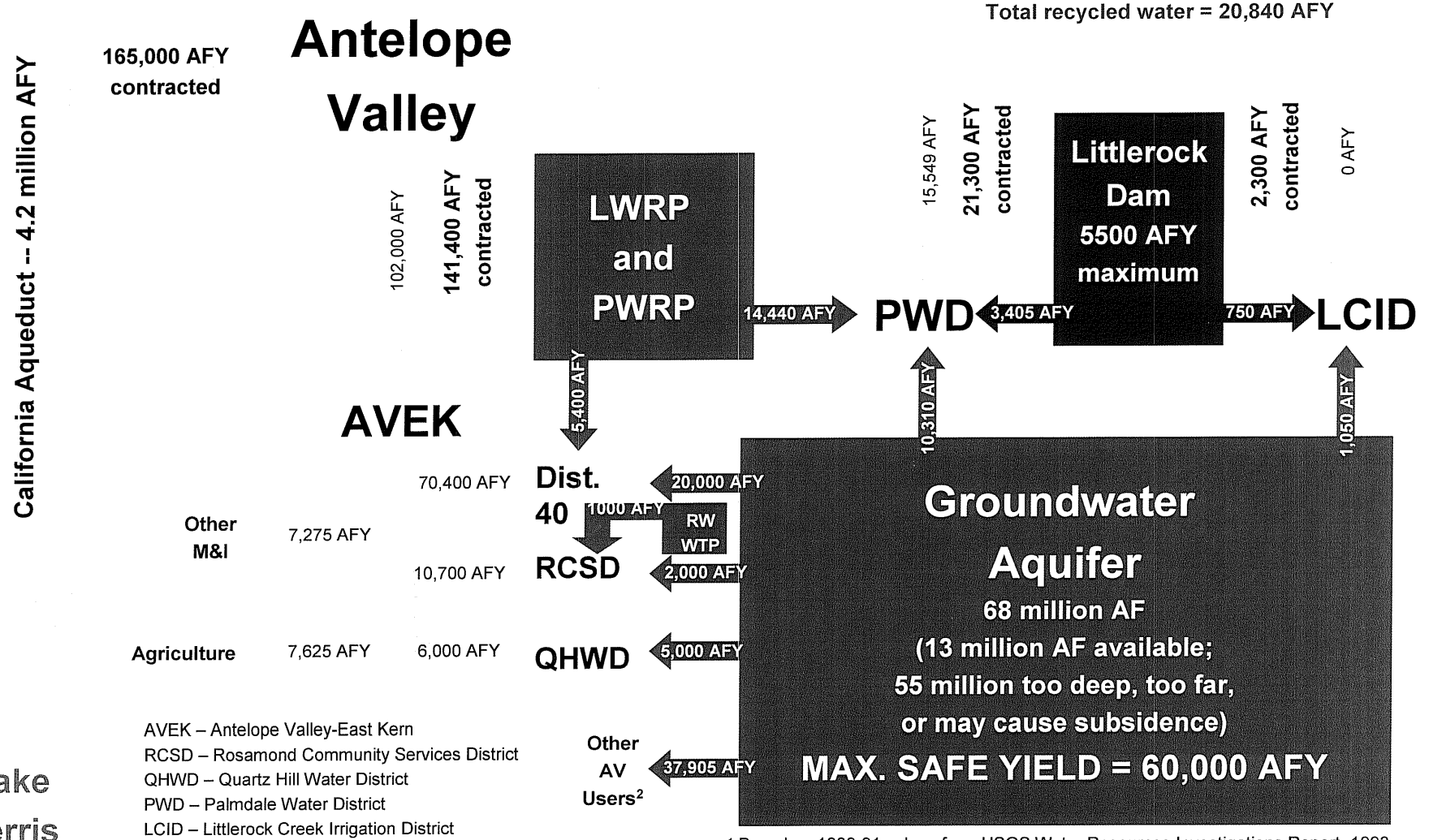
Compliance with the California Environmental Quality Act:

The SEP will obtain California Environmental Quality Act (CEQA) coverage as required by State law.

Water Supply in the Antelope Valley

Normal Year -- 2015

Total SWP contracted flow = 165,000 AFY
Total SWP delivered flow = 117,549 AFY
Total GW pumped = 76,265 AFY[1]
Total surface water used = 4,155 AFY
Total recycled water = 20,840 AFY



AVEK – Antelope Valley-East Kern
RCSD – Rosamond Community Services District
QHWD – Quartz Hill Water District
PWD – Palmdale Water District
LCID – Littlerock Creek Irrigation District
RWWTP – Rosamond Wastewater Treatment Plant

[1] Based on 1989-91 values from USGS Water Resources Investigations Report, 1993
[2] 76,265 AFY – GW pumped by LCID, PWD, Dist. 40, RCSD, and QHWD

ATTACHMENT B

FINAL FACILITIES PLANNING REPORT, ANTELOPE VALLEY RECYCLED WATER PROJECT DESCRIPTION OF RECOMMENDED PLAN

August 8, 2006

Prepared for Los Angeles County Waterworks District No. 40 by Kennedy/Jenks Consultants

Section 8: Recommended Plan

8.1 All Proposed Facilities and Basis for Selection

The proposed facilities are selected based on an analysis of the service area demands, topography and desired operating pressures. The proposed system distributes recycled water throughout the service area and provides a backbone system that could accommodate minimum and maximum demands and allow significant deliveries of recycled water to recharge areas.

8.2 Preliminary Design Criteria and Refined Pipeline Routes

The preliminary design criteria for the recycled water supply system are provided in Table 21. The sizes of pipelines, pump stations, and storage depend on the peak demands of potential users for Phases 1A - 4. These demands are presented in Section 6. All pipelines will follow the most convenient and lowest cost routes which have been described above.

Table 21: Summary of Recycled Water System Criteria

System Components	Criteria
Recycled Water Supply	• Assume project plant production for year 2025.
Main Pump Stations	• Pumps will operate 24 hours during peak day demands. • Size for peak day demands.
Booster Pump Stations	• To serve high zones, size for peak day demands. • To serve users from reservoirs, size for peak hour demands.
Storage Reservoirs	• Provide storage for 30% of peak day demand. • Reservoir elevations should be adequate to provide optimum delivery pressures to most users. • Provide surface storage adequate to meet peak season demands.
Distribution System	• Size to meet average day, peak day and peak hour demands. • Maximum design velocity is 6 feet per second. • Maximum system pressure: 185 psi. • Optimum delivery pressure range: 55 to 150 psi.

8.3 Cost Estimate Based on Time of Construction

The cost estimate based on the anticipated year of construction for RW delivery as described in Section 6.3.4 is presented in Table 22.

Table 22: Costs at Time of Construction

	Estimated 2005 Costs	Estimated Year Construction Begins	Estimated Costs at Time of Construction*
Phase 1A	$4,027,000	2005	$4,027,000
Phase 1B	$27,958,000	2007	$30,239,000
Phase 2	$33,316,000	2008	$37,476,000
Phase 3	$17,168,000	2010	$20,887,000
Phase 4	$36,715,000	2011	$46,456,000

*Escalated at 4%

8.4 All Potential Users

The same quantity and peak demand for the potential users described in Sections 6.2 and 7.7 are being used for design purposes. Most of the potential users are in the City of Lancaster and City of Palmdale. Commitments and agreements between the water reclamation plants, the water districts and municipal users are under discussion.

8.5 Reliability of Facilities as Compared to User Requirements

All facilities for the recycled water project will meet user requirements. The recycled water facilities for this project will be new and built to meet user requirements. When the new facilities are implemented into the project, they will be done so in a way to provide reliable facilities. Because the facilities are for irrigation, the level of reliability required is not as high as if for potable water at vital facilities such as hospitals or schools.

8.6 Implementation Plan

8.6.1 Coordination with Water/Recycled Water Suppliers

As discussed in Section 4.7, LACWW40 is in discussions with CSDLAC to purchase the tertiary treated effluent from LWRP and PWRP and receive the rights for the reuse of the recycled water. The City of Lancaster is also conducting discussions with CSDLAC for the purchase of recycled water.

Design of the recycled water pipeline, pump stations (including alarms and shut-off control systems), and other appurtenant equipment shall be closely coordinated with CSDLAC District No. 14 staff.

A coordination protocol will need to be established to communicate between the water reclamation plants and LACWW40 as water quality, water quantity and operation & maintenance issues arise.

8.6.2 Ability and Timing of Users to Join System

LACWW40 intends and is likely to adopt a mandatory use ordinance for recycled water, which will be forwarded to the State Board after adoption. Existing potential recycled water users are expected to join the recycled water system as soon as the facilities construction and user connections are complete and in operation.

LACWW40 and the surrounding water supply agencies will be considering the need to provide financial assistance to onsite retrofit costs.

8.6.3 Tentative Water Recycling Requirements of RWQCB

The RW treatment facilities are regulated by waste discharge requirements as discussed in Section 5.1. The use of RW will likely be regulated by a combination of WDR for the treatment facilities in combination with other WDRs for the RW users. Currently there are efforts in progress to establish state-wide general RW requirements.

8.6.4 Commitments from Potential Users

Commitments and agreements between the water reclamation plants, the water districts and potential users will be developed as the program is implemented. The other water agencies associated with the Antelope Valley have indicated their interest in the recycled water project with the letters found in Appendix F.

8.6.5 Water Rights Impact

As discussed in Section 4.7, LACWW40 is in discussions to purchase the tertiary treated effluent from LWRP and PWRP and receive the rights for the reuse of the recycled water.

8.6.6 Permits, Right-of-Way, Design, and Construction

Pipeline construction will require encroachment permits from the City of Lancaster, the City of Palmdale and the County of Los Angeles. Also, land for the proposed reservoirs and pump stations will have to be purchased either from the Cities or negotiated through potential developers. LACWW40 is seeking financial assistance from the State Water Resources Control Board in the form of grants for constructing Phases 1A - 4.

Encroachment permits for all work within the public rights-of-way will be needed from each involved agency prior to commencement of any construction. All traffic control requirements will be complied with as well.

The DHS Title 22 review and inspection will be completed, as necessary. LACWW40 will need to prepare the Recycled Water Rules and Regulations in accordance with Title 22 regulations, which could be adopted at the same time as the mandatory use ordinance.

8.6.7 Detailed schedule

A detailed schedule has been prepared and is attached as Figure 15.

8.7 Operational Plan

8.7.1 Responsible People

LACWW40 will establish a knowledgeable staff for their recycled water operations. The existing and new staff will be given appropriate training and responsibility for recycled water system operations & maintenance. An appropriate staff member will be assigned as a backflow prevention technician.

8.7.2 Necessary Equipment

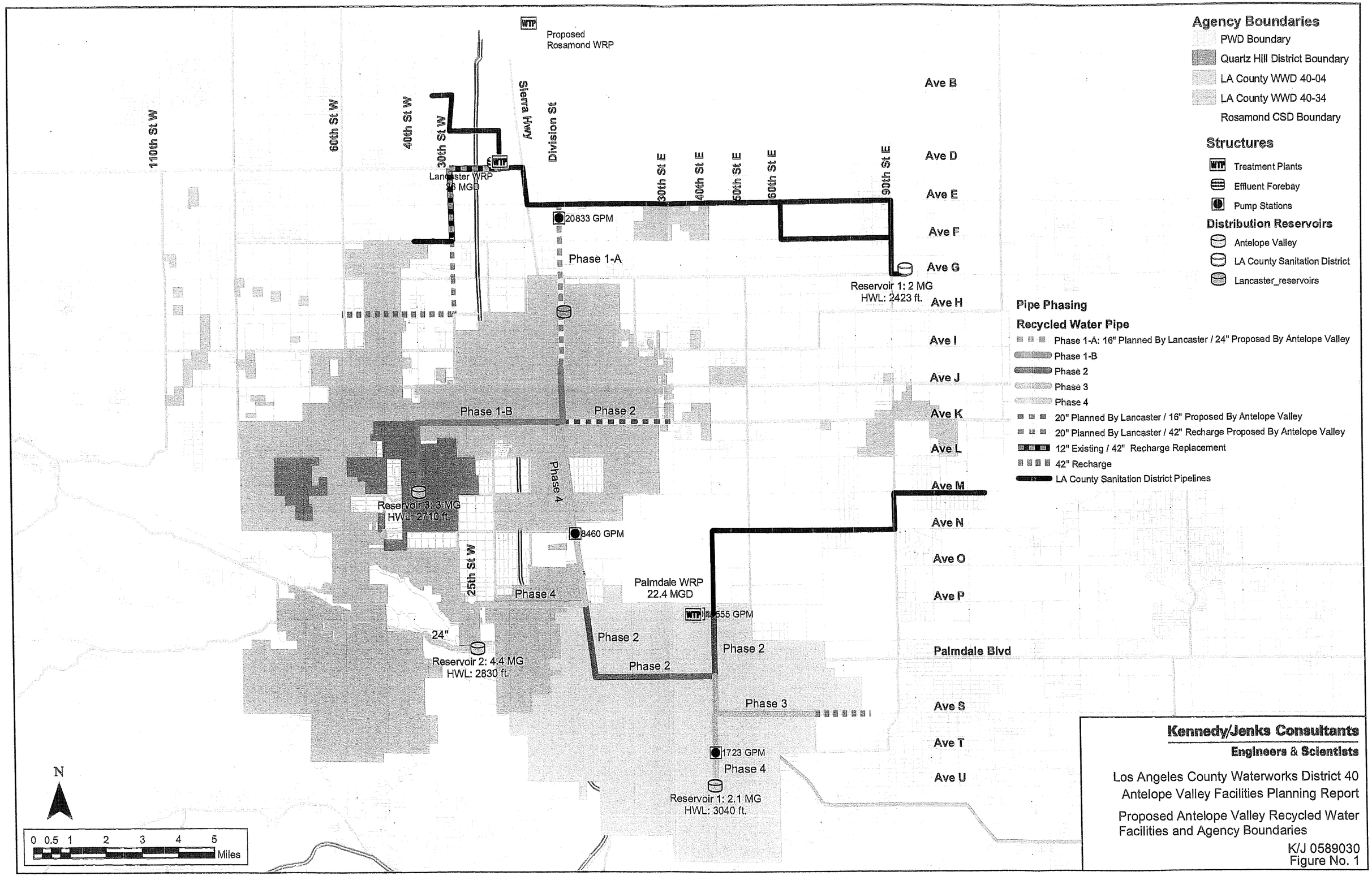
Any necessary equipment will be purchased for proper operation & maintenance of the recycled water system.

8.7.3 Monitoring

RWCQB requires that wastewater treatment plants (Producers) develop and implement a water reuse monitoring program as part of their General Water Reuse Requirements. When the User(s) is other than the Producer, delegation of responsibilities must be clearly spelled out and included in the Producer's Water Use Permits. The proposed reuse monitoring program requirements for LWPR, PWRP and RWWTP's recycled water have not been established by the RWCQB-LH at this time.

8.7.4 Irrigation Scheduling

For all potential users, irrigation scheduling should not change from the way they currently operate. The majority of the users will be irrigated at night to minimize interference with recreation, reduce evapotranspiration, improve irrigation efficiency and decrease waste. During periods of high temperatures, additional irrigation may occur outside this nighttime window to allow for longer irrigation to compensate for higher evapotranspiration.



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Antelope Valley Facilities Planning Report

Proposed Antelope Valley Recycled Water Facilities and Agency Boundaries

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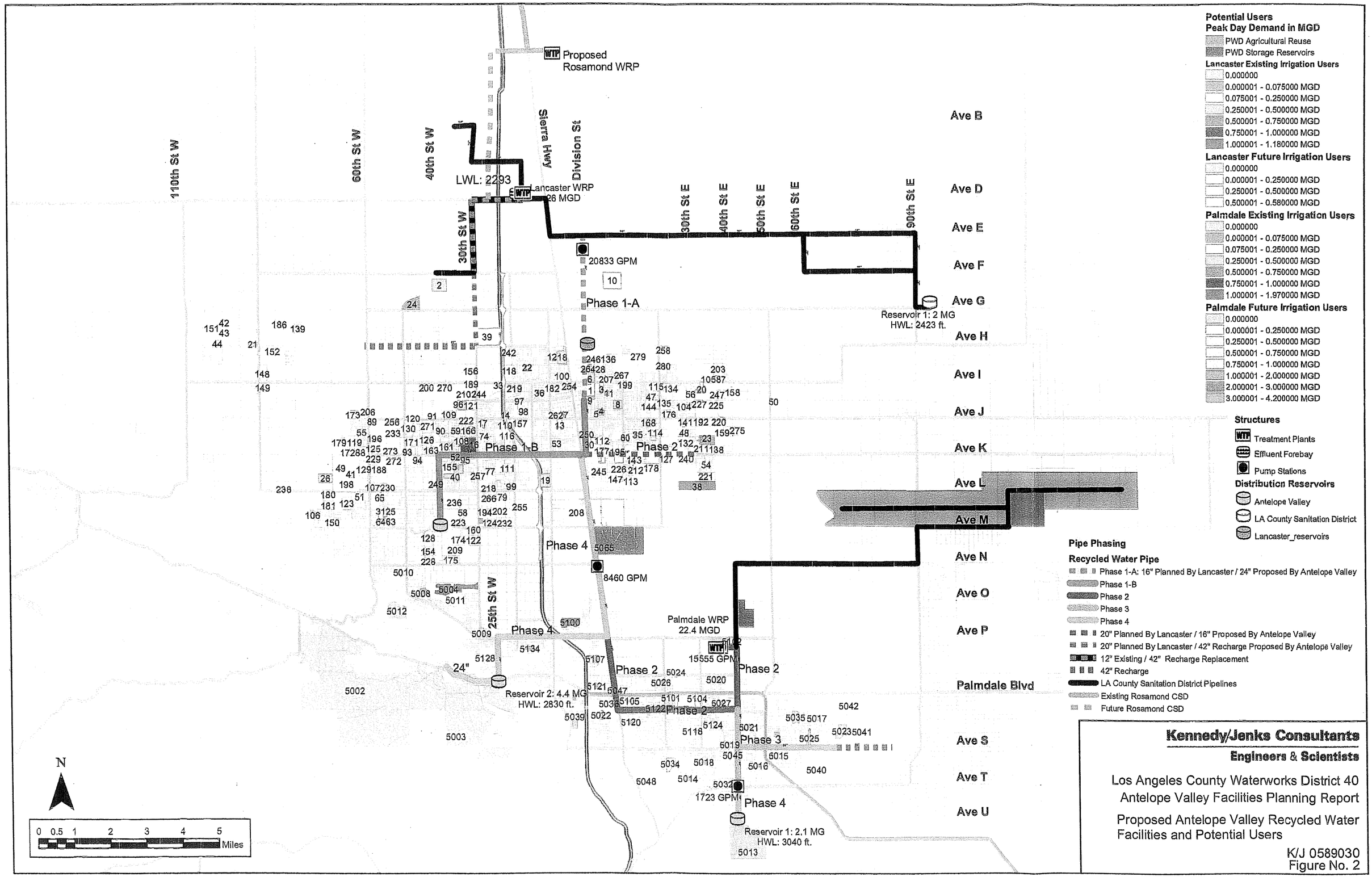
Figure No. 1



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Proposed Antelope Valley Recycled Water Facilities and Potential Users

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Figure No. 2