

APPENDICES

APPENDIX A

NOTICE OF PREPARATION (NOP)



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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JAMES F. STAHL
Chief Engineer and General Manager

December 6, 2002
File: 14.00-00.00

To: Mailing List
Subject: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT
Project Title: Lancaster Water Reclamation Plant 2020 Facilities Plan
Project Location: Lancaster, Los Angeles County

Project Description: The project consists of the preparation of a facilities plan for County Sanitation District No. 14 of Los Angeles County's (District 14) Lancaster Water Reclamation Plant (LWRP). The plan will assess the wastewater treatment and effluent management needs of District 14 through the year 2020, and recommend specific improvements to meet those needs. This Notice of Preparation (NOP) revises District 14's February 2001 NOP for the subject project and is being recirculated because recent developments have led to changes in the possible project alternatives. The recent developments are:

- negotiations with the City of Lancaster have resulted in a proposed agreement to develop a municipal reuse project that will provide recycled water to the City for landscape irrigation,
- a signed Letter of Intent between District 14 and Edwards Air Force Base (EAFB) allows for the possible leasing of EAFB property for construction of effluent management facilities in conjunction with the continuing protection of Piute Ponds and the adjacent Impoundment Areas on EAFB, and
- revisions to the LWRP's Waste Discharge Requirements by the Lahontan Regional Water Quality Control Board require the elimination of unauthorized effluent overflows to Rosamond Dry Lake by August 25, 2005, and affect the level of treatment required at the LWRP.

In accordance with the California Environmental Quality Act, the District will be the Lead Agency and, due to the scope of the project, will prepare an Environmental Impact Report (EIR). The project description, location, and the potential environmental impacts are contained in the attached materials. It is anticipated that the EIR will be sufficient to comply with the National Environmental Policy Act for preparation of an Environmental Assessment (EA) for project alternatives that would require United States Air Force approval.

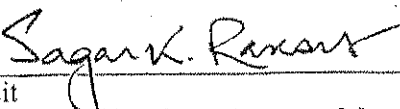
If you are a Responsible, Trustee, or Interested Agency, District 14 is requesting comments as to the scope and content of the environmental information which is relevant to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR/EA prepared by District 14 when considering any permit or other approval for the project. Please provide the name and telephone number of a contact person in your agency with your response.

If you are an interested property owner or individual, District 14 is requesting your written comments concerning any effects the project may have on your property or your community. Please share this notice with anyone else you feel may be interested in this project.

In addition to written comments, a Scoping Meeting will be held to receive comments as to the scope of analysis and content of the proposed EIR/EA. The Scoping Meeting will be held on *Thursday, January 9, 2003*, at 7:00 p.m., at Lancaster City Hall, EOC Room, located at 44933 North Fern Avenue, Lancaster, California.

Please submit your written response to District 14 at the earliest possible date, but no later than January 16, 2003. Your response should be directed to the undersigned at the address shown above.

Date: December 6, 2002


Sagar K. Raksit
Supervising Engineer, Planning & Property Management Section

**COUNTY SANITATION DISTRICT NO. 14 OF LOS ANGELES COUNTY
LANCASTER WATER RECLAMATION PLANT 2020 FACILITIES PLAN**

**NOTICE OF PREPARATION OF AN
ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT**

1.1 INTRODUCTION

County Sanitation District No. 14 of Los Angeles County (District 14) is preparing the Lancaster Water Reclamation Plant (LWRP) 2020 Facilities Plan to propose upgrades and expansions of wastewater treatment and effluent management facilities to meet the needs of District 14 through the year 2020 in a cost effective and environmentally sound manner. This Notice of Preparation (NOP) has been prepared pursuant to the requirements of the California Environmental Quality Act (CEQA) to notify interested agencies and the public that an Environmental Impact Report (EIR) will be prepared to assess potential impacts of the project. The project may also include facilities which require United States Air Force approval. As a result, the impact assessment will be conducted to meet the requirements of an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA).

This NOP replaces a previous NOP issued in February 2001 by District 14 that described the project alternatives, but did not include alternatives involving the City of Lancaster's proposed municipal reuse project or the possible utilization of Edwards Air Force Base (EAFB) property. Since the original NOP, District 14 and the City of Lancaster have developed a proposed agreement that will require the City to utilize up to 1.5 million gallons per day (mgd) of recycled water from the LWRP for municipal reuse purposes. In addition, District 14 and EAFB have agreed to cooperate in the assessment of project alternatives that involve construction of effluent storage facilities in the southwest corner of the base. As a result, the EIR/EA for the project will comply with both CEQA and NEPA requirements for evaluating potential impacts of the project. EAFB will utilize the EA to determine if any significant impacts could occur from implementation of any alternative that would require United States Air Force approval.

1.2 BACKGROUND

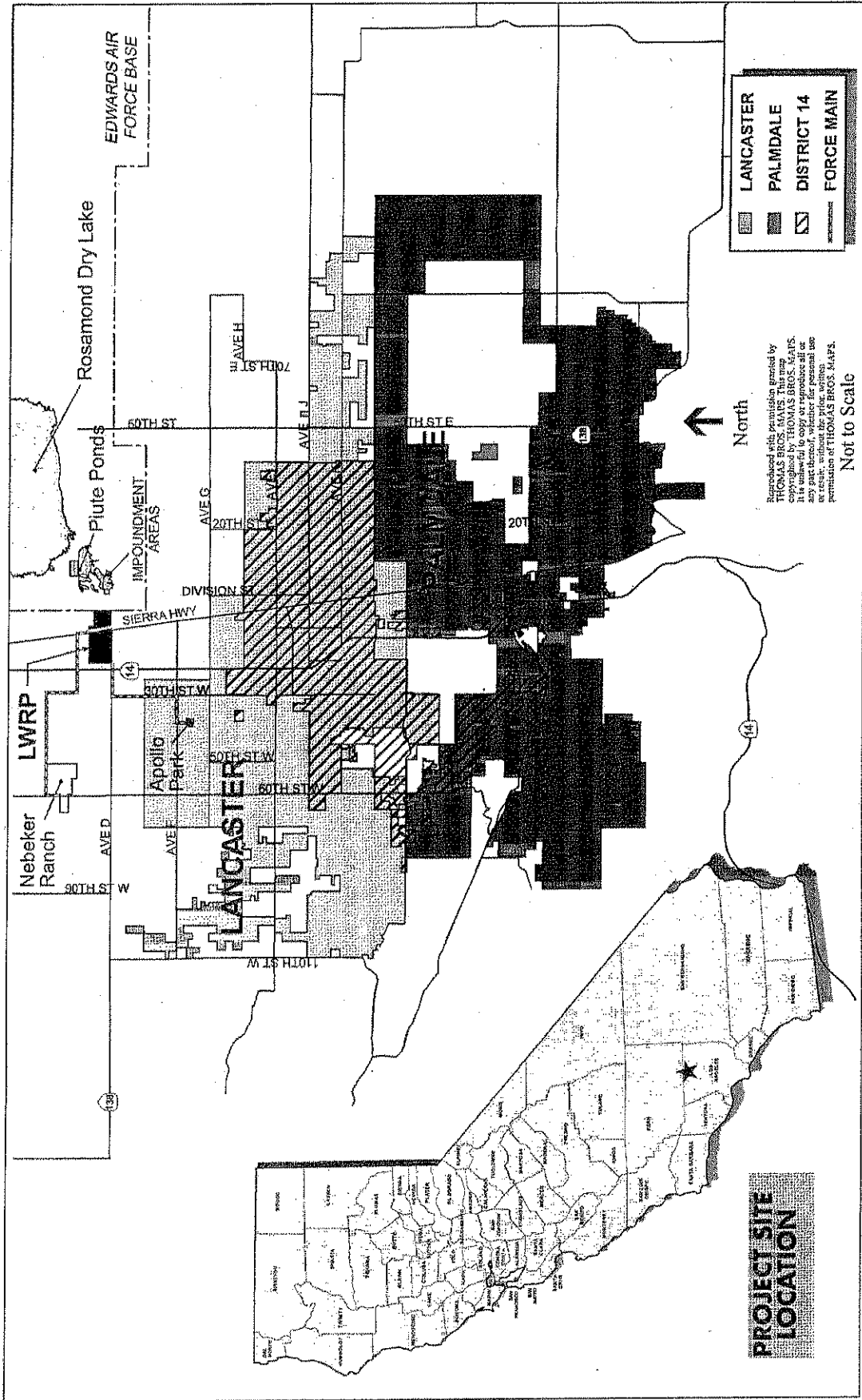
The County Sanitation Districts of Los Angeles County (Districts) are a confederation of special districts that serve the wastewater and solid waste management needs of approximately 5.4 million people in Los Angeles County. The Districts' service area covers approximately 800 square miles and encompasses 78 cities and unincorporated territory within the County. The Districts were formed under authority provided by the County Sanitation District Act of 1923, which authorized the formation of sanitation districts based on the drainage areas that determine efficient wastewater management instead of political boundaries. The Act authorizes the Districts to construct, operate, and maintain facilities to collect, treat, and dispose of wastewater. The Act was amended in 1949 to allow the Districts to also

provide solid waste management and disposal services, including refuse transfer and resource recovery. The local sewers and laterals that connect to the Districts' trunk sewers and the collection and transport of solid waste to Districts' facilities are the responsibilities of local jurisdictions.

District 14 provides wastewater collection, treatment, and disposal services for the City of Lancaster, portions of the City of Palmdale, and unincorporated Los Angeles County (see Figure 1). District 14 has constructed a network of trunk sewers that extend throughout its service area and convey wastewater to the LWRP, which is located near the intersection of Avenue D and Sierra Highway (see Figure 1). District 14's trunk sewer network forms the backbone of the regional wastewater collection system. Lateral sewers, which collect wastewater generated at individual properties, drain to local sewers that are owned, operated, and maintained by local jurisdictions (typically either the City or the County). Local sewers drain to District 14's trunk sewers, which convey wastewater to the LWRP.

The rated treatment capacity of the LWRP is 16 million gallons per day (mgd) and the LWRP currently treats an average flow of approximately 12.8 mgd. The LWRP provides secondary treatment to all influent wastewater utilizing primary settling followed by stabilization in oxidation ponds. The Antelope Valley Tertiary Treatment Plant (AVTTP), which is also located at the LWRP site, can provide tertiary treatment for up to 0.6 mgd of LWRP effluent, and currently treats an average flow of approximately 0.15 mgd.

The LWRP produces recycled water that may be reused in accordance with regulations promulgated by the State of California Department of Health Services in Title 22 of the California Code of Regulations. Recycled water produced at the LWRP is discharged and/or reused at a variety of sites. Disinfected secondary effluent is discharged to Piute Ponds, where it is used to maintain wetlands habitat, and to the adjacent Impoundment Areas, which are used for duck hunting and winter effluent storage. Piute Ponds overflow to Rosamond Dry Lake when surplus recycled water is discharged to Piute Ponds. This typically occurs during the winter months when reuse demand and evaporation rates are low. Piute Ponds, the Impoundments Areas, and Rosamond Dry Lake are located on EAFB property. According to EAFB, effluent-induced overflows could potentially interfere with its use of the lake bed. Undisinfected secondary effluent is transported via a force main to Nebeker Ranch where it is used to irrigate alfalfa. Nebeker Ranch is located approximately 4 miles northwest of the LWRP near the intersection of Avenue B and 60th Street West. Disinfected tertiary effluent produced by the AVTTP is transported to Apollo County Park where it is used to maintain a series of recreational impoundments that are open to the public. Additionally, a significant amount of water evaporates from the treatment and storage facilities at the LWRP (430 total acres). The locations of the various effluent management/reuse sites are illustrated in Figure 1.



LWRP 2020 Plan EIR-NOP ■
Figure 1
 Project Vicinity Map

SOURCE: Environmental Science Associates

1.3 NEED FOR PROJECT

A project is needed to accommodate projected increases in wastewater flow in the service area of District 14 through the year 2020. Based on population projections provided by the Southern California Association of Governments, wastewater flows are projected to reach 26 mgd by 2020. As discussed above, current facilities have a capacity to treat only 16 mgd. In addition, the LWRP's effluent management sites have insufficient capacity to handle existing flows.

District 14 is proposing a project that would increase treatment capacity to meet future flow projections and optimize wastewater recycling through agricultural reuse and by increasing the LWRP tertiary treatment capacity to meet local municipal reuse demand. However, since agricultural and municipal reuse demand decreases significantly in the winter months, storage reservoirs may be necessary to accommodate treated effluent in the winter. The LWRP currently relies on four storage reservoirs with a total storage capacity of 500 million gallons (1,534 acre-feet). Under current conditions, when the storage reservoirs become full, discharges of treated effluent to Piute Ponds can cause Piute Ponds to overflow onto Rosamond Dry Lake.

In September 2002, the Regional Water Quality Control Board-Lahontan Region (RWQCB-LR) issued revised Waste Discharge Requirements (WDRs) for the LWRP requiring the elimination of effluent-induced overflows from Piute Ponds to Rosamond Dry Lake which threaten or create a nuisance condition by August 25, 2005. The revised WDRs also require more stringent effluent limits for chlorine residual and ammonia concentration in order to protect aquatic beneficial uses of Piute Ponds. District 14 must meet the new effluent quality limit for ammonia by August 25, 2005, or perform studies demonstrating to the RWQCB-LR that alternative water quality objectives should be applied. District 14 must also meet the new chlorine residual limitations by August 25, 2005.

Finally, District 14 is obligated to maintain Piute Ponds under a three-party Memorandum of Understanding (MOU) between District 14, the California Department of Fish and Game, and EAFB. Specifically, this MOU, dated May 6, 1981, requires District 14 to discharge effluent from the LWRP to Piute Ponds at a rate sufficient to maintain a minimum of 200 wetted acres of habitat. Neither the Ponds nor their extensive marsh-type habitat would exist if it were not for the discharge of effluent from the LWRP. Therefore, as required by the 1981 MOU, the proposed project identified in the Facilities 2020 Plan will include provisions for, at a minimum, maintaining Piute Ponds at its current area of approximately 400 acres.

1.4 LANCASTER WATER RECLAMATION PLANT 2020 FACILITIES PLAN

Objectives

The objectives of the LWRP 2020 Facilities Plan are as follows:

- Provide wastewater treatment and effluent management capacity adequate to meet the needs of District 14 through the year 2020 in a cost effective and environmentally sound manner.

- Eliminate unauthorized effluent-induced overflows from Piute Ponds to Rosamond Dry Lake by August 25, 2005, in order to avoid any nuisance condition.
- Ensure recycled water of sufficient quality and quantity is available to satisfy emerging municipal reuse needs.
- Comply with the requirements to maintain Piute Ponds.

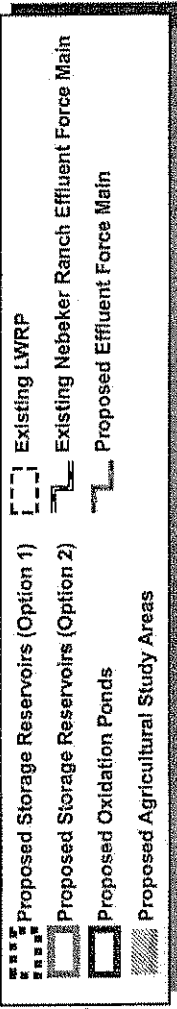
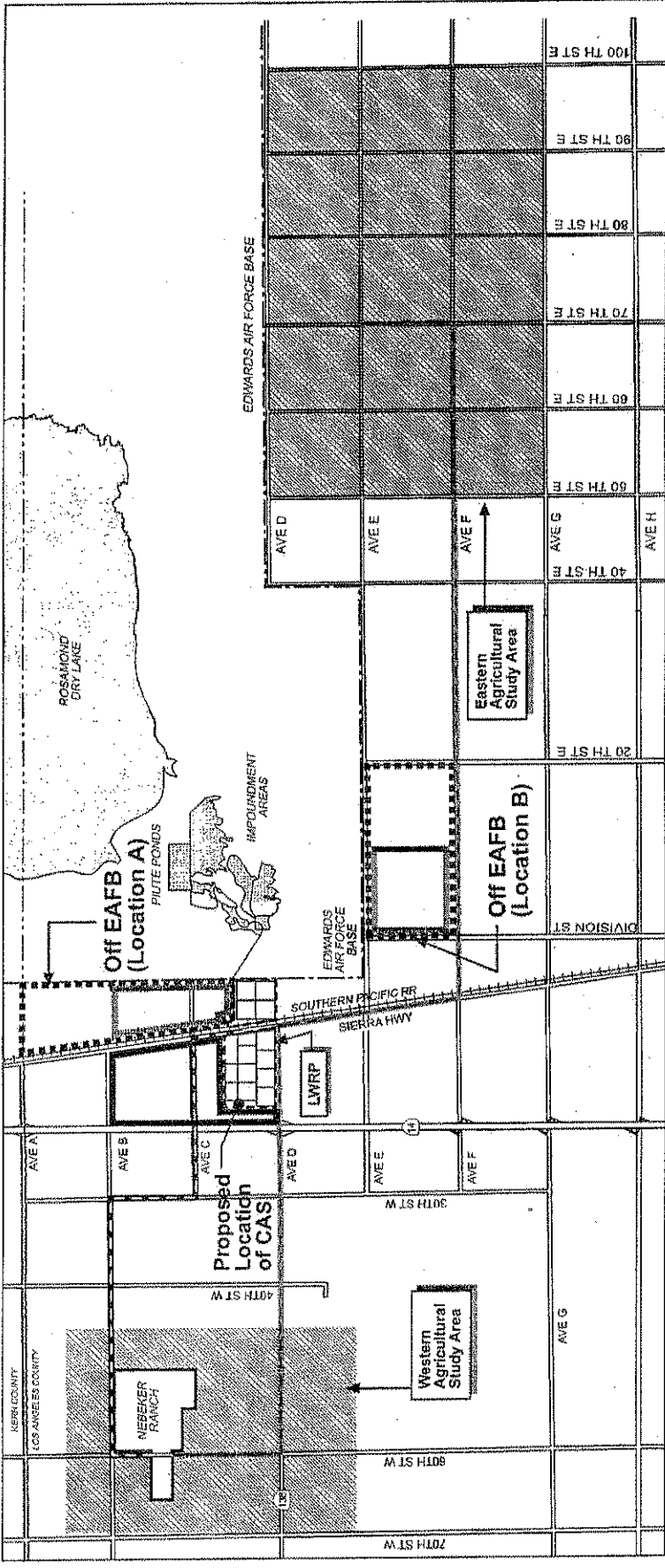
Proposed Project Components

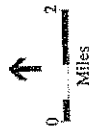
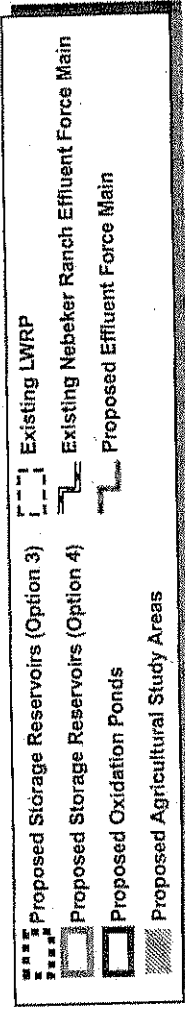
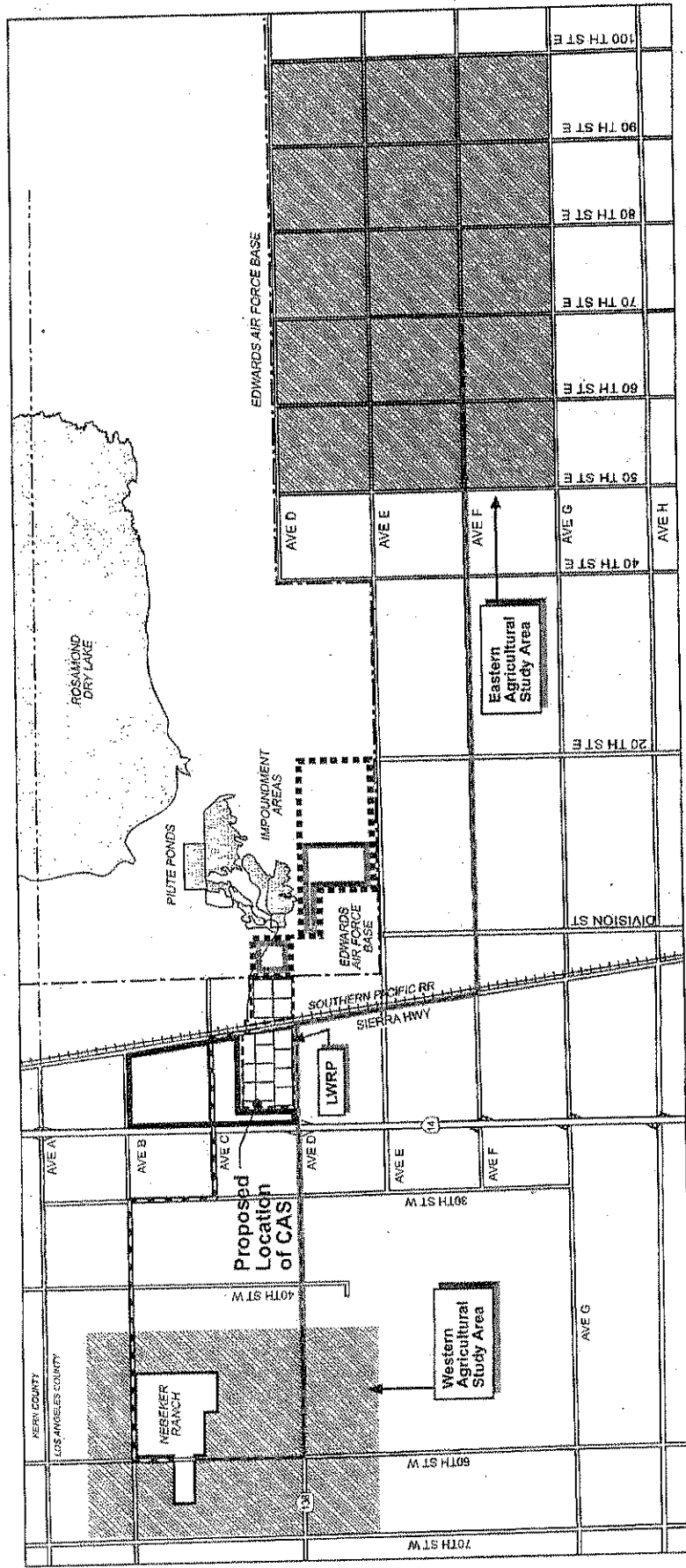
To meet the project objectives, numerous preliminary project alternatives were considered, including groundwater recharge, constructed wetlands, and evaporation ponds. Following a preliminary alternatives screening process, the project alternatives identified below are the only feasible alternatives that met project objectives within the timeframe required by the RWQCB-LR. The Facilities Plan will include a detailed analysis of the alternative screening process conducted by District 14. The basic elements of the feasible alternatives include (1) construction of additional wastewater treatment facilities at the LWRP, (2) increased agricultural reuse and municipal landscape irrigation reuse, and (3) construction/utilization of effluent storage reservoirs. Effluent storage reservoirs are the only project component that can reasonably insure, particularly during winter months, that any effluent that is not municipally or agriculturally reused will not result in unauthorized overflows to Rosamond Dry Lake. The planning process will more specifically define the proposed project as the Facilities Plan is finalized. The EIR/EA will analyze the proposed project's impacts. The proposed project will be more specifically identified as to (1) the type of wastewater treatment facilities, (2) the location and size of effluent storage reservoirs and agricultural reuse sites, and (3) the extent that EAFB may authorize effluent-induced overflows to Rosamond Dry Lake.

Construction of the necessary treatment and effluent management facilities to accommodate 2020 flow projections could occur all at once or in phases. If construction is phased, the first phase will, at minimum, provide adequate effluent management capacity to eliminate unauthorized effluent-induced overflows onto Rosamond Dry Lake by August 25, 2005.

Wastewater Treatment Facilities

Additional wastewater treatment facilities will be constructed to accommodate projected flows. Secondary treatment capacity at the LWRP will be increased to treat 26 mgd using either the conventional activated sludge (CAS) process or additional oxidation ponds. The CAS facilities would be constructed mostly within the existing LWRP property, but would require acquisition of five acres adjacent to the LWRP. Oxidation ponds would require acquisition of 950 acres near the LWRP. Figure 2 or 3 indicates the location of the CAS and oxidation pond facilities.





Additional tertiary treatment facilities will be constructed within the existing LWRP property to provide up to 1.5 mgd of recycled water to the City of Lancaster for municipal landscape irrigation, as requested by the City and agreed to in a proposed contract between District 14 and the City. The type of tertiary treatment will depend on the secondary treatment facilities constructed. Additional tertiary treatment facilities may need to be constructed in order to meet the revised effluent discharge standards for chlorine residual and ammonia in Piute Ponds. The expanded tertiary facilities will be located on the existing LWRP site.

Biosolids Processing

The current biosolids processing facilities will be expanded to accommodate expected increases in solids production through the year 2020. The expanded solids processing facilities will be located on the existing LWRP site. It is anticipated that processed solids (biosolids) will continue to be dried in drying beds and hauled off-site for disposal and/or reuse.

Effluent Management Facilities

In addition to assessing various wastewater treatment methods, the EIR/EA will assess various effluent management options. All involve continuation of existing cooperative agreements with EAFB and the California Department of Fish and Game for the protection of Piute Ponds and the adjacent Impoundment Areas on EAFB. The six effluent management options are:

1. Storage reservoirs on private property, agricultural and municipal reuse, and no overflows onto Rosamond Dry Lake.
2. Storage reservoirs on private property, agricultural and municipal reuse, and authorized winter overflows onto Rosamond Dry Lake.
3. Storage reservoirs on EAFB property, agricultural and municipal reuse, and no overflows onto Rosamond Dry Lake.
4. Storage reservoirs on EAFB property, agricultural and municipal reuse, and authorized winter overflows onto Rosamond Dry Lake.
5. No new storage reservoirs, agricultural and municipal reuse, and no overflows onto Rosamond Dry Lake.
6. No new storage reservoirs, agricultural and municipal reuse, and authorized winter overflows onto Rosamond Dry Lake.

Storage Reservoirs

For each effluent management option, except options 5 and 6, storage reservoirs will be constructed to store surplus recycled water during the winter months. Depending on the location, the storage reservoirs will either be lined with compacted native clay or a synthetic liner. Each reservoir will have a wetted surface area of approximately 40 acres and a water depth of 10 feet. Depending on the extent of EAFB-authorized winter overflows, construction of storage facilities will require acquisition of between 510 and 1,070 acres of land. Effluent management options 1 and 2 would involve construction of reservoirs on private property on one of two possible locations shown in Figure 2. The storage reservoir locations proposed for options 1 and 2 could either be north of the LWRP (location A) or south of

EAFB (location B). Effluent management options 3 and 4 would involve construction of reservoirs on EAFB property as shown in Figure 3.

With no overflows, approximately 1,070 acres of storage reservoirs would be needed to manage effluent generated through the year 2020. However, the acreage of storage reservoirs needed would decrease in proportion to the volume and duration of overflows. Any controlled winter overflows onto Rosamond Dry Lake will have to be approved by EAFB. Specifically, the Commander of EAFB will only approve an effluent management option if it is in the best interest of EAFB and the community. If EAFB does not authorize periodic controlled winter overflows, when the lake bed would normally be susceptible to natural storm water runoff, then effluent management options 2 and 4 would be infeasible. If EAFB does not authorize the siting of effluent storage reservoirs on the Base, effluent management options 3 and 4 would be infeasible.

Effluent management options 5 and 6 would involve effluent management via agricultural and municipal reuse only. The primary difference of these two options from the others is that during winter months, rather than storing effluent, effluent would be used to irrigate a winter crop or be land applied. Under option 6 less land would be required if controlled winter overflows are authorized by EAFB; if not, option 6 would be infeasible. The agricultural study areas shown on Figure 2 or 3 indicate the possible location of the agricultural reuse operations. Table 1 summarizes the land requirements for each option.

Agricultural Reuse

Depending on the effluent management option selected, District 14 would need to acquire between 2,430 and 7,220 acres of land for agricultural operations irrigated with recycled water. Agricultural operations would either be managed by District 14 or leased to qualified farming entities. Initially, it is anticipated that the agricultural operations would cultivate alfalfa. The reuse operations would comply with Department of Health Services requirements for the use of recycled water included in Title 22 of the California Code of Regulations or other Water Recycling Requirements prescribed by the RWQCB-LR. The Facilities Plan identifies two general areas that would be suitable for agricultural reuse operations either east or west of the LWRP (see Figure 2 or 3). The actual location of agricultural reuse operations may differ from the identified study areas, depending on the emergence of farming entities willing to use recycled water. The agricultural reuse operations will require construction of a pump station and pipeline to convey recycled water.

District 14 currently conveys undisinfected, secondary-treated wastewater to Nebeker Ranch, located northwest of the LWRP, where a private operator uses the water to cultivate alfalfa. District 14 is currently negotiating to purchase the 667-acre ranch. If the property is acquired, it will satisfy part of the total requirement for agricultural land summarized in Table 1.

Municipal Reuse

A portion of the LWRP's effluent management needs will be satisfied by the City of Lancaster's municipal reuse project. The City has requested up to 1.5 mgd of tertiary-treated recycled water for

municipal landscape irrigation projects. The Facilities Plan and EIR/EA will include construction of treatment facilities required to provide recycled water suitable for the City's proposed project, but will not include construction of the distribution system or development of municipal irrigation projects. The City will prepare the necessary environmental document for its municipal reuse project. Additional municipal reuse projects and commitments to take more recycled water would reduce the acreage requirements for agricultural land.

Maintenance of Piute Ponds

The District is committed to providing sufficient quantities of recycled water from the LWRP to maintain the wildlife and recreational uses of Piute Ponds without causing unauthorized effluent-induced overflows to Rosamond Dry Lake. The Facilities Plan will evaluate ways of enhancing Piute Ponds in order to provide greater effluent storage capacity without compromising EAFB's mission. Enhancing Piute Ponds may reduce the acreage requirements for storage reservoirs and agricultural reuse operations.

Summary of Proposed Project Alternatives

Table 1 summarizes the various combinations of the proposed project's wastewater treatment and effluent management options that will be analyzed in the Facilities Plan and EIR/EA. This table indicates the approximate acreage required for each alternative of the proposed project. Figures 2 and 3 provide conceptual footprints for each of the proposed project alternatives. It should be noted that the footprints for wastewater treatment and effluent management facilities for the proposed project shown in Figures 2 and 3 are preliminary and are subject to change pending further engineering, environmental, and public review.

**TABLE 1
SUMMARY OF FACILITIES PLAN PROJECT ALTERNATIVES**

	ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 4		ALTERNATIVE 5		ALTERNATIVE 6	
WASTEWATER TREATMENT FACILITIES												
TREATMENT TYPE	CAS	OX. PONDS	CAS	OX. PONDS	CAS	OX. PONDS	CAS	OX. PONDS	CAS	OX. PONDS	CAS	OX. PONDS
LAND REQUIRED (ACRES)	5	950	5	950	5	950	5	950	5	950	5	950
EFFLUENT MANAGEMENT FACILITIES[1]												
STORAGE RESERVOIRS												
- LOCATION	PRIVATE PROPERTY		PRIVATE PROPERTY		ON EAFB		ON EAFB		N/A		N/A	
- LAND REQUIRED[2] (ACRES)	1,070	1,040	540	510	1,070	1,040	540	510	N/A	N/A	N/A	N/A
AG. LAND REQUIRED[3] (ACRES)	3,320	3,000	2,760	2,430	3,320	3,000	2,760	2,430	7,220	7,170	3,750	3,710
AUTHOR. OVERFLOWS TO RDL[4]	NO		YES		NO		YES		NO		YES	
TOTAL LAND REQUIRED (ACRES)	4,395	4,990	3,305	3,890	4,395	4,990	3,305	3,890	7,225	8,120	3,755	4,660
COMMON ELEMENTS												
MAINTAINS PIUTE PONDS	YES		YES		YES		YES		YES		YES	
EXPANDS BIOSOLIDS FACILITIES	YES		YES		YES		YES		YES		YES	

[1] All project alternatives include the City of Lancaster's proposed municipal reuse project.

[2] Land requirements for storage reservoirs do not include the existing storage reservoirs.

[3] Agricultural acreage includes the 667-acre Nebeker Ranch.

[4] Authorized overflows assumes that the current overflow regime of 13 mgd from December to March each year would continue.

2.0 POTENTIAL ENVIRONMENTAL EFFECTS

The LWRP 2020 Facilities Plan identifies wastewater treatment and effluent management facilities necessary to meet projected wastewater flow in the District 14 service area through the year 2020. The EIR/EA for the LWRP 2020 Facilities Plan will assess the potential impacts of full implementation of these treatment and effluent management facilities. The project-level analysis conducted for the EIR/EA will cover operational and construction activities for the full facility expansion including acquisition of all property necessary to accommodate the projected 2020 flow. The EIR/EA will assess the CEQA-required *No Project* alternative and the variations of the proposed project at an equal level of detail. The following sections provide preliminary assessment of potential impacts of the proposed project.

Land Use

The effects of the project on local land uses will be evaluated. The EAFB mission and identified uses for the Piute Ponds area and Rosamond Dry Lake will be addressed. Local land uses including residential, agricultural, and open space uses could be significantly impacted through the acquisition of up to approximately 8,120 acres of land and through the installation of wastewater management facilities. The project will significantly alter current land uses within the areas to be acquired, including a substantial increase in agricultural reuse operations. District 14 will look for willing sellers for the required property. However, property may have to be acquired through eminent domain proceedings. The *Los Angeles County General Plan*, *Antelope Valley Area General Plan*, the *City of Lancaster General Plan*, and the *Draft West Mojave Plan* will each be reviewed with respect to potential land use impacts of the project.

In addition, any new storage reservoirs could support insect breeding, such as midges, and since these reservoirs may be located near Sierra Highway, the Antelope Valley Freeway, and/or other main roadways, a concentration of flying insects could create driving hazards. This may also create a nuisance for nearby residences. Similarly, any new reservoirs are likely to attract birds and may result in a concentration of birds near major highways and in EAFB flight corridors. In addition, the project will be analyzed to assess impacts on EAFB's mission and designated land uses.

Visual Resources

Potential impacts to visual resources of the Antelope Valley will be evaluated. Some of the wastewater treatment and effluent management options under consideration include the construction of a substantial number of storage reservoirs, which could impact the viewshed and create glare depending on the elevation and levee heights. From adjacent locations, the levees would be 5 to 12 feet high and unvegetated. The levees could block views of surrounding areas. Views from a distance at higher elevations could provide views of a broad expanse of the surface water of the reservoirs and could be a

noticeable feature on the landscape. In addition, agricultural operations could alter the existing character of local areas from open space to rural agriculture.

Cultural Resources

The proposed project could impact up to approximately 8,120 acres of land. The area has a long history of use by prehistoric and historic people. The possibility of encountering cultural resources including archaeological and paleontological resources is considered high for previously undisturbed areas, although locating historic monuments and landmarks within the study area is not anticipated.

Biological Resources

Much of the acreage to be acquired for the project is currently undeveloped. The project could impact dry land biological resources throughout these undeveloped areas. The areas will be assessed for their potential habitat value for state-designated and federally designated sensitive species including desert tortoise and Mohave ground squirrel.

Impacts to the existing habitat and water quality at Piute Ponds due to the change in operations and possible cessation of flushing (overflows onto Rosamond Dry Lake) will be assessed. The EIR/EA will evaluate the potential water quality and habitat quality changes that may occur at Piute Ponds as a result of the project.

Impacts to birds will be assessed with respect to water quality at Piute Ponds and the storage reservoirs. Bird air strike hazards will be evaluated with respect to the location of any wetlands and storage reservoirs near EAFB flight corridors. Other issues including localized impacts of construction activities will be addressed.

Transportation

Construction impacts will be assessed including the construction of conveyance systems across roads, including the Antelope Valley Freeway, necessary to connect any proposed storage reservoirs and the proposed expanded agricultural areas. The impacts to local traffic from increased insect populations, such as midges, as a result of additional storage reservoirs and/or oxidation ponds will be assessed.

Hydrology and Water Quality

Implementation of the Facilities Plan could have impacts on surface water drainage systems. The reservoirs could alter 100-year flood plains in the area. Levee failure could create flooding impacts. In addition, effluent management facilities could impact groundwater quality through unintended percolation. Water quality in any proposed storage reservoirs will be evaluated with respect to impacts on wildlife. The EIR/EA will review the expanded use of recycled water for agricultural irrigation to

ensure compliance with the Title 22 regulations for such reuse. The analysis will assess the permeability of the local soils and the potential to impact groundwater quality.

Geologic Hazards and Soils

Geologic hazards could include potential seismic activities as well as unstable or expansive soils which could damage the reservoir levee structures or promote levee failure. The Lancaster area has experienced subsidence in the past due to extensive groundwater extraction. Subsidence in the project area could damage levee stability and create flooding hazards. The analysis will assess the potential for subsidence and will provide measures to minimize the risk of levee failure.

Air Quality and Odor

The air quality impacts of construction and operational activities such as earthwork, worker commute trips, biosolids disposal trips, and agricultural operations will be evaluated. Air emissions from the operation of treatment facilities including volatile organic compounds and odors will be included in the analysis.

Project air emissions will be assessed based on Antelope Valley Air Quality Management District's regulations. The project is not anticipated to create significant operational impacts to air quality in the region. However, construction activities could emit significant amounts of nitrogen oxides and dust. Agricultural operations could also generate significant amounts of dust.

Noise

The potential of construction and operational activities to generate noise will be assessed. Impacts to sensitive receptors will be evaluated. Construction activities are expected to generate noise during daytime hours. Treatment equipment could generate noise levels hazardous to workers.

Public Services

The effects of the project on public services are not anticipated to be significant. However, expansion of the effluent management system could disrupt public services during construction activities. Indirect effects could include increased need for public services due to increased population in the region.

Population and Housing / Secondary Effects of Growth

The effects of the expanded treatment capacity at the LWRP will be evaluated with respect to local population and housing. Impacts to housing within the lands to be acquired will be addressed. It is not anticipated that the project would promote a need for increased population, rather the project would accommodate existing growth projections. The secondary effects of growth will be addressed including

air impacts, traffic impacts, biological impacts, and open space impacts. In addition, the availability of water sufficient to meet projected population projections will be evaluated.

Hazardous Materials

Hazardous materials storage and handling practices could impact worker and public safety. The operating practices for the LWRP as well as the agricultural operations will be evaluated to assess potential public health impacts from hazardous materials.

Public Safety

Impacts to public safety from the proposed project could include bird air strike hazards, traffic hazards, and levee failures. As described in the Biology, Transportation, and Geology sections above, these issues will be assessed with respect to local residents, land uses, and air space uses.

Socio-Economic Resources

Impacts of the project to the local economy will be evaluated. Costs associated with the project alternatives will be compared and summarized. Placement of project facilities will be assessed with respect to environmental justice.