

3.8 Land Use and Agriculture

This section addresses impacts to land use and agricultural resources associated with the construction and operation of the proposed project.

3.8.1 Setting

Regional Setting

The proposed project is located in multiple jurisdictions of the Antelope Valley, which include the City of Palmdale, the City of Lancaster, portions of unincorporated Los Angeles County, and portions of unincorporated Kern County (**Figure 3.8-1**). Each jurisdiction has independent planning documents that guide the development of urban, agricultural and other land uses within their jurisdictional boundaries.

The Antelope Valley consists of approximately 2,400 square miles of elevated desert terrain in northern Los Angeles County, southern Kern County, and western San Bernardino County. The area is bordered on the southwest by the San Gabriel Mountains, on the northwest by the Tehachapi Mountains, and on the east by a series of hills and buttes that generally follow the San Bernardino county line.

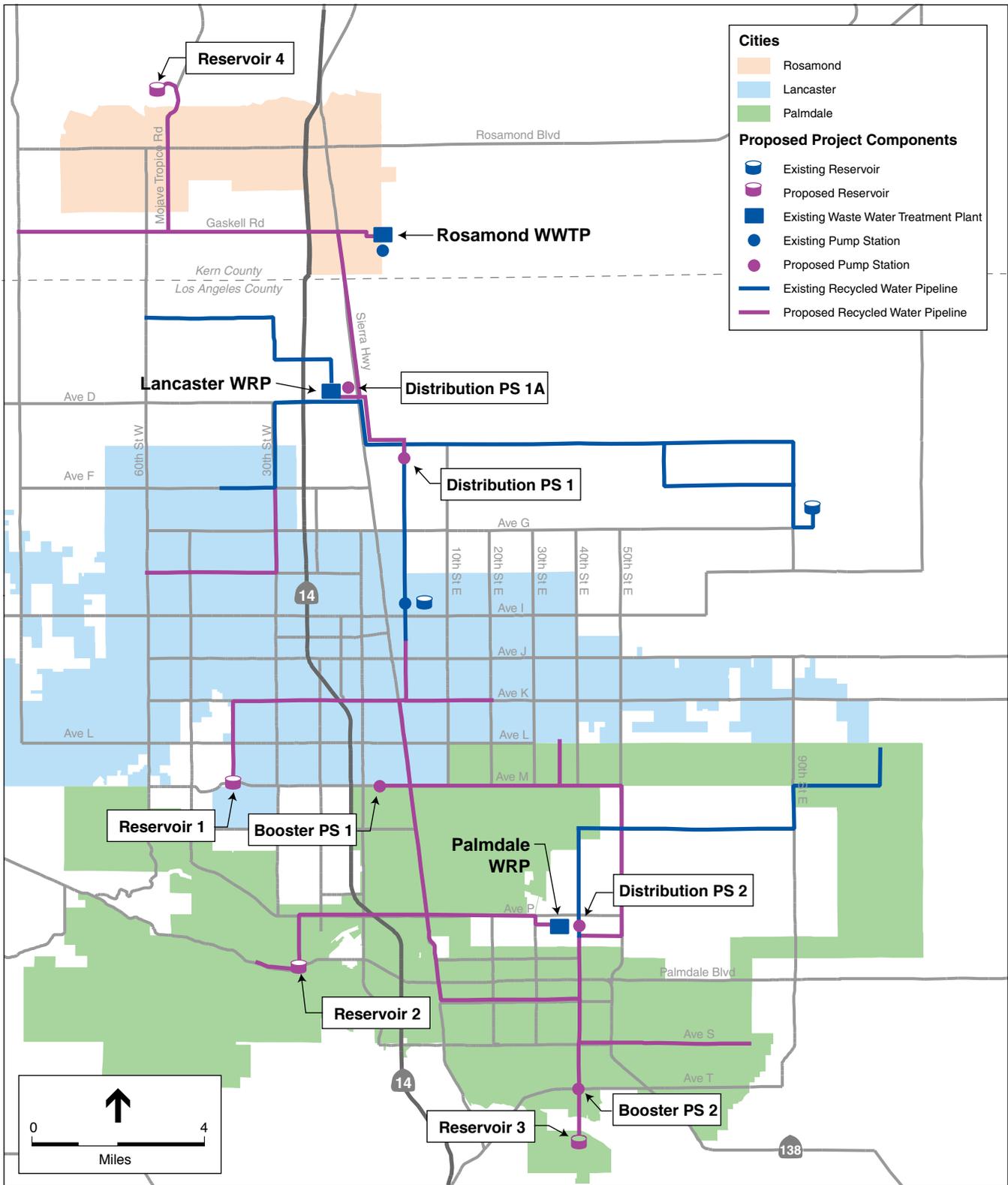
City of Lancaster

The City of Lancaster is located in the central portion of the Antelope Valley, approximately 70 miles north of downtown Los Angeles and 60 miles north of the San Fernando Valley. The developing community of Rosamond in Kern County is located several miles to the north, and the City of Palmdale is located immediately to the south. Lands to the east and west of the city are undeveloped and within unincorporated Los Angeles County. Lancaster began as an independent farming community located around the Southern Pacific Railroad. The economy transitioned from agriculture to aerospace in the 1950s, 1960s and 1970s.

City of Palmdale

The City of Palmdale is approximately 104 square miles with a sphere of influence of approximately 174 square miles (City of Palmdale, 1993). Palmdale is located approximately 60 freeway miles north of downtown Los Angeles. Palmdale is bordered by the City of Lancaster and the unincorporated community of Quartz Hill to the north; unincorporated communities of Lake Los Angeles and Littlerock to the east; the unincorporated community of Acton to the south; and the unincorporated community of Leona Valley to the west. Lake Palmdale is located in the center of the city between Highway 14 and the Sierra Highway.

The United States Air Force (USAF) owns Air Force Plant 42 in the City of Palmdale. Los Angeles World Airports (LAWA) and the USAF signed an agreement in 1989, allowing LAWA to lease the facility for commercial use. Plant 42 was renamed LA/Palmdale Regional Airport (PMD) by the Los Angeles Board of Airport Commissioners in 2006, and PMD reopened for commercial airline service on June 7, 2007.



SOURCE: Kennedy/Jenks Consultants; ESA

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Figure 3.8-1
Jurisdictional Boundaries

County of Los Angeles

Portions of the proposed project would occur within northern unincorporated Los Angeles County. The unincorporated areas of Los Angeles County within the Antelope Valley include unincorporated towns such as Quartz Hill in addition to rural living communities and undeveloped desert terrain.

County of Kern

Portions of the proposed project would occur within the unincorporated community of Rosamond. The Rosamond Specific Plan area is located about 75 miles southeast of Bakersfield and approximately 10 miles north of Lancaster just north of the Kern County border. The community of Rosamond is located in the Mojave Desert just west of Rosamond Dry Lake and has served as a gateway to Edwards Air Force Base.

Existing Land Use Designations

The majority of the proposed project would be located in the cities of Palmdale and Lancaster, with the exception of the northernmost and southernmost portions, which would be located within unincorporated county regions. The land use maps for the cities of Palmdale and Lancaster and the counties of Los Angeles and Kern are included in **Appendix H**. Land uses within Los Angeles County include the rural areas north and south of the City of Palmdale and the Palmdale Regional Airport. A small parcel of land located on Sierra Highway between Avenues P and Q is also designated as unincorporated Los Angeles County. Land uses within Kern County are designated as non-jurisdictional land by the County's General Plan.

Land uses within the City of Palmdale include open space, residential, commercial, airport, industrial, public, and other jurisdictional. Palmdale Regional Airport is located within the City of Palmdale on land leased by Los Angeles County (i.e., LAWA) from the USAF. Land uses within the City of Lancaster include residential, industrial, public, and commercial. The land uses associated with each component of the proposed project are described below and summarized in **Table 3.8-1**.

Components of the proposed project are located within two miles of public airports and within airport influence areas (AIA) designated by Airport Land Use Compatibility Plans (ALUCPs) (**Figure 3.8-2**). The Palmdale Regional Airport (PMD) is within 1.0 mile of East Avenue M and 50th Street East and adjacent to Sierra Highway. General William J. Fox Airfield Airport (Fox Airfield) is approximately 1.5 miles north of West Avenue H. Rosamond Skypark Airport is approximately 1.0 mile east of Mojave Tropic Road. Two private aviation facilities, Bohunk's Airpark and Little Butte's Antique Airfield, are also located within five miles of proposed project components. These private facilities are not regulated by ALUC policies and procedures.

Sensitive Receptors

Sensitive receptors within the project area include recreational areas, schools, medical centers, and residences. The locations of sensitive receptors adjacent to project components are shown in

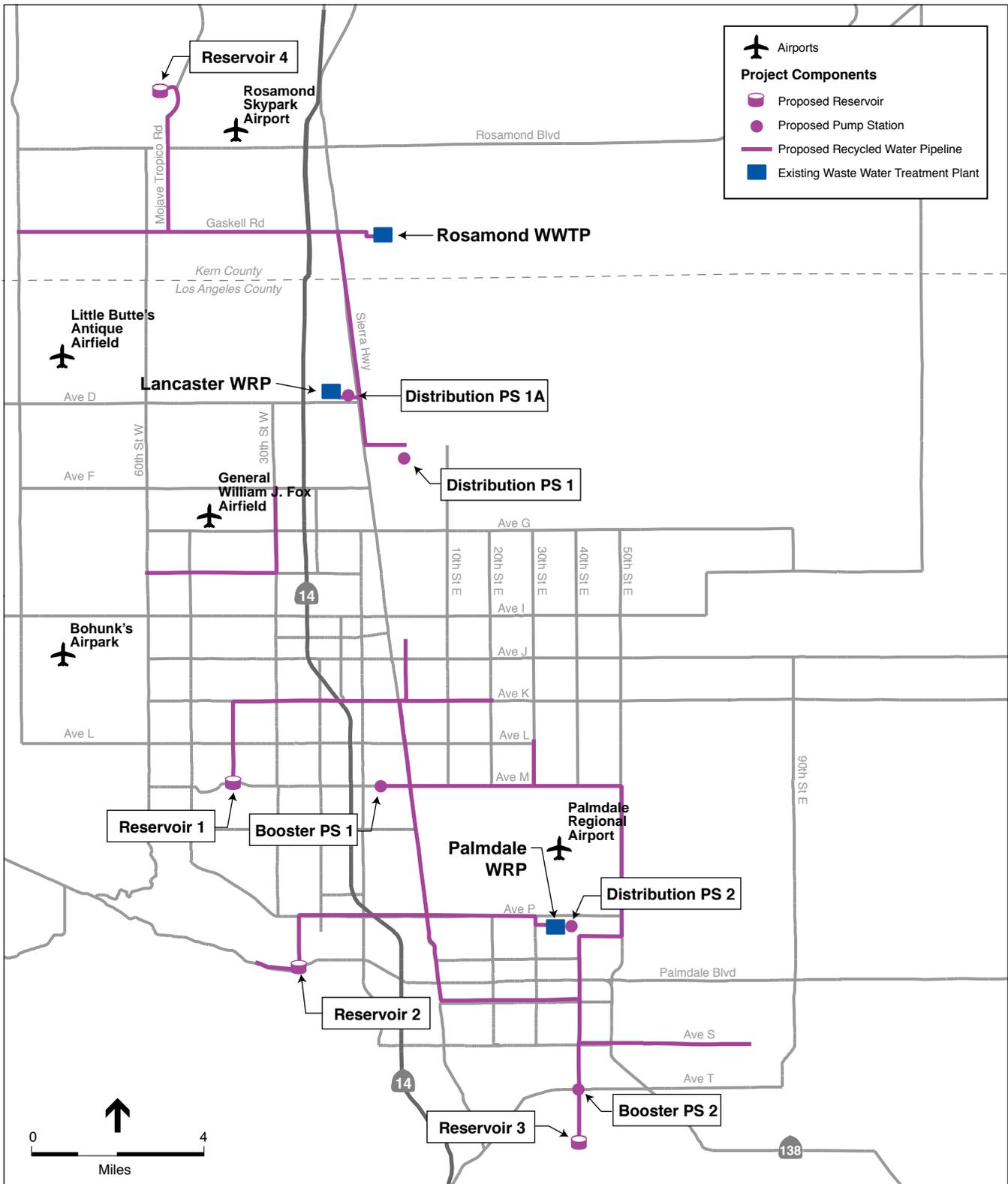
**TABLE 3.8-1
 CITY AND COUNTY LAND USE CATEGORIES BY PROJECT COMPONENT**

Project Component	Pipeline Segment	City and County Land Use Categories
Pipeline Alignment - City of Palmdale	40 th St E	LDR, SFR-3, OS, SP, PF, NC, CC, IND
	Ave S	NC, SFR-3, CC, PF, MR, SFR-2, SP
	50 St E	IND
	Ave M	AR, SP, PF, IND
	Sierra Highway	CM, SP, AR, BP, IND, PF, OC, DC
	Ave R	CM, SFR-3, PF, SFR-1
	Ave P	SFR-3, OS, SFR-1, RC, PF, CC, SP, CM,
	Elizabeth Lake Rd	SFR-1, LDR, SP
	Highland St	SFR-3
	30 th St E	IND
Pipeline Alignment - City of Lancaster	Ave H	NU, LI, MR1, MR2, SP
	30 th St W	LI, SP
	Division St	LI, C, UR, MR1
	Ave K	UR, S, C
	40 th St W	PDW, UR, C, NU
	Sierra Highway	C, LI, SP
Pipeline Alignment – Kern County	Ave M	HI
	Gaskell Rd	ACPA
	56 th Ave	ACPA
	Mojave Tropico Rd	ACPA
Pipeline Alignment – Los Angeles County	Sierra Highway	ACPA
	40 th St E	RL, P
	Sierra Highway	RL, I, U, P
	Ave D	P
	Ave E	RL
	Ave P	P
	50 th St E	P
Distribution Pump Station 1	Division St	NU
Distribution Pump Station 1A	Ave D	P
Distribution Pump Station 2	40 th St E	P
Booster Pump Station 1	Ave M	LI
Booster Pump Station 2	Ave T	LDR, SFR-3
Reservoir 1	40 th St W	NU
Reservoir 2	Elizabeth Lake Rd	SFR-3
Reservoir 3	Barrel Springs Rd	RL
Reservoir 4	Mojave Tropico Rd	ACPA

Abbreviations:

ACPA	Accepted county plan areas	LI	Light Industry	RC	Regional Commercial
AR	Airport and Related Uses	MR	Medium Residential	RL	Rural Land
BP	Business Park	MR1	Multi-Residential	SFR-1	Single Family Residential
C		MR2	Multi-Residential	SFR-2	Single Family Residential
CA	California Aqueduct	NC	Neighborhood Commercial	SFR-3	Single Family Residential
CC	Community Commercial	NU	Non-Urban Residential	SP	Specific Plan
CM		OS	Open Space	U	Urban
DC	Development Commercial	P	Public and Semi-Public	UR	Urban Residential
HI	Heavy Industry	PDW	Prime Desert Woodland		
I/IND	Industrial	PF	Public Facility		
LDR	Low Density Residential	S	Public School		

SOURCES: Los Angeles County, 2007; Kern County, 2007; City of Palmdale, 2007; City of Lancaster, 2007.



SOURCE: ESA, 2008.

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Figure 3.8-2
Airports in Project Vicinity

Figure 3.8-3. Educational centers in Palmdale include Quail Valley Elementary, Pete Knight High School, the Antelope Valley High School District Office, Youth Center, and Early Child Preschool, Palmdale High School, Pinecrest School, Cactus School, the Palmdale Youth Library, and Highland High School. Adjacent medical centers include the South Valley Medical Clinic and Kaiser Permanente Medical Care. Recreational areas include the DryTown Water Park and William J. McAdam Park. Residences are generally located in the southeastern and western portions of the city. Residential streets that would be affected by pipeline construction include 40th Street East, Elizabeth Lake Road, Avenue R, Avenue S, Gaskell Road and 25th Street West. Sensitive receptors in Lancaster include educational centers, residences, and the Lancaster National Soccer Center. Adjacent schools include Kindercare, Antelope Valley College, Bethel Christian School, and Antelope Valley High School. The majority of the residences are located in the eastern and western portions of the city, with a mix of residential and commercial areas in the city center. Residential streets that would be affected by pipeline construction include 40th Street West and West Avenue K.

Agriculture

As shown in **Figure 3.8-4**, there are numerous parcels of land designated by the California Department of Conservation as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance near the project area (California Department of Conservation, 2007). Some of the project components run parallel and adjacent to these agricultural lands. However, all proposed pipeline components would be located within public road rights-of-way and, therefore, would not be located on protected soil as the FMMP does not include designated roadways or their rights-of-way as viable farmland. There would be no impacts to any Prime or Unique Farmland, or Farmland of Statewide importance.

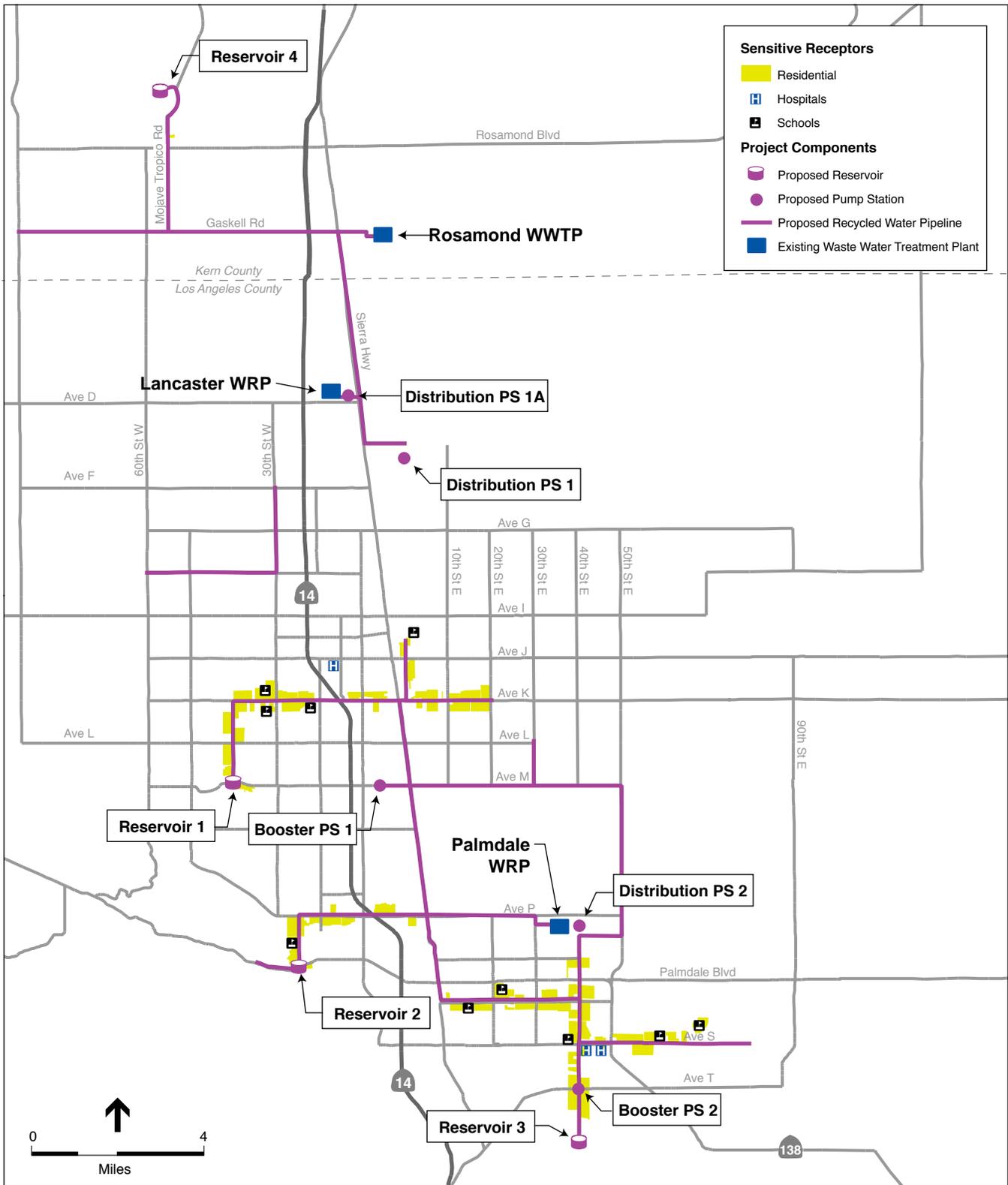
Within the project area there are two adjacent parcels of land that are under a Williamson Act contract and contain prime agricultural soils (California Department of Conservation, 2005). The parcels are located in Kern County, south of Rosamond Boulevard and east of 90th Street West. (Sec 20, T9N, R12W; Sec 29, T9N, R12W) (Figure 3.8-4). Neither of the identified Williamson Act parcels are on or adjacent to any project facilities nor would they be impacted by project implementation.

3.8.2 Regulatory Framework

Federal

Federal Aviation Administration

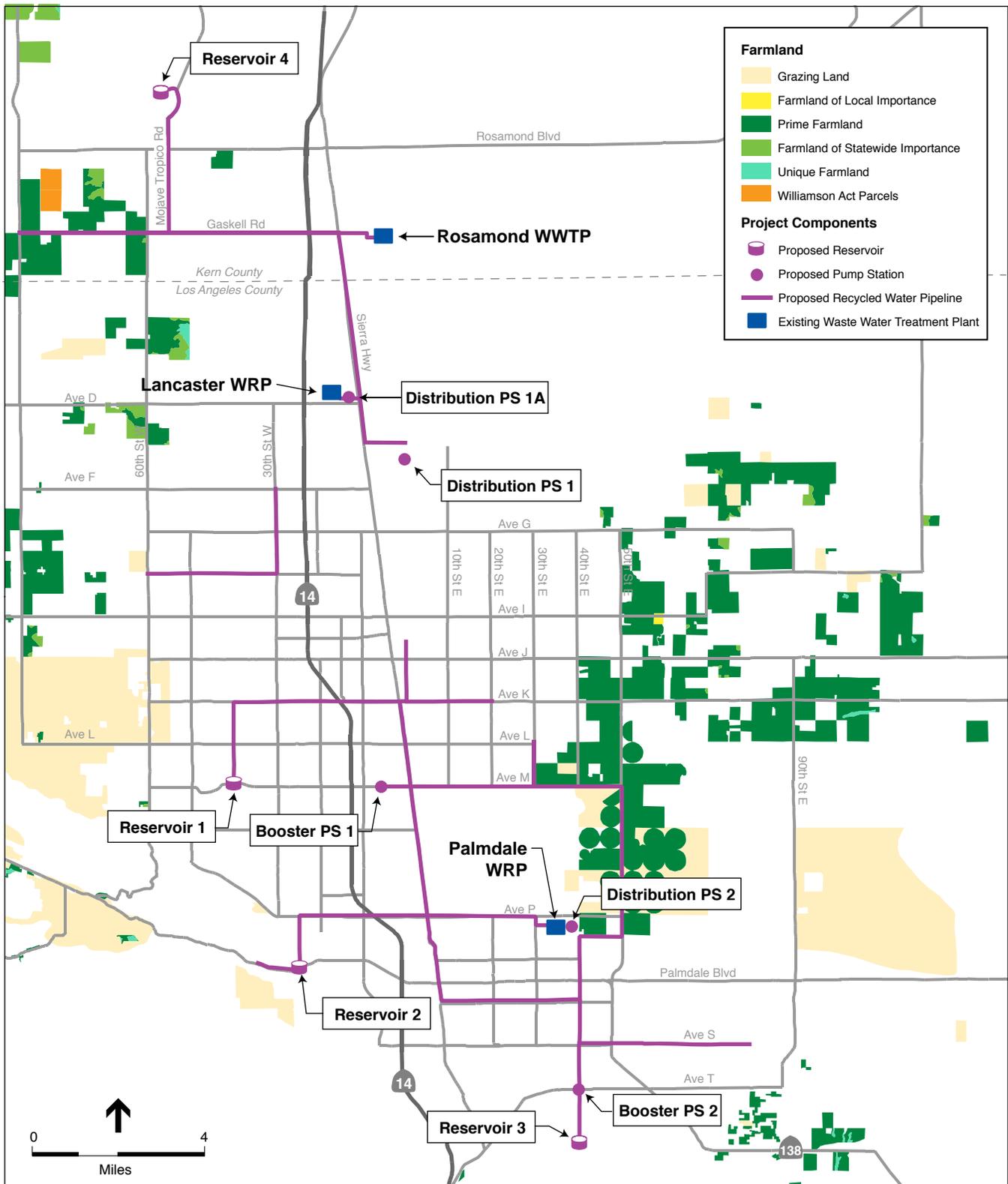
The Federal Aviation Administration (FAA) is the branch of the U.S. Department of Transportation with regulatory responsibility for civil aviation. The FAA is responsible for establishing policies and regulations to ensure the safety of the traveling public. The FAA oversees airports that are open to the public or airports that receive federal funding (Rodriguez, 2006). FAA Advisory Circular (AC) 150/5200-33B addresses hazardous wildlife attractants on or near airports (FAA, 2007). This Advisory Circular is intended to provide guidance on siting



SOURCE: ESA, 2008

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Figure 3.8-3
Sensitive Receptors



SOURCE: Department of Conservation, Farmland Mapping and Monitoring Program, 1984-2006.

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Figure 3.8-4
Agricultural Resources

certain land uses that have the potential to attract potentially hazardous wildlife to a public-use airport or its vicinity. The FAA Advisory Circular recommends against “land use practices that attract or sustain populations of hazardous wildlife within the vicinity of airports or cause movement of hazardous wildlife onto, into, or across the approach or departure airspace, aircraft movement area, loading ramps, or aircraft parking area of airports.” The Advisory Circular recommends a separation distance of 5,000 feet between airports using piston-powered aircraft and any project or change in land use that could attract hazardous wildlife, such as open-air water storage facilities. For airports using turbine-powered aircraft, the FAA recommends a separation distance of 10,000 feet between an airport and a potential hazardous wildlife attractant. For projects that are located outside the 5,000/10,000-foot criteria but within five statute miles of the airport’s air operations area¹, the FAA may review development plans, proposed land use changes, operational changes, or wetland mitigation plans to determine whether such changes in land use would create potential wildlife hazards to aircraft operations.

State

Caltrans Division of Aeronautics

The State Aeronautics Act, Public Utilities Code (PUC) section 21001 *et seq.*, provides the foundation for the California Department of Transportation’s (Caltrans) aviation policies. The Division of Aeronautics issues permits for and annually inspects public-use airports throughout the State, and provides grants and loans for safety, maintenance and capital improvement projects at airports (Caltrans, 2006b). To foster compatible land use around airports, the Division administers noise regulation and land use planning laws and encourages environmental mitigation measures to lessen noise, air pollution, and other impacts caused by aviation. The Division’s System Planning group provides for the integration of aviation into transportation system planning on a regional, statewide, and national basis.

The State Aeronautics Act² requires local jurisdictions that operate public airports to establish Airport Land Use Commissions (ALUCs) or an equivalent designated body to protect the public health, safety, and welfare. The ALUC or equivalent is responsible for promoting the orderly expansion of airports and adoption of land use measures by local public agencies to minimize exposure to excessive noise and safety hazards near airports. Each ALUC or equivalent designated body is responsible for preparing and maintaining an Airport Land Use Compatibility Plan (ALUCP) that identifies compatible land uses near each public use airport within its jurisdiction. The ALUCP must provide policies for reviewing certain types of development that occur near airports. State law requires consistency between airport land use compatibility plans and any associated general plans. Caltrans is responsible for the review and approval of all ALUCPs within the State of California.

¹ Any area of an airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An air operations area includes such paved areas or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiways, or apron.

² The State ALUC law is contained in Public Utilities Code Article 3.5, State Aeronautics Act, Section 21661.5, Section 21670 *et seq.*, and Government Code Section 65302.3 *et seq.*

California Farmland Mapping and Monitoring Program

The California Department of Conservation, under the Division of Land Resource Protection, has established the Farmland Mapping and Monitoring Program (FMMP). The FMMP monitors the conversion of the state's farmland to and from agricultural use. The map series identifies eight classifications and uses a minimum mapping unit size of 10 acres. The FMMP also produces a biannual report on the amount of land converted from agricultural to non-agricultural use. The FMMP maintains an inventory of state agricultural land and updates its "Important Farmland Series Maps" every two years (California Department of Conservation, 2007). Important farmlands are divided into the following five categories based on their suitability for agriculture.

- **Prime Farmland.** Prime Farmland is land with the best combination of physical and chemical characteristics able to sustain long-term production of agricultural crops. This land has produced irrigated crops at some time within the four years prior to the mapping date.
- **Farmland of Statewide Importance.** Farmland of Statewide Importance is land that meets the criteria for Prime Farmland but with minor shortcomings such as greater slopes or lesser soil moisture capacity.
- **Unique Farmland.** Unique Farmland has even lesser quality soils and produces the state's leading agricultural crops. This land is usually irrigated but also includes non-irrigated orchards and vineyards.
- **Farmland of Local Importance.** Farmland of Local Importance is land that is important to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- **Grazing Land.** Grazing Land is land on which the existing vegetation is suited to the grazing of livestock.

Williamson Act

The California Land Conservation Act of 1965, also known as the Williamson Act, is designed to preserve agricultural and open space lands by discouraging their premature and unnecessary conversion to urban uses. Williamson Act contracts, also known as agricultural preserves, create an arrangement whereby private landowners contract with counties and cities to voluntarily restrict their land to agricultural and compatible open-space uses. The vehicle for these agreements is a rolling term 10-year contract.³ In return, restricted parcels are assessed for tax purposes at a rate consistent with their actual use, rather than potential market value. At the end of the 10-year contract, either the local government, or landowner, can initiate the nonrenewal process. A "notice of nonrenewal" starts a 9-year nonrenewal period. During the nonrenewal process, the annual tax assessment gradually increases. At the end of the 9-year nonrenewal period, the contract is terminated. Contracts renew automatically every year unless the nonrenewal process is initiated. Williamson Act contracts can be divided into the following categories: Prime Agricultural Land, Non-Prime Agricultural Land, Open Space Easement, Built up Land, and Agricultural Land in Non-Renewal.

³ Information about the basic provisions of Williamson Act contracts can be found on the California Department of Conservation, Division of Land Resource Protection web site:
http://www.consrv.ca.gov/DLRP/lca/basic_contract_provisions/index.htm, accessed June 22, 2007.

The Williamson Act states that a board or council by resolution shall adopt rules governing the administration of agricultural preserves. The rules of each agricultural preserve specify the uses allowed. Generally, any commercial agricultural use will be permitted within any agricultural preserve. In addition, local governments may identify compatible uses permitted with a use permit.

Local

The local land use regulations that apply to this proposed project include the following planning documents which govern land use in the area.

City of Lancaster General Plan

The following is a selected list of General Plan goals, objectives, and polices that are applicable to the proposed project.

Goal 1: To ensure that Lancaster manages its land use and development in such a manner as to place the highest value of people and their quality of life.

Objective 1.3: Ensure a well designed, visually pleasing built environment.

Goal 2: To facilitate the development of the City of Lancaster into a balanced and complete community encompassing a diverse mix of land use types and business opportunities which combine to provide a quality living and working environment.

Objective 2.4: Plan for population and economic growth while striving to maintain or improve environmental quality consistent with availability of natural and energy resources, and the ability of public agencies and quasi-public agencies to provide required services and facilities.

Objective 2.5: Promote a distribution of population consistent with resource availability, service system capacity, accessibility, and environmental limitations.

Goal 3: To identify the level of natural resources needed to support existing and future development within the City and its sphere of influence, and ensure that these resources are managed and protected.

Objective 3.1: Protect, maintain, and expand groundwater supplies to meet the present and future urban and rural needs.

Policy 3.1.1: Ensure that development does not adversely affect the groundwater basin.

Policy 3.1.2: Promote efforts to exert greater City control over the existing water supply and to explore potential new sources.

Policy 3.1.3: Encourage the use of reclaimed water and tertiary wastewater for irrigation and other non-contact uses.

City of Palmdale General Plan

The following is a selected list of General Plan goals, objectives, and polices that are applicable to the proposed project.

Goal L1: Create a vision for long-term growth and development in the City of Palmdale which provides for orderly, functional patterns of land uses within urban areas, a unified and coherent urban form, and a high quality of life for its residents.

Goal L2: Adopt land use and development policies which encourage growth and diversification of the City's economic base.

Goal ER4: Protect the quality and quantity of local water resources.

Objective ER4.1: Ensure that ground water supplies are recharged and remain free of contamination.

Objective ER4.2: Minimize the impacts of urban development on groundwater supplies.

Policy ER4.2.4: Coordinate with local water agencies to monitor ground water levels, State water allocations and development approvals, to assure that development does not outpace long-term water availability. In the event applicable water agencies notify the City that ground water levels and State water allocations are insufficient to serve existing development or projected development, the City will determine whether it is appropriate to reevaluate this General Plan and take other appropriate actions, as permitted by law.

Objective ER4.3: Maintain and further the City's commitment to long-term water management within the Antelope Valley by promoting and encouraging planning for the conservation and managed use of water resources, including groundwater, imported water, and reclaimed water.

Policy ER4.3.1: Assess the feasibility of utilizing reclaimed water for landscape irrigation on a city-wide basis. Factors to be considered include the potential quantities of reclaimed water as determined by the Sanitation Districts, and costs associated with developing infrastructure and delivery systems to facilitate utilization. Within those areas in which it is determined to be feasible to utilize reclaimed water, consider establishment of an ordinance requiring installation of secondary water delivery systems to service landscaped areas.

Policy ER4.3.3: Continue to seek out long-range water management techniques as new technology is developed; promote implementation of systems which are feasible and appropriate to the Planning Area.

Policy ER4.3.4: Encourage residents and businesses to recycle water where feasible, and where water recycling does not result in health and safety concerns, within their homes and/or businesses.

Policy ER4.3.5: Participate in regional efforts to retain imported water allocations and seek out other sources as they become available.

Los Angeles County General Plan

The County of Los Angeles has developed the Antelope Valley Areawide (AVA) General Plan, in conjunction with the other chapters and elements of the County of Los Angeles General Plan. The AVA General Plan is a coordinated statement of public policy by the County for use in making public decisions relating to the future of the Antelope Valley. The AVA General Plan is designed to provide decision makers with a policy framework to guide them in efforts to improve the quality of life in the valley. The following is a list of selected AVA General Plan polices that apply to the proposed project.

2. Closely monitor growth in the Antelope Valley to maintain a balance between development and the capacity of the environmental, economic, and man-made or social services.
5. Assign priority for future land use growth in the Antelope Valley considering for the following criteria:
 - a. Hazards or constraints of natural environmental systems on land use;
 - b. Sensitivities of natural environmental systems;
 - c. Constraints of man-made systems.
23. Protect underground water supplies by enforcing controls on sources of pollutants.
29. Encourage development of services to meet the needs of Antelope Valley residents including health, education, welfare, police and fire, governmental operations, recreation, cultural, and utility services. Such services should be expanded at a rate commensurate with population growth. Phasing of their implementation should be timed to prevent gaps in services as the area grows. Where feasible, service facilities will be established in central urban area with branches located in outlying communities. When the population base in a community is too small to support a facility, a common facility should be shared by a number of small communities and established at a central point.
39. Ensure conservation of natural resources through the establishment of public programs to encourage continued agricultural production and to control energy consumption, mineral extraction, groundwater recharge, construction, and other public and private activities which affect the future availability and quality of such resources.
101. Develop and use groundwater sources to their safe yield limits.
102. Use imported water, when available, to relieve overdrafted groundwater basins and maintain their safe yield for domestic uses outside of urban areas.
103. Encourage utilization of flood waters and reclaimed wastewater for groundwater recharge.

Los Angeles County Airport Land Use Plan

The State Aeronautics Act of the California Public Utilities Code establishes statewide requirements for airport land use compatibility planning and requires nearly every county to create an Airport Land Use Commission (ALUC) or alternative designated body to implement these requirements. Los Angeles County established a county-wide ALUC, which is charged with the responsibility of preparing and implementing an airport land use plan (ALUP).

An ALUP provides for the orderly growth of an airport and the area surrounding the airport, excluding existing land uses. Its primary function is to safeguard the general welfare of people

and property within the airport vicinity and the public in general. The *Los Angeles County Airport Land Use Plan* (ALUP) includes several components:

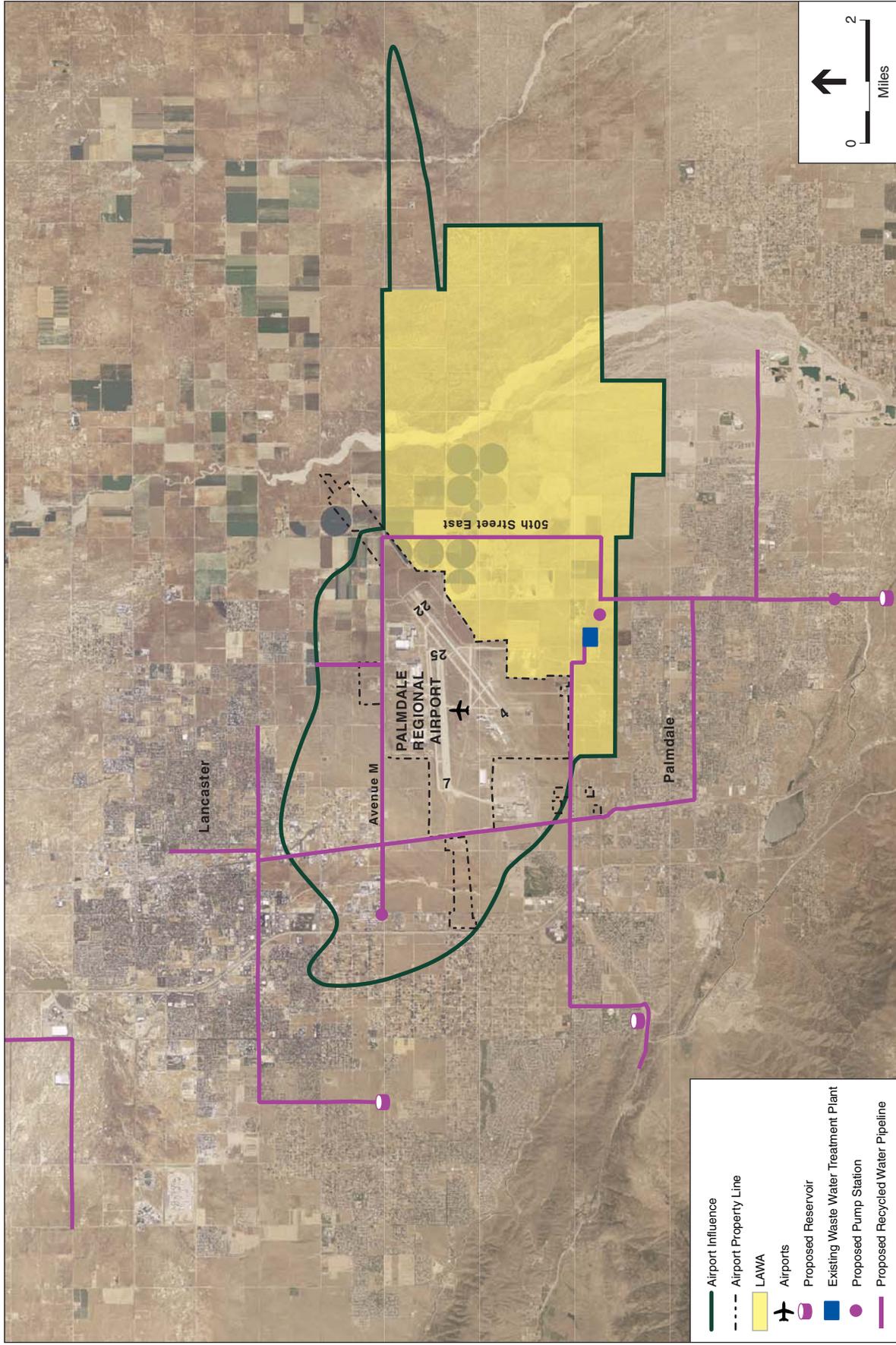
- *Airport Land Use Commission Review Procedures* (Review Procedures), adopted on December 1, 2004. The Review Procedures are County-wide procedures that apply to all 11 public-use airports in the County, including Palmdale Regional Airport.
- Airport Land Use Plan, adopted December 19, 1991. Although some of the county-wide policies addressed in this plan have been superseded by the 2004 Review Procedures, the 1991 plan includes background on compatibility issues and each airport for which the ALUC is responsible for policy development.
- Other airport-specific plans. The County is in the process of developing an individual Airport Land Use Compatibility Plan for each airport. The County has developed two airport-specific Land Use Compatibility Plans to-date, including the *General William J. Fox Airfield Land Use Compatibility Plan*.

Taken together, these document components define the procedures and criteria through which the County can address, evaluate, and review airport compatibility issues in the vicinity of any of its public use airports.

The goal of an airport land use compatibility plan is twofold: To protect the public from the adverse affects of aviation, and to protect air travelers from land uses that could present unsafe conditions. The ALUP provides specific policies and procedures for proposed changes in land use within the AIA to ensure compliance with four types of compatibility concerns:

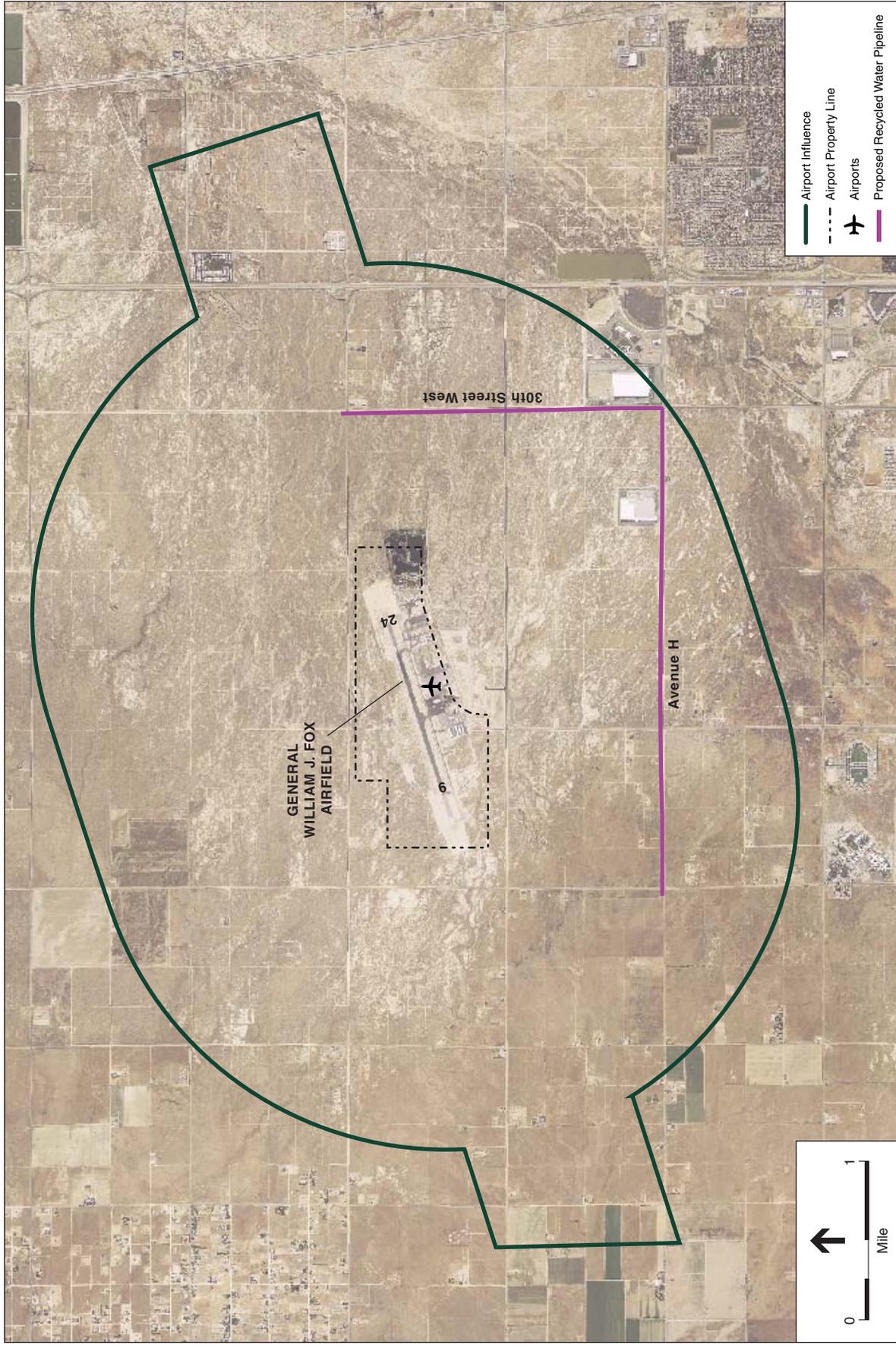
- Exposure to aircraft noise;
- Land use safety with respect to both people and property on the ground and air travelers;
- Airspace protection; and
- General concerns related to aircraft overflights.

The ALUC has identified the Airport Influence Area (AIA) for each public use airport in Los Angeles County. The AIA is the geographic area that could be affected by present or forecasted aircraft operations and the area in which new land uses or changes in land uses could cause adverse effects to flight operations and safety. Proposals for development within an AIA, as defined by the adopted ALUP, are reviewed for their consistency with ALUP compatibility criteria. **Figures 3.8-5** and **3.8-6** identify the AIA associated with PMD and Fox Airfield. As shown in Figure 3.8-5, the AIA for PMD includes a large portion of the City of Palmdale, a portion of the City of Lancaster, and portions of unincorporated Los Angeles County. As shown on Figure 3.8-6, the AIA for Fox Airfield includes a portion of the City of Lancaster and unincorporated Los Angeles County.



SOURCE: Los Angeles County ALUC, 2003; GlobeXplorer, 2007; Kennedy/Jenks Consultants, 2008; and ESA, 2008

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Figure 3.8-5
 PMD Airport Influence Area



SOURCE: Los Angeles County ALUC, 2004; GlobeXplorer, 2007; and ESA, 2008

North LA/Kern County Regional Recycled Water Project - 206359
Figure 3.8-6
 General William J. Fox Airfield Airport Influence Area

Airport Land Use Commission Review Procedures (December 2004)

The Review Procedures provide the following county-wide policies and procedures that would be applied to any development near the County's public-use airports:

General Policies

- G-1** Require new uses to adhere to the Land Use Compatibility Chart.
- G-4** Prohibit any uses which will negatively affect safe air navigation.

Policies related to safety

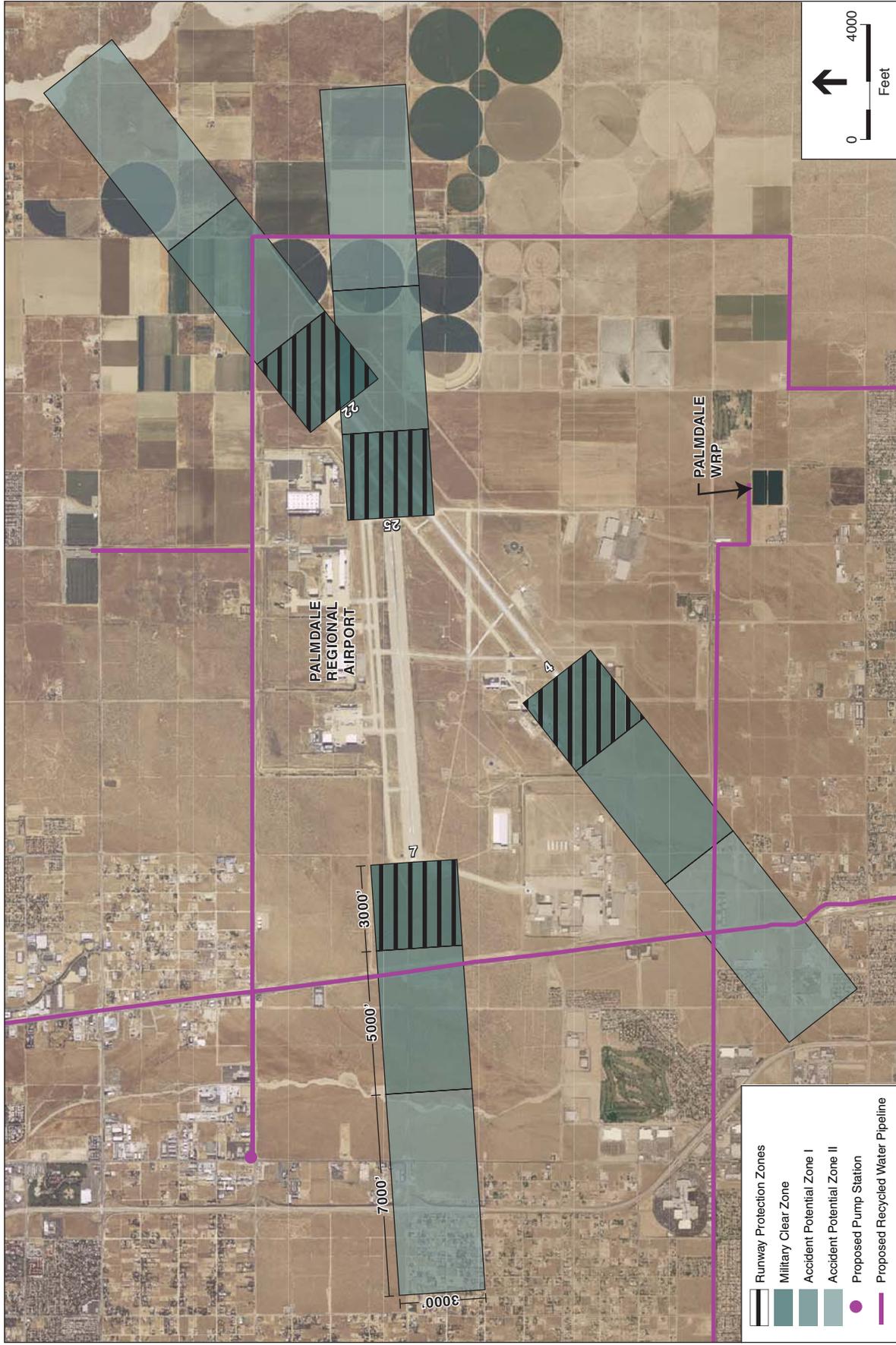
- S-1** Establish "runway protection zones" contiguous to the ends of each runway. These runway protection zones shall be identical to the FAA's runway protection zone (formerly known as "clear zones").
- S-3** Prohibit, within a runway protection zone, any use which would direct a steady light or flashing light of red, white, green or amber colors associated with airport operations towards an aircraft engaged in an initial straight climb following take-off or toward an aircraft engaged in final approach toward landing at an airport.
- S-4** Prohibit, within a designated runway protection zone, the erection or growth of objects which rise above the approach surface unless supported by evidence that it does not create a safety hazard and is approved by the FAA.
- S-5** Prohibit uses which would attract large concentrations of birds, emit smoke, or which may otherwise affect safe air navigation.
- S-7** Comply with the height restriction standards and procedures set forth in FAR Part 77.

General William J. Fox Airfield Land Use Compatibility Plan

The policies set forth in the *General William J. Fox Airfield Land Use Compatibility Plan* establish the criteria applied by the County and affected local jurisdictions for evaluating the compatibility of proposed development in the airport vicinity. The plan is to be used in combination with the ALUC's county-wide Review Procedures. The airport-specific plan addresses issues associated with noise, safety, airspace protection, and overflight areas and the potential effects of proposed development on airport operations. As shown on Figure 3.8-6, portions of the Phase I pipeline components adjacent to 30th Street West and Avenue H occur within the AIA for Fox Airfield.

Palmdale Airport Land Use Compatibility Plan

At this time, the County has not prepared a specific Land Use Compatibility Plan for PMD, but an AIA has been established for PMD, and proposed development would be subject to the county-wide Review Procedures. As shown on **Figure 3.8-7**, proposed project components would be located outside of all four Runway Protection Zones associated with civilian aircraft operations. Many of the proposed project components will occur within the AIA for PMD, and the county-wide policies set forth in the Review Procedures will apply to all proposed facilities within the AIA. However, airport-specific policies have not been developed at this time.



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Figure 3.8-7
PMD Clear Zones and Accident Potential Zones

SOURCE: USAF, 2002; and ESA, 2008

Air Installation Compatible Use Zone Study

The *Air Installation Compatible Use Zone (AICUZ) Study* provides extensive analysis on the effects of aircraft noise, aircraft accident potential, and land use development upon present and future land uses in the vicinity of PMD. The AICUZ identifies military clear zones (CZs) and accident potential zones (APZs) for runways 7/25 and 4/22 (see Figure 3.8-7). The CZ, which is located at each runway end, represents the area at the highest risk of experiencing aircraft accidents. (The CZs presented in the AICUZ Study coincide with the RPZs identified by the ALUCP for PMD.) APZs I and II, which extend beyond the CZ, represent diminishing levels of risk for aircraft accidents, yet 60 percent of Air Force accidents occur within these three zones.

Table 3.8-2 depicts the recommended land uses for both the CZs and the APZs.

**TABLE 3.8-2
 RECOMMENDED LAND USE FOR CLEAR ZONES AND ACCIDENT POTENTIAL ZONES**

Generalized Land Uses	Clear Zones	APZ I	APZ II
Residential	No	No	Yes ^a
Commercial	No	No ^b	Yes ^b
Industrial	No	Yes	Yes ^b
Public/Quasi-Public	No	No	Yes ^b
Recreational	No	Yes ^b	Yes ^b
Open/Agriculture/Low Density	No	Yes ^b	Yes ^b

^a Suggested maximum density 1 dwelling unit per acre.
^b Only limited low-density, low-density uses recommended.

SOURCE: *Air Installation Compatible Use Zone Study*, 2002.

Kern County General Plan

The county has adopted a coordinated statement of public policy, in the form of a Specific Plan for the unincorporated area near Rosamond. The Rosamond Specific Plan has land use goals and policies that parallel the County General Plan. The following is a list of selected Rosamond Specific Plan goals that apply to the project:

- To ensure a safe, reliable supply of water for both new and existing residential development.
- To prevent, as far as is possible, any further drawdown of the water table within the plan area.

Kern County Airport Land Use Compatibility Plan

The purpose of the *Kern County Airport Land Use Compatibility Plan (ALUCP)* is to establish procedures and criteria by which the County of Kern and the affected incorporated cities can

address compatibility issues when making decisions regarding airports and the land uses around them.

The ALUC has identified the AIA for each of the sixteen airports located within Kern County, one of which, Rosamond Airport, is located in the project area (see **Figure 3.8-8**). The AIA for Rosamond Airport is located entirely within unincorporated portions of Kern County. As shown on Figure 3.8-8, portions of the Phase 5 pipeline occur within the AIA for Rosamond Airport.

Airport Land Use Commission Compatibility Criteria

The ALUCP's compatibility criteria include the following county-wide policies and procedures that would be applied to any development near the County's public-use airports:

Safety Policies

3.2.1 Objective: The intent of land use safety compatibility criteria is to minimize the risks associated with an off-airport aircraft accident or emergency landing.

- a. Risks both to people and property in the vicinity of an airport and to people on board the aircraft shall be considered.
- b. More stringent land use controls shall be applied to the areas with greater potential risk.

Airspace Protection Policies

3.3.1 Height Limits: The criteria for limiting the height of structures, trees, and other objects in the vicinity of an airport shall be set in accordance with Part 77, Subpart C, of the Federal Aviation Regulations and with the United States Standard for Terminal Instrument Procedures (TERPS).

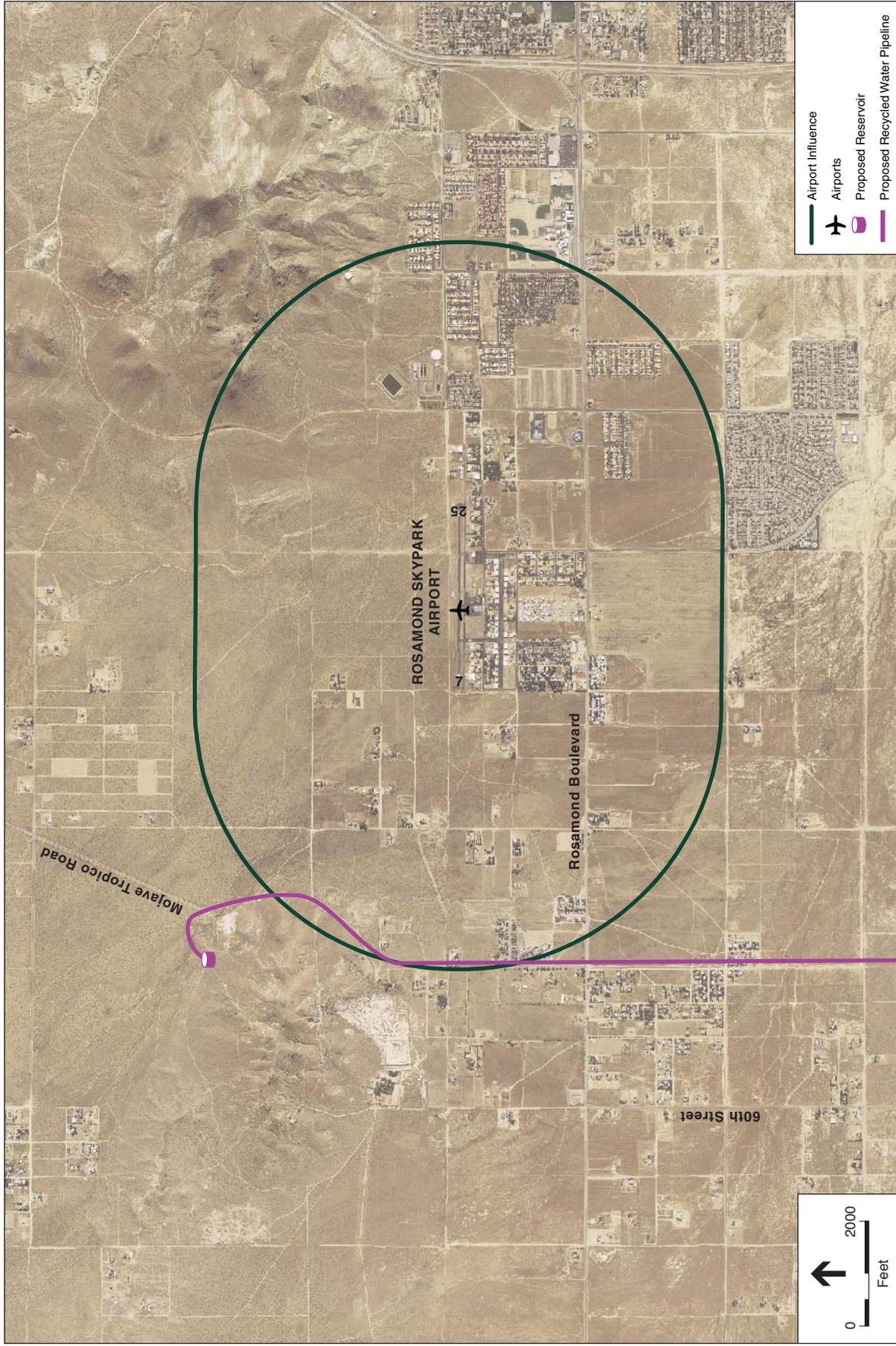
3.8.3 Impacts and Mitigation Measures

This section discusses the proposed projects' potential impacts to land use and agricultural resources. A project-level impact analysis has been prepared for the pipeline installation and operation, and for M&I end uses for recycled water. This section also includes a program-level impact analysis for installation and operation of the proposed pump stations and storage reservoirs and the following recycled water end uses: agricultural reuse, power plant cooling water, and groundwater recharge.

Significance Criteria

For the purposes of this PEIR and consistency with Appendix G of the *CEQA Guidelines*, applicable local plans, and agency and professional standards, the project would have a significant impact on agriculture and or land uses if it would:

- Convert Prime Farmland, Unique farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resource Agency to non-agricultural uses.
- Conflict with existing zoning for agricultural use, or a Williamson Act contract.



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Figure 3.8-8
 Rosamond Skypark Airport Airport Influence Area

SOURCE: Kern County, 2006; and ESA, 2008

- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural uses.
- Physically divide an established community.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.
- Conflict with existing or future airport operations or conflict with an approved plan, such as an airport Master Plan, Airport Layout Plan, or ALUCP.

The significance determination for the above listed impact thresholds is based on both short-term and long-term impacts of project implementation.

Impacts Discussion

No part of the proposed project is located on land under a Williamson Act contract. Additionally, none of the project components would directly affect land that is zoned for agricultural uses by the Cities of Lancaster and Palmdale or the Counties of Los Angeles and Kern. Therefore, there would be no direct impact on agricultural land use designations. The proposed recycled water project may actually increase agricultural production in the area by providing recycled water suitable for agricultural uses.

The proposed pipeline installation and selected recycled water end uses would not conflict with any applicable land use plan goals, objectives, or policies. Implementation of the proposed project would be consistent with goals and policies of the general plans and land use plans described in Section 3.8.2, with regard to support for recycled water use, protection and enhancement of groundwater supplies, promotion of water conservation, maintenance of long-term water supplies, and protection of agricultural land uses. The fundamental goals and objectives of the proposed project are to implement water reuse and water conservation measures that directly support these goals and policies. There would be no policy conflicts.

Landscape irrigation would be made available to customers with a variety of land uses throughout the project area. The water would benefit golf courses, school yards, city properties, and other landscaped properties. This would be considered a beneficial outcome to cities and recreational land uses throughout the project area.

Project-level Impacts

Impact 3.8-1: The proposed pipeline could traverse through land controlled by other agencies. Less than Significant.

The proposed pipeline would traverse private property and property owned by other agencies including local cities, the County, and the Department of Water Resources. Segments of the pipeline would be constructed either by local jurisdictions or by a Joint Powers Authority if one is

established. Construction on private property or public land would require that the implementing agency obtain permanent utility easements. In addition, construction within city streets would require encroachment permits from the cities and the counties. With the acquisition of easements and encroachment permits, impacts to land uses would be less than significant.

Mitigation Measures

None required.

Impact 3.8-2: The proposed pipeline would be constructed within the AIA for Palmdale Regional Airport, General William J. Fox Airfield, and Rosamond Skypark Airport. Less than Significant with Mitigation.

As shown in Figures 3.8-5 through 3.8-8, several project components would be constructed within the AIA for these public use airports. As shown in Figure 3.8-7, several components are also located very near to Clear Zones associated with PMD. The potential short-term impacts associated with the construction of the proposed pipeline would be potentially significant due to their close proximity to these airports. The presence of construction equipment, particularly cranes and lights, could pose hazards to aircraft operations.

To prevent potential intrusions to navigable airspace, the implementing agency would notify the airport of proposed construction activities in advance and work with the airport to complete project review through the FAA's 7460 airspace review process, which would ensure that construction equipment, such as cranes and flashing lights, would not pose hazards to aviation. In addition to FAA airspace review, ongoing coordination with the airport would be required to ensure that proposed construction activities do not disrupt airport operations and to ensure that appropriate notice is provided to aviators using the airport. Portions of the Phase 2 and 3 pipeline construction would occur on federally obligated property associated with PMD and LAWA (see Figure 3.8-5). Although it is anticipated that construction will occur within the rights-of-way for jurisdictions owning the roads intersecting these properties, the implementing agencies must coordinate construction schedules with airport staff to minimize effects to airport operations.

Construction activities can pose threats to aviation through the inadvertent creation of habitat, open water, or food sources for potentially hazardous wildlife. For example, the use of temporary or permanent sediment traps, the use of soil-stabilization mixtures that include grains or other food sources, or the use of landscaping materials that provide opportunities for nesting or loafing can attract birds and other wildlife that pose hazards to aircraft.

Implementation of the following mitigation measures would minimize these potential effects associated with construction of the proposed pipeline.

Mitigation Measures

Mitigation Measure 3.8-1a: For project components occurring within an AIA, the implementing agencies shall submit their proposed project plans to the Los Angeles County ALUC for review and comment prior to final design.

Mitigation Measure 3.8-1b: Prior to conducting construction activities within an AIA, the implementing agencies shall prepare an airport construction safety plan that would identify best management practices. The plan would include, at a minimum, construction timeframes and hours, lighting and flagging requirements, air traffic control communication requirements, access and egress restrictions, equipment staging area requirements, and personal safety equipment requirements for construction workers, and appropriate notification to aviators. The plan would be reviewed and approved by airport staff and implemented by both the airport and project construction staff and FAA.

Mitigation Measure 3.8-1c: Prior to final design of project components within an AIA, the implementing agencies shall identify the ground elevation associated with each project component and submit their project plans to airport staff for review and comment. Working with airport staff, the implementing agencies shall submit their design plans for airspace analysis (FAA Part 7460 review) to determine whether any of the proposed project components or proposed construction equipment would protrude into protected airspace. If such objects are identified, the implementing agencies, airport staff, and FAA will identify appropriate steps to adjust project plans or include appropriate markings to identify hazards to aviators pursuant to FAA Part 7460.

Mitigation Measure 3.8-1d: To prevent the creation of wildlife attractants, the implementing agency should coordinate with construction contractors to ensure that neither project design nor construction plans create temporary or permanent sources of open water, inappropriate seed mixtures, or inappropriate landscaping designs. Notes should be incorporated on construction plans to warn against the creation of potential wildlife hazards.

Significance after Mitigation: Less than significant.

Impact 3.8-3: The proposed pipeline would be constructed in the vicinity of three public use airports and potentially affect navigable airspace as defined by FAR Part 77. Less than Significant with Mitigation.

Three public use airports are located within the vicinity of the proposed project and governed by ALUC policies and procedures (see Figure 3.8-2). The proposed project would occur within the Airport Operations Area of PMD, Fox Airfield, and Rosamond Skypark.

Construction equipment, such as cranes or lights, and the dust or smoke created by construction activities can interfere with aircraft operations. To prevent potential intrusions to navigable airspace within the project vicinity, the implementing agency would notify the airport of proposed construction activities in advance and participate in the FAA's 7460 process to ensure that the proposed construction equipment would not pose hazards to aviation. In addition to FAA airspace

review, ongoing coordination with the airport would be required to ensure that proposed construction activities do not disrupt airport operations and to ensure that appropriate notice is issued to aviators. The implementing agencies would coordinate construction schedules with airport staff to minimize effects to airport operations.

Implementation of Mitigation Measure 3.8-1c will reduce the potential hazards of construction activities within the navigable airspace of an airport to less than significant levels.

Mitigation Measure

Implementation of **Mitigation Measure 3.8-1c.**

Significance after Mitigation: Less than significant.

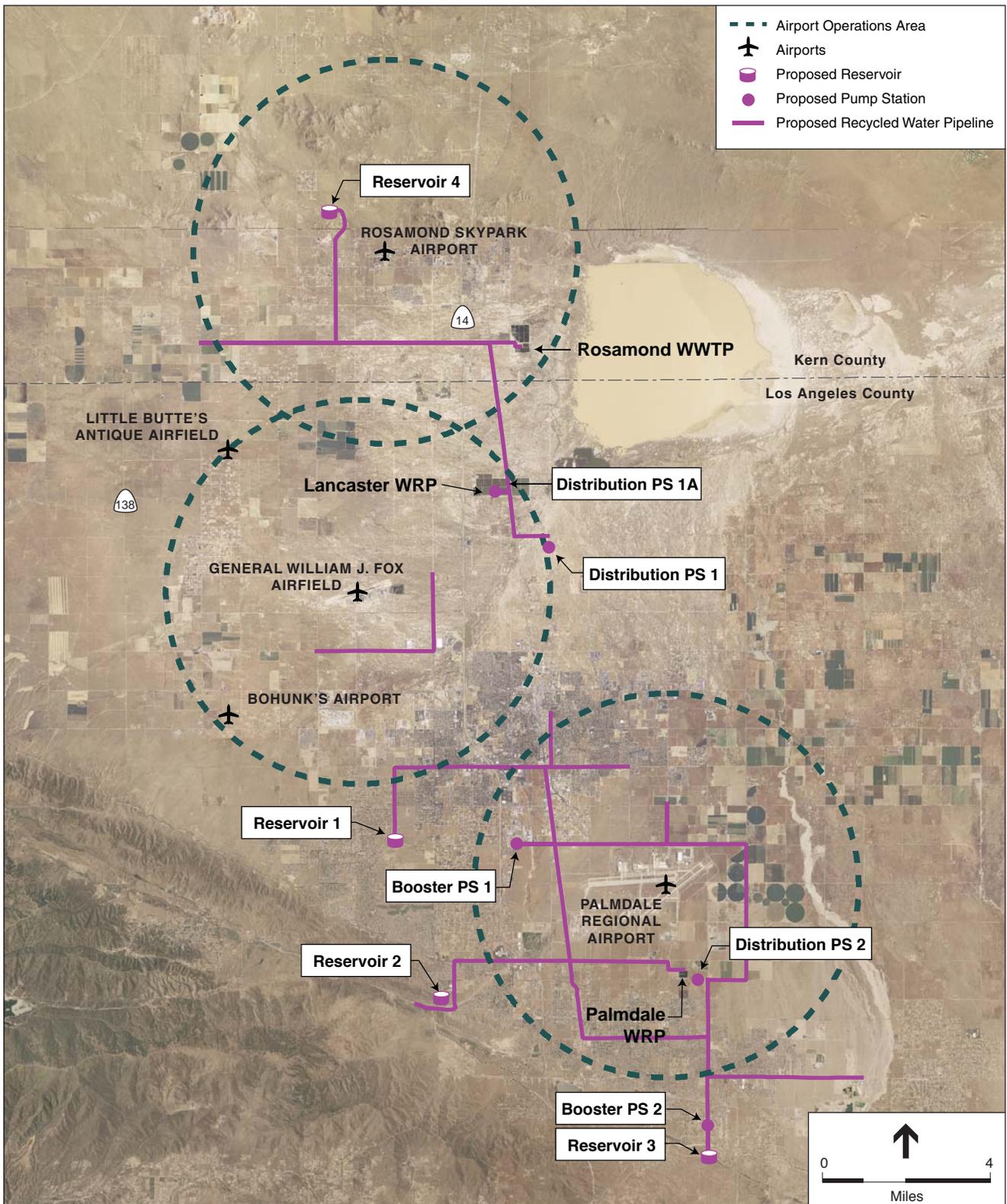
Program-level Impacts

Impact 3.8-4: Construction and operation of the proposed storage reservoirs and pump stations could result in short-term disturbance to some adjacent land uses or result in long-term effects to existing land uses. Less than Significant with Mitigation.

The exact locations of the proposed storage reservoirs and pump stations are unknown at this time. The short-term and long-term impact of the facilities would depend primarily on their location and the county or city land use designations at those locations. Construction of future facilities could result in short-term disturbance to adjacent land uses due to construction-related air emissions, access restrictions, and effects related to construction traffic and materials hauling. Due to the temporary nature of these impacts, however, they are anticipated to be less-than-significant with the implementation of Mitigation Measure 3.2-1a through 3.2-1f and Mitigation Measure 3.11-1a.

Long-term impacts due to operation of the proposed storage reservoirs and pump stations could occur if the facilities are located at sites that are designated as farmland, recreational land or open space, or other land use categories incompatible with public utility or water storage facilities, or within five miles of airport operations areas. The parcels considered for the proposed facilities are not designated as Prime Farmland, Unique Farmland, or Farmlands of Statewide Importance, or under a Williamson Act contract so there would be no impacts due to conversion of farmland to non-agricultural uses would not occur.

As currently shown, the proposed reservoirs are likely to be located within five miles of a public use airport (see **Figure 3.8-9**), namely PMD, Fox Airfield, and Rosamond Skypark. FAA warns against the creation of open water facilities, such as ponds or water treatment facilities, because such facilities can attract waterfowl and potentially hazardous wildlife (FAA AC 150/5200-33B). The proposed project would not introduce open water facilities into the Airport Operations Area of PMD, Fox Airfield or Rosamond Skypark as the proposed reservoirs would be enclosed tanks.



SOURCE: GlobeXplorer, 2008; and ESA, 2008

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Figure 3.8-9
Five Mile Radii – Public Use Airports

Nonetheless, coordination with FAA regarding facility location and design would be required during preliminary and detailed design efforts to prevent the introduction of potential wildlife hazards to aircraft.

Some facilities may be incompatible with General Plan land use designations and would require either a site plan review or a conditional use permit, as required by associated zoning ordinances. Distribution Pump Station 1 and Reservoir 1 would be constructed on parcels designated as Non-Urban Residential (NU) for which the zoning requires a conditional use permit from the City of Lancaster. Booster Pump Station 1 would be constructed on a parcel designated as Light

Industrial (LI) by the City of Lancaster. The zoning associated with this land use permits water pumping stations without site plan review. Booster Pump Station 2 and Reservoir 2 would be constructed on parcels designated as Low Density Residential (LDR) or Single Family Residential (SFR-3). The zoning associated with these land uses would require site plan review approval from the City of Palmdale. Reservoir 3 may require discretionary review by Los Angeles County to be compatible with the Rural Land (RL) designation. Reservoir 4 is located in an Accepted County Plan Area and is zoned as Unlimited Agriculture. Refer to Table 3.8-1 for city and county land use designations. Implementation of Mitigation Measure 3.8-2 would reduce impacts to a less than significant level.

Mitigation Measures

Mitigation Measure 3.8-2: The implementing agencies shall obtain conditional use permits and complete site plan reviews from the appropriate jurisdiction, as necessary, prior to construction of project facilities. The implementing agencies shall also coordinate with FAA regarding the locations and design of proposed reservoirs and pump stations.

Implementation of **Mitigation Measure 3.2-1a** through **3.2-1f** and **Mitigation Measure 3.11-1a**.

Significance after Mitigation: Less than significant.

Impact 3.8-5: Construction and operation of the proposed groundwater recharge basins could result in short-term disturbance to some adjacent land uses or result in long-term effects to existing land uses. Less than Significant with Mitigation.

The exact location of the proposed future groundwater recharge basins is unknown at this time. The short-term and long-term impact of the facilities would depend primarily on their location and the county or city land use designations at those locations. Construction of future facilities could result in short-term disturbance to adjacent land uses due to construction-related air emissions, access restrictions, and effects related to construction traffic and materials hauling. Due to the temporary nature of these impacts, however, they are anticipated to be less-than-significant with the implementation of Mitigation Measure 3.2-1a through 3.2-1f and Mitigation Measure 3.11-1a.

Long-term impacts due to operation of the proposed recharge basins could occur if the facilities are located at sites with designated land uses that are incompatible with public utility, water supply, or groundwater recharge facilities. Selection of future sites for recharge basins would likely take into consideration land use and zoning designations. As described above for the proposed storage reservoirs and pump stations, implementation of the proposed recharge facilities could require site plan review or a conditional use permit (CUP) from the governing jurisdiction. In addition, implementation of the proposed recharge basins could require a general plan amendment if the land use designation is not compatible with this type of facility.

Long-term impacts due to the operation of recharge basins could occur if these facilities are located within five miles of a public use airport (see Figure 3.8-9). Consultation with FAA during the site selection and design process for future recharge basins would be required to avoid the creation of potential wildlife strike hazards per FAA Advisory Circular 150/5200-33B.

Mitigation Measures

Mitigation Measure 3.8-3: The implementing agencies shall obtain a conditional use permit or a general plan amendment if necessary from the appropriate jurisdiction prior to construction of groundwater recharge facilities. The implementing agencies shall also coordinate with FAA regarding the locations and design of future recharge basins.

Implementation of Mitigation Measure 3.2-1a through 3.2-1f and Mitigation Measure 3.11-1a.

Significance after Mitigation: Less than significant.
