

Palmdale Development Services Building



Envision
PALMDALE 2045
A complete community

Public Facilities, Services, and Infrastructure

This section of the Palmdale General Plan outlines the goals and policies related to public facilities, services, and infrastructure in Palmdale. Information on park facilities in the city can be found in Chapter 8: Parks, Recreation, and Open Space.

Statutory Requirements

Per California Government Code section 65302, a chapter on Public Facilities and Services has been included in the General Plan. The following federal and state regulations pertain to public facilities, infrastructure, and public services.

Federal Clean Water Act

The Federal Clean Water Act (FCWA) is the comprehensive federal law governing water quality and water pollution in the United States. The FCWA works to protect water resources by prohibiting unlawful discharge of any pollutant into local waterways and authorizing the United States Environmental Protection Agency (US EPA) to develop national water quality criteria for pollutants in surface water.



Lake Palmdale

Relevant Plans & Documents

Palmdale Water District Urban Water Management Plan (2020)

The Palmdale Water District's (PWD) 2020 Urban Water Management Plan (UWMP) projects water demand and supply for the district's service area through the year 2045. The Plan is focused on identifying sources of water supply available to meet existing and future water needs and aims to diversify those sources to limit impacts on depleted water resources.



Palmdale Water District Urban Water Management Plan

Los Angeles County Waterworks District No. 40 2020 Urban Water Management Plan (2020)

The Waterworks District No. 40 UWMP projects water demand and supplies through 2045, describes water supply reliability under a range of scenarios, provides a water shortage contingency plan, and describes various water demand management measures for the District service area.



Antelope Valley Integrated Water Management Plan (2019 Update)

The Integrated Water Management Plan (IWRM) provides a mechanism for: 1) coordinating, refining and integrating existing planning efforts within a comprehensive, regional context; 2) identifying specific regional and watershed-based priorities for implementation projects; and 3) providing funding support for the plans, programs, projects and priorities of existing agencies and stakeholders. The 2019 update complies with new State integrated planning requirements, improves the content, and enhances eligibility for future grant funding.



Antelope Valley Integrated Water Management Plan

Recycled Water Facilities Master Plan (2015)

The Palmdale Recycled Water Authority (PRWA) adopted the Recycled Water Facilities Master Plan in 2015 to coordinate recycled water resources generated and used within the Palmdale area. The PRWA oversees recycled water planning, installation, and development throughout the majority of Palmdale, generally east of State Route 14 (SR-14). The goal of the PRWA is to analyze existing and planned recycled water facilities and explore opportunities to offset potable water demand using recycled water.



Recycled Water Facilities Master Plan

City of Palmdale Storm Water Management Plan (2003)

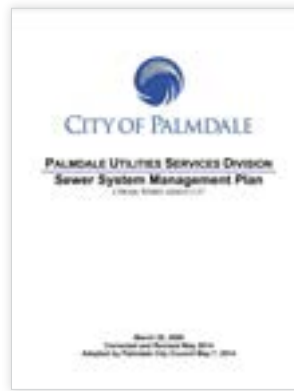
The Palmdale Storm Water Management Plan (SWMP) was adopted in 2003. The Plan was prepared by the Palmdale Department of Public Works with the objective to preserve the quality of City waters, including storm water conveyances such as closed conduits, open channels, drainage basins, and dry wells. The city currently maintains a “small” Municipal Separate Storm Sewer System (MS4) permit that authorizes the city to legally discharge stormwater into local waterways. The goal of the SWMP is to reduce the discharge of pollutants to the MS4 to the Maximum Extent Practicable (MEP). The Plan requires that each development attenuate post-developed flows to 85 percent of pre-developed flows, enforced through City Ordinance.



Palmdale Storm Water Management Plan

Palmdale Sewer System Management Plan (2009)

The Palmdale Sewer System Management Plan (SSMP) was adopted in 2009 to address the planning, operation, and maintenance of the City’s sewer system. The SSMP presents an analysis of the hydraulic capacity of the sewer system under current and future flow conditions and provides an assessment of the existing structural conditions of the sewer system. Updates to this plan took place in 2014 and are underway as of 2022.



Palmdale Sewer System Management Plan

Palmdale Drainage Master Plan (1989)

The Palmdale Drainage Master Plan was adopted in 1989 to address existing drainage issues associated with storm water runoff and prepare for anticipated drainage from future development. The Plan outlines construction of flood control facilities in Palmdale that would connect with the planned regional drainage system. As of 2022, the City of Palmdale is underway with an update to this plan to reflect changes to the Anaverde and Pearblossom drainage areas.

Context

Public Facilities

The City of Palmdale offers a range of public facilities to meet community needs. Palmdale’s main governmental offices are centrally located at the intersection of Palmdale Boulevard and Sierra Highway and includes City Hall, which houses the office of the City Manager, elected officials, City Council chambers, City Attorney, Administrative Services, and City Clerk. The City’s Development Services Building is located at 38250 Sierra Highway, and includes Building & Safety, Planning, Public Works, Business License, Economic Development, and Neighborhood Services.

As shown in Figure 12.1, in addition to the main Palmdale governmental offices, there are several other local, regional, and federal facilities that are open to the public. Table 12.1 lists major publicly accessible City services and facilities in Palmdale. These are organized by the City of Palmdale, County of Los Angeles, and Federal facilities. Note that recreation facilities and programs are discussed and mapped in Chapter 10: Parks, Recreation, and Open Space.



Table 12.1

Palmdale Facilities and Services

Map #	Facility	Address
CITY OF PALMDALE		
1	Palmdale City Hall	38300 Sierra Hwy
2	Palmdale City Library	700 East Palmdale Boulevard
3	Palmdale Playhouse	38334 10th Street East
4	Palmdale Parks and Recreation	827 E. Avenue Q-9
5	Palmdale South Antelope Valley Emergency Services (SAVES)	1002 East Avenue Q-12
COUNTY OF LOS ANGELES		
6	Los Angeles County Animal Care Center	38550 Sierra Hwy
7	Los Angeles County Department of Children & Family Services	39959 Sierra Highway #150
8	Los Angeles County Housing Authority	2323 E Palmdale Boulevard
9	Los Angeles County Public Works	38126 Sierra Hwy
10	Palmdale GAIN Office*	1050 East Palmdale Boulevard
FEDERAL		
11	Antelope Valley Veterans Center	38925 Trade Center Drive
12	SSA Office of Disability Adjudication and Review	38925 Trade Center Drive

*The GAIN (Greater Avenues for Independence) program is provided by the Department of Public Social Services, for Los Angeles County.

Schools

Palmdale is served by three school districts. These districts include two elementary (K-8) districts – Westside School District and Palmdale School District; and one high school district – Antelope Valley Union High School District. Table 12.2 lists each school serving Palmdale by district and grade level. Schools serving Palmdale are mapped in Figure 12.2.

Palmdale contains three charter schools within its purview: the Antelope Valley Learning Academy for home-schooled children, Palmdale Academy Charter School, and The Palmdale Aerospace Academy. With the clustering of aerospace industries in the city, many campuses have taken a focused approach to educating local talent and inspiring young minds to join the aerospace industry. The City of Palmdale nominates members to serve on the board of the Palmdale Aerospace Academy, which provides specialized STEM education for grades 7-12.

Table 12.2

Schools Serving Palmdale

Map #	Institution	Address	Grades
ANTELOPE VALLEY UNION HIGH SCHOOL DISTRICT			
1	Highland High School	39055 25th St West	9-12
2	Knight High School (William J. “Pete” Knight High School) and Academy Prep Junior High School Knight Campus	37423 70th St East	9-12
3	Palmdale High School	2137 East Avenue R	9-12
4	R. Rex Parris Alternative High School	38801 Clock Tower Plaza Dr East	9-12
5	Palmdale Prep Academy Junior High School/SOAR	2270 East Avenue Q	7-8
PALMDALE SCHOOL DISTRICT			
6	Barrel Springs Elementary	3636 Ponderosa Way	K-5
7	Buena Vista Elementary	37005 Hillcrest Dr	K-5
8	Cactus Intermediate	3243 East Ave R-8	6-8
9	Chaparral Elementary	37500 50th St East	K-5
10	Cimarron Elementary	36940 45th St East	K-5
11	David G. Millen Intermediate	39221 22nd Street West	6-8
12	Desert Rose Elementary	37730 27th St East	K-5
13	Desert Willow Intermediate	36555 Sunny Lane	6-8
14	Dos Caminos Elementary	39147 Palm Tree Way	K-5
15	Golden Poppy Elementary	37802 Rockie Lane	K-5
16	Innovations Academy of Palmdale	37230 37th Street East	K-8
17	Joshua Hills Elementary	3030 Fairfield Ave	K-5
18	Los Amigos Elementary	6640 East Ave R-8	K-5
19	Manzanita Elementary	38620 33rd St East	K-5
20	Mesquite Elementary	37622 43rd St East	K-5
21	Oak Tree Community Day	37230 37th Street East	K-8
22	Oak Tree Learning Center	38136 35th St East	K-8
23	Ocotillo Elementary	38737 Ocotillo School Drive	K-5
24	Palm Tree Elementary	326 East Avenue R	K-5
25	Palmdale Discovery Center	39174 Palm Tree Way	K-8, Special Education

Map #	Institution	Address	Grades
26	Palmdale Learning Plaza	38043 Division Street	K-8
27	Quail Valley Elementary	37236 58th St East	K-5
28	Sage Space & Aeronautics Gateway to Exploration Magnet Academy	38060 20th Street East	6-8
29	Shadow Hills Intermediate	37315 60th St East	6-8
30	Summerwind Elementary	39360 Summerwind Drive	K-5
31	Tamarisk Elementary	1843 East Ave Q-5	K-5
32	Tumbleweed Elementary	1100 E Avenue R-4	K-5
33	Yellen Learning Center	37015 Goldenview Way	K-8, Special Education
34	Yucca Elementary	38440 2nd St East	K-5
WESTSIDE UNION SCHOOL DISTRICT			
35	Anaverde Hills Elementary	2902 Greenbrier St	K-8
36	The IDEA Academy at Cottonwood	2740 West Avenue P-8	K-5
37	Esparanza Elementary	40521 35th St West	K-5
38	Gregg Anderson Academy Elementary	5151 West Avenue N-8	K-8
39	Hillview Intermediate	40525 Peonza Lane	6-8
40	Rancho Vista Elementary	40525 Peonza Lane	K-5
PRIVATE AND OTHER SCHOOLS			
41	Antelope Valley Learning Academy	37212 47th Street East	K-12
42	Antelope Valley YouthBuild	38626 9th Street East	HS Diploma, Trades Training
43	Berean Fellowship Christian School	38050 30th Street East	1-12
44	Empowered Church International/Empowered Learning Academy	2205 East Palmdale Boulevard, Suite B	K-12
45	Palmdale Academy Charter School	3838 East Avenue R	9-12
46	The Palmdale Aerospace Academy (PSD, City of Palmdale, NASA)	37212 47th Street East	TK-12
47	Saint Mary School	1600 East Avenue R-4	K-8
48	Shepherd Christian School	1730 High Vista Ave	K-12
49	Westside Christian	40027 11th Street West	K-8



Higher Education

The city is also home to four higher education institutions. Antelope Valley College Palmdale Center provides Career Technical Education programs for adults interested in starting a new career in the clerical, medical, dental, and technology fields. Additionally, the Aircraft Fabrication and Assembly (AFAB) program, housed at the Antelope Valley College Palmdale Center, prepares students with entry-level and upgraded skills for the aerospace industry. Higher education, along with schools serving Palmdale, are mapped on Figure 12.2. Table 12.3 lists the higher education institutions serving the city.

While Palmdale offers a variety of higher education opportunities, residents and employers cited a need for additional higher education—specifically a four-year university—and training opportunities for Palmdale adults.

Table 12.3

Higher Education in Palmdale

Map #	Institution	Address	Type
HIGHER EDUCATION			
50	Antelope Valley Adult Education – Palmdale Campus	1156 East Avenue S	Public Adult School
51	Antelope Valley College – Palmdale Center	2301 East Palmdale Blvd	Community College
52	University of Massachusetts Global “UMass Global” (Formerly Brandman University)	39115 Trade Center Dr Suite 203	Private
53	DeVry University Keller Graduate School of Management	39115 Trade Center Dr Suite 100	Private
54	Embry-Riddle Aeronautical University High Desert Campus	40015 Sierra Hwy Suite B-110	Private



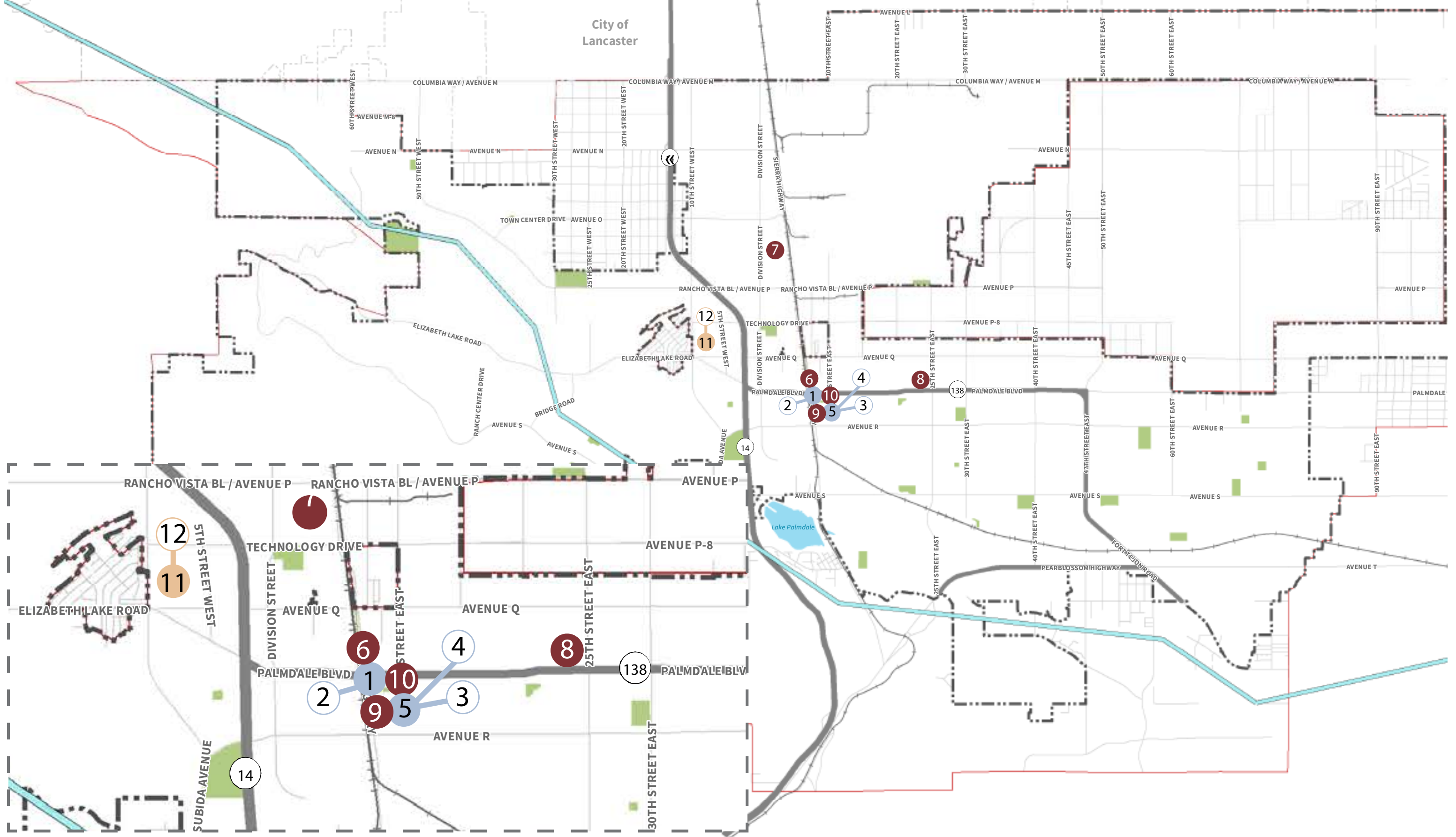
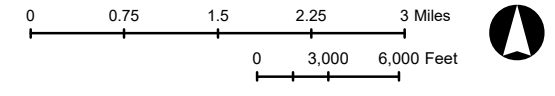


Figure 12.1

Palmdale Public Facilities and Services

- City Boundary
- Sphere of Influence
- California Aqueduct
- Major Highway/Arterial
- + Railroad
- Federal
- County
- City



Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.

Produced by Raimi + Associates
May 2019

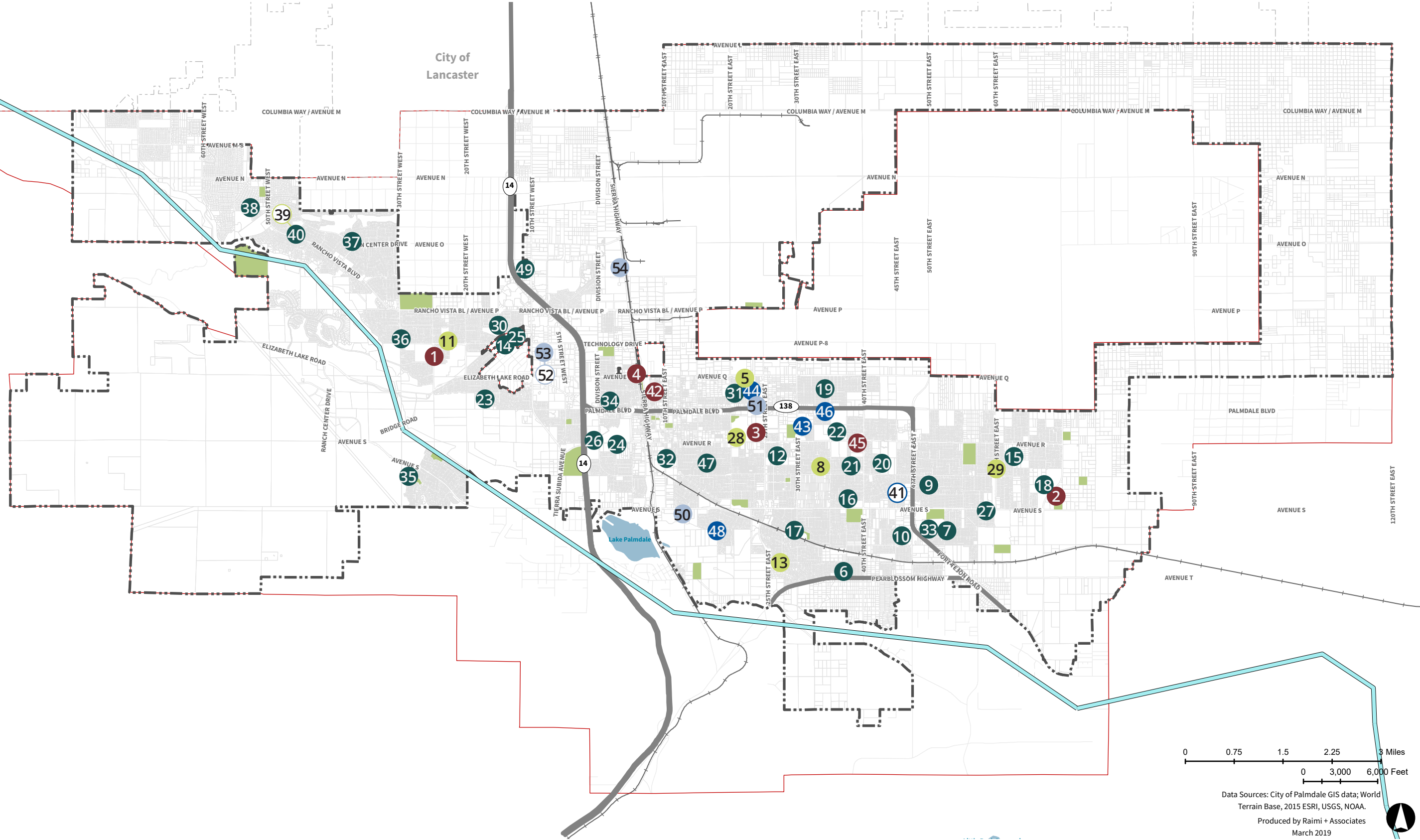


Figure 12.2

Palmdale Schools and Higher Education

- City Boundary
- Sphere of Influence
- California Aqueduct
- Major Highway/Arterial
- Railroad
- Water Body
- Park
- Elementary
- K-12
- Middle School
- High School
- Higher Education

0 0.75 1.5 2.25 3 Miles
 0 3,000 6,000 Feet

Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.
 Produced by Raimi + Associates
 March 2019



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Emergency Services

The City contracts with the County of Los Angeles for law enforcement, fire, and emergency medical services. Palmdale contains one sheriff’s station and five fire stations, as shown on Table 12.4 and Figure 12.3 Emergency Facilities.

Law Enforcement

As noted above, Palmdale contracts law enforcement services through the Los Angeles County Sheriff’s Department (LASD). LASD operates one station located at 750 East Avenue Q, which serves the City of Palmdale and surrounding communities (Acton, Agua Dulce, Big Pines/Wrightwood, Green Valley, Lake Elizabeth, Lake Hughes, Leona Valley, Littlerock, Llano, Pearblossom, Sun Village, Valyermo, and Vasquez Rocks). The LASD’s response time goal is under 6 minutes for on scene arrival.

The Palmdale Sherriff’s Station is a state-of-the-art facility constructed in 2006 to replace the previous neighborhood sub-station. The sheriff’s station includes a 47,000 square-foot main building, 7,800 square-foot jail, and 8,400 square-foot motor pool and storage building.

Fire and Emergency Medical Service

Fire protection, first response emergency and medical services in Palmdale are contracted through the County of Los Angeles Fire Department (LACoFD). LACoFD operates five stations within the City of Palmdale which are categorized under the North Regional office, Division Five, within Battalions 11 and 17. According to the LACoFD incident analysis for the city, the response times have generally decreased across all categories since 2015 and are within the LACoFD response time goal of 4-6 minutes for on scene arrival.

Emergency Operations

The City of Palmdale has an Emergency Services Coordinator that works in conjunction with law enforcement and fire personnel. The Emergency Services Coordinator facilitates the City’s efforts to prepare for, respond to, and recover from natural or human made disasters.



Table 12.4

Emergency Facilities

Map #	Facility	Address
1	Los Angeles County Sheriff’s Station	750 East Avenue Q
2	Los Angeles County Fire Department Station #24	1050 West Avenue P
3	Los Angeles County Fire Department Station #37	38318 9th Street East
4	Los Angeles County Fire Department Station #93	5624 East Ave R
5	Los Angeles County Fire Department Station #131	2629 East Ave S
6	Los Angeles County Fire Department Station #136	3650 Bolz Ranch Rd

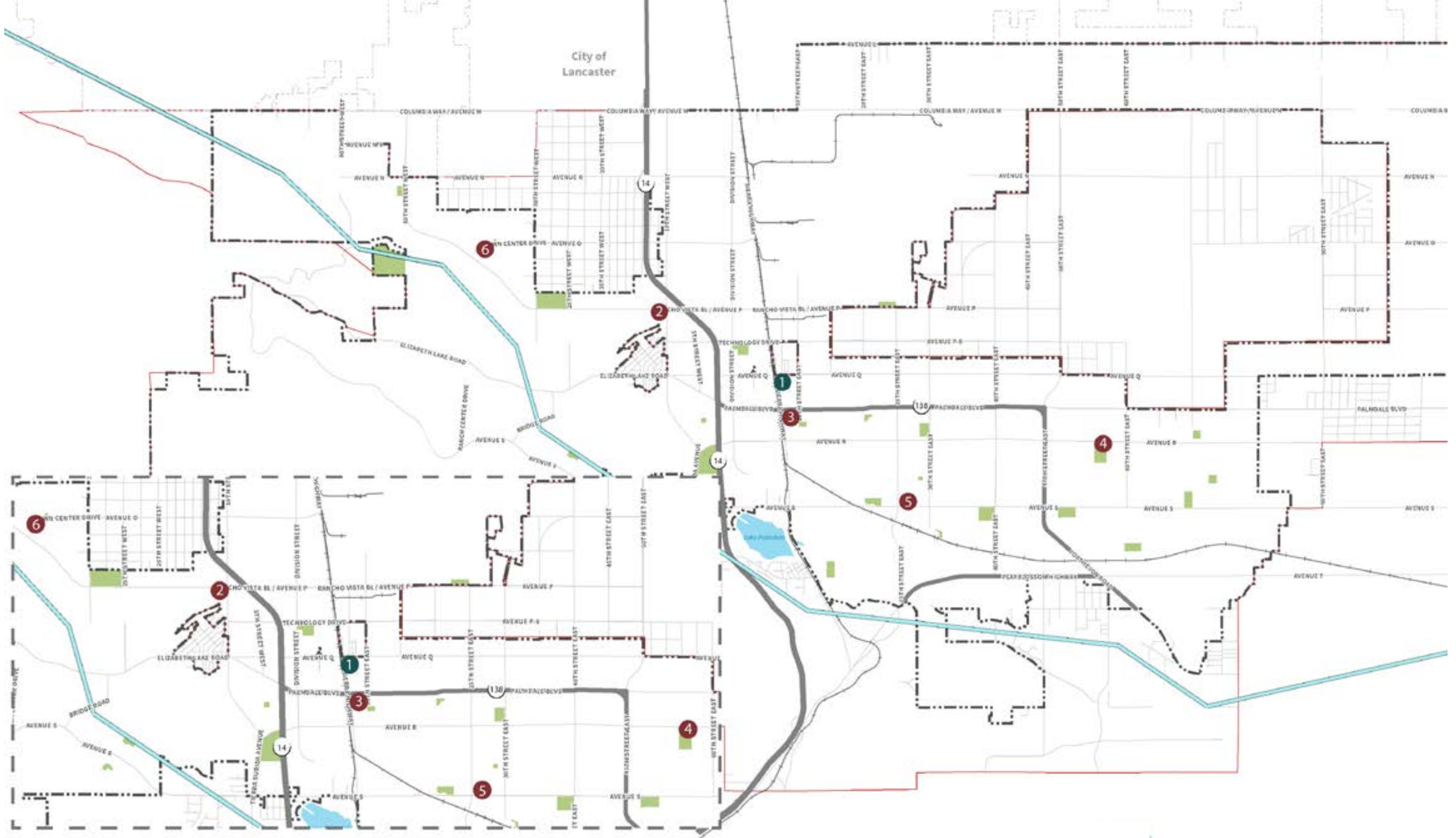
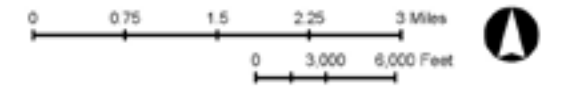


Figure 12.3
Palmdale Emergency Facilities

- City Boundary
- Sphere of Influence
- California Aqueduct
- Major Highway/Arterial
- Railroad
- Fire Department Station
- Sheriff's Department Station



Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.
Produced by Rainiri + Associates
May 2019

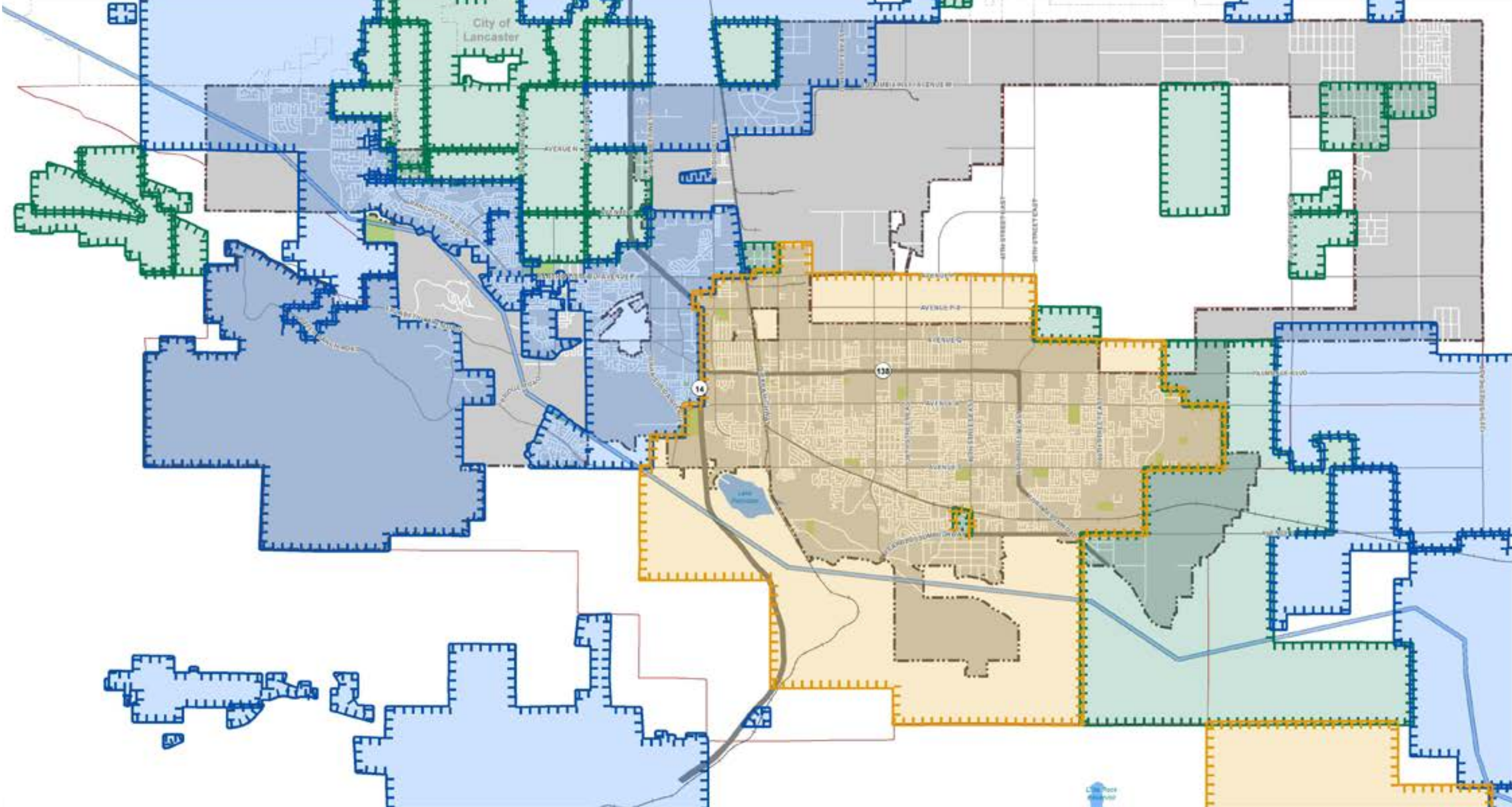











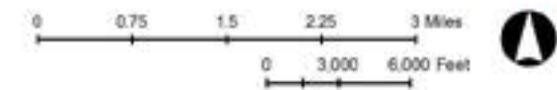


Figure 12.4
Palmdale Water Supplier Service Areas

- | | | | |
|---|---------------------------|---|------------------------------|
|  | City of Palmdale Boundary |  | Palmdale Water District |
|  | Other City Boundary |  | LA County Water Works |
|  | Sphere of Influence |  | Private Mutual Water Company |
|  | California Aqueduct | | |
|  | Major Highway/Arterial | | |
|  | Railroad | | |
|  | Water Body | | |
|  | Park | | |



Data Sources: City of Palmdale GIS data; Los Angeles County, 2019.

Produced by Rincon Consultants, Inc.

Water Utilities and Infrastructure

The City has an extensive water infrastructure system. The infrastructure related to water includes pipelines, storage tanks, pumps, groundwater wells, and sewers/sewer lines. In addition, existing flood control facilities include engineered channels and retention basins along Amargosa Creek. There is also a flood retention basin along Anaverde Creek, protecting areas in the vicinity of 20th Street East and 30th Street East.

Water Suppliers

Palmdale is predominantly served by two water suppliers: Palmdale Water District (PWD) and Los Angeles County Waterworks District No. 40 (LACWD 40). PWD water supplies include groundwater, local surface water, and imported water. LACWD 40 purchases water from the Antelope Valley – East Kern Water Agency (AVEK). PWD serves the central and southern portions of Palmdale while LACWD 40 serves areas both east and west of State Route 14 (SR-14). Other water suppliers in and around Palmdale include Quartz Hill Water District, Littlerock Creek Irrigation District, various small mutual water companies, and private wells. These suppliers generally serve small portions of the city or areas adjacent to city limits. Figure 12.4 presents service areas for water suppliers in the Palmdale area.

Water Sources

Water supply in Palmdale is from the Antelope Valley Groundwater Basin, the State Water Project, and Little Rock Dam Reservoir, which is fed by natural run-off from snowpack in the San Gabriel Mountains and from rainfall. The Antelope Valley Groundwater Basin (AVGB) (Basin 6-44 is a 1,580-square mile aquifer with an estimated storage of 68 million AF (DWR 2004). The AVGB is divided into 12 sub-basins, with Palmdale overlying the Lancaster, Buttes, and Pearland sub-basins. Figure 12.5 displays locations of groundwater wells and features in the Palmdale region.

Groundwater from the AVGB has historically served as the primary supply source for PWD and a secondary source for LACWD 40. In 2015, groundwater from the basin accounted for approximately 64 percent of PWD’s supply and 47 percent of LACWD 40’s supply. Table 12.5 summarizes historic groundwater pumping in the AVGB by both water agencies.

Table 12.5

Historic Groundwater Basin Pumping by Palmdale Water Suppliers

Year	Palmdale Water District (AFY*)	Los Angeles County Water District 40 (AFY*)
2016	8,470	16,002
2017	5,350	17,397
2018	6,060	17,274
2019	4,430	12,813
2020	7,600	14,266

*Acre-feet per year (AFY).

PWD and AVEK have annual Table A allocations of 21,300 acre-feet (AF) and 144,844 AF, respectively, from the State Water Project (PWD 2016; County of Los Angeles 2017). The actual amount of SWP water received annually by contractors varies depending on availability.

Little Rock Dam Reservoir has a storage capacity of 3,500-acre feet or 1.1 billion gallons of water. Water from the reservoir is transferred to Palmdale Lake via a pipeline.

Recycled Water

In 2012, the City of Palmdale and PWD created the Palmdale Recycled Water Authority (PRWA) through a Joint Exercise of Powers Agreement. The PRWA oversees recycled water planning, installation, and development throughout a majority of Palmdale, generally east of SR-14. To date, recycled water infrastructure in the city is limited to a recycled water transmission line connecting the Palmdale Water Reclamation Plant to McAdams Park for delivery of irrigation water supply. Locally, at least one park uses recycled water for landscaping purposes, but there is currently no regional recycled water distribution system to convey treated water from Palmdale to locations where it can be used.

In 2015, PRWA published the Recycled Water Facilities Master Plan, calling for construction of approximately 70,000 linear feet of recycled water pipeline and a variable horsepower pump station over a 10-year period. As of 2022, the PRWA is investigating development of an advanced treatment system that would allow recycled water to be injected into the aquifer and extracted as potable water.

Sewers

Most sewers in Palmdale are within Los Angeles County Sanitation District (LACSD) 20, which covers most of the southern half of Palmdale. These sewers carry wastewater for treatment at the Palmdale Water Reclamation Plant. Some of the sewers in the northern portion of Palmdale discharge to LACSD trunk sewers that convey flow to the Lancaster Reclamation Plant within LACSD District 14. The discharge from sewers on-site at USAF Plant 42 is split between LACSD District 20 and LACSD District 14. There are also approximately 2,726 septic tanks served by the system, of which approximately 1,000 are within Palmdale city limits. The City sewer system was assessed in 2009 and found to be in adequate condition. The City continually provides for sewer system cleaning and repair as needed.

Water Treatment

Water and wastewater treatment facilities in Palmdale are shown in Figure 12.6. A summary of existing facilities is included below.

- The Palmdale Water Treatment Plant, also known as the Leslie O. Carter Treatment Plant, is located at 700 East Avenue S, along the shores of Lake Palmdale. It can treat 35 million gallons per day. Water from Lake Palmdale is conveyed to the treatment plant via a pipeline along East Avenue S.
- The Palmdale Water Reclamation Plant, north of Palmdale, provides primary, secondary, and tertiary treatment for 12 million gallons of wastewater per day. Effluent is reused for irrigation of trees and fodder crops on the City of Los Angeles airport property, and for parks in the City of Palmdale.
- The Acton Water Treatment Plant treats water from the SWP and is operated by the Antelope Valley-East Kern Water District (AVEK). This water is pumped via pipeline from the plant site near Barrel Springs Road, to Vincent Hill Summit. From there it is pumped into the Los Angeles County Waterworks pipeline for transport to the Acton area.
- The Quartz Hill Water treatment plant is located in western Palmdale off West Avenue N, near the California Aqueduct. As a water wholesaler, AVEK is a SWP contractor who obtains all its water from the California Aqueduct to supply the Antelope Valley with potable water and untreated agricultural water.
- The Eastside Water Treatment Plant is operated by AVEK and is located between Littlerock and Pearblossom.
- The Little Rock Reservoir is formed behind the Littlerock Dam, south of Palmdale in the San Gabriel Mountains. The capacity of the Littlerock Reservoir is 3,270-acre feet. Water travels to the Palmdale Water Treatment Plant through an earthen channel called Palmdale Ditch.

Storm Drainage and Flood Protection

Portions of Palmdale adjacent to Amargosa Creek and Anaverde Creek, along the southwestern portion of Palmdale, are classified by FEMA as Zone A, AE, or AO—areas subject to inundation by the 1-percent-annual-chance flood. A wide swath along the Littlerock Wash in the eastern portion of Palmdale (and currently occupied by mining operations) is also classified as Zone A.

Storm water mitigation in the City of Palmdale consists mostly of a network of flood control channels and culverts maintained by the Los Angeles County Flood Control District. Floodwaters are restricted by catch basins feeding into a network of 396 miles of gravity flow sewer mainlines and 2,790 feet of forced flow mainlines. There are approximately 172 catch basins within the Palmdale city limits. Two pump stations operate within Palmdale.

The Los Angeles County Flood Control District also maintains three debris retention basins along the southern edge of the city.

The Upper Amargosa Creek Recharge Project, completed in 2021, provides flood control along with erosion protection for housing developments along Elizabeth Lake Road and 25th Street West. This project provides groundwater recharge and protection of buried utilities in addition to flood control.

The City's Capital Improvement Plan specifies the development of a new regional detention basin located near Division Street and Avenue R. The new basin will store water from the Anaverde Watershed and reduce flooding along Avenue R and a secondary drainage channel near the existing Palmdale Transportation Center.

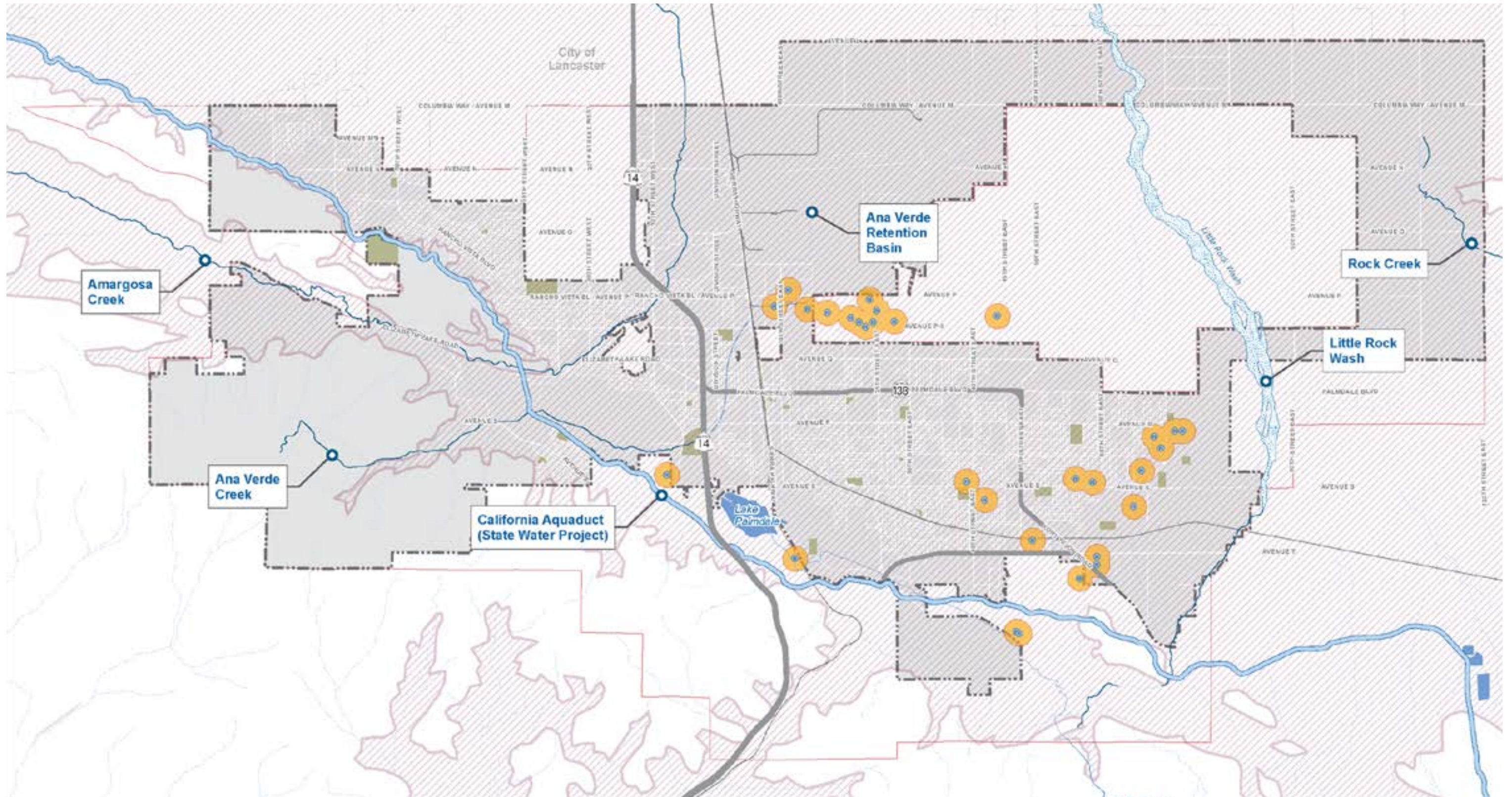











Figure 12.5
Palmdale Water Sources

-  Groundwater Well
-  Groundwater Well Protected Area
-  California Aqueduct
-  River/Creek (intermittent)
-  River/Creek (perennial)
-  Antelope Valley Groundwater Unit
-  City of Palmdale Boundary
-  Sphere of Influence
-  Water Body



Data Sources: City of Palmdale GIS data, World Terrain Base, 2015 EDR, USGS, NOAA.

Produced by Raini + Associates
March 2019

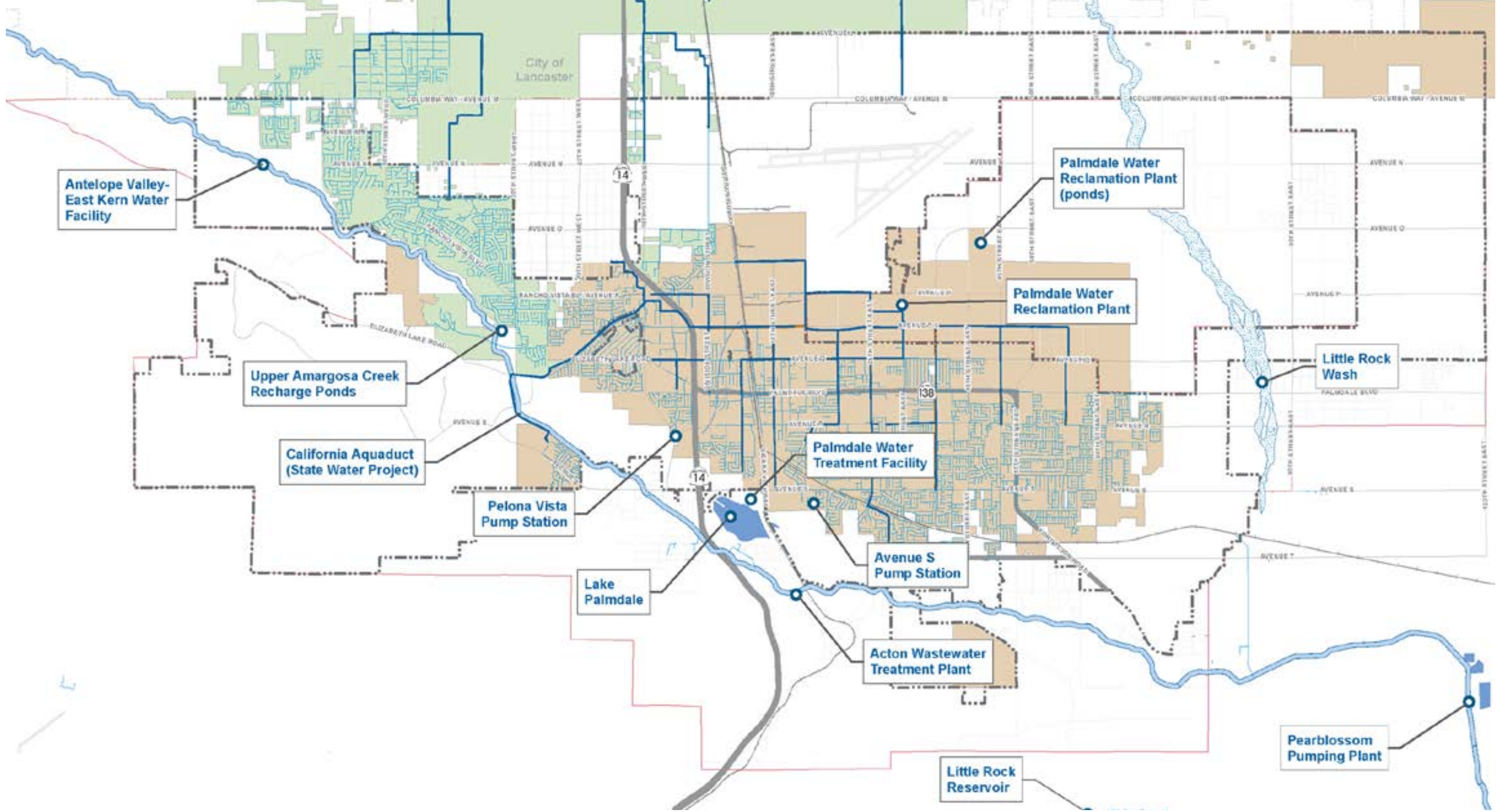









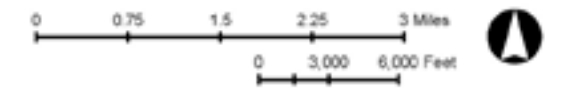


Figure 12.6

Palmdale Wastewater Facilities

-  City Boundary
-  Sphere of Influence
-  California Aqueduct
-  Major Highway/Arterial
-  Railroad
-  Sewers
-  Sewer (Trunk)
-  LACSD District 14
-  LACSD District 20



Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.

Produced by Raini + Associates
May 2019

Dry Utilities and Infrastructure

Landfill

The Antelope Valley Recycling and Disposal facility is operated by Waste Management and is located off City Ranch Road, west of State Route 14. Onsite facilities include a weigh station and a liquefied natural gas fueling station. There is an operations facility, facilities for green waste recycling and electronic waste recycling.

Additional places in Palmdale to bring materials for recycling include:

- Alameda Metals
- Allen Company Recycling Center
- 75th Street Quarry & Recycling
- Genesis Recycling
- Granite Materials
- Vulcan Materials
- Hi Grade Materials Company
- AV Quarry
- Robertsons

Electricity

Southern California Edison is responsible for the distribution of electricity in the Palmdale area. There are several electric substations located throughout the City of Palmdale. High voltage electrical transmission lines (220 kilovolts and greater) cross the Palmdale area along the western border and along the base of the San Gabriel Mountains in the south. The high voltage transmission lines converge on the Vincent Substation south of Palmdale. Standard electrical distribution lines run along existing street right-of-way throughout the city. All substations are located along the electrical distribution lines.

Other sites associated with electrical distribution include the Southern California Edison Antelope Valley Service Center, located on 10th Street West in Lancaster, and the Lockheed Energy Plant. As of 2022, the Lockheed Energy Plant, located at a Lockheed facility near Plant 42, is under construction and will produce power for Lockheed Martin and other users, using a single axis photovoltaic system that racks the sun and converts direct current (DC) to alternating current (AC), before it goes to the grid.

The City has established a Community Choice Aggregation (CCA) Program that will be available for municipal and residential customers in October 2022 and commercial and industrial customers in May 2023. The CCA Program allows the local utility (Southern California Edison) to continue to provide the infrastructure needed to serve a location, but the CCA will produce the energy on behalf of rate payers. This will allow the City to have better control over greenhouse gas emissions and the City's sources for renewable and non-renewable energy.



Palmdale Lake Wind Turbine

Gas

Natural gas is distributed by Southern California Gas. The distribution lines are located throughout the Palmdale area. A 30-inch main gas transmission pipeline runs through the southern portion of Palmdale, along an easement on the south side of Avenue S.

Telecommunications

Cell phone towers, microwave towers and other telecommunication equipment are located throughout the city. Cell phone, fiber optic, and microwave towers are owned by AT&T, CenturyLink, Direct TV, Dish Network, Excede Satellite Internet, Frontier Communications, HughesNet, Sprint, Time Warner, Verizon, and Viasat Satellite. Television/radio towers are in the foothills of the San Gabriel Mountains.

Infrastructure Limitations to New Development

As shown in Figure 12.5, sewer access is limited to the developed core of Palmdale. The lack of existing sewer connections in the northern portion of the city--as well as the outer perimeter of Palmdale--adds expenses to new development already saddled with rising construction and labor costs. Specifically, the lack of available sewer utilities is one of the constraints that suppresses new housing production on undeveloped land.

While the Palmdale community, and State of California, desperately need new housing, cheaper development on the outer edges of a city can bring a host of unforeseen costs and consequences. This development style, when developers skip over land to obtain cheaper land further away from developed areas, leaves huge swaths of vacant land between the developed core and new construction. This exacerbates reliance on automobiles for daily goods and services and reduces opportunities to safely walk and bike as a means of transportation. Leap-frog development also adds a cost burden to local government who are now required to maintain and provide future upgrades to new infrastructure created by developers.



While the lack of critical infrastructure makes new development more costly, it also encourages new construction to take place where sewer connections already exist – thus promoting infill development. Infill development offers benefits like, access to existing public transportation, access to goods and services, promotes walkability, and preserves natural resources and open spaces.

In an effort to expand critical utilities that support new development, the City of Palmdale has created an Enhanced Infrastructure Financing District (EIFD), which is described in the following section.

Palmdale's Enhanced Infrastructure Financing District (EIFD)

Approved by State legislation in 2014, EIFDs are special districts with defined boundaries that use local property taxes to issue bonds to fund infrastructure projects (e.g., streets, utilities, sidewalks, pedestrian safety enhancements) or affordable housing. EIFDs can be formed among any entities with property taxing authority, including a City, County, or Special District, but excluding school districts. In Palmdale's case, the two entities with property taxing authority include the City and the County of Los Angeles.

The City of Palmdale, in partnership with the County of Los Angeles, initiated an EIFD in 2021. The goal of the Palmdale Enhanced Infrastructure Financing District ("Palmdale EIFD" or "District") is to support needed infrastructure in the Antelope Valley to help accelerate the production of quality jobs and accessible housing. The Palmdale EIFD will help fund investments in streets and roads, utilities, and exploration of an Antelope Valley County Service Center to help fulfill economic goals for the City, County, and State, as well as promote sustainability by connecting jobs and housing in the Antelope Valley. The anticipated \$176.2 million of infrastructure will help accelerate \$3.5 billion in private sector investment to promote jobs and housing in Palmdale and the growing Antelope Valley.

Desired Outcomes, Indicators, and Targets

The following desired outcomes and metrics were identified to help the City of Palmdale track progress toward maintaining and enhancing public facilities, services, and infrastructure. This process follows the City of Palmdale's General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

Top Key Outcomes

OUTCOME: Protection of Palmdale's residents, workers, and visitors from fire hazards

KPI's:

- Fire service response times
- Fire Station proximity to developed areas

TARGETS:

- **Maintain Los Angeles County Fire Protection District's response time goal of 4-6 minutes**
- **Maintain a 2-mile proximity of fire stations to all existing and newly developed areas**

OUTCOME: Protection of persons and property from criminal activity

KPI's:

- Police service response times
- Crime rate

TARGETS:

- **Maintain police emergency response time under 6 minutes**
- **Rates of violent and non-violent crime below State averages**

OUTCOME: Reduce reliance on imported water from the State Water Project.

KPI's:

- Recycled water use

TARGETS:

- **Construct and maintain infrastructure needed to store and distribute recycled water as appropriate**

OUTCOME: Maintenance of a consistent level of wastewater treatment service to meet existing and new development demands.

KPI's:

- Adequate wastewater treatment capacity
- Adequate sewer line capacity

TARGETS:

- **Upgrade treatment capabilities at facilities once utilization of the current capacity reaches 85%**
- **Address sewer line inadequacies as outlined in the City's Capital Improvement Program**

Goals and Policies

The following section includes goals and policies for the Public Facilities, Services, and Infrastructure Element. Goals and policies are followed by implementation actions. Some related policies are woven throughout the General Plan, including in the Land Use and Community Design, Equitable and Healthy Communities, and Safety Elements.

PUBLIC FACILITIES AND SCHOOLS

Goal PFSI-1

Maintain superior public facilities to support the Palmdale community.

PFSI-1.1 Community Facilities Master Plan. Prepare a citywide master plan for community facilities that addresses existing and future facilities and equitable access. Include evaluation of existing facilities, need for new or expanded facilities and potential locations, and a funding plan.

PFSI-1.2 Accessibility. Promote accessibility for all residents within City facilities by meeting ADA guidelines and expanding language resources when feasible.

PFSI-1.3 Expand Public Facilities. Expand public facilities, recreation, and library facilities to underserved areas as needed, including the areas west of SR-14.

PFSI-1.4 Access to Library Services. Consider expanding library services to include branch locations in Village Centers (including retail centers), Education Districts, near public parks, and other similar settings to provide access to residents across Palmdale.

PFSI-1.5 Pursue Funding. Pursue federal and state funding sources to utilize in the expansion and enhancement of local public facilities, especially in underserved areas.

PFSI-1.6 Rehabilitate Facilities. Rehabilitate City-owned public facilities using the most innovative technologies and best practices available to ensure long term efficacy.

PFSI-1.7 City Facility Efficiency. Install energy efficient lighting and promote energy conservation practices in all city-owned facilities.

PFSI-1.8 Public Facilities Adequacy. Assess deficiencies in public facilities and address identified issues when feasible.

PFSI-1.9 Higher Education Facilities. Attract, encourage, and support the development of higher education facilities, trade and vocational training in areas within the Education District land use designation.

PFSI-1.10 Private Educational Facilities. In order to encourage development of educational facilities, permit development of private educational facilities that are found to meet the general educational needs of the community within residentially designated districts.

Goal PSFI-2

Maintain superior public safety services to protect the community and meet the need of residents, businesses, and visitors.

PFSI-2.1 Response Times. Maintain existing or superior average response times for fire and police services as the City's population expands.

PFSI-2.2 Fire Protection. Coordinate with and assist the Los Angeles County Fire Department in planning for future fire station sites in Palmdale and facilitate location and construction of fire stations in conjunction with other City facilities (such as parks or municipal buildings) where feasible.

PFSI-2.3 Service Level Expansion. Regularly assess the need for service level expansion for fire and police services as the City's population expands.

PFSI-2.4 County Sheriff Coordination. Coordinate with the Los Angeles County Sheriff's Department to ensure that service availability, resources, and staffing are appropriate for the community need.

PFSI-2.5 County Fire Coordination. Coordinate with the Los Angeles County Fire Department to ensure that service availability, resources, and staffing are appropriate for the community need.

PFSI-2.6 Community Policing. Strengthen the relationship between law enforcement and the community by developing programs and initiatives focused on community policing.

WASTE AND WASTEWATER

Goal PSFI-3

Ensure that all development in Palmdale is served by adequate water distribution and sewage facilities.

PFSI-3.1 Water Supply and Delivery. Support water suppliers and other jurisdictions within the Antelope Valley in studying status and projected needs for water supply and delivery.

PFSI-3.2 Local Drainage Detection Basins. Make use of interim local drainage detention basins to slow stormwater runoff until such time as permanent drainage facilities are constructed.

PFSI-3.3 Retention Facilities. Where feasible, plan for detention or retention facilities in areas where groundwater recharge can be accomplished.

PFSI-3.4 Drainage Facilities. Through the development review process, reserve land in appropriate locations for construction of drainage facilities.

PFSI-3.5 Sanitation District Collaboration and Water Purveyors. Work with the Sanitation District and Water Purveyors to identify users for reclaimed water and support plans for its treatment and distribution.

PFSI-3.6 Code Compliance. All private sewage disposal systems must comply with the requirements of the City of Palmdale Plumbing Code, the Los Angeles County Health Department, and Lahontan Regional Water Quality Control Board and any Memorandum of Understanding between these agencies concerning private sewage disposal systems.

PFSI-3.7 Public Sewer System Prioritization. Require that all commercial, industrial, institutional, and multiple family uses be connected to a public sewer system with only limited use of private sewage disposal systems.

WASTE AND WASTEWATER

Goal PSFI-3

Ensure that all development in Palmdale is served by adequate water distribution and sewage facilities.

PFSI-3.8 Public Sewer System Utilization Requirement. Require that all single-family residential uses with lot sizes of less than one acre be connected to a public sewer system.

PFSI-3.9 Renewable Energy Project Disposal Systems. Allow the use of private sewage disposal systems on nonresidential renewable energy projects with domestic discharge only on property with an IND (Industrial) General Plan Land Use designation located between Avenue L and M between 50th Street East and 120th Street East, and on property with an IND (Industrial) General Plan Land Use designation on property located south of Avenue M, north of Avenue P-8, between 90th Street East and 120th Street East. The maximum daily estimated discharge shall not exceed 500 gallons/acre/day wastewater flow with a maximum discharge of 5,000 gallons per day.

PFSI-3.10 Mining and Construction Disposal Systems. Allow the use of private sewage disposal systems on nonresidential industrial aggregate mining and construction aggregate related uses with domestic discharge only within the MRE (Mineral Resource Extraction) General Plan Land Use designations. The maximum daily estimated discharge shall not exceed 500 gallons/acre/day wastewater flow with a total maximum of 5,000 gallons per day.

PFSI-3.11 New Development Fees. Require new development to pay necessary fees for expansion and ongoing maintenance of the sewage disposal system to the appropriate agencies, to handle the increased load, which it will generate.

PFSI-3.12 Water and Wastewater BMPs. Utilize best management practices (BMPs) in the purveyance of water resources and management of wastewater.

PFSI-3.13 Low Impact Development. Require new development to minimize storm water runoff and pollutant exposure by incorporating low impact development (LID) measures and appropriate best management practices (BMPs) consistent with the National Pollution Discharge Elimination System (NPDES).

PFSI-3.14 Water and Wastewater Provision. Ensure the provisions of adequate water and wastewater services to all new development.

PFSI-3.15 Diversify Water Supplies. Coordinate with water purveyors to facilitate the commitment to diversifying the region's water supply through water banking projects and expanded recycled water projects.

PFSI-3.16 Service Levels. Provide sufficient levels of water, sewer, and storm drain services throughout the City.

PFSI-3.17 Adequate Systems. Identify and correct issues within the City's sewer and storm drain systems to prevent system failures.

PFSI-3.18 Water Conservation. Support and promote water conservation across all facets of City water infrastructure.

Goal PSFI-4

Maximize the use of infrastructure facilities through appropriate land use strategies.

PFSI-4.1 Infill Development. Direct growth toward areas which already have backbone infrastructure available by providing incentives for infill development.

PFSI-4.2 Utilize Existing Infrastructure. Encourage development, which fully utilizes existing infrastructure systems, while decreasing the need for costly extensions of infrastructure into undeveloped areas.

PFSI-4.3 Infrastructure Evaluation. Evaluate infrastructure facilities and service levels within developed areas, which annex to the City, and promote programs to retrofit street, drainage and sewer improvements where warranted.

PFSI-4.4 Cluster Development. Encourage clustering of development where appropriate, to maximize use of infrastructure.

PFSI-4.5 Planning Documents. Require comprehensive planning documents such as area plans, specific plans, and development agreements, to specify the nature, timing and financing of both capital improvements and ongoing operations/maintenance of public improvements and services.

PFSI-4.6 Mixed Use Development. Encourage mixed use development to maximize use of existing infrastructure systems.

PFSI-4.7 EIFD. Utilize Palmdale's Enhanced Infrastructure Financing District to issue bonds to fund infrastructure projects (e.g., streets, utilities, sidewalks, pedestrian safety enhancements) or affordable housing.

UTILITIES

Goal PSFI-5

Ensure that adequate public utilities are available to support development in an efficient and orderly manner.

PFSI-5.1 Development Priorities. Prioritize development in areas that have existing horizontal infrastructure (roads, sewer, water, drainage, etc.).

PFSI-5.2 On-site Infrastructure. Require all new development, including major modifications to existing development, to construct required on-site infrastructure improvements pursuant to City standards.

PFSI-5.3 Off-Site Fair Share Contribution. Require all new development, including major modifications to existing development, to construct or provide a fair share contribution toward construction of required off-site improvements needed to support the project. This includes a fair share contribution toward development of regional master facility plans for roads, sewer, water, drainage, schools, libraries, parks, fire, and other community facilities, prior to granting approval of development applications.

PFSI-5.4 Funding for Maintenance. Ensure there is a funding plan in place for the ongoing maintenance of these off-site facilities.

PFSI-5.5 Improvements Prior to Occupancy. Require that on- and off-site improvements are constructed prior to occupancy of a new development project, or phase thereof, unless otherwise approved by the City.

PFSI-5.6 Land Use Changes. When reviewing applications for land use designation changes (i.e., zone change, General Plan Amendment, specific plan amendment), conduct a thorough analysis of the impacts of the proposed change on all elements of the City's infrastructure systems, and require mitigation as deemed appropriate.

PFSI-5.7 Adjacent Development Integration. Require that individual development projects integrate with adjacent development with respect to backbone infrastructure (streets, sewer, water, and drainage). If adjacent property is undeveloped, a conceptual plan should be prepared to show that the pending development will allow for future integration and development of adjacent properties in a manner which is reasonable from a design, construction, and cost standpoint.

Goal PSFI-6

Coordinate with utility providers to support adequate provision of critical utilities.

PFSI-6.1 Infrastructure Equity.

Distribute the costs of extending infrastructure equitably among those benefiting from the improvements.

PFSI-6.2 Waste Ordinance

Review. Regularly review the City's ordinances related to recycling and solid waste to reflect updated best management practices and technological innovation.

PFSI-6.3 New Utility Development.

When feasible, require new utility lines to be constructed underground and along existing utility corridors.

PFSI-6.4 Utility Construction

Cost Minimization. Coordinate installation of utility line placement with street construction to minimize cost, where possible.

PFSI-6.5 Utility Provision.

Coordinate with electricity, gas, and waste providers to ensure adequacy of services for future and current needs.

PFSI-6.6 Prioritize Connections.

Work with providers to prioritize connections near existing development in the core of the city.

PFSI-6.7 Utility Safety.

When feasible, require new utility lines to be constructed away from fault lines, flood zones, fire zones, and other vulnerable areas.

PFSI-6.8 Utility Easements.

Through the development review process, protect existing utility easements and require dedication of additional easements where needed.

PFSI-6.9 Telecommunication

Retrofitting. Work with telecommunication providers to retrofit underserved areas with necessary telecommunication facilities and utilities.

PFSI-6.10 Capital Improvement

Plans. Adopt and annually update the City's Capital Improvement Program to prioritize funding for public works projects in accordance with the General Plan.

PFSI-6.11 City-Initiated Planning.

Inform adjacent cities, town councils and county agencies of City-initiated planning and public works projects which may impact infrastructure systems and consider input and recommendations from these entities in the land use decision process.

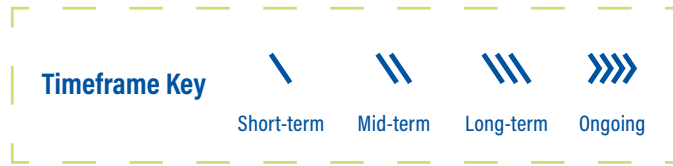
PFSI-6.12 Area-Wide

Improvements. Participate in regional efforts to gain State or Federal funding for area-wide improvements.



Implementation Actions

The table below identifies programs, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s Public Facilities, Services, and Infrastructure goals and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.



Correlating Goals	Action	Timeframe	Responsible Department
PFSI-1	Facilities Master Plan. Prepare a master plan for the City’s community facilities including libraries, recreation facilities, City services, etc.	Mid-term	Public Works and Parks and Recreation
PFSI-3, PFSI-4, PFSI-5	Fee Programs. Review the City’s Impact Fee program to determine if additions are needed to facilitate City growth and adequate provisions.	Short-term	Economic and Community Development and Public Works
PFSI-3	Water Use Efficiency Ordinance. Adopt an ordinance aimed at efficient water use. The ordinance will address a variety of water conservation measures, potentially including but not limited to low water use fixtures, low water use landscaping and irrigation, and water recycling/use of graywater.	Mid-term	Public Works
PFSI-3	Sewer System Management Plan. Review and update the City’s Sewer System Management Plan.	Mid-term	Public Works
PFSI-3	Sewer System Assessment. Perform an assessment of the City’s sewer and storm drain system to identify infrastructure deficiencies. Develop a strategy to address deficiencies when feasible.	Mid-term	Public Works

Correlating Goals	Action	Timeframe	Responsibility
PFSI-4	<p>Federal Recovery and Infrastructure Fund. Follow procedures to secure both formula allocation as well as competitive grant funds to be deployed via the bi-partisan infrastructure bill.</p>		City Manager's Office and Public Works
PFSI-6	<p>High Speed Broadband Infrastructure. Implement universal broadband to reduce the digital divide faced by small businesses and low-income households.</p>		Public Works