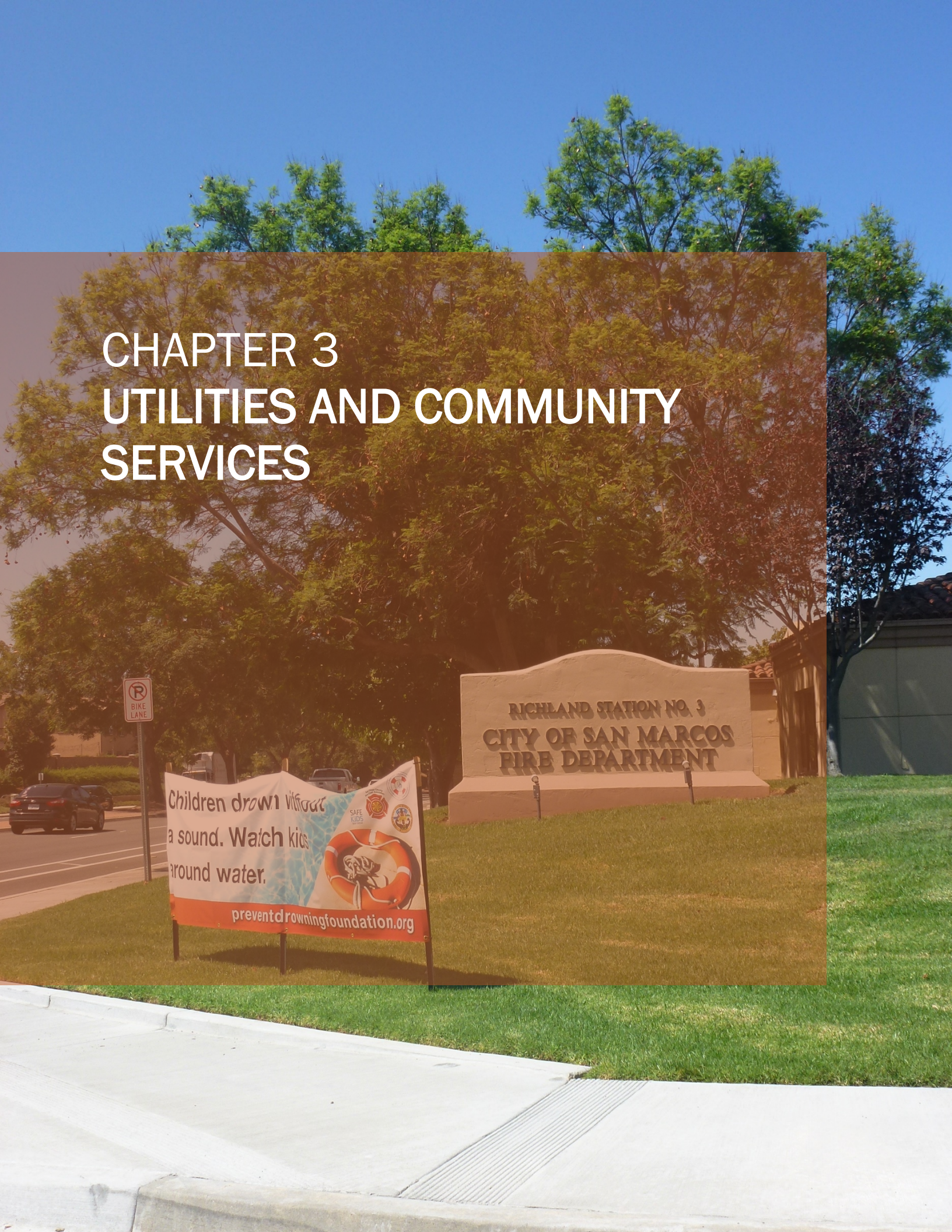

CHAPTER 3
UTILITIES AND COMMUNITY SERVICES

3 UTILITIES AND COMMUNITY SERVICES

This chapter addresses utilities and community services within the Planning Area. Utility services include the provision of water services, wastewater (sewer) services, stormwater and drainage, solid waste disposal, electricity, and natural gas. Community services include fire protection, law enforcement, parks and recreation, schools, libraries, and other public facilities.

3.1 WATER SERVICES

This section describes the Planning Area's water demands, water supplies, water quality, water distribution system, and area plans.

The City's current General Plan includes the following goals, policies, and implementation measures related to water services and supplies.

Element	Topic Area	Goal	Policy
Land Use and Community Design	Water Services	Goal LU-13: Water Service and Supply: Manage and conserve domestic water resources by reducing water usage and waste on a per capita basis, to ensure an adequate water supply for existing and future residents.	Policy 13.1: Work closely with local and regional water providers to ensure high quality water supplies are available for the community. Policy 13.2: Actively promote water conservation programs aimed at reducing demand. Policy 13.3: Encourage exploration and use of deep underground wells to reduce reliance on treatable water.

Source: City of San Marcos General Plan, 2012

Water Demands

Water resources in San Marcos include imported water resources such as the Second San Diego Aqueduct connections to the Vallecitos Water District, Vista Irrigation District, Olivenhain Municipal Water District, Rincon del Diablo Municipal Water District (Rincon Water District), and the siphon Vista Canal. Other local groundwater and surface water resources include Discovery Lake, South Lake, privately owned and operated Lake San Marcos, and multiple wells. Figure 3-1 shows an overview of the City's water service area.

The Planning Area's water supply and services are provided primarily by Vallecitos Water District (VWD), a member agency of the San Diego County Water Authority (SDCWA). Limited portions of the Business/Industrial District, College Area Neighborhood, Twin Oaks Valley Neighborhood, and Richland Neighborhood are served by Vista Irrigation District (VID). A southern portion of the Questhaven/La Costa Meadows Neighborhood is served by the Olivenhain Municipal Water District (OMWD), and an eastern portion of the Richland Neighborhood is served by Rincon.

Vallecitos Water District (VWD)

Most of San Marcos is provided water service by VWD, which also serves portions of Escondido, Carlsbad, and Vista. According to the VWD 2018 Master Plan, VWD services an area of approximately 45 square miles containing 96,200 residences. VWD provided an average of 14.8 million gallons a day (MGD) of potable water for residential, commercial, light industrial, institutional, construction, landscape irrigation, and agricultural uses in 2014. The total operation storage capacity for VWD is 120.5 million gallons.

VWD buys water from SDCWA, which is the largest purchaser of water from the Metropolitan Water District of Southern California (MWD). MWD owns and operates the Colorado River Aqueduct and buys the most water from the State Water Project for the delivery of Sacramento-San Joaquin Delta water to Southern California. An additional water purchase agreement for desalinated water from the future Carlsbad Seawater Desalination Facility is in place, which will eventually comprise 35 percent of VWD's supply at current demand levels.

Future water demand for VWD was calculated in its 2015 Urban Water Management Plan (UWMP) up to the year 2035. The ultimate future (i.e., beyond 2035) built-out water demand projection for VWD is approximately 12,520 million gallons per year, nearly three times that of its delivery of potable water in 2015. The table below lists the water demand projections for VWD from 2020 through 2035.

Table 3-1: VWD Projected Demands for Potable and Raw Water

Year	Projected Water Use Potable and Raw	Projected Water Use Recycled Water	Total Projected Water Use
2020	10,173	471	10,644
2025	10,716	471	11,187
2030	10,798	771	11,569
2035	11,559	771	12,330

Note: Units are in million gallons.
Source: Vallecitos Water District, 2015 Urban Water Management Plan (UWMP)

Vista Irrigation District (VID)

The Vista Irrigation District service area is over 21,000 acres and includes areas within the City of San Marcos, City of Vista, and County of San Diego. VID currently has several water sources including imported water, local surface water, and groundwater. However, due to limitations on the latter two sources, the SDCWA, which is the source of purchased water, will provide a growing percentage of VID's supply to meet future water demands. The SDCWA, in turn, currently purchases about half of its water from MWD but is seeking to further diversify its supplies.

Utilizing population forecasts reported in the VID 2015 Urban Water Management Plan, the population in the VID service area is expected to increase approximately 24 percent from 2015 to 2040. The Vista Irrigation District estimates a 24 percent increase in water demand by 2040 as a result of this population growth, which would project a total water demand of approximately 21.44 to 21.56 MGD in the year 2040. Table 3-2 shows the 2015 VID UWMP projections for future water demand in MGD from 2020 through 2040.

Table 3-2: VID Projected Demands for Potable and Raw Water

Year	2015 UWMP Demand Projection	2015 UWMP Under Single and Multi Dry Year Conditions	Estimated Water Conservation Savings	2015 UWMP with Dry Year Conditions and Conservation Savings
2020	17.63	19.39	2.77	16.62
2025	19.04	20.94	3.38	17.56
2030	20.20	22.22	3.51	18.72
2035	20.82	22.90	3.74	19.16
2040	21.56	23.72	3.97	19.75

Note: Units are in million gallons.
Source: Vista Irrigation District, 2015 Urban Water Management Plan (UWMP)

Olivenhain Municipal Water District (OMWD)

OMWD serves the cities of Carlsbad, Encinitas, and the southern end of San Marcos within the Questhaven/La Costa Meadows Neighborhood. OMWD only serves a few residential and commercial customers as much of the Planning Area within their service is currently open space area. Due to its small service area within San Marcos, no further review of OMWD's system is included in this report.

Rincon del Diablo Municipal Water District (Rincon)

On the southeast side of the Planning Area, Rincon serves water to a small population of San Marcos residents per agreement with VWD. Due to its small service area, no further review of Rincon's system is included in this report.

3.1.1 Water Supplies

Vallecitos Water District (VWD) Supplies

As of 2015, VWD obtained 100 percent of its water supply directly or indirectly from the SDCWA. This reliance on the SDCWA is anticipated by VWD for the foreseeable future. The table below outlines projected water supplies for VWD until the year 2035.

Table 3-3: VWD Projected Supply of Potable and Raw Water

Year	Projected Purchased or Imported Water Supply	Projected Desalinated Seawater Supply	Projected Water Supply from Storage	Projected Recycled Water Supply	Total Projected Water Supply
2020	5,180	1,140	123	471	6,914
2025	6,266	1,140	134	471	8,011
2030	6,741	1,140	142	771	8,794
2035	7,141	1,140	146	771	9,198

Note: Units are in million gallons.
Source: Vallecitos Water District, 2015 Urban Water Management Plan (UWMP)

Tables 3-1 and 3-2 show that VWD projects a shortage in its supply capabilities starting in Year 2020. VWD planned demand-reduction actions and conservation measures in its 2015 UWMP to account for this shortage. However, VWD projections based on normal water year data can be exceeded in dry years by 7 percent as per the SDCWA's 2015 UWMP, which would exacerbate VWD's water supply shortage. Table 3-4 shows water demand projections and shortages in the case of a single dry year.

Table 3-4: VWD Project Supply and Demand Comparison for Single Dry Year

Year	Supply Totals	Demand Totals	Difference
2020	7,362	11,399	4,037
2025	8,539	11,985	3,446
2030	9,359	12,398	3,039
2035	9,799	13,225	3,426

Note: Units are in million gallons.
Source: Vallecitos Water District, 2015 Urban Water Management Plan (UWMP)

Since the VWD is the primary supplier of water across the Planning Area, the projected water supply shortage identified in the 2015 VWD UWMP will likely prove to be a challenge for San Marcos as it plans for future growth.

3.1.2 References

California Department of Water Resources, 1980. Groundwater Basins in California – A Report to the Legislature in Response to Water Code Section 12924. Bulletin 118 – 80.

California Department of Water Resources, 2003. California's Groundwater Bulletin 118-Update.

California Department of Water Resources, 2017. Final California 2014 and 2016 Integrated Report (CWA Section 303(d) List / 305(b) Report).

Vallecitos Water District, 2015. 2015 Urban Water Management Plan. Accessed March 2020. Available at: http://www.vwd.org/departments/engineering/capital-facilities/urban-water-management-plan-uwmp-copy

Vista Irrigation District, 2015. 2015 Urban Water Management Plan. Accessed March 2020. Available at: https://www.vidwater.org/planning-documents

West Yost Associates, 2020. Background Report for Infrastructure Analysis for the City of San Marcos General Plan Update. Prepared April 2, 2020.

3.2 WASTEWATER

This section describes the Planning Area's wastewater infrastructure, wastewater flows, and previous infrastructure planning. The City of San Marcos does not own or operate a sanitary sewer (wastewater) system. San Marcos's sewer services are provided by three utility districts – VWD, the City of Vista, and Buena Sanitation District. Among the three entities, there are approximately 211 miles of sewer mains within the borders of the Planning Area. The wastewater infrastructure that serves San Marcos is shown in Figure 3-2.

3.2.1 Wastewater Collection System

Vallecitos Water District (VWD)

According to its 2018 Master Plan, VWD has approximately 1.35 million feet (255 miles) of gravity sewer mains ranging in size from 4-inches to 42-inches in diameter. The oldest pipelines were installed in 1956 and consist of vitrified clay pipe (67 percent of pipes) and poly-vinyl chloride pipe (25 percent of pipes). VWD operates four wastewater drywell/wet well lift stations and utilizes two wastewater treatment facilities, a land outfall, and a sludge pipeline to failsafe pipeline to treat and convey wastewater flows.

City of Vista & Buena Sanitation District

According to the 2017 City of Vista Comprehensive Sewer Management Plan, the City of Vista's combined system contains approximately 317 miles of pipeline and four pump stations. However, only a small portion of the system is located on the western edge of San Marcos.

3.2.2 Wastewater Treatment Capacity

Vallecitos Water District (VWD)

The Encina Wastewater Authority (EWA) is the primary wastewater treatment provider utilized by VWD and was established to provide for the day-to-day operation of the Encina Water Pollution Control Facility (EWPCF). The EWPCF also serves the City of Carlsbad, City of Encinitas (Encinitas Sanitary Division), Leucadia Wastewater District, and Buena Sanitation District (City of Vista).

VWD's Unit I capacity rights at the EWPCF were set forth in the 1998 Revised Basic Agreement and included 7.54 MGD of liquids treatment capacity and 7.54 MGD of solids treatment capacity. The most recently completed Phase V Expansion of the EWPCF was primarily solids driven. With that expansion, VWD maintained its 7.54 MGD of liquids treatment capacity, and increased its solids treatment capacity to 10.47 MGD. In 2014, EWA re-rated the EWPCF capacity and a "true-up" calculation was performed, which increased VWD's liquid capacity to 7.67 MGD.

VWD owns and operates the Meadowlark Water Reclamation Facility (MRF). The MRF treats wastewater to meet recycled water standards in accordance with State of California Title 22 requirements and under the provisions of Waste Discharge Permit R9-2007-0018 issued by the State of California Regional Water Quality Control Board for Region 9. The treatment process includes tertiary treatment with disinfection. Most of the existing flows that MRF treats are diversions via VWD's Lift Station 1 located along San Marcos Boulevard and Rancho Santa Fe Road, and via Lake San Marcos Lift Station along Rancho Santa Fe Road. Ultimately, the southern portions

of VWD will build out and contribute additional wastewater flows to the MRF, reducing the diversion from the EWPCF basin via Lift Station 1.

The MRF was recently upgraded to a capacity of 5.0 MGD, with a peak wet weather capacity of 8.0 MGD. It is anticipated that at buildout, approximately 3.5 MGD and 1.5 MGD of source wastewater will come from the San Elijo area (including flows from the Questhaven Lift Station) and the Lake San Marcos Lift Station, respectively, requiring little to no "make-up" wastewater during dry weather conditions from Lift Station 1. The plant does not have solids treatment capability. Solids are pumped from the MRF through a sludge pipeline to the land outfall and subsequently treated at the EWPCF. Therefore, VWD requires a higher capacity of solids treatment than liquid treatment at EWPCF. When combined with the 7.67 MGD treatment capacity of the EWPCF, VWD currently has a total liquids treatment capacity of 12.67 MGD.

City of Vista & Buena Sanitation District

The City of Vista's combined system conveys sewage to the EWPCF for treatment. With the recently completed Phase V Expansion, the combined systems have liquids and solids capacity rights of 13.67 MGD, with 10.67 MGD owned by the City and 3.0 MGD owned by the Buena Sanitation District. In 2016, total wastewater flows from all agencies to the EWPCF averaged 20.76 MGD with approximately 33 percent of that flow originating from the City of Vista's combined system.

3.2.3 Wastewater Flows

Projected wastewater flows for the two districts serving San Marcos are discussed below.

Vallecitos Water District (VWD)

In the VWD 2018 Master Plan, the wastewater flow under the buildout scenario was calculated based on the established unit rates and the approved planned land use data. Interim flow projections (2020-2035) were estimated based upon SANDAG's growth forecasts for VWD.

As show in Table 3-5, the projected average annual flow under ultimate buildout conditions is 14.4 MGD. This total represents the potential flow based on allowable land uses and existing flows. The VWD 2018 Master Plan also noted that continued conservation and water use efficiencies could delay reaching ultimate buildout condition flows.

City of Vista & Buena Sanitation District

Some areas along the west edge of the Planning Area are served by the City of Vista's combined system. Table 3-5 shows the City of Vista's projected wastewater flow through buildout conditions for its combined system.

Table 3-5: Projected Sewer Flow vs. Treatment Capacity

Utility District	Projected Buildout Flow	Current Liquid Treatment Capacity	Current Total Solids Treatment Capacity
VWD	14.4	7.67	10.47
City of Vista	18.8	13.67	13.67

Note: Units are in million gallons.

Sources: Vallecitos Water District, 2018 Master Plan; City of Vista, 2017 Sewer Master Plan

3.2.4 References

City of San Marcos, 2012. City of San Marcos General Plan EIR.

The Vallecitos Water District, 2018. 2018 Water, Wastewater, and Recycled Water Master Plan.

West Yost Associates, 2020. Background Report for Infrastructure Analysis for the City of San Marcos General Plan Update. Prepared April 2, 2020.

3.3 STORMWATER AND DRAINAGE

Provided below is a discussion of the stormwater drainage and flood control systems that serve the Planning Area. Issues related to the floodplain are addressed in Chapter 4. The existing City of San Marcos General Plan identifies the following policies related to hydrology and water quality.

Element	Topic Area	Goal	Policy
Land Use and Community Design	Flood Control	Goal LU-15: Flood Control and Storm Water Drainage Facilities: Ensure adequate flood control and storm water drainage is provided to the community.	Policy 15.1: Implement activities, practices, procedures, or facilities that avoid, prevent, or reduce pollution of the San Marcos Storm Water Conveyance System and Receiving Waters. Policy 15.2: Improve inadequate or undersized drainage/ flood control facilities to solve both small neighborhood and large regional drainage and flood control problems. Policy LU-15.3: Avoid, to the extent possible, development in floodplain and flood prone areas. Policy 15.4: Retain drainage courses in their natural condition, to the extent possible. Consider smaller-scale drainage improvements to protect the environment and avoid disturbing natural drainage courses; consider detention areas and raised building pads.

Source: City of San Marcos General Plan, 2012

3.3.1 Storm Drainage System

The City of San Marcos is responsible for managing the public storm drain system within the city limits and ensuring that an adequate level of service is provided to protect the public from excessive surface flooding conditions. Stormwater within the Planning Area is primarily tributary to San Marcos Creek, discharging to Lake San Marcos located within the Carlsbad Watershed. Lake San Marcos is privately owned by Pacifica Enterprises, which is a property developer and manager. The overall watershed is comprised of six hydrologic basins: San Marcos Creek – North Basin, San Marcos Creek – East Basin, San Marcos Creek – Main Basin, Las Posas, North Outlying Basin, and South Outlying Basin.

The primary purpose of the public storm drain system is to facilitate the conveyance of drainage water from rainfall events away from urban areas. In addition, the facilities are designed to mitigate the increase in runoff volumes and velocities to downstream areas and drainages to prevent flooding of public and private facilities in urbanized areas. The drainage system includes any roads with drainage infrastructure, catch basins, natural and artificial channels, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, natural and artificial channels, and storm drains.

3.3.2 Local Infrastructure

According to the City of San Marcos' draft 2019 Drainage Master Plan (pending adoption), a large portion of critical inventory and associated attributes are missing from their digital records. A surveying study identified critical survey locations and collected data to fill in critical gaps for the City's stormwater model.

3.3.3 Stormwater and Flood Control

As part of the 2019 Drainage Master Plan, hydrologic and hydraulic modeling were performed on 619,271 LF of existing pipes to determine the conveyance capacity of the pipes and to identify deficient entities. The 619,271 LF of existing pipes do not include channels, ditches, or culverts within the FEMA floodplain. Channels and ditches were modeled but were not analyzed for deficiencies. Analysis of deficiencies was focused on storm drain infrastructure and considered the General Plan's land use for the hydrologic modeling parameters.

For a 100-year 24-hour storm event, 188,185 LF of pipeline was identified as deficient. A total of 44,220 LF was found deficient due to upstream surcharging. 50,683 LF of pipeline was identified as deficient due to downstream surcharging. 93,232 LF of pipeline was identified as deficient due to both upstream and downstream surcharging. A total of 1,102 of 5,483 junctions were identified as being surcharged by one foot or more. Channel or ditch confluences were modeled but not considered for this analysis. Based on identified deficiencies, the City of San Marcos identified 13 CIP projects.

The 13 CIP projects aim to increase conveyance efficiency within the drainage system. The projects are inclusive of providing new infrastructure and replacing or realigning existing infrastructure. In addition to the drainage improvement projects, regional improvement projects are suggested to improve water quality and utilize flood storage benefits.

More information on flooding and flooding potential can be found in Section 4.0 (Hazards, Safety, and Noise) of this document.

3.3.4 Stormwater Quality

In general, potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosive forces, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures, contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm which produces significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminates in the low flowing stream. Such conditions are most frequent during the Fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, deficient slope and ground surface stabilization, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

303(d) Impaired Water Bodies: Section 303(d) of the Federal Clean Water Act requires states to identify waters that do not meet water quality standards or objectives and, thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a water body and thereby the basis for the states to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

Within the Planning Area are five water bodies listed by the State Water Resources Control Board (SWRCB) as 303(d) impaired Water Bodies: Agua Hedionda Creek; Buena Creek; Drain to central southwest fork of San Marcos Lake; San Marcos Creek, and; South Lake.

Watershed Program

The City of San Marcos owns and operates a Municipal Separate Storm Sewer Systems (MS4 or storm drain system) and is considered a copermittee under the San Diego Regional Water Quality Control Board (SDRWQCB) Order R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100 (MS4 Permit or Municipal Permit), which regulates discharges from Phase I MS4s in the San Diego Region. Provision B of the MS4 Permit requires Responsible Agencies (RA)s, in each of the region's Watershed Management Areas (WMA)s to develop Water Quality Improvement Plans (WQIP)s that identify water quality conditions and strategies to improve water quality within the watershed. Through the WQIP approach, Highest Priority Water Quality Conditions (HPWQC) within the WMA are identified, and strategies are implemented through the RAs' Jurisdictional Runoff Management Programs (JRMP)s to progressively improve water quality. The City of San Marcos is one of eight agencies that is part of the Carlsbad Watershed Management Area (CWMA).

The CWMA WQIP was originally approved by the SDRWQCB in 2016 and subsequent updates have occurred in 2018 and 2021.

The CWMA WQIP categorizes three types of strategies: jurisdictional strategies, optional strategies, and WMA strategies. Planned jurisdictional strategies include core jurisdictional programs to address the requirements of MS4 Permit provisions E.2. through E.7 and are described in more detail in the City's JRMP. The core jurisdictional program strategies include the following:

- Administrative BMPs – review/update inventories, establish minimum BMP requirements, develop BMP design requirements, develop SOPs or equivalent plans, update ordinances, review approval processes, etc.
- Investigations – to identify illegal discharges and illicit connections resulting from public reporting, inspection findings, staff referrals, and/or monitoring results.
- Development and Redevelopment Requirements – development/redevelopment project application review/compliance determination with MS4 regulations/BMP Design Manual.
- Inspections – development planning (post-construction structural BMPs), construction sites, industrial/commercial, municipal areas/activities, and residential areas/activities
- MS4 Inspections/Cleaning
- Street Sweeping
- General Education and Outreach
- Employee Training
- Enforcement – based on investigations and/or inspections at either a construction, municipal, industrial, commercial, and/or residential areas
- Partnership Program(s) – partnerships with entities to achieve overarching water quality improvement objectives.
- Program for Retrofitting Areas of Existing Development
- Program for Stream, Channel and /or Exiting Habitat Rehabilitation in Areas of Exiting Development
- Offsite Alternative Compliance – program allows development project proponents to trade onsite mitigation for water quality impacts for offsite mitigation.

Optional strategies are BMPs, incentives, or programs that may be implemented in response to specific conditions. WMA strategies are optional regional or multi-jurisdictional BMPs, incentives, or programs.

Required monitoring and assessment programs for both the dry and wet weather provides the vehicle for determining whether intended outcomes are being realized or whether RA's programs adaptions are necessary. The collection and evaluation of monitoring data will guide future implementation of the RA's management actions as part of the WQIP process.

Post-Construction Structural Best Management Practices

The City's Post Construction Structural Best Management Practices (BMPs) program element consists of public and privately maintained structural BMPs. Over two thousand structural BMPs reduce pollutants from entering the City's Municipal Separate Storm Sewer System (MS4). These structural BMPs consist of curb inlet drain inserts, bioretention basins, swales, and hydrodynamic separators. Some of the more common pollutants these systems manage include sediments, chemicals, oils and grease, metals, nutrients, erosion, and flooding. Accordingly, all existing, future development, and redevelopment projects must comply with this program element to comply with the 2013 MS4 permit (Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100).

3.3.5 References

California Department of Water Resources, 2019. Final California 2019 Integrated Report (CWA Section 303(d) List / 305(b) Report). Available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml

City of San Marcos, 2012. City of San Marcos General Plan EIR.

State Water Resources Control Board (SWRCB). Order No. R4-2012-0175 as amended by SWRCB Order WQ 2015-0075 NPDES Permit No. CAS004001. Available at: https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/Riverside_ms4/2016/R4-2012-0175-A01.pdf

State Water Resources Control Board (SWRCB). Strategy to Optimize Resource Management of Storm Water (Storm Water Strategy, STORMS). Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/storms/

State Water Resources Control Board (SWRCB), 2013. Water Quality Order No. 2013-0001-DWQ. https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/phsii2012_5th/order_final.pdf

West Yost Associates, 2020. Background Report for Infrastructure Analysis for the City of San Marcos General Plan Update. Prepared April 2, 2020.

3.4 SOLID WASTE

The following section describes solid waste disposal contracting and facilities serving the Planning Area. The existing San Marcos General Plan includes the following goals and policies related to solid waste.

Element	Topic Area	Goal	Policy
Safety	Hazardous Materials	Goal S-4: protect life, structures, and the environment from the harmful effects of hazardous materials and waste.	Policy 4.1: Promote and support the proper disposal, handling, transport, delivery, treatment, recovery, recycling, and storage of hazardous materials in accordance with applicable federal, State, and local regulations.
Land Use and Community Design	Solid Waste	Goal LU-16: Solid Waste: Reduce the amount of waste material entering regional landfills with an efficient and innovative waste management program.	Policy 16.1: Work closely with local service providers to ensure adequate solid waste disposal, collection, and recycling services. Policy 16.2: Increase recycling, composting, source reduction, and education efforts throughout the city to reduce the amount of solid waste requiring disposal at landfills.

Source: City of San Marcos General Plan, 2012

3.4.1 Waste Collection Services

EDCO Waste and Recycling (EDCO) is a private franchise hauler that provides solid waste disposal within the Planning Area. With minor exceptions for certain homeowners' associations in the SOI, EDCO handles all residential, commercial, and industrial collections within the Planning Area. Waste collected by EDCO is hauled to the Escondido Resource Recovery Transfer Station where it is then transported to the Sycamore Sanitary Landfill located at 8514 Mast Boulevard at West Hills Parkway, in Santee (CalRecycle 2011).

According to the 2012 San Marcos General Plan EIR, the estimated closure date of the Sycamore Sanitary Landfill is December 31, 2031. The landfill has a maximum permitted capacity of 147,908,000 cubic yards of waste and a remaining capacity of 113,972,637 cubic yards. The total disposal acreage is 349,2000 acres.

3.4.2 Hazardous Waste Disposal

Household hazardous waste is any hazardous waste generated incidental to owning or maintaining a residence, including paints, solvents, varnishes, acids, flammables, acrylics, and resins. The most affordable way for residents in the Planning Area to dispose of these waste products is to take them to one of the following Household Hazardous Waste (HHW) Collection Facilities in nearby communities:

- Vista HHW Collection Facility (1145 E. Taylor Street, City of Vista)
- Poway HHW Collection Facility (12325 Crosthwaite Circle, City of Poway)

Free door-to-door collection services are available to residents 65 or older, or households possessing a registered placard for persons with disabilities.

In addition, sharps can be dropped off for free at EDCO's Buyback Center at 224 S. Las Posas Road, San Marcos. Customers can reach out to EDCO for any waste related inquiries.

3.4.3 Solid Waste Generation Rates and Volumes

The California Department of Resources Recycling and Recovery (CalRecycle) tracks and monitors solid waste generation rates on a per capita basis. Total annual solid waste disposal volumes for the City of San Marcos for the year 2018 (latest available data) was 94,649.04 tons. The per capita solid waste generation rate was 5.4 pounds/person/day. The annual disposal volume for 2018 had increased from the 2017 rate of 89,099.73 tons per year.

The City of San Marcos has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. The City's per capita disposal target rate in 2018 was 8.9 pounds/person/day. The City's per capita disposal rate in 2018 was 5.4 pounds/person/day, which successfully satisfies the target reduced disposal rate.

3.4.4 References

CalRecycle, 2018. Jurisdiction Disposal by Facility. Disposal during 2018 for San Marcos. https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator

CalRecycle, 2018. Jurisdiction Per Capita Disposal Trends (2011-2018). Available at: http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=JurisdictionID%3d239%26BeginYear%3d2011%26EndYear%3d2016%26ReportName%3dARDRPopEmpTrendExternal%26ShowParameters%3dfalse%26AllowNullParameters%3dFalse

CalRecycle, 2018. SWIS Facility/Site Search. Available at: http://www.calrecycle.ca.gov/swfacilities/directory/search.aspx

EDCO Waste and Recycling. About EDCO. Accessed March 2020. Available at: http://edcodisposal.com

3.5 ELECTRICITY AND NATURAL GAS

The existing San Marcos General Plan includes the following goals and policies related to Electricity and Natural Gas.

Element	Topic Area	Goal	Policy
Land Use and Community Design Element	Growth Management and Adequate Provision of Urban Services.	Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.	Policy 8.1: New development shall pay its fair share of required improvements to public facilities and services. Policy 8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.
		Goal LU-17: Utilities and Communications: Encourage provision of power and communication systems that provide reliable, effective and efficient services for San Marcos.	Policy 17.1: Coordinate with all communications and utility companies (electrical, gas, telephone, cable, satellite and future utilities) in the provision of services throughout the community and the installation and maintenance of facilities in their respective franchise areas. Policy 17.2: Require all new development and redevelopment to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wire - less technologies, and satellite communications. Policy 17.3: The City shall prohibit above ground utility equipment within any of the pedestrian pathway and street frontage areas. All above ground utilities shall be placed either within; “wet closets” within the buildings, underground vaults, or behind buildings where they are not visible. The developer shall be responsible to contact the applicable utility agencies in advance to coordinate utilities prior to approval of the final street improvement plans for both public and private street frontages and prior to submittal of building permits.

			Policy 17.4: Require utility location to be shown on all site development plans at the time of development/ project application.

Source: City of San Marcos General Plan, 2012

3.5.1 Existing Setting

Electricity and natural gas in the Planning Area are provided by San Diego Gas & Electric (SDG&E), which is owned by Sempra Energy. SDG&E is a regulated public utility that provides energy service to 3.6 million people through 1.4 million electric meters and 873,000 natural gas meters in San Diego and southern Orange counties. The SDG&E service area spans 4,100 square miles.

SDG&E obtains electricity from a variety of sources, including SDG&E-owned facilities and other private and publicly owned facilities that provide electricity through contracts and agreements. Electricity is generated from a variety of energy sources, including coal, natural gas, nuclear, hydroelectric, and a mix of other renewable resources. SDG&E does not directly own any of its own renewable generation resources.

Discovery Valley Utility

Discovery Valley Utility (DVU) is a non-profit municipal utility owned by the City of San Marcos. During the City's charter development in 1994, voters authorized the City to establish the municipal utility, an act which was passed by City Council resolution in 2000. Although the DVU, which is both an electrical and natural gas utility as of 2003, is not yet serving customers, DVU continues to work to establish competition in the electrical and natural gas utility business within San Marcos and is working within a variety of strategic alliances to put a long-term plan in place that will provide competitive electric and natural gas rates to constituents within San Marcos. Chapter 15.04 of the City of San Marcos Municipal Code contains the codifying language for the municipally-owned utility, which is intended to ultimately "be responsible for the planning, development, production, purchase and transmission of all electricity and natural gas and other utility-related services, by the City."

3.5.2 References

California Energy Commission. 2015. California Electric Utility Service Areas. http://www.energy.ca.gov/maps/serviceareas/Electric_Service_Areas_Detail.pdf

San Diego Gas & Electric. Accessed March 2020. http://www.sdge.com/

3.6 PUBLIC SAFETY

This section addresses the provision of public safety services in the Planning Area, including fire protection, law enforcement, and other local safety provisions.

3.6.1 Fire Protection

The City of San Marcos has its own full-service fire department to provide fire protection services to the Planning Area. The existing City of San Marcos General Plan identifies the following goals and policies related to fire protection services:

Element	Topic Area	Goal	Policy
Safety Element	Natural Hazards	Goal 2-3: Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.	Policy 3.1: Require development to be located, designed and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers. Policy 3.2: Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination among fire protection and emergency service providers. Policy 3.3: Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.

			Policy 3.4: Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short and long term fire prevention needs.
Land Use and Community Design Element	Growth Management and Adequate Provision of Urban Services	Goal LU-10: Fire Protection, Emergency Services, and Law Enforcement: Provide effective high-quality and responsive services.	Policy 10.1: Provide demand-based fire-fighting and emergency medical services infrastructure, equipment, and personnel to provide a high level of fire, emergency medical, and law enforcement service in San Macros to meet existing and future demands. Policy 10.2: Work closely with the County of San Diego Sheriff's Department to determine and meet the community needs for adequate personnel, equipment and state-of-the-art technology to effectively combat crime, and meet existing and projected service demands. Policy 10.3: Continue to conduct Public Outreach and education regarding fire safe.

Source: City of San Marcos General Plan, 2012

Fire Protection Services

The San Marcos Fire Department (SMFD) provides full-service fire protection to the City of San Marcos and the San Marcos Fire Protection District, which covers an area of approximately 33 square miles (including the City and its Sphere of Influence) and a population of approximately 97,000 residents. The Fire Department is rated as an ISO Class 1 department and consists of four

fire stations, four paramedic assessment engine companies, one paramedic assessment truck company, five paramedic transport ambulances, one Shift Battalion Chief, and one On-Call Duty Chief. The Department also cross-staffs three wildland fire engines and a State of California/Office of Emergency Services (Cal OES) wildland fire engine.

The SMFD provides a variety of services to the community, including fire suppression, rescue, emergency medical services, including Advanced Life Support (ALS), 911 response and transportation services, fire prevention, vegetation management, public education, emergency preparedness, and trauma support. In addition, SMFD protects and manages several thousand acres of wildland and wildland urban interface lands.

Fire Department facilities are distributed throughout the City of San Marcos and include Fire Station 1 at 180 W. Mission Road, Fire Station 2 at 1250 S. Rancho Santa Fe Road, Fire Station 3 at 404 Woodland Pkwy, and Fire Station 4 at 204 San Elijo Road. Two additional fire stations are proposed – one targeted for a central location, possibly the San Marcos Creek District, and the other for a location to be determined.

In February 2017, a *Standard of Response Cover Plan* was prepared for the San Marcos Fire Department, which reviewed the adequacy of the current fire station deployment system to support the community's goals. The report found that the City is currently meeting its needs through its own fire response resources and using its neighbors in the regional mutual aid system for assistance on catastrophic emergencies. It also found that the deployment system largely meets the City's current demands, but needs small adjustments to best meet the ongoing needs of the population and for San Marcos to be protected against risks.

Table 3-6 shows how the current fire station deployment system provides unit coverage across a variety of population density/risk areas for emergency medical and fire incident types. According to the *Standard of Response Cover Plan*, the best practices recommendation is for the first-due fire unit to arrive within 7:30 minutes of fire dispatch receiving the call, 90 percent of the time.

Table 3-6: Call to Arrival Response Time (Minutes) – 90% Performance

Station	2013	2014	2015
Department-wide	07:28	07:34	07:31
Station 1	07:54	08:14	07:55
Station 2	06:51	06:53	06:58
Station 3	07:12	07:26	07:16
Station 4	07:39	07:11	07:41

Source: Citygate Assoc., LLC. City of San Marcos, Standards of Response Cover Plan, 2017.

The report concluded that slow travel times in San Marcos are the result of a difficult to serve primary road network along with traffic congestion. However, the two additional fire stations will stabilize the response time performance, and prevent it from decaying further.

Fire Department Programs

The SMFD provides more than traditional fire services and emergency medical services; the SMFD also participates and manages a range of all-risk programs related to health and safety.

Safely Surrendered Baby Program

The San Diego County Board of Supervisors has designated all hospital emergency rooms and select fire stations as the appropriate places to surrender infants safely. All fire departments in San Marcos are Safe Surrender sites.

Project Heart Beat

The SMFD participates in San Diego Project Heart Beat (SDPHB) in order to increase the use of Automated External Defibrillators (AED), which are portable, lightweight devices that analyze a patient's EKG. When appropriate, the AED delivers an electrical pulse through the heart to restore a normal heart rhythm.

Clinical studies estimate that the survival rate from sudden cardiac arrest increases 50-70% when an AED is available and used on a victim within 3-5 minutes from the onset of a cardiac arrest. Now an individual, following clear voice directions from the AED, can increase patient survivability through the push of a button from an AED.

Senior Smoke Detector Program

The SMFD, along with the Burn Institute, offers senior citizens free inspections and assistance with their smoke detectors' maintenance. To qualify for a free inspection, participants must be a citizen of San Marcos, be at least 55 years of age, and need assistance in determining if their smoke detector is in good working condition. If a smoke detector needs to be replaced, one will be provided free of charge.

Public Education

Fire and life safety presentations and events presented by SMFD include Annual Fire Department Open House, fire extinguisher training, business fire safety presentations, fire drills, poolside CPR training, and Mobile Home Park and HOA presentations.

Wildfire Mitigation Program

The SMFD conducts Annual Proactive Inspections in High Fire Zones including all parcels within CAL FIRE's high and very high severity zones annually. SMFD also provides the PACE model program to high risk areas of the community on a biennial basis in a town hall style format.

3.6.2 Law Enforcement

The City of San Marcos does not have its own police department. Instead, the City contracts with the San Diego County Sherriff's Department for its law enforcement services. The San Diego County Sheriff's captain assigned to the San Marcos Station serves as the City's chief of police and is responsible for deploying law enforcement resources that are available via the City's contract. Sheriff's deputies are responsible for general patrol, traffic enforcement, criminal investigations, and other law-enforcement related duties.

The existing City of San Marcos General Plan identifies the following goals and policies related to law enforcement and police protection services.

Element	Topic Area	Goal	Policy
Safety Element	Neighborhood Safety	Goal 2-6: Provide Neighborhood Safety through effective Law Enforcement.	Policy 6.1 Continue to maintain demand-based law enforcement service levels to reduce the risk of criminal activity. Policy 6.2 Continue public education efforts and community outreach programs to promote community involvement in crime and drug prevention. Policy 6.3 Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings.
Land Use and Community Design Element	Growth Management and Adequate Provision of Urban Services	Goal LU-10: Fire Protection, Emergency Services, and Law Enforcement: Provide effective, high-quality and response services.	Policy 10.1: Provide demand-based fire-fighting and emergency medical services infrastructure, equipment, and personnel to provide a high level of fire, emergency medical, and law enforcement service in San Macros to meet existing and future demands. Policy 10.2: Work closely with the County of San Diego Sheriff's Department

			to determine and meet the community needs for adequate personnel, equipment and state-of-the-art technology to effectively combat crime, and meet existing and projected service demands. Policy 10.3: Continue to conduct Public Outreach and education regarding fire safe.

Source: City of San Marcos General Plan, 2012

Police Protection Services

San Marcos is served by a standalone Sheriff's Station located at 182 Santar Place, which is also part of the larger San Marcos Public Safety Center. The Station provides services to the citizens and visitors of San Marcos and the surrounding unincorporated communities of Lake San Marcos, Elfin Forest, Harmony Grove, Hidden Meadows, Ivy Del, Del Dios, Lake Hodges, and the San Pasqual Valley. The Station has a total service area of approximately 100 square miles of territory including the City and the unincorporated areas around San Marcos and Escondido, serving more than 111,000 residents.

Law enforcement services for the Planning Area include patrol, traffic, community-oriented policing, gang and narcotics details, and detectives. The City does not have an adopted target officer-to-population service ratio. Instead, the City works closely with the Sheriff's Department to determine and meet the community needs for adequate personnel and equipment to effectively combat crime, and meet existing and projected service demands. As of March 2020, there are over 100 sheriff's deputies, volunteers, and professional staff members serving the Planning Area. These officers provide 24 hour per day coverage.

The Sheriff's Department also employs Community Oriented Policing and Problem Solving (COPPS) deputies. COPPS deputies are special-purpose deputies assigned to investigate quality of life issues within the community. These special deputies use the COPPS philosophy to promote quality interaction between law enforcement and neighborhood citizens. COPPS deputies also conduct directed patrols focusing on gangs, persons on parole/probation, persons with outstanding warrants, graffiti, human trafficking, prostitution, habitual offenders, transient camps, and alcohol/tobacco-related crimes. COPPS deputies are also active within the community by attending Neighborhood Watch meetings and providing various presentations to youth groups, community groups, schools, and businesses.

Crimes by Category in San Marcos

Statistics on the number of crimes by category of crime in San Marcos during each year from 2010 to 2018, as reported by the Federal Bureau of Investigation (FBI) Criminal Justice Information Services Division, are shown in Table 3-7 below.

Table 3-7: Crimes by Category, 2010-2018

Category	2010	2011	2012	2013	2014	2015	2016	2017	2018
Violent Crimes	237	233	227	214	196	171	197	195	202
Homicide	1	0	2	0	2	3	0	0	0
Rape	16	19	11	19	9	17	13	25	18
Robbery	70	60	57	62	38	34	42	54	61
Aggravated Assault	150	154	157	133	147	117	142	116	123
Violent Crime Rate Per 100,000 Population	283.3	274.9	264.5	244.0	215.9	179.4	207.7	200.4	205.9
Property Crimes	1,642	1,424	1,502	1,400	1,286	1,516	1,145	1,136	1,052
Burglary	350	358	366	299	242	277	211	202	167
Larceny-theft	1054	908	907	931	854	996	783	784	740
Vehicle Theft	238	158	229	170	190	243	151	150	145
Arson	5	7	3	7	10	2	3	4	5
Property Crime Rate Per 100,000 Population	1,962.4	1,679.9	1,750.4	1,596.1	1,416.3	1,590.5	1,207.3	1,167.6	1,072.5
Population	83,671	84,766	85,810	87,712	90,799	95,314	94,840	97,290	98,088

Source: Federal Bureau of Investigation, Criminal Justice Information Services Division, Offenses Known to Law Enforcement Tables (2010 through 2018).

Emergency Preparedness

The City of San Marcos prepared an all-hazards Emergency Operations Plan (EOP) in 2015 that defines the actions and roles necessary to provide a coordinated response within the Planning Area before, during, and following extraordinary emergencies associated with natural, manmade, and technological disasters. The plan has built-in flexibility to allow use in all emergencies and will facilitate response and short-term recovery activities. It was developed in accordance with the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The EOP is also designed to integrate into and support the County of San Diego's Operational Area Emergency Plan for a more seamless multi-jurisdictional response to disasters.

The EOP includes detailed sections related to: Hazard Profiles, Training and Exercises, Assignment of Responsibilities, Mutual Aid, Emergency Operations Center (EOC), Emergency Declarations, Public Information, Finance, and Logistics. Furthermore, the City has an Emergency Operations Center for use, if necessary. In the event of a major emergency, the EOC would be used to coordinate resources, assist in mitigating the emergency, and properly allocate emergency resources and relief aid.

In addition, the City is included in the County of San Diego's Hazard Mitigation Plan. This plan was last revised in 2018 and is currently in the process of a 2023 update. The plan serves as both a countywide plan, as well as a plan for local jurisdictions, that identifies risks posed by natural and human-made disasters before a hazard event occurs. Hazards were assessed and mapped on a regional basis. Hazards identified for the Planning Area include earthquakes, dam failure, flood events, rain-induced landslides, and liquefaction.

3.6.3 References

Citygate Associates, LLC, 2017. City of San Marcos, *Standards of Response Cover Plan*.

City of San Marcos, 2012. City of San Marcos General Plan. Safety Element.

City of San Marcos, 2015. City of San Marcos 2015 Emergency Operations Plan.

City of San Marcos Sheriff Services. Accessed April 10, 2020. Available at: https://www.san-marcos.net/departments/public-safety/sheriff

Federal Bureau of Investigation, Criminal Justice Information Services Division, 2010 through 2018. Table 8, Offenses Known to Law Enforcement, by State by City.

San Diego County Sheriff's Department. Accessed April 10, 2020. Available at: https://www.sdsheriff.net/index.html

3.7 PARKS AND RECREATION

The City of San Marcos has 19 major parks and 20 mini parks. In addition, the City has a 70.4-mile trail network that includes hiking, biking, running, and equestrian facilities.

The San Marcos Parks Master Plan was updated in July 2018. The Parks Master Plan evaluated the City's existing park facilities, programs, and services, and provided recommendations for facility improvements. The City also maintains a Trails Master Plan to serve as San Marcos's active transportation and trails guide. The existing City of San Marcos General Plan identifies the following goals and policies related to parks and recreation.

Element	Topic Area	Goal	Policy
Parks, Recreation, and Community Health	Community Health and Family Enrichment	Goal PR-1: Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high quality recreational facilities.	Policy 1.1: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors. Policy 1.2: Update and maintain a Master Parks Plan and a Trails Master Plan that implements the City's long term vision for a complete system of parks, trails, and recreation facilities. Policy 1.3: Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City. Policy 1.4: Promote increased access to parks

			and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights of-way, and a variety of active and passive uses of parks and open space. Policy 1.5: Require new development to be designed and constructed in accordance with the approved Master Trails Plan to meet or exceed the City's parkland standard of 5 acres per 1,000 residents. Policy 1.6: Require new infill development to provide plazas, mini parks, or other civic spaces, as part of their parkland requirement. Policy 1.7: Promote park and facility design that discourages vandalism, deters crime, provides natural surveillance and creates a safe and comfortable environment
		Goal PR-2: Become a leader in building healthy communities by supporting recreation and community service programs that promote wellness, fun, lifelong learning, skill development, personal enrichment, and positive relationships	Policy 2.1: Provide programs at City-owned facilities for people of diverse cultures, backgrounds, ages, gender, interests, languages, lifestyles, abilities, and socioeconomic status. Policy Policy 2.2: Implement the trail network per the Trails Master Plan to increase opportunities for physical activity (e.g., walking,

			biking), healthy lifestyles, and to reduce reliance on cars.

Source: City of San Marcos General Plan, 2012.

3.7.1 Types of Parks

The National Recreation and Parks Association (NRPA) has created a set of standards for classification of park and recreation facilities to help serve as a guide to planning. This classification system is to be used as a boilerplate set of standards to be modified to fit the individual municipality's needs. According to the NRPA classification system, parks are usually categorized according to their service area, size, function, and acres/1,000 population.

Below are descriptions and requirements of the four categories of parks as defined by using the NRPA guidelines to inform City-specific standards.

Mini (Urban) Parks: The mini park is designed to offer green space in those urban locations where yards are limited or in areas not served by any other park. They are established when larger acreage is unavailable, particularly in densely populated, developed areas. The cost of development and maintenance of mini parks is very high relative to the number of people served. As part of the community partnership commitment, they bring development and maintenance endowment dollars as well as sweat-equity to the project. Land most frequently used for such a facility has been vacant lots scattered throughout the inner city, although newer suburban subdivisions are setting land aside for mini parks. Such parks are usually designed for the use by a specific age group (i.e. preschool children, teens, or senior citizens) living within the immediate neighborhood. They also address limited or isolated recreation needs. They may be located where dense residential populations limit the availability of open space. Recreation resources include both active and passive use.

City Standards:

- Size: Mini parks are between 2,500 square feet and one acre in size. However, park areas less than 5 acres would technically be considered a mini park. Anything larger would be considered a neighborhood park.
- Service Area: Several city blocks or less than 1/4 mile in a residential setting.

Neighborhood Parks: Neighborhood parks remain the basic unit of the park system and serve as the recreation and social focus of the neighborhood. They should be developed for both active and passive recreation activities geared specifically for those living in the service area. Accommodating a wide variety of age and user groups, including children, adults, senior citizens, and special populations, is important. Creating a sense of place by bringing together the unique character of the site with that of the neighborhood is vital to successful design. The neighborhood park is designed to provide the types of recreation one would expect to be able to walk to rather than be required to drive to gain access. Neighborhood parks offer small areas of open space and a sampling of park resources to service individual neighborhoods.

City Standards:

- Size: Demographic profiles and population density within the park's service area are determinants of a neighborhood park's size. Generally, 5 acres is accepted as the minimum size necessary to provide space for a variety of recreation activities; 7 to 10 acres is considered optimal.
- Service Area: A neighborhood park is limited by geographical or social limits (maximum 15-20 minutes walking distance). The park primarily serves the local neighborhoods located within a radius of 1/4 to 1/2 mile of the park, without physical or social barriers to the boundaries.

Community Parks: Community parks fall between regional and neighborhood parks in size and scope of services. Their focus is on meeting the recreation needs of several neighborhoods or large sections of the community, as well as preserving unique landscapes and open spaces. They allow for group activities and offer other recreation opportunities not feasible, nor perhaps desirable, at the neighborhood level. As with neighborhood parks, they should be developed for both active and passive recreation activities.

City Standards:

- Size: In addition to minimum size of 10 to 100 acres, a park may be classified as a community park solely on the amenities and programs offered to a particular neighborhood.
- Service Area: The service area should be 0.5 to 3.0 miles in radius. A community park should serve two or more neighborhoods.

Regional Parks: Regional parks offer county residents the opportunity to participate in a variety of park experiences capable of entertaining the entire family for extended time periods. They may provide a natural setting or sense of remoteness from the common urban fabric or enrich participants about the area's cultural heritage. Because regional parks are designed for both active and passive recreation, and are centered on unique terrain, extensive natural areas, scenic views, a lake, river, or cultural features, they typically attract a large number of persons from throughout the county. These parks serve a broader purpose than community parks and are used when community and neighborhood parks are not adequate to serve the needs of the community.

City Standards:

- Size: Minimum of 50 acres with 75 or more acres being optimal.
- Service Area: The normal drive time is 1 hour or less. Depending on the amenities offered, regional parks could draw from San Diego County and Orange County at a minimum.

3.7.2 City Parks

As shown below in Table 3-8, the City of San Marcos has 19 major parks (community parks and neighborhood parks as described in the prior section) and 20 mini parks. In addition, the City has 13 recreational centers (Parks Master Plan, 2018). All parks and recreational centers are within the City limits (i.e., none within the Sphere of Influence), although the Lake San Marcos community does offer other recreational opportunities, including St. Mark Golf Club and San Marcos Lake.

Open space within the Planning Area is characterized by large tracts of agricultural land in the northern portion of the Planning Area, and the foothills north and south of State Route 78. Local and regional trail systems offer additional opportunities for outdoor recreation.

A summary of existing City parks with notable amenities and locations is provided below.

Table 3-8: Existing Park Facilities

Park	Address	Facilities	Acreage
Community Parks			
Bradley Park	1587 Linda Vista Drive	Soccer Fields, Ballfields, Bleachers, Picnic Tables, BBQ Grills, Turf Play, Tot Lot, 3 Restrooms, Picnic Shelters, Horseshoe Courts	34
Discovery Lake/ Lakeview Park	650 Foxhall Drive	Splash Pad, Picnic Tables, Picnic Shelters, Tot Lot, 1 restroom, Trail Connections.	23
Double Peak Park	910 Double Peak Drive	Picnic Tables, Picnic Shelter, Benches, Tot Lot, 1 Restroom, Gazebo, Amphitheater Trail Connections.	10
Walnut Grove Park	Olive and Sycamore Avenue off of Twin Oaks Valley Road	2 Community Buildings, Soccer Fields, Picnic Tables, BBQ Grills, Picnic Shelters, Benches, Turf Play, Tot Lot, 2 Restrooms, Trail Connections, Equestrian Facilities.	39
Woodland Park	Woodland Parkway and Rock Springs Road	2 Community Buildings, Public Pool, Tennis Courts, Pickleball Courts, Picnic Tables, Picnic Shelters, BBQ Grills, Benches, Turf Play, Tot Lot, 1 Restroom, and Community Garden (SMUSD owns the tennis courts and community garden)	14.6
Neighborhood Parks			
Buelow Park	300 Autumn Drive	Splash Pad, Picnic Tables, Picnic Shelter, Benches, 1 Restroom, Tot Lot, Trail Connections, Half Basketball Courts, Amphitheatre	2
Cerro de las Posas Park	1387 W. Borden Road	Soccer Fields, Ballfields, Public Pools, Splash Pad, Tennis Courts, ½ Basketball Court, Picnic Tables, Picnic Shelters, Benches, 1 Restroom, Trail Connections	12
Connors Park	302 W. San Marcos Blvd.	Soccer Field, Basketball Courts, Tennis Courts, Pickleball Courts, Volleyball Courts, Picnic Tables, Picnic Shelters, Benches, Tot Lot, 1 Restroom, Half Basketball Court, Skate Park.	4.7
Hollandia Park	12 Mission Hills Court	Soccer Field, Ballfields, Picnic Tables, BBQ, Picnic Shelters, Benches, Turf Play, Tot Lot, 3 Restrooms, Trail	30

		Connections, Horseshoe Courts, Multi-Purpose Field, Skate Park, Gazebo, Amphitheatre, Dog Park	
Jack's Pond Park	986 La Moree Road	1 Community Building, 1 Kiosk, Picnic Tables, Picnic Shelters, Tot Lot, 1 Restroom, Trail Connections, Nature Center, Corral	21.9
Knob Hill Park	860 Avenida Ricardo	Picnic Tables, Picnic Shelters, Benches, Turf Play, Tot Lots,	3
Mission Sports Park	931 Bailey Court	Ballfields, Picnic Tables, Picnic Shelters, Benches, 2 Restrooms, Tot Lot, Dual Batting Cages, Concession Stands	14
Montiel Park	2290 Montiel Road	Picnic Tables, Benches, Turf Play, Disc Golf, 1T Restroom, Half Basketball Court, Dog Park	10
Mulberry Park	751 Mulberry Drive	Splash Pad, Picnic Tables, Benches, Turf Play, Tot Lot, 1 Restroom, Trail Connections	4
Richmar Park	110 Richmar Avenue	Picnic Tables, Benches, Turf Play, Tot Lot, 1 Restroom, Gazebo	0.95
San Elijo Park	1105 Elfin Forest Road	1 Community Building, Soccer Fields, Ballfields, Splash Pad, Picnic Tables, Picnic Shelters, BBQ, Benches, Tot Lot, 3 Restrooms, Trail Connections, Horseshoe Courts, Gazebo, Concession Stand, Dog Park	21.1
Simmons Family Park	2180 Rocky Point Drive	Basketball Court, Picnic Tables, BBQ, Benches, Turf Play, Tot Lot, 1 Restroom, Trail Connections	6
Sunset Park	909 Puesta del Sol	Soccer Fields, Splash Pad, Picnic Tables, BBQ, Picnic Shelter, Benches, Disc Golf, Tot Lot, 2 Restrooms, Half Basketball Court, Gazebo	18
Mini Parks			
Alder Glenn Park	Shelly Drive	Picnic Tables, Tot Lot, Permanent Restrooms, Trail Connections	0.4
Amigo Park	Camino Magnifico and Avenido Arana	Picnic Tables, Benches, Tot Lot	0.74
Children's Discovery Park	Via Vera Cruz	Picnic Tables, Benches, Tot Lot	0.92
Civic Center Park	3 Civic Center Drive	Basketball Courts, Picnic Tables, Benches, Sand Volleyball, Tot Lots, Trail Connections	0.62
Creek View Park	Corte Encanto	Picnic Tables, Benches, Tot Lot	0.96
Discovery Meadows Park (2 Parks)	Sonoma and Foxhall	Benches, Tot Lot	1.39
Foothills Park	Via Barquero	Picnic Tables, Benches, Turf Play Area, Tot Lot, Trail Connections	1.11

Helen Bougher Memorial Park	1243 Borden Road	Benches, Turf Play Area	1.5
Innovation Park	1151 Armorlite Drives	Pickleball Courts, Dog Park, Tot Lot, Benches, Climbing Rocks, Restroom	0.92
The Laurels Park	Hawthorne Court	Picnic Tables, Benches, Tot Lot	0.79
Optimist Park	Richland and Borden	Picnic Tables, Turf Play Area	0.34
Pebblestone Park	Glendale Avenue	Picnic Tables, BBQ, Horseshoe Court, Sand Volleyball, Benches, Tot Lot	0.77
Quail Hills Park	Avenida Leon	Picnic Tables, Benches, Tot Lot, Trail Connections	1.28
Questhaven Park	Questhaven Road and Hollowbrook Court	Picnic Tables, BBQ, Turf Play, Tot Lot, Trail Connections	2.48
Regency Hills Park	Calle Capistrano	Picnic Tables, Turf Play, Tot Lot, Swing Set	0.95
Ridgeline Trailhead	102 San Elijo Road	Picnic Tables, 1 Permanent Restroom, Trail Connections	1.92
Santa Fe Hills Park	Via Barquero	Picnic Tables, Benches, Tot Lots, Trail Connections	1.01
Senior Center Outdoor Fitness Zone	111 Richmar Avenue	Fitness Equipment, Benches, Picnic Tables	0.24
Summer Hill Park	Borden Road and Bel Esprit	Basketball Courts, Picnic Tables, Benches, Tot Lots, Trail Connections	1
Valley View Park	Corte Loren	Picnic Tables, Benches, Tot Lot	0.93
Park Acreage Totals			282.61

Source: City of San Marcos. Parks Master Plan 2017.

Combined, the Planning Area has at least 340.05 acres of existing parkland, trails, and recreational facilities, based on land designated in the City's existing General Plan. Therefore, with a 2018 population of approximately 96,834, the current distribution of park acreage per 1,000 residents is at least 3.51, which is slightly above the Statewide Park Program standard of 3 acres of parkland per 1,000 residents. However, the City's current official parkland standard is 5 acres per 1,000 residents, which means the existing parkland ratio of approximately 3.51 acres per 1,000 residents is below the adopted City goal for park acreage.

In addition to parkland, through its current General Plan land use map, City has set aside approximately 2,499 acres of dedicated open space and preserve areas within the City to protect the area's natural beauty and contribute to a regional system of hiking, biking, and equestrian trails.

3.7.3 Trails

The San Marcos Trails Master Plan, pending approval, envisions a 108-mile, interconnected trail system, with three main types of trails:

- 28 miles of Urban Trails (10-foot-wide paved trail)
- 54 miles of Multi-Use Trails (10-foot-wide paved and 10-foot-wide D.G. soft-surface trails)
- 26 miles of Soft-Surface Trails (6 to 12-foot wide D.G. soft-surface trails)

The City of San Marcos currently owns and manages 70.4 miles of completed trails. Trails that are planned or under construction will connect key recreational destinations throughout the City, such as San Marcos Creek, Owens Peak, Discovery Park, Twin Oaks Valley Road, Sunset Park, and the Rail Trail. Figure 3-4 illustrates the existing and planned trails within the community.

3.7.4 References

City of San Marcos, 2018. Parks Master Plan.

City of San Marcos, 2020. City of San Marcos Parks & Rec website. Accessed March 2020. Available at: https://www.san-marcos.net/departments/parks-recreation/parks-recreation-facilities

3.8 SCHOOLS, LIBRARIES, AND OTHER PUBLIC FACILITIES

The City of San Marcos prides itself on being the educational hub of North San Diego County. It is home to California State University San Marcos, Palomar College, University of St. Augustine, and many public and private primary education schools. The San Marcos Unified School District serves the Planning Area, providing K-12 instruction. The City and Planning Area are also served by the San Marcos Branch Library, which is part of the San Diego County Library system.

The existing General Plan goals and policies related to schools and public facilities are listed below.

Element	Topic Area	Goal	Policy
Land Use and Community Design	Growth Management and Adequate Provision of Services	Goal LU-11 Schools: Ensure all residents have access to high-quality education.	Policy 11.1: Collaborate with the local public school district (SMUSD), private schools, and institutions of higher learning to ensure a range of traditional and distance-learning educational opportunities are provided in superior, accessible facilities that compliment the surrounding land uses. Policy 11.2: Work with San Marcos Unified School District and developers to ensure adequate school facilities are funded as required by State law and through developer mitigation agreements between the school district and the developer. The City shall require a "will serve" letter substantiating that the developer has paid fees to the satisfaction of the school district prior to issuance of building permits.
		Goal LU-12: Libraries: Provide library resources and services that meet the needs of the community.	Policy 12.1: Provide adequate library facilities and techno - logical access that enhance San Marcos's quality of life and create a civic environment with vast opportunities for

			self-learning and academic enrichment. Policy 12.2: Accommodate technology needs of the community and locate accessible technology in the library.

Source: City of San Marcos General Plan, 2012

3.8.1 Public and Parochial Schools

Primary education (grades kindergarten through 12) in the Planning Area is provided primarily by the San Marcos Unified School District (SMUSD). As shown in Table 3-9, SMUSD includes 12 elementary, three middle, two comprehensive high schools, one alternative high school, and one adult education school. For the 2018-2019 school year, 20,980 students were enrolled in grades kindergarten through 12 in the district. SMUSD also serves portions of the Cities of Carlsbad, Vista, Escondido, and the County of San Diego.

In addition to public schools, there are also several private and religious academic schools located within the Planning Area.

Table 3-9: San Marcos Unified School District Schools Serving the Planning Area

Public Elementary Schools			
Carrillo Elementary	K-5	2875 Poinsettia Lane, Carlsbad	902
Discovery Elementary	K-5	730 Applewilde Drive	574
Double Peak	K-8	111 San Elijo Road	1,286
Joli Ann Leichtag Elementary	K-5	653 Poinsettia Avenue, Vista	752
Knob Hill Elementary	K-5	1825 Knob Hill Road	835
La Costa Meadows Elementary	K-5	6889 El Fuerte Street, Carlsbad	867
La Mirada Academy	K-8	3697 La Mirada Drive	931
Paloma Elementary	K-5	660 Camino Magnifico	873
Richland Elementary	K-5	910 Borden Road	787
San Elijo Elementary	K-5	1615 Schoolhouse Way	1,053
San Marcos Elementary	K-5	1 Tiger Way	772
Twin Oaks Elementary	K-5	1 Cassou Road	651
Public Middle/High Schools			
San Elijo Middle School	6-8	1600 Schoolhouse Way	1,838
San Marcos Middle School	6-8	650 West Mission Road	1,132
Woodland Park Middle School	6-8	1270 Rock Springs Drive	1,381
Foothills High School (Alternative)	9-12	158 Cassou Road	118
Mission Hills High School	9-12	1 Mission Hills Court	2,626

San Marcos High School	9-12	1615 San Marcos Boulevard	3,439
Twin Oaks High School (Adult/Continuing Education)	9-12	158 Cassou Road	163

Source: San Marcos unified school district, 2018-2019 School Accountability report cards.

3.8.2 Higher Education

San Marcos is home to three institutions of higher learning – California State University San Marcos, Palomar College, and the University of St. Augustine – each of which is discussed below.

California State University San Marcos

California State University San Marcos (CSUSM) is part of the California State University system, which operates 23 campuses across California. CSUSM is located at 333 S. Twin Oaks Valley Road on a 304-acre hillside campus overlooking the City. Of the 14,519 students that were enrolled at CSUSM for the Fall 2019 semester (including graduate, part-time, and online learners), 13,879 of them were undergraduate students.

In 1982, CSUSM began as a satellite campus in San Marcos for San Diego State University. Construction of the CSUSM campus began in 1990 and the university experienced a building boom and expansion during the 2000s, gaining an important alternative for transportation to and from campus when the SPRINTER light-rail line began service, complete with a train station on campus. Development of the campus continued throughout the 2010s, capped by the new Extended Learning building, part of a public-private partnership, that included a 135,000-square foot, six-story building, an accompanying 709-space parking garage, and a pedestrian bridge over Barham Drive. The location of CSUSM's campus makes the university and its students an integral part of the success and vitality of the Heart of the City and University District Specific Plan areas.

CSUSM's campus is being developed and updated in accordance with the California State University San Marcos Master Plan. The CSUSM campus originated with 4 main buildings (Craven Hall, Academic Hall, Science Hall I, and Commons) and has now grown to 11 buildings with more underway. Capital Improvement Projects begin with the vision of a new building or project in support of the Campus Academic Master Plan. A campus planning committee works toward meeting the needs of the campus and the utilization requirements of the California State University system. The CSUSM Master Plan is designed to accommodate 25,000 full-time equivalent students on campus with a full build-out anticipated in 2030.

Palomar College

Palomar College is a public, two-year community college enrolling approximately 30,000 full- and part-time students. Palomar College was established in 1946 and has a ubiquitous "P" appearing at the top of a hill behind the college's main San Marcos Campus. The San Marcos Campus is located at 1140 West Mission Road on 200 acres of land and is composed of over 50 major buildings.

Palomar College has five academic divisions: (1) Arts, Media, and Business Administration; (2) Career, Technical, and Extended Education; (3) Languages and Literature; (4) Mathematics and the Natural and Health Sciences; and (5) Social and Behavioral Sciences. The college offers more than 200 credit degree and certificate programs within those five divisions and noncredit courses.

In 2006, voters approved an educational facilities improvement measure (Proposition M), which provided $694 million for an ambitious construction and remodeling campaign for Palomar College. Through Prop. M, the Palomar Community College District has erected new buildings and overhauled facilities across the San Marcos Campus. The expansion of facilities is being guided by the Palomar Community College District Master Plan 2022.

University of St. Augustine

The University of St. Augustine for Health Sciences (USAHS) is a for-profit graduate institution that emphasizes health science education. The USAHS San Marcos Campus, which opened in 2009, provides professional development of health care providers and offers degree programs in physical therapy and occupational therapy. The campus is located at 700 Windy Point Drive and is comprised of three buildings and over 56,000 square feet of office/institutional space.

3.8.3 San Marcos Libraries

The Planning Area is served by the San Diego County Library (SDCL), San Marcos Branch, located at 2 Civic Center Drive. The San Marcos Branch is 15,394 square feet, seats approximately 40 people, contains public access computers, and has a collection of approximately 8,118 materials. Additional library resources are available to the community through CSUSM and Palomar College colleges.

3.8.4 San Marcos Community Center

The San Marcos Community Center is located two blocks north of State Route 78, off Twin Oaks Valley Road. This community center is used for a variety of events including community meetings, business conferences, weddings, theatre productions, concerts, and enrichment classes. The Main Hall and Dining Room within the center are available for rent to the public.

3.8.5 References

California State Legislature, Leroy F. Greene School Facilities Act of 1998 (SB 50).

California State Legislature, The Kindergarten-University Public Education Facilities Bond Act of 2002 (Prop 47).

California State University San Marcos, 2020. Accessed April 10, 2020. Available at: https://www.csusm.edu/

City of San Marcos, 2012. City of San Marcos General Plan. Parks, Recreation, and Community Health Element.

GreatSchools, 2020. Top-rated schools in San Marcos. Accessed April 10, 2020. Available at: https://www.greatschools.org/california/san-marcos/

Palomar College, 2003. Palomar Community College District Master Plan 2022. Available at: http://www2.palomar.edu/pages/strategicplanning/files/2016/04/2003-Facilities-MP-2022.pdf

San Marcos Unified School District, 2020. Accountability Report Cards. Accessed March 10, 2020. Available at: https://www.smusd.org/cms/One.aspx?portalId=157433&pageId=307897

University of St. Augustine, 2020. Accessed April 10, 2020. Available at: https://www.usa.edu/about/our-campuses/san-marcos-ca/

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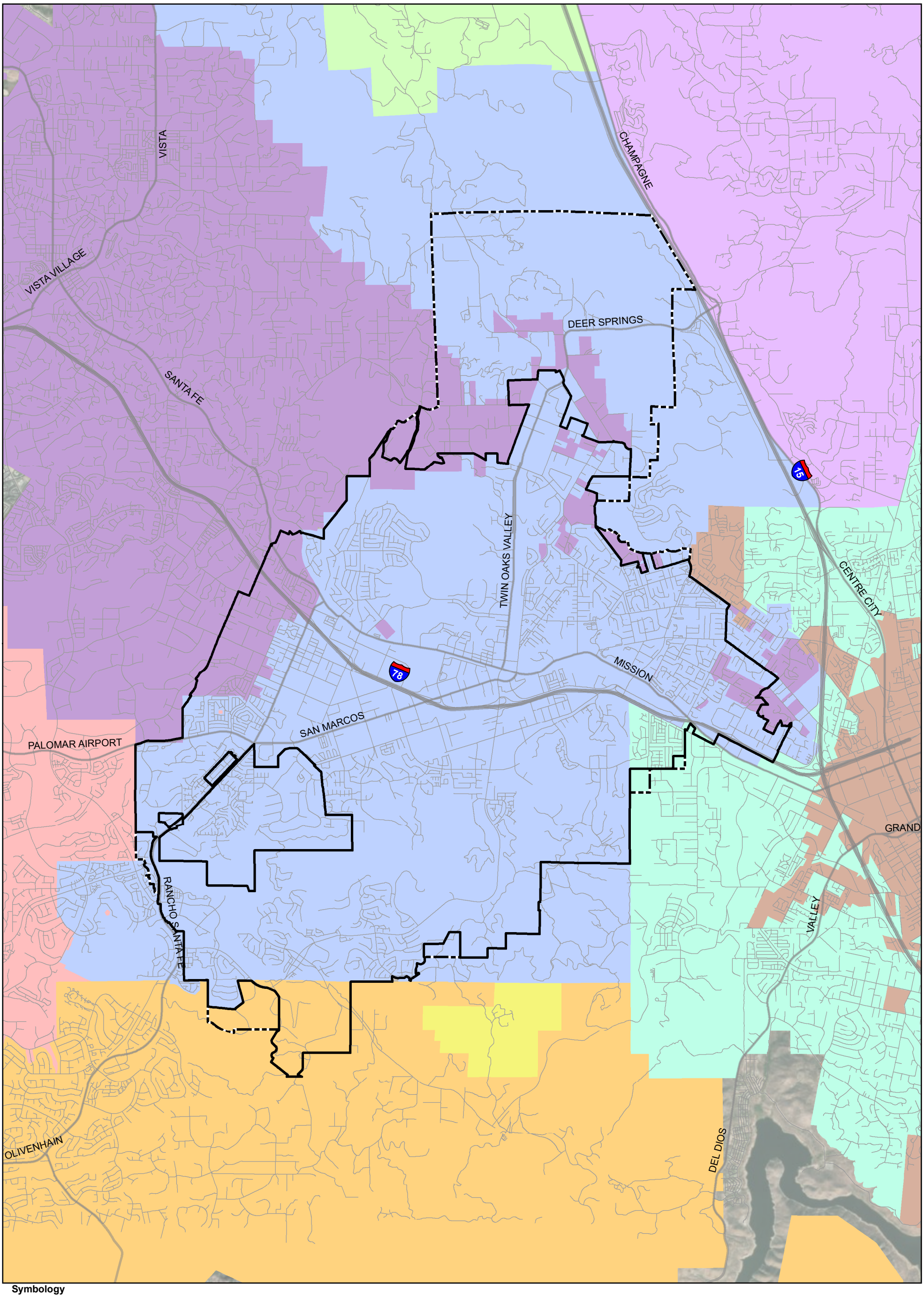

Symbology

Water Agency

- Carlsbad Municipal Water District
- City of Escondido
- Olivehain Municipal Water District
- Questhaven Municipal Water District
- Rainbow Municipal Water District
- Rincon del Diablo Municipal Water District
- Vallecitos Water District
- Valley Center Municipal Water District
- Vista Irrigation District

- San Marcos Boundary
- San Marcos Sphere of Influence
- Freeways
- Highways
- Roads

N

0 3,000 6,000

Scale in Feet

SAN MARCOS GENERAL PLAN UPDATE

WEST YOST ASSOCIATES

Figure 3-1

Water Agency Boundaries

City of San Marcos General Plan Update

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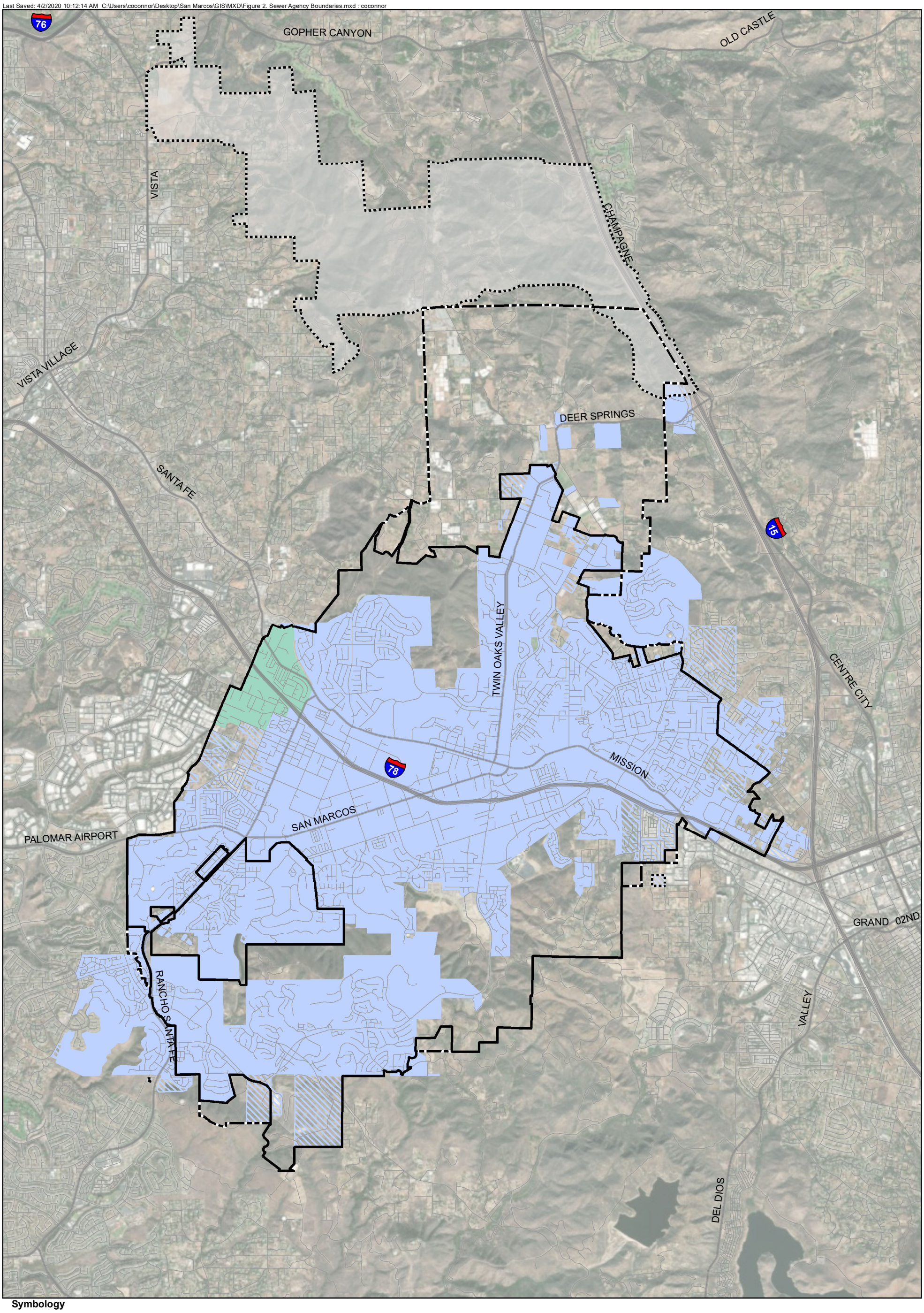
Last Saved: 4/2/2020 10:12:14 AM C:\Users\coconnor\Desktop\San Marcos\GIS\MXD\Figure 2. Sewer Agency Boundaries.mxd : coconnor



Symbology

Sewer Agency

- Vallecitos Water District
- Vallecitos Water District - Improvement District A
- City of Vista
- San Marcos Boundary
- San Marcos Sphere of Influence
- Northern Tributary Area

- Freeways
- Highways
- Roads

N

0 3,000 6,000

Scale in Feet

SAN MARCOS GENERAL PLAN UPDATE

WEST YOST ASSOCIATES

Figure 3-2

Sewer Agency Boundaries

City of San Marcos General Plan Update

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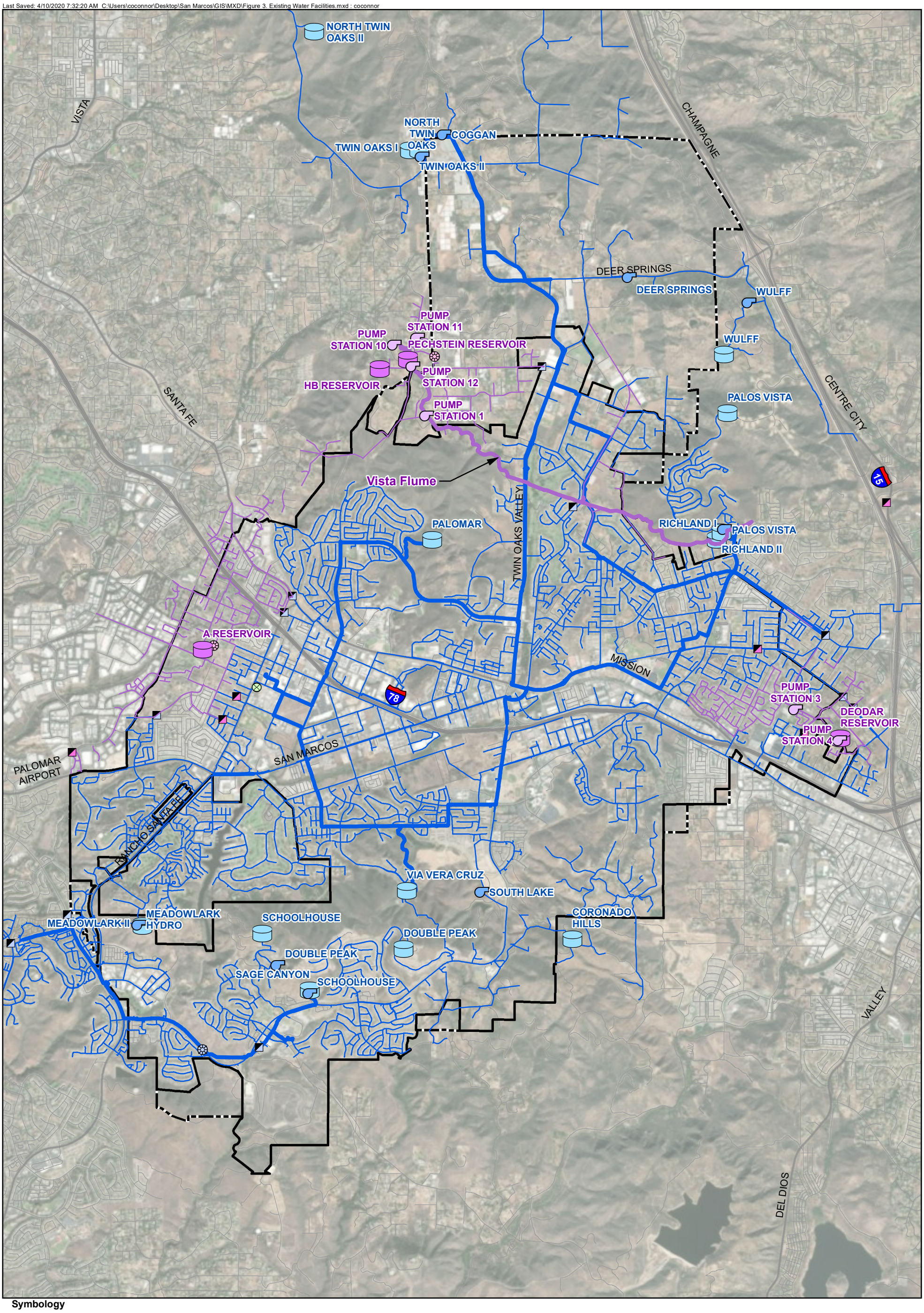

Symbology

VWD Water Main
- 4-18 inches
- 20+ inches

Diameter
- 4-18 inches
- 20+ inches

- VWD SDCWA Connection
- VWD Interagency Connection
- VWD Desalination Connection
- VID SDCWA Connection
- VID Interagency Connection
- VWD Reservoir
- VWD Pump Station
- VID Reservoir
- VID Pump Station
- San Marcos Boundary
- San Marcos Sphere of Influence
- Freeways
- Highways
- Roads

N

0 2,500 5,000

Scale in Feet

SAN MARCOS GENERAL PLAN UPDATE

WEST YOST ASSOCIATES

Figure 3-1
Existing Water Facilities

City of San Marcos
General Plan Update

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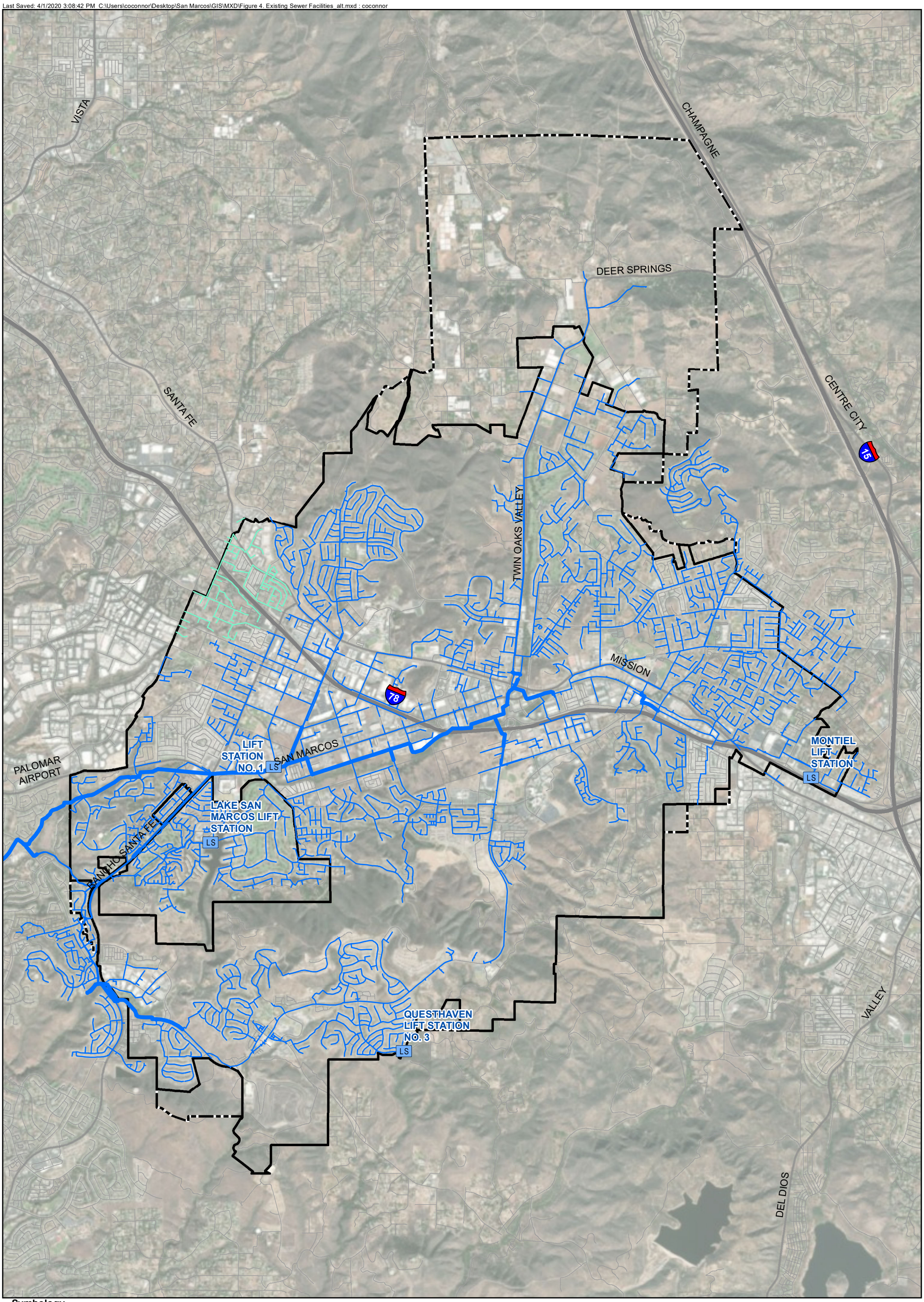

Symbology

VWD Sewer Mains
- 4-18 inches
- 20+ inches

City of Vista Sewer Mains
- 4-18 inches
- 20+ inches

- LS — VWD Lift Station
- San Marcos Boundary
- San Marcos Sphere of Influence
- Freeways
- Highways
- Roads

N

0 2,500 5,000

Scale in Feet

SAN MARCOS GENERAL PLAN UPDATE

WEST YOST ASSOCIATES

Figure 3-4
Existing Sewer Facilities

City of San Marcos
General Plan Update

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Figure 3-5: Park Facilities

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Figure 3-6: Trail Network

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