

# 2045 General Plan Existing Conditions Report

# **Chapter 9: Infrastructure**

# Infrastructure Findings

#### WATER SUPPLY AND DISTRIBUTION

- 1. The Atascadero Mutual Water Company (AMWC) provides water to all of Atascadero, serving over 30,000 residents and over 10,000 service connections. Groundwater is provided by 15 active wells. The water company reports that the current water supply is generally adequate and affordable (as related to other Central Coast communities).
- 2. The projected future groundwater budget period (2020-2042) shows an average annual increase in groundwater storage of 800-acre feet per year (one acre-foot of water is considered adequate to meet the needs of a family of four for one year). Looking forward, future areas for above-ground or below-ground storage (such as tanks), or groundwater recharge areas, can be identified to expand water storage. This will address concerns related to future multi-year drought events that could potentially impact seasonal groundwater capacity.
- 3. The Atascadero State Hospital is within the city limits but is currently not served by AMWC. There are currently (2023) no plans to extend service to this area since it has its own on-site water supply source.
- 4. The existing population identified for analysis in the 2010 Water Master Plan was estimated at 30,595 persons and a build-out population of 36,711 persons. The buildout population is projected to occur between 2020 and 2025. The current (2022) population of Atascadero is 30,480 people, which is within the range identified and analyzed in the plan.
- 5. AMWC's distribution system includes 11 distribution zones, 9 storage tanks, 8 booster stations, 20 pressure-reducing valve (PRV) stations, and over 220 miles of distribution main.
- 6. In 2023, AMWC updated existing fire hydrant locations within the master plan system. This exhibit illustrates that all developed areas of the City are served by adequately spaced fire hydrant service.

#### WASTEWATER COLLECTION AND TREATMENT

 The City owns, operates, and maintains local sanitary sewer collection facilities and the local water reclamation facility, which has a treatment capacity of 1.4 million gallons per day. The City of Atascadero provides wastewater collection and treatment service for most non-residential properties and a portion of the City's residential population serving a combined area consisting of approximately 2,000 acres of the roughly 15,000 acres within the City boundary. Customers of the wastewater collection and treatment system are comprised of approximately 5,000 parcels that include residential, commercial, and light industrial customers. The remainder of the City's population is served by on-site wastewater treatment systems (septic systems). These include mostly Rural Residential properties on the western side of the city, outside of the Urban Service Line (USL). Upgrades to the City's wastewater treatment and collection systems are required to accommodate new growth within the USL. The City is currently working on plans to upgrade and build capacity, in addition to bringing the current wastewater treatment system into compliance with new regional board regulations.

- 2. The current City sewer system provides sewer collection with a series of lift stations and force mains to get sewer flows to the sewer wastewater treatment facility (WTF) located east of the Chalk Mountain Golf Course.
- 3. The City of Atascadero serves land uses that include residential, office, commercial, and light industrial developments. The existing municipal sewer collection system consists of more than 303,600 lineal feet of laterals, mains, trunks, and 44,500 feet of force mains, ranging in size from 4 to 24 inches in diameter. A series of gravity collection system mains and 15 lift stations pump directly to the City-owned water reclamation facility.
- 4. The 2018 Local Agency Management Program (LAMP) Report identified 1,711 parcels that are currently not served by the existing sanitary sewer collection system.

#### STORMWATER DRAINAGE

 Four natural watersheds cover Atascadero: Atascadero Creek, Graves Creek, Paloma Creek, and the Salinas River. The Salinas River is a major "blue-line" stream, which means that it flows most of the year. Four additional minor blue-line creeks cross the city. Federal Emergency Management Agency (FEMA) has identified 100-year floodplains along most of the major and minor blue-line rivers and streams in Atascadero, including Atascadero Creek, Graves Creek, Paloma Creek, and the Salinas River. While localized flooding can and does occur during heavy rain events, including the major storms in January 2023, the potential for major flooding is most likely to occur along Atascadero Creek.

#### **DRY UTILITIES**

1. Natural Gas is supplied by the Southern California Gas Company and electricity services are provided by the Pacific Gas and Electric Company (PG&E). Beyond the downtown area, the existing electricity supply system consists of overhead and underground facilities.

# 9.1 Introduction

Atascadero relies on a variety of infrastructure to provide critical utility services for residents and businesses. The age of the infrastructure, changes in population and population characteristics, and the evolution of environmental regulations and hazards all influence how well the existing infrastructure networks can provide reliable, safe, and efficient services to Atascadero businesses and residents.

This chapter includes an overview of infrastructure conditions based on available master plans and interviews with the City departments and outside agencies, and a review of the area's utility infrastructure supply, transmission, and distribution facilities. Additionally, based on the ongoing threat of catastrophic wildfires, this chapter includes an assessment of the City's water system to determine if there are deficiencies or issues in the ability to fight fires. This included a review of water, wastewater, and drainage systems to support the current population and anticipated growth. This analysis was done at a district level and does not address modeling or analysis of individual segments of the pipeline. A Water Supply Assessment that reviews pressure zones and fire flow rates was not part of this analysis. Lastly, this chapter includes a review of areas in the city that are historically prone to flooding.

This chapter is organized into the following sections:

Section 9.1: Introduction
Section 9.2: Regulatory Setting
Section 9.3: Water Supply and Distribution
Section 9.4: Wastewater Collection and Treatment
Section 9.5: Stormwater Drainage
Section 9.6: Dry Utilities
Section 9.7: Sources
Section 9.8: Acronyms and Key Terms

# 9.2 Regulatory Setting

#### FEDERAL

#### Federal Clean Water Act

The Federal Clean Water Act (33 U.S.C. 1251 et seq.) creates the framework for regulating pollutant discharge into the waters of the United States and provides water quality standards for surface waters.

The Clean Water Act was initially enacted in 1948 but was significantly revised and expanded in 1972. The US Environmental Protection Agency (EPA), under the Clean Water Act, has set wastewater standards and made it unlawful to discharge pollutants from a point source to any navigable waters without obtaining a permit. Some of these point sources include pipes and human-made drainage channels that drain industrial or commercial facilities.

#### Federal Safe Drinking Act

The Safe Drinking Water Act (SDWA; 42 U.S.C. 300[f] et seq.) was established to ensure the protection of the quality of drinking water in the US. It authorizes the EPA to establish minimum health standards for public water system owners or operators to comply. Water suppliers are required to remove constituents or contaminants that exceed the maximum levels allowed. The primary regulatory agency in California with regard to the enforcement of these standards is the Department of Health Services. If the water supplied by these agencies is not up to standards, the water supplier must notify its customers.

#### Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 introduced aggressive requirements for shifting the US toward energy independence and security (EPA 2007). These requirements include increasing the production of cleaner, renewable fuels and increasing the efficiency of products and energy for buildings and vehicles.

#### Energy Policy Act of 2005

The Energy Policy Act of 2005 (42 U.S.C. 1302 et seq.) provides resources to entities that develop or use technologies or integrate practices that reduce the production of greenhouse gases (GHG). Some energy production methods that are addressed include energy efficiency, renewable energy, and electricity and energy tax incentives.

#### Environmental Protection Agency

The EPA regulates stormwater discharge and maintenance activities under the National Pollutant Discharge Elimination System (NPDES) permit.

#### National Flood Insurance Act of 1968

The City of Atascadero has been a regular member of the National Flood Insurance Program since 1981. In participating communities that adopt adequate floodplain management policies, the Federal Emergency Management Agency (FEMA) can make affordable flood insurance available to property owners (42 U.S.C. 4001 et seq.).

#### National Pollutant Discharge Elimination System

The NPDES program was created in 1972 by the federal Clean Water Act. The NPDES program helps regulate water pollution by imposing regulations that control the pollutant at the source of discharge. The EPA has authorized state, tribal, and territorial governments to perform administrative, enforcement, and permitting aspects of the NPDES program (EPA 2020).

#### STATE

#### 2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations provide standards and requirements for the 21 different categories of appliances that are sold in California. They include Federally regulated appliances as well as non–Federally regulated appliances (CEC 2020).

#### 2022 CALGreen Building Code

CALGreen mandatory green building standard codes were adopted in 2010. The 2022 CALGreen building codes were effective January 2023. The goals and initiatives of the CALGreen building code are to reduce GHG emissions from buildings, reduce water consumption, and promote environmentally friendly and cost-effective places to live and work (DGS 2020a).

#### 2022 California Building Code, Building Energy Efficiency Standards

The 2022 building energy efficiency standards provide regulations for new commercial and residential buildings. Some requirements include efficient HVAC systems and lighting systems (DGS 2020b).

#### 2022 California Plumbing Code

The 2022 California Plumbing Code is an overarching document that provides guidelines and requirements. Its purpose is to provide a universal document for reference and to prevent conflicting plumbing codes in local jurisdictions. Some topics covered in the code include potable and non-potable water systems, water fixtures, and recycled water systems.

#### California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates utilities, ensures reliable access to utility infrastructure, and protects the environment and consumers (CPUC 2020). In relation to energy, the CPUC specifically regulates investor-owned electric and natural gas utilities operating in California, including Pacific Gas & Electric and Sonoma Clean Power, which serve the City of Atascadero. Some initiatives and mandates addressed by the CPUC relate to consumer electric costs, electric power procurement and generation, infrastructure, customer energy resources, energy efficiency, and energy rates.

#### California Senate Bill (SB) 610 and 221

SB 610 and SB 221 were amended in 2001 to ensure coordination between the local water and land use decisions and to confirm that California cities and communities are provided with adequate water supply. Specific projects are required to prepare a Water Supply Assessment (WSA). The WSA is composed of information regarding existing and forecasted water demands as well as information pertaining to available water supplies for the new development.

Projects required to prepare a WSA include:

- Residential developments consisting of more than 500 homes.
- A business employing more than 1,000 people or having more than 500,000 square feet.
- A commercial office building employing more than 1,000 people or having more than 250,000 square feet of floor space.
- A hotel having more than 500 rooms.
- An industrial complex with more than 1,000 employees and occupying more than 40 acres of land.
- A mixed-use project that requires the same or greater amount of water as a 500dwelling-unit project.

SB 221 requires written verification that there is a sufficient water supply available for new residential subdivisions that include over 500 dwelling units. The verification must be provided before commencement of construction for the project.

#### California Sustainable Groundwater Management Act

The California Sustainable Groundwater Management Act (SGMA) was amended in 2014 and consists of AB 1739, SB 1168, and SB 1319. The SGMA provides a framework for sustainable groundwater management. It requires governments and water agencies that deal with high and medium-priority basins, as assessed by the State's Department of Water Resources, to halt overdraft and implement measures to bring the groundwater basins back into sustainable levels of pumping and recharge. As the sustainability plans are implemented, the respective basins should return to sustainable levels within 20 years. The SGMA supports local agencies by providing guidance and financial and technical assistance.

#### California Urban Water Management Planning Act

The California Urban Water Management Planning Act and Section 10620 of the Water Code require that every urban water supplier in California prepare and adopt an urban water management plan (UWMP) and update it every five years. The UWMP describes the service area of the water supplier; projected 20-year water supply; demand for the service area in normal years, dry years, and multiple dry years; and water recycling strategies.

#### Governor's Green Building Executive Order

The Governor's Green Building Executive Order was given in April 2012 (EO B-18-12). The Green Building Executive Order calls for the reduction of GHG emissions by achieving directives such as new government buildings being net zero energy by 2025, reducing peak electrical loads, pursuing electrical vehicle systems, and obtaining, at a minimum, LEED silver certification for large government buildings.

#### Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act provides local jurisdictions and established agencies, such as the State Water Resources Control Board and the nine Regional Water Quality Control Boards, with the authority to enforce water quality standards over State water rights and quantity policies.

#### State Water Resources Control Board

The State Water Resources Control Board establishes statewide policies and regulations for California under the federal Clean Water Act and the Porter-Cologne Water Quality Control Act. The Board's role is to protect California's water resources—both surface waters and groundwater. The Board regulates water quality and mitigates deficiencies in the state's water resources.

#### The Water Conservation Act of 2009

The Water Conservation Act of 2009, also known as Senate Bill X7-7, requires all water suppliers in California to increase their water use efficiencies. The goal of the bill is to reduce urban water usage by 20 percent by the year 2020. Urban water suppliers who do not meet the 20 percent by 2020 goal will be ineligible for state water grants or loans. Water suppliers must determine baseline water usage and set goals to meet specified water reductions by certain years.

#### REGIONAL

#### Central Coast Regional Water Quality Control Board

The Central Coast Regional Water Quality Control Board was created as a result of the California Porter-Cologne Water Quality Control Act. The Board's jurisdiction includes the Central Coast Region that covers the entirety of the coastal, valley, and upland areas of Santa Cruz, San Benito, Monterey, San Luis Obispo, Santa Barbara Counties, and southern Santa Clara County as well as very small portions of San Mateo, Kern, and Ventura Counties that collectively make up the Central Coast Hydrologic Unit. It includes 378 miles of coastline between San Mateo and Ventura Counties and 3,559 square miles of groundwater basins. The Central Coast Region is primarily a rural agricultural region that also includes urban and industrial land uses. Major industries include agriculture, and associated food processing, oil production, power production, military installations, technology-based and industrial services and manufacturing, and tourism. The Board's purpose is to protect water quality at the regional level by implementing and enforcing rules that regulate discharge.

#### LOCAL

#### City of Atascadero General Plan 2002

The City of Atascadero 2002 General Plan contains policies and goals addressing water use and conservation, including a critical need to conserve existing water supplies by practicing efficient and sustainable water use. These policies guide City decisions around infrastructure expansion, funding for new projects, and how infrastructure improvements relate to the new development shown in the current General Plan. The general policy direction as outlined in the General Plan is to avoid expansion of sewer infrastructure beyond the Urban Service Line boundary (largely due to topographical constraints).

#### City of Atascadero Drainage Storm Water Management Plan (2010)

The City of Atascadero Storm Water Management Plan has been prepared with the purpose to discuss the city stormwater system to define that stormwater surface drainage sources and outlets, as well as to document historical and projected stormwater runoff during normal rainfall and 100-year storm events.

#### Atascadero Mutual Water Company (AMWC) Urban Water Management Plan (2015)

The City of Atascadero's Urban Water Management Plan has been prepared in accordance with the Urban Water Management Planning Act. The purpose of the UWMP is to discuss the city water system and water supply sources, as well as to document historical and projected water use in comparison to water supply and water demands during normal service years. This document also contains an Urban Water Shortage Contingency Plan in the event of severe, prolonged drought or loss of a water source.

#### City of Atascadero Sewer System Management Plan (SSMP) – Updated (2019)

The most recent Sewer System Management Plan (SSMP) was updated in 2019. The purpose of the SSMP is to create a record of the activities and events that the City utilizes to manage its wastewater collection system. Some of these methods include maintaining the system to provide reliable service for the future, providing or increasing capacities to allow for peak sewer flows, and minimizing the number of sewer overflows. The plan should meet the requirements of the Regional Water Quality Board and the Statewide General Waste Discharge Requirements. It is important that system overflows are minimized because they pose a hazard to natural drainage systems and the environment.

#### City of Atascadero Municipal Code

In addition to the General Plan, the City of Atascadero Municipal Code shapes the development of the city.

# 9.3 Water Supply and Distribution

Atascadero Mutual Water Company (AMWC) serves over 30,000 residents of Atascadero with over 10,000 service connections, and supplies water for domestic water service and fire suppression purposes. AMWC's distribution system includes various distribution and pressure zones, storage tanks, booster stations, and pressure-reducing valve (PRV) stations and includes over 220 miles of water distribution mainlines. As older infrastructure is replaced and new development projects are constructed, AMWC's goal is to construct water improvements consistent with the current and ultimate needs of the community. To facilitate this goal and to adequately plan for the capital resources needed to meet this goal, AMWC prepared a comprehensive Water Master Plan in 2010. Existing water facilities are shown on **Figure 9-1**.

#### SOURCE

AMWC obtains all its water from two distinct yet interrelated groundwater sources - the Salinas River Underflow and the Atascadero Groundwater Basin. Water from these sources resides in the tiny spaces between sands and gravels until it is pumped to the surface by AMWC's wells. These sands and gravels act as natural filters, resulting in water that is clean and clear. Shallow wells (70' - 100') pump water from the Salinas River Underflow, while deeper wells (300' - 500') pump from the Atascadero Groundwater Basin.

#### QUALITY

AMWC consistently produces water that meets or exceeds all State and Federal drinking water standards. Water quality samples are regularly taken at the wells and throughout the entire distribution system. AMWC monitors these samples for all contaminants as required

by the USEPA, the Safe Drinking Water Act, and Primary Drinking Water Standards, and follows all guidelines according to the national primary drinking water regulations. AMWC is required to keep all water analysis results on file for three years. A summary of water quality sampling results can be found in the Consumer Confidence Report prepared each year by AMWC.

The majority of AMWC's groundwater requires no treatment other than chlorination and the "natural filtration" that occurs when the water passes through sand and gravel formations. Water produced from AMWC's wells is disinfected with chlorine. AMWC maintains positive chlorine residuals both at our wells and throughout the distribution system to maintain disinfection levels. Particular attention is paid to circulation in the reservoirs to maintain proper chlorine levels there as well.

The high calcium and magnesium levels found in the geologic formation (aquifer) from which AMWC produces its water cause "hardness." While such minerals offer positive health benefits, the hardness can stain fixtures and require greater amounts of detergents than soft water. While hardness can be reduced using water softeners, the brine discharge from the softeners eventually ends up in the groundwater, further increasing its hardness.

AMWC is considering plans for primary and secondary Per and Poly-Fluoroalkyl Substances (PFAS) treatment. Note that a PFAS relates to a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. Other typical sources of PFAS are fire retardants.

#### WELLS

Activities in and around the wells that produce our water can directly impact its quality. For this reason, AMWC monitors activities that take place in areas that drain toward our wells (i.e., the "watershed") and conducts daily inspections of the immediate vicinity of each well to identify and eliminate potential sources of contamination or vandalism. Community and private sewer systems, animal waste, leaking underground fuel tanks, industrial discharges, agricultural activities, pesticide/herbicide use, and stormwater runoff are possible sources of contaminants to the water supply. However, no contaminant associated with these activities has been detected in the water produced from AMWC's wells.

In 1913, AMWC deeded all water rights within its service area to hold in trust for its shareholders. As the trustee, AMWC has the authority and responsibility to manage these groundwater resources. AMWC has a policy that restricts the drilling and use of private wells within its service area. AMWC's intent is to protect the groundwater resources of the shareholders and provide for the equitable distribution of these resources. AMWC allows the drilling and use of some private wells in those areas where the wells are not likely to have significant impacts on the groundwater resources of AMWC. AMWC prohibits the drilling and use of new wells in areas that overlie the Atascadero Sub-basin, the alluvial deposits of the Salinas River, or other areas that could significantly impact the quantity, quality, or recharge of groundwater.

#### SUPPLY

#### Salinas River Underflow

AMWC extracts water from the Salinas River Underflow through eight active shallow alluvial well sites. The portions of the Salinas River underflow which contribute to water production within the AMWC well fields are mainly attributed to reservoir release from the Salinas

Reservoir (i.e. Santa Margarita Lake) and the Santa Margarita Creek tributary, which drains a watershed area of 40 square miles. The west side of the Salinas River contributes additional flow from an 8.3 square mile area. Wells located adjacent to the confluence of the Salinas River with Atascadero Creek have a tributary watershed of 19.5 square miles.

Alluvial deposits occurring beneath the flood plains of the Salinas River and the adjacent streams reach a depth of approximately 100 feet below ground surface or less and are typically comprised of coarse sand and gravel. The alluvium is generally coarser than the Paso Robles Formation sediments, with higher permeability that results in well production capability that often exceeds 1,000 gpm. AMWC's shallow alluvial wells have historically each produced at this level or greater.

Prior to 1970, AMWC well production was exclusive to the shallow alluvial underflow of the Salinas River. Wells drilled deep into the Atascadero basin have since contributed an increasing percentage of the community water supply, providing relief from the strain previously placed on the Salinas River Underflow during periods of multi-year droughts. Well production from the Salinas River Underflow since the introduction of the deep wells in Water Year 1970 and recorded through Water Year 1999, has averaged approximately 68 percent of total production. During periods of a multi-year drought, that percentage has dropped as low as 32 percent of total production as increased well production is transferred to the deeper Atascadero basin wells to account for the reduced groundwater flow in the alluvium along the Salinas River (Fugro West, August 2000).

#### Nacimiento Water Project (NWP)

The Nacimiento Water Project (NWP) regional raw water transmission facility delivers water from Lake Nacimiento to communities in San Luis Obispo County. The NWP includes 45 miles of pipeline ranging from 12 inches to 36 inches in diameter, an intake structure at Nacimiento Lake, three pump stations ranging from 1,200 horsepower (hp) to 3,500 hp, and three water storage tanks ranging from 300,000 gallons to 850,000 gallons. The NWP is designed to deliver 15,750 acre-feet of water per year (AFY). Atascadero Mutual Water Company (AMWC) has contracted for 2,000 AFY, which will significantly improve its ability to meet the current and future water needs of its shareholders. One acre-foot of water is approximately 326,000 gallons. The County of San Luis Obispo was the lead agency for the \$176.1 million NWP. In 2004, AMWC entered into a Delivery Entitlement Contract with the County for participation in the project, with AMWC's share of the project costs being approximately \$39 million to be paid over 30 years. Other agencies currently participating in the project are the City of Paso Robles, Templeton Community Services District, and the City of San Luis Obispo. The project has already had a large effect on connection fees and water rates paid by AMWC's shareholders. Construction on this project is complete, and AMWC began taking deliveries of water in the summer of 2012.

#### FUTURE SUPPLY AND DISTRIBUTION

#### Water Conservation

AMWC promotes water conservation throughout its service area. It is estimated that over 50 percent of AMWC's total average daily demand is outdoor use. Typical municipalities have an outdoor usage of approximately 30 percent of the total average daily flow. It is recommended to continue this water conservation effort through education and public awareness, to help

reduce outdoor irrigation demand during the summer and indoor demand throughout the year.

#### New Water Supply

AMWC began receiving water from the Nacimiento Water Supply Project in late 2010. As part of this project, AMWC constructed two new wells, wells 25 and 26, to help extract the 2,000 AFY from the basin. Atascadero is an independent basin, and not a sub-basin. This basin is recharged with Lake Nacimiento water. It is recommended to continue to pursue these types of projects to assist AMWC during drought conditions.

# 9.4 Wastewater Collection and Treatment

Wastewater service (sewer) is currently supplied by the City of Atascadero to approximately 5,000 parcels covering an estimated 2,000 acres in the City. Land uses served by the City's sewer system include residential, retail, office commercial, and light industrial developments. The City does not provide wastewater collection and services to all property within the city limits. Existing residential parcels (regardless of size), and new parcels (one acre and larger) are allowed to operate onsite collection and disposal systems. Most properties outside of the Urban Service Line (USL) are not served by sewer service due to topographic constraints (e.g., too costly to provide pump stations and full service).

Wastewater revenue is collected by the City through fees incorporated into property taxes. Fixed Fees for residential users are established based upon sewer capacity, at building permit issuance, and are invoice quarterly and reflected on the annual property tax. Wastewater customers are recorded during the issuance of final building occupancy permits. The sewer collection system consists of more than 63 miles of laterals, mains, trunks, and force-mains, ranging in size from 4 to 24 inches in diameter, and 15 lift stations in operation (of which 3 are private). Existing sewer facilities are shown on **Figure 9-2**.

#### CURRENT SYSTEM

The City's sewer collection system consists of more than 303,600 lineal feet of laterals, mains, trunks, and 44,500 feet of force mains, ranging in size from 4 to 24 inches in diameter. A series of gravity collection system mains and 15 lift stations pump directly to the City-owned water reclamation facility. The collection system is mapped out on AutoCAD and inputted into the City's Geographic Information Systems (GIS). Updates to the City's wastewater infrastructure are made in GIS on an ongoing basis. The size and locations of all force mains and pipelines are included in the system. The manholes, cleanouts, and lift stations are also shown. As-built plans and construction drawings are maintained as the system is improved through the CIP, data is routinely integrated back into collection system mapping. The age of the sewer pipe system is a concern and portions of the older Vetrified Clay Pipe (VCP) lines will need to be upgraded to typical Polyvinyl Chloride (PVC) pipe over time. This will minimize the potential for pipe joint leaking or line collapse.

#### TREATMENT FACILITY

The City owns, operates, and maintains local sanitary sewer collection facilities and the local Wastewater Reclamation Facility (WRF). The City's WRF was originally designed for an average daily flow (ADF) of 1.4 MGD. Based on the findings in the 2016 WRF MP, current daily flow conditions are 1.38 MGD, which is 99 percent of the original design capacity. Future ADF,





### Figure 9-1 Water Facilities

#### **Basemap Features**

- \_\_\_\_ Atascadero City Limits
- Atascadero Planning Area
  - Atascadero Sphere of Influence
- Urban Services Line
- Rivers + Waterbodies
- Parks + Open Space
- —— Major Roads + Freeways

#### Water Facilities

- Water Hydrant
- —— Water Lines

including Eagle Ranch and other approved development projects, is estimated at 1.75 MGD (125 percent of the design capacity). The existing treatment system is at hydraulic design capacity and requires an upgrade to increase treatment and solids handling capacity. Located east of the Chalk Mountain Golf Course, the existing WRF treatment system includes the following treatment processes:

- Preliminary treatment via influent screens (two mechanical and one manual by-pass)
- Secondary treatment via aeration, facultative, and polishing ponds
- Solids removal and dewatering via dredging system with sludge drying beds
- Disinfection
- Final disposal to percolation ponds

Groundwater reclaimed from below the facilities' infiltration ponds is used for fairway irrigation. The WRF consists of an aerobic, facultative, polishing lagoon and six percolation ponds. Operations, maintenance, and environmental compliance staff guarantee that WRF is operated and maintained in the most efficient manner possible and complies with all regulatory requirements. The WRF also produces Class B biosolids. In addition, the WRF receives the final effluent discharged by the Atascadero State Hospital's wastewater treatment plant to the sixth and final percolation pond.

On September 25, 2020 the Central Coast RWQCB adopted the General Waste Discharge Requirements Order No. R3-2020-0020 for Discharges from Domestic Wastewater Systems with Flows Greater than 100,000 Gallons per Day (General Permit). The City applied for enrollment in the new General Permit in December 2021, and became formally enrolled in the new permit on June 6, 2023. The General Permit adopts stringent effluent discharge requirements for discharge of treated effluent to land. The most notable requirements for the City include a total dissolved solids (TDS) limit of 550 milligrams per liter (mg/L) and a chloride limit of 70 mg/L. Currently, the City operates under the General Waste Discharge Requirements Order No. 01-014, and routinely discharges TDS greater than 900 mg/L and chlorides greater than 230 mg/L. With regard to organic loading, the new key parameter is the addition of a total Nitrogen effluent limitation of 10 mg/L.

Additional drivers for WRF replacement include the stated interest of Atascadero State Hospital (ASH) to send their screened wastewater to the WRF for treatment and disposal, potential expansion of the City's collection system to include up to an additional approximately 1,700 parcels (predominantly single family residential), and State legislation (SB9, AB68, etc.) prioritizing residential densification.

Based upon the Water Reclamation Facility Update and Alternatives Analysis Presentation dated August 2023, the following preferred Alternate was recommended: **The Membrane Bioreactor (MBR) followed by Reverse Osmosis (RO)**, is considered as the baseline cost for secondary treatment and as the City's minimum project cost for this report. Other solutions, such as RO treatment, softening of drinking water, disposal of effluent outside of the basin, or reuse would be additive to the MBR secondary treatment process and provide more realistic representation of the costs likely to be incurred by the City.

To reduce TDS concentration and remove other materials in water such as boron, sulfate, chloride, and sodium salts sufficiently to meet the effluent requirements, an RO treatment system is required. Treated effluent will require pre-treatment prior to feeding the treated effluent into an RO system. One of the reliable pre-treatment methods are filtration through ultrafiltration membranes such as those included in an MBR. By building an MBR system as

the secondary treatment process, the City will be ready for future addition of RO to reduce salts and

TDS. A treatment system with an MBR followed by RO produces a very high-quality effluent that can be designed to meet the discharge limitations of the General Permit and would be suitable for disinfected tertiary water for unrestricted reuse. This treatment process would likely use UV disinfection to eliminate the addition of salts associated with chlorine disinfection.

#### MANAGEMENT

On May 2, 2006, The State Water Resources Control Board (SWRCB) adopted Water Quality Order No. 2006-0003, requiring all public wastewater collection system agencies in California with greater than one mile of sewers to be regulated under General Waste Discharge Requirements (WDR). The SWRCB action mandates the development of an SSMP and the reporting of Sanitary Sewer Overflows (SSO) using an electronic reporting system.

Adopted in 2009 and updated in 2019, the City of Atascadero Sewer System Management Plan (SSMP) is intended to meet the requirements of both the Central Coast Regional Water Quality Control Board (RWQCB) and the Statewide GWDR.

#### FATS, OILS, AND GREASE CONTROL PROGRAM

The Fats, Oils, and Grease (FOG) Control Program Section of the SSMP describes the regulatory requirements being placed upon the City and the implementation process to "roll-out" this program in the most economic and feasible method. One objective of the FOG Program is the identification of trouble spots, or High Maintenance Activities (HMA), that include Restaurants, Automotive, Car Washes, etc., likely to have grease accumulation. The City identifies potential grease problem areas by tracking locations and causes of dry weather blockages and overflows. This is also noted when an area of the sewer system is viewed by Closed Circuit Television (CCTV). The specific locations of the areas with several restaurants or grease-producing facilities near CCTV or cleaned lines are considered potential grease problem areas and increased inspections may take place. Additionally, the identified locations are noted in the Operation & Maintenance program and will be monitored for changes in cleaning frequency requirements.

#### SEWER MASTER PLAN

A City's Sewer System Master Plan was last updated in 2015. This Master Plan provides the City with a hydraulic evaluation of the collection system and pumping stations. The plan includes mapping, flow projections, hydraulic modeling, SCADA evaluation, recommendations, and a final report. The Sewer System Master Plan is used as a basis for CIP budget planning and identifying problem areas.

The 2015 Sewer Masterplan identified the following goals and objectives:

- Continue to public and environmental health by collecting and treating wastewater
- Continue to maintain facilities to insure reliable wastewater collection and treatment service
- Continue to comply with state and federal waste discharge requirements.
- Continue to upgrade collection and treatment facilities, to increase efficiency, and to ensure compliance with state and federal laws.

- Support the development of wastewater collection facilities based on the Collection System Master Plan, and on the City's General Plan
- Complete the installation of the SCADA hardware and software to improve efficiency of the wastewater collection system management.
- Implement efficient and cost effective initiatives to improve wastewater collection and treatment.

#### OTHER

In 2018, the City of Atascadero prepared a Local Agency Management Program (LAMP.) The purpose of the LAMP is to allow the continued use of Onsite Wastewater Treatment Syst ems (OWTS) or septic

systems, within the jurisdiction of the City as well as to expand the local program to permit a nd regulate alternative OWTS while protecting water quality and public health.

Also, one of the elements reviewed in this Report includes identifying areas within its service area that could potentially be served in the future with an expansion of the existing municipal sanitary sewer collection system. Criteria considered in this study included the following:

- Expansion into existing neighborhoods
- Potential increased impacts to ground water
- Proximity to existing sanitary sewer infrastructure
- Number and size of parcels that could be serviced with the expanded infrastructure
- The presence of existing rights-of-way and / or utility easements
- The feasibility of gravity service vs service via force mains and lift stations
- Estimated costs of system expansion vs probable benefits
- Capacity of the existing water reclamation facility (WRF) to accommodate the additional loading

Criteria that was NOT considered include areas of potential future growth. This LAMP should be updated to match the proposed development area goals identified in the General Plan.

Based on the results of the study, the City identified 1,711 parcels that are currently not served by the existing sanitary sewer collection system, which could potentially be served through an expansion of the system. A summary of the project costs for expansion of the existing sanitary sewer collection system for each of these (5) areas is included in Appendix D of the 2018 LAMP Report. The costs summarized are preliminary and based on a conceptual level design effort.

Other sewer system concerns are segments that become pressurized during peak sewer flows. The portions of hydraulically deficient sewer systems, need to also be identified

### 9.5 Stormwater Drainage

The City storm drains and culverts handle storm runoff to prevent flooding and other problems caused by ponding stormwater. The City has over 1,750 storm pipes totaling nearly 30 miles and 600 inlets with no funding source to replace them. About one-third of these pipes are in poor or failed condition.

In 2012, a Storm Drainage Atlas Project Report was done to review the condition of the roadway pipe culverts. The report provided a summary of the condition of the existing storm

drain systems within each Watershed area. In addition, this report identified future projects related to the replacement of deteriorated drainage collection systems.

During recent discussions, City staff shared that they experienced some significant storm drain damage after a series of major storms during the 2022/2023 winter season (specifically the Jan 9, 2023 storm). The damages included :

- Debris flow that impacted the City's 25 bridges
- A levee overtopping along Atascadero Creek
- Roadway culvert failures
- Rip-rap damage at bridge abutments
- Minor landslides along Atascadero Creek

After the storm, a number of culverts were replaced, however, storm drain system deficiencies still remain. The City is summarizing the number of culverts replaced and the other improvements that were completed. Existing storm drain facilities are shown on **Figure 9-3**.

#### STORMWATER QUALITY

The City's Stormwater Management Plan (SWMP) was prepared in 2003 and updated in 2008. This report defined strategies and guidelines for the protection of water quality and reduction of pollutant discharges from all areas within the City and all City maintained facilities. The City's SWMP was implemented over the next 5 years (March 2009 to March 2014).

The current City focus is on storm water management on private property. As each new development moves forward, each project would be required to address storm water treatment. The City/County/State have policies that any new project must have a zero net affect the public storm drain system. This includes hydro-modification; or having the post-development peak storm flows to be equal or less than the pre-developed condition. Also, the project would need to treat the volume of storm water generated during a first flush rain event. These Brest Management Practices (BMP) treatment systems could be infiltration, bio-treatment, or other applicable BMP's.

The City is also reviewing opportunities to incorporate certain elements in the Downtown watershed plan to address storm water quality to have in lieu fees for Downtown development to alleviate individual on-site storm water management on each small individual Downtown parcel.

In 2019, the City also began implementing a new management plan to help improve the water quality in Atascadero Lake. The plan focuses on the use of regulatory agency-approved probiotics and pond dye to prevent algae blooms during the hot Atascadero summers. This has shown to be an effective preventative measure and keeps the lake water much healthier

Stormwater runoff that occurs throughout the City's storm drains is regulated and requires an annual MS4 Stormwater permit.

The City's Stormwater Management Plan (SWMP) was prepared in 2003 and updated in 2008. This report defined strategies and guidelines for the protection of water quality and reduction of pollutant discharges from all areas within the City and all City maintained





### Figure 9-2 Sewer Facilities

#### **Basemap Features**

- \_\_\_\_ Atascadero City Limits
- Atascadero Planning Area
- Atascadero Sphere of Influence
- Urban Services Line
- Rivers + Waterbodies
- Parks + Open Space
- —— Major Roads + Freeways

#### Sewer Facilities

- Sewer Treatment Plant
- △ Sewer Lift Station (In Use)
- Sewer Lift Station (Private)
- + Sewer Manholes
- —— Sewer Force Mains
- Sewer Gravity Lines





### Figure 9-3 Storm Drain Facilities

#### **Basemap Features**

- \_\_\_\_ Atascadero City Limits
- Atascadero Planning Area
- Urban Services Line
- Rivers + Waterbodies
- Major Roads + Freeways

#### Storm Drain System

- Storm Drain Manholes
- ----- Storm Drain Lines (Selection)

#### Watersheds (USGS 8-digit HU)

- Central Coastal
- Salinas

#### Subwatersheds (USGS 12-digit HU)

- Atascadero Creek
- Graves Creek-Salinas River
- Morro Creek
- Paloma Creek-Salinas River
- Paso Robles Creek
- Santa Margarita Creek
- Town of Templeton-Salinas River





### Figure 9-4 FEMA Flood Zones

#### **Basemap Features**

- \_\_\_\_ Atascadero City Limits
- Atascadero Planning Area
- Urban Services Line
- Rivers + Waterbodies
- Parks + Open Space
- —— Major Roads + Freeways

#### Flood Zones

- Zone A (1% annual chance of flooding-no depth provided)
- Zone AE (1% annual chance of floodingdepth provided)
- Zone AH (1% annual chance of flooding-1 to 3 feet depth)
- Zone X (0.2% Annual Chance of Flooding)
- Zone X (Outside 0.2% Annual Chance Flooding)
- Zone D (No Flood Analysis)

facilities. The City's SWMP was implemented over the next 5 years (March 2009 to March 2014).

#### NPDES & MS4s STORMWATER PERMIT

The City's Stormwater Management Plan (SWMP) describes the City's program to comply with the proposed California NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) (Permit). The permit regulates Phase II MS4s in California. The City's SWMP is a guidance document to be used by the City's regulatory body, contractors, and the public. It is also an evolving program that will be monitored and revised as necessary to address changes in the compliance programs or in the Permit requirements.

The SWMP defines strategies and guidelines for protection of water quality and reduction of pollutant discharges to the Maximum Extent Practicable (MEP) from all areas and facilities within the City. The focus of this SWMP is on the Atascadero's Urbanized Area, also referred to as the Urban Core. The SWMP provides an overview of the city, including current land use, city facilities, and the watershed. It also addresses the regulatory framework of the city as a basis for incorporating the management practices and goals established by the SWMP. Other sections discuss best management practices (BMPs), and associated measurable goals that will fulfill the requirements for the program areas (referred to as Minimum Requirements).

In terms of Post Construction Best Management Practices (BMP's), the City's goal is to require each project to consider a low impact development (LID) plan. Any new development project would be required to address the required treatment of storm water, the City/County/State have policies that any new project must have a zero net affect the public storm drain system. These new projects are also subject to the NPDES Stormwater regulations. Each new project will identify opportunities for low impact development (LID) elements at the site such as green roofs, water quality basins, pervious paving, flow through planters, and rainwater harvesting. Each project is then reviewed to determine LID feasibility/infeasibility based on NPDES regulations.

During construction, every construction project in Atascadero must comply with State Water Quality Board requirements, that include a Storm Water Pollution Prevention Plan (SWPPP) permit requirement to reduce nonpoint pollution sources. This includes implementing best management practices on job sites to minimize erosion, eliminate contaminated runoff and control construction site pollution. NPDES requirements also encourage construction measures in site planning that can help reduce the discharge of pollutants into storm water, including swales, detention ponds and other design elements. The features work to reduce storm water run-off, increase water quality protection to the river and maintain existing conditions runoff peaks and duration.

#### FLOOD ZONES

According to the Federal Emergency Management Agency (FEMA) Flood Zone determination, the city is located primarily within Zone X 0.2 PCT Annual Chance Flood Hazard (500-year storm event) and partially within Zone X Area of Minimal Flood Hazard. Parts of the City are also within Zone A, Zone AE, Zone AH, and Zone AO which require mandatory flood insurance. Figure 9-4 shows the existing Flood Zones for the City of Atascadero. Existing FEMA flood zones are shown on **Figure 9-4**.

#### WATERSHEDS

The city includes four watershed areas including Atascadero Creek, Graves Creek, Paloma Creek, Boulder Creek and Salinas Creek. The Salinas River is a major "blueline" stream along with four other minor blueline creeks. There are no significantly developed urban areas within the 100-year Flood Zone.

Based on Atascadero's topography, the City includes over 70 blue-line creeks which feed into Atascadero Creek, Graves Creek, Boulder Creek, the Salinas River, and/or complete their own watershed. These creeks are located on private property zoned for a variety of uses. All blue-line creeks and the Salinas River are protected by the 20-foot creek setback as measured from each side of the ordinary high water mark. A majority of the Salinas River is also located within parcels owned and managed by the Atascadero Mutual Water Company, providing added protection from intensive development. The only permitted exceptions to the current creek setback regulations require a Conditional Use Permit and must be approved by Planning Commission. In this situation, the Planning Commission must find that creeks, riparian areas, and site improvement will not be negatively impacted by the exception based on information provided by a qualified biologist and Geotechnical engineer.

Atascadero is located in the Salinas River Watershed. The Salinas River, Atascadero (also described as Hale Creek), Graves and Paloma Creeks, and Atascadero Lake are surfaces water bodies that lie within the City boundaries. They are considered part of the Salinas Hydrologic Unit, Paso Robles Hydrologic Area, and Atascadero Hydrologic Sub Area and all ultimately drain into Monterey Bay.

#### Atascadero Creek Watershed

The Atascadero Creek Watershed is located in the center developed portion of Atascadero, extending southwest. This Watershed follows the Atascadero Creek through the center part of downtown.

#### Boulder Creek Watershed

Boulder Creek (is a tributary to Graves Creek) as Graves Creek begins north of the City and flows southeast to Monterey Road before flowing north on the east side of highway 101 before joining the Salinas River north of town

#### Graves Creek Watershed

The Graves Creek Watershed is located in the rural northwest portion of Atascadero, extending to the west. This Watershed follows Graves Creek, which runs to the north.

#### Paloma Creek Watershed

The Paloma Creek Watershed is located in the rural southern portion of Atascadero, extending to the south. This Watershed follows Paloma Creek through Paloma Creek Park and into the Salinas River.

#### Salinas Creek Watershed

The Salinas Creek Watershed is located along the north and east portion of Atascadero and extends as a large area to the east side of the river. This watershed is adjacent to, and parallels, the Salinas River.

#### FUTURE

The 2012 Storm Drainage Atlas Project report identified that there are 28 miles of culvert used in the City's storm drain network that includes a total of 1,740 individual pipe segments. There are currently 3,180 feet of culvert marked for replacement. **Table 9-1** summarizes the condition of existing culvert segments.

Condition	# of Segments
Excellent	150
Good	755
Fair	333
Poor	136
Replace	65
Total	1,439

Table 9-1: Culvert Segment Condition

Source(s): Drainage Atlas Project Executive Summary, 2012.

# 9.6 Dry Utilities

Natural gas in Atascadero is supplied by the Southern California Gas Company and all electrical services are provided by the Pacific Gas and Electric Company (PG&E). Within the downtown commercial zoning district area, the existing electricity supply system consists of underground facilities. Beyond the downtown district, the existing electricity supply system consists of overhead lines and power poles.

The current regional cable service and telecommunications service providers are DISH, Direct TV, Spectrum, and AT&T. Astound Broadband is the provider of cable TV, broadband internet, and telephone services in the City. Astound provides services via their fiber-optic network, including high speed internet, digital cable, home phone service, international programming, DVR, HDTV, and TV On Demand. In the area, Astound's expansion has continued with its purchase of San Luis Obispo-based Digital West on January 26, 2021,

### 9.7 Sources

#### **REPORTS AND DATA**

- 2003, August City of Atascadero Storm Water Management Plan (SWMP)
- 2008, December Preliminary Draft City of Atascadero Storm Water Management Plan (SWMP)
- 2003 City of Atascadero Sewer Master Plan (SMP)
- \*\* 2010 Atascadero Mutual Water Company (AMWC) Water System Masterplan
- \*\* 2010 City of Atascadero Drainage STM Storm Water Management Plan
- \*\* 2012 City of Atascadero Drainage Atlas Pipe Condition Management Plan
- \*\* 2012 City of Atascadero Storm Drainage System Atlas Map Book
- 2015 Atascadero Mutual Water Company (AMWC) Urban Water Management Plan
- \*\* 2015 City of Atascadero Wastewater Collection System Master Plan Update
- 2016 Atascadero 2025 General Plan July 2016
- 2016 Atascadero Long Term Goal 2016+
- \*\* 2016 City of Atascadero Wastewater Reclamation Facility Master Plan Update
- \*\* 2018 City of Atascadero Onsite Wastewater Treatment Systems, Local Agency Management Program (LAMP)
- \*\* 2018 City of Atascadero Wastewater, Local Agency Management Program (LAMP) Exhibits
- 2019 Corragio City of Atascadero Insite Report
- \*\* 2019 City of Atascadero Sewer System Management Plan (SSMP) Updated
- \*\* 2019 City of Atascadero Sewer Evaluation to Serve Potential Users
- 2020, August Downtown Infrastructure Enhancement Project City Council Staff Report
- 2000, July Atascadero Downtown Revitalization Plan
- 2021, February Public Outreach Kickoff Staff Report
- 2021-2023 Adopted Action Plan
- \*\* 2023 Atascadero Mutual Water Company (AMWC)- GIS Hydrant Locations
- \*\* 2023 Water Reclamation Facility (WRF) Update and Alternative Analysis Presentation\*\* 2023 – C2a Water Reclamation Facility (WRF) - Alternative Analysis
- \*\* 2023 C2b Water Reclamation Facility (WRF) Secondary Treatment Evaluation
- \*\* 2023 C2c Water Reclamation Facility (WRF) CCWQCB Notice
- \*\* Added since revised draft April 2023

# 9.8 Acronyms and Key Terms

AC	Asbestos Cement
ADD	Average Day Demand
ADF	Average Daily Flow
ADWF	Average Dry Weather Flow
AWWF	Average Wet Weather Flow
ВМР	Best Management Practices
CCTV	Closed Circuit Television
CDFG	California Department of Fish and Game
CIP	Capital Improvement Plan
CIWQS	California Integrated Water Quality System
CWEA	California Water Environment Association
DIP	Ductile Iron Pipe
EH	San Luis Obispo County Environmental Health Department
FOG	Fats, Oils, and Grease
FSE	Food Service Establishment
GIS	Geographic Information System
GPCD	Gallons per Capita per Day
GPD	Gallons per Day
GPDU	Gallons per Dwelling Unit
GPM	Gallons per Minute
I/I	Infiltration and Inflow
LRO	Legally Responsible Official
MDD	Maximum Day Demand
MFR	Multi-Family Residential
MGD	Million Gallons per Day
MKN	Maximum Month Flow
NPDES	National Pollution Discharge Elimination System
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services

0&M	Operations and Maintenance
OWTS	Onsite Wastewater Treatment System
PDDWF	Peak Day Dry Weather Flow
PDWWF	Peak Day Wet Weather Flow
PDF	Peak Daily Flow
PHD	Peak Hour Demand
PHDWF	Peak Hour Dry Weather Flow
PHF	Peak Hour Flow
PHWWF	Peak Hour Wet Weather Flow
PVC	Polyvinyl Chloride
RWQCB	Regional Water Quality Control Board
SFR	Single-family Residential
SHECAP	Sewer Hydraulic Evaluation and Capacity Assessment Plan
SSOR	Sanitary Sewer Overflow Report
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
VCP	Vitrified Clay Pipe
WWTF	Wastewater Treatment Facility

**Aquifer:** A body of rock or sediment that is sufficiently porous and permeable to store, transmit, and yield significant or economic quantities of groundwater to wells and springs.

**Bedrock:** Bedrock means the rock, usually solid, that underlies soil or other unconsolidated, surficial material.

**Biological Oxygen Demand (BOD):** BOD measures the oxygen required for biochemical degradation of organic and inorganic material. High BOD causes an increased biological demand on downstream OWTS components and may shorten the life of the system.

**Central Coast Regional Water Quality Control Board (Central Coast RWQCB):** Central Coast RWQCB means Region 3 of the Regional Water Quality Control Boards as designated by Water Code Section 13200.

**Cesspool:** Cesspool means an excavation in the ground receiving domestic wastewater, designed to retain the organic matter and solids, while allowing the liquids to seep into the soil. Cesspools differ from seepage pits because cesspool systems are not preceded by a septic tank. The term cesspool does not include pit-privies and out-houses.

**Clay:** Clay is a kind of soil particle; the term also refers to a type of soil texture. As a soil particle, clay consists of individual rock or mineral particles in soils having diameters <0.002 mm. As a soil texture, clay is the soil material that is comprised of 40 percent or more clay particles, not more than 45 percent sand and not more than 40 percent silt particles using the USDA soil classification system.

**Cobbles:** Cobbles mean rock fragments 76 mm or larger using the USDA soil classification systems.

**Domestic wastewater:** Domestic wastewater means wastewater with a measured strength less than high-strength wastewater and is the type of wastewater normally discharged from, or similar to, that discharged from plumbing fixtures, appliances and other household devices including, but not limited to toilets, bathtubs, showers, laundry facilities, dishwashing facilities, and garbage disposals. Domestic wastewater may include wastewater from commercial buildings such as office buildings, retail stores, and some restaurants, or from industrial facilities where the domestic wastewater is segregated from the industrial wastewater. Domestic wastewater may include incidental recreational vehicle (RV) holding tank dumping but does not include wastewater consisting of a significant portion of RV holding tank wastewater such as at RV dump stations. Domestic wastewater does not include wastewater from.

**Domestic well:** Domestic well means a groundwater well that provides water for human consumption and is not regulated by the California Water Board – Division of Drinking Water.

**Drainageway:** Drainageway means a natural or artificial channel that is not a watercourse. Examples of a drainageway include irrigation and drainage ditches that flow only for hours or days following rainfall, grass-lined swales, concrete-lined canals, and stormwater runoff devices.

**Dwelling Unit:** Dwelling unit means a single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, or sanitation, conforming with the edition of the California Residential Code (Title 24) in place at the time of construction.

**Effective Depth:** Effective depth means the depth of the useable, permeable layers of soil below the bottom of the distribution pipe in a dispersal system.

**Effluent:** Effluent means sewage, water, or other liquid, partially or completely treated or in its natural state, flowing out of a septic tank, supplemental treatment unit, or dispersal system.

**Fats, Oils and Grease (FOG):** FOG measures biological lipids and mineral hydrocarbons. The analytical test for FOG does not measure an absolute quantity but is useful in making comparisons of wastewater.

**Gray Water:** Gray water means untreated wastewater that has not been contaminated by any toilet discharge, and has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes (Health and Safety Code section 17922.12). Gray water includes used water from bathtubs, showers, bathroom wash basins, clothes washing machines and laundry tubs. Gray water does not include wastewater from kitchen sinks or dishwashers.

**Groundwater:** Groundwater means water below the land surface that is at or above atmospheric pressure and is located below the water table elevation within the saturated zone.

**Health Department:** Health Department means the San Luis Obispo County Health Department.

**Impaired water bodies:** Impaired water bodies means those surface water bodies or segments thereof that are identified on a list approved first by the State Water Board and then approved by US EPA pursuant to Section 303(d) of the federal Clean Water Act.

**Impervious layer or material:** Impervious layer or material is characterized as having a percolation rate slower than one hundred twenty (120) minutes per inch or having clay content of sixty (60) percent or greater.

**Infiltrative Area:** Infiltrative area means the surface area of the sidewalls below the effluent distribution pipe where the dispersal field media makes direct contact with the soil or permeable rock. The surface area of the bottom of the dispersal system can be included in specific circumstances.

**Leach field:** Leach field means a system of trenches or beds filled with drain rock, or other approved aggregate material, and overlain by a perforated pipe that distributes treated sewage effluent for subsurface dispersal into the soil. A leachfield is also known as a "drainfield" or a "soil absorption system".

**Local Agency:** Local agency means any subdivision of state government that has responsibility for permitting the installation of facilities. Local agency refers to the City of Atascadero.

**Oil/Grease interceptor:** A passive interceptor with a rate of flow exceeding 50 gallons-perminute, and that is located outside a building. Oil/grease interceptors are used for separating and collecting oil and grease from wastewater.

**Onsite Wastewater Treatment System (OWTS):** OWTS means individual wastewater disposal systems, community collection and disposal systems, and alternative collection and disposal systems that use subsurface disposal. The short form of the term may be singular or plural. OWTS do not include gray water systems pursuant to Health and Safety Code Section 17922.12.

**Percolation test:** Percolation test is a method of testing water absorption of the soil. The test is conducted with clean water and test results can be used to establish the dispersal system design.

**Percolation rate:** Percolation rate means the speed at which water moves through soil, usually reported in minutes per inch.

**Public water system:** "Public water system" means a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year (California Health and Safety Code Section 116275).

**Public water well:** A public water well is a ground water well serving a public water system. A spring which is not subject to the California Surface Water Treatment Rule (SWTR), CCR, Title 22, sections 64650 through 64666 is a public well. **Regional Water Board:** Regional Water Board means any of the Regional Water Quality Control Boards designated by Water Code Section 13200 and generally refers to the Central Coast Regional Water Quality Control Board.

**Reservoir:** Reservoir means a pond, lake, basin or other space either natural or created in whole or in part by the building of engineering structures, which is used for storage, regulation and control of water, recreation, power, flood control or drinking. A detention pond designed to meter runoff water during a storm event is not considered a reservoir.

**Sanitary sewer:** Sanitary sewer means a system for collecting residential or municipal wastewater and directing the collected wastewater to a treatment works prior to dispersal.

**Seepage pit:** Seepage pit means a drilled or dug excavation, four to six feet in diameter and gravel filled, that receives the effluent discharge from a septic tank or other OWTS treatment unit for dispersal.

**Silt:** Silt is a kind of soil particle; this term also refers to a type of soil texture. As a soil particle, silt consists of individual rock or mineral particles in soils having diameters ranging from between 0.05 and 0.002 mm. As a soil texture, silt is soil that is comprised of approximately 80 percent or more silt particles and not more than 12 percent clay particles using the USDA soil classification system.

**Soil structure:** Soil structure means the arrangement of primary soil particles into compound particles, peds, or clusters that are separated by natural planes of weakness from adjoining aggregates.

**Wastewater:** Wastewater includes sewage, gray water, and any and all other contaminated liquid waste substances associated with human habitation.