Greater Hollister Area Draft Storm Water Resource Plan

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Prepared by

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List of Acronyms

AC	Acres
AF	Acre Feet
AFY	Acre Feet per Year
ACS	American Community Survey
AMBAG	Association of Monterey Bay Area Governments
BFE	Base Flood Elevation
BMP	Best Management Practice
CASQA	California Storm water Quality Association
CCAMP	Central Coast Ambient Monitoring Program
CCPCR	Central Coast Post-Construction Requirements
CEQA	California Environmental Quality Act
CFS	Cubic Feet per Second
Corps	Army Corps of Engineers
CVP	Central Valley Project
CWA	Clean Water Act
DAC	Disadvantaged Communities
D/DBP	Disinfection Byproducts
DWQ	Division of Water Quality
EA	Effectiveness Assessment
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FCS	Full Capture System
FEMA	Federal Emergency Management Authority
FIB	Fecal Indicator Bacteria
FPS	Feet per Second
ft	Feet
GAC	Granular Activated Carbon
GPD	Gallons Per Day
GSA	Groundwater Sustainability Authority
GSP	Groundwater Sustainability Plan
IRWMP	Integrated Regional Water Management Plan
IWTP	Industrial Wastewater Treatment Plant
KG	Kilograms
LBS	Pounds
LID	Low Impact Development
MCL	Maximum Contaminant Level
MG	Million Gallons
MGD	Million Gallons Per Day
MG/L	Milligrams per Liter
MHI	Mean Household Income
mL	Milliliters
MOU	Memorandum of Understanding
MPN	Most Probable Number
MS4	Municipal Separate Storm Sewer Systems

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N/A	Not Applicable
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NPDES	National Pollutant Discharge Elimination System
OF	Outfall
PAH	Polynuclear Aromatic Hydrocarbons
PCR	Post-Construction Requirements
PEAIP	Program Effectiveness Assessment and Improvement Plan
PGA	Pollutant-Generating Activities
POC	Pollutant of Concern
POTW	Publicly Owned Treatment Works
PRWFPA	Pajaro River Watershed Flood Prevention Authority
PRWS	Pajaro River Watershed Study
PV	Pajaro Valley
RDWTP	Regional Domestic Wastewater Treatment Plant
RWMG	Regional Watershed Management Group
RWQCB	Regional Water Quality Control Board
SBCWD	San Benito County Water District
SBR	Sequencing Batch Reactor
SCM	Storm water Control Measure
SDAC	Severely Disadvantaged Communities
SNMP	Salt and Nutrient Management Plan
SSC	Suspended-Sediment Concentration
SSCWD	Sunnyslope County Water District
SGMA	Sustainable Groundwater Management Act
SSO	Sanitary Sewer Overflow
SWAMP	Surface Water Ambient Monitoring Program
SWMM	Storm Water Management Model
SWRCB	State Water Resources Control Board
SWRP	Storm Water Resource Plan
TBD	To Be Determined
TDS	Total Dissolved Solids
TELR	Tool to Evaluate Load Reduction
TMDL	Total Maximum Daily Load
USGS	United States Geological Survey
UV	Ultraviolet
WAAP	Waste Allocation Attainment Plant
WBD	Watershed Boundary Dataset
WDR	Waste Discharge Requirement
WRF	Water Resources Facility
WTP	Water Treatment Plant

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CHAPTER 1
INTRODUCTION

This Storm Water Resource Plan (SWRP) is utilized as a planning document for the City of Hollister, City of San Juan Bautista, and San Benito County to identify and prioritize storm water and dry weather runoff projects, programs, and opportunities through a watershed-based approach to storm water management. This chapter summarizes the legislative background for preparing the SWRP and describes the purpose of the SWRP.

Legislative Background

Proposition 1 (Section 79747) provides $200 million in grant funds for multiple-benefit storm water management projects. The Storm Water Management Planning Act of 2014, Senate Bill 985, amended Water Code Section 10560 et seq. to require a Storm Water Resource Plan (SWRP) in order to receive grant funding for storm water and dry weather runoff capture projects from any bond approved by voters after January 1, 2014. This applies to Proposition 1 grants for multi-benefit storm water management projects.

Purpose of Plan

The State Water Resources Control Board's (SWRCB) Division of Water Quality (DWQ) developed the Storm Water Resource Plan Guidelines for public agencies to prepare a SWRP consistent with the Water Code. These Guidelines were adopted by the SWRCB in December 2015.

The purpose of a SWRP is to identify a watershed-based approach to managing storm water as a resource. This planning document describes the watersheds tributary to the greater Hollister area, within the City of Hollister, City of San Juan Bautista, and the northern portion of San Benito County. The Plan summarizes water quality compliance and identifies planned and future storm water projects that will benefit water supply, water quality, and the community.

This SWRP will be incorporated into the Pajaro River Watershed Integrated Regional Water Management Plan (IRWMP). This integration is important for the SWRP objectives to match the broader water management goals for the Pajaro River Watershed.

Organization of the SWRP

This SWRP is divided into the following chapters per the State Water Board's SWRP Guidelines:

Chapter 1—Introduction and SWRP Objectives: provides an overview of the legislative background and purpose of this SWRP.

Chapter 2—Watershed Identification: describes the watershed boundary and characteristics; identifies surface and ground water resources along with potable water supplies and natural watershed processes.

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Chapter 3—Water Quality Compliance: identifies contributors to storm water pollution and summarizes regulatory plans and permits such as Total Maximum Daily Load (TMDL) Implementation Plan, National Pollutant Discharge Elimination System (NPDES) Permit, and Waste Discharge Permit.

Chapter 4—Organization, Coordination, Collaboration: describes local agencies, organizations, and other stakeholders' involvement along with community engagement and the incorporation of this plan into the existing Integrated Regional Water Management Plan (IRWMP).

Chapter 5—Identification and Prioritization of Projects: identifies storm water and dry weather runoff projects and prioritizes each based on quantitative measures.

Chapter 6—Implementation Strategy and Schedule: discusses how the SWRP will be integrated into the IRWMP along with review, updates, and management of the SWRP; strategizes project implementation including responsible entities, status tracking, performance measures, and community participation.

Chapter 7—Education, Outreach, Public Participation: discusses methods used for public education and participation, engagement with local stake holders, and awareness for environmental injustice needs.

Chapter 8—References

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CHAPTER 2
WATERSHED IDENTIFICATION

Pajaro River Watershed

A region that drains to a river, lake, or other body of water is defined as a watershed. The SWRP focuses on a watershed-based approach to storm water management in order to replicate natural hydrology and processes within the watershed. The Pajaro River Watershed, managed by the Regional Watershed Management Group (RWMG), is shown in Figure 2-1. The RWMG includes Pajaro Valley Water Management Agency (PV Water), San Benito County Water District, and Valley Water. The following information regarding the Pajaro River Watershed was taken from the Pajaro River Watershed IRWMP.

> The Pajaro River is the largest coastal stream between San Francisco Bay and the Salinas River Watershed in the County of Monterey. The watershed is approximately 1,300 square miles and it includes portions of Santa Cruz, Santa Clara, San Benito, and Monterey Counties. Its large size contributes to the number of diverse environments, physical features, and land uses within the watershed.

The major direct tributaries to the Pajaro River include the San Benito River, Tequisquita Slough, Santa Ana Creek, Pacheco Creek, Llagas Creek, Uvas Creek, and Corralitos Creek. The Pajaro River flows to the Pacific Ocean via Monterey Bay.

SWRP Boundary

The State Water Resources Control Board (SWRCB) Guidelines recommend the boundary of a SWRP to be delineated by the CalWater watershed designations, the United States Geological Survey (USGS) Hydrologic designations, or an equivalent boundary. Figure 2-2 shows the CalWater and USGS Hydrologic Unit Designations for the Pajaro River watershed.

This SWRP started with focusing on storm water and dry weather runoff patterns primarily in the City of Hollister but grew to encompass the greater northern San Benito County watershed because of their effects on the downstream Pajaro River. The SWRP boundary is based on the following eight subwatersheds from the USGS Watershed Boundary Dataset (WBD): Bird Creek-San Benito River, Lower Pacheco Creek, Lower Pajaro River, Lower Uvas Creek, San Juan Canyon, Santa Ana Creek, Tequisquita Slough, and Upper Pajaro River. The SWRP Boundary is shown on Figure 2-3.

These eight subwatersheds were identified based on the support by City of Hollister, County of San Benito, and Pajaro River Watershed Flood Prevention Authority (PRWFPA) to identify multi-benefit projects, programs, and opportunities within this region. Figure 2-4 shows the eight subwatersheds that make up the SWRP boundary.

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Bird Creek-San Benito River

Bird Creek begins at the San Benito-Monterey County line north west of the City of Salinas. This creek drains to the San Benito River, which is tributary to the Lower Pajaro River. The confluence of the San Benito River and Pajaro River has historically been an important predictor for the flow conditions within the lower Pajaro River. This subwatershed is 32,742 acres. The western portion of the City of Hollister drains to the San Benito River through six (6) City outfalls and two (2) County outfalls.

Lower Pacheco Creek

The Lower Pacheco Creek within the SWRP boundary covers 6,689 acres in the subwatershed. The other 15,360 acres of the subwatershed is accounted for in the South Santa Clara County SWRP boundary. Pacheco Creek begins downstream of the Pacheco Lake Reservoir Dam in Santa Clara County and continues through San Benito County, terminating at San Felipe Lake.

Lower Pajaro River

The lower Pajaro River subwatershed spans San Benito, Santa Clara, Santa Cruz, and Monterey counties. Only 2,714 acres are within this SWRP Boundary. The other 33,280 acres of the subwatershed are accounted for in the Greater Monterey County and Santa Cruz County SWRPs. A majority of the lower Pajaro River subwatershed is within Monterey County, where the Pajaro River flows to the Pacific Ocean via Monterey Bay.

Lower Uvas Creek

The lower Uvas Creek subwatershed within the SWRP boundary covers 1,996 acres. The other 23,694 acres is accounted for in the South Santa Clara County SWRP boundary. Uvas-Carnadero Creek flows through the length of the subwatershed with Tar Creek and Tick Creek entering Uvas-Carnadero Creek upstream of its confluence with the Pajaro River at the drainage point of the subwatershed.

San Juan Canyon

San Juan Canyon subwatershed, approximately 24,415 acres, is entirely encompassed within the SWRP boundary. San Juan Valley is bounded by Lomerias Muertas and the Flint Hills to the north and the Gabilan Range to the south and east. San Benito River enters the valley from the east and confluences with the Pajaro River just north of this subwatershed.

Santa Ana Creek

The Santa Ana Creek subwatershed confluences with the Tequisquita Slough just north of the City of Hollister's limits. The eastern portion of the City of Hollister, approximately 3,343 acres, drains to the Santa Ana Creek through seven (7) City outfalls. This subwatershed is 33,717 acres.

Tequisquita Slough

The Tequisquita Slough is tributary to the Upper Pajaro River. The Tequisquita Slough subwatershed is fed by Santa Ana Creek and Arroyo Dos Picachos. This subwatershed flows into San Felipe Lake and has an approximate area of 25,964 acres.

Upper Pajaro River

The upper Pajaro River subwatershed spans both the County of San Benito and the County of Santa Clara. Approximately 19,923 acres of the total 35,200 acres are within this SWRP boundary. The Pajaro River begins at San Felipe Lake and flows along the San Benito County line. Located in this subwatershed is Millers Canal, which conveys water from the San Felipe Lake to the Pajaro River.

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Soap Lake Floodplain

This SWRP boundary encompasses the Soap Lake floodplain, which lies along the Pajaro River within San Benito and Santa Clara Counties. Although a portion of this floodplain is encompassed in Santa Clara County, an analysis of the Soap Lake floodplain was not included in the South Santa Clara County SWRP. The entirety of the Soap Lake floodplain was important to include in this SWRP boundary due to the direct effects this floodplain has on flooding in the lower Pajaro River watershed communities. Upper Soap Lake, also known as San Felipe Lake, is a permanent body of water. Lower Soap Lake, or just Soap Lake, is created when flood events create a backup on the Pajaro River upstream of the San Benito River.

Soap Lake is not a true lake, however, during significant rainfall events, the low-lying areas of Soap Lake become flooded and storm flow backs up on the Pajaro River upstream of its confluence with the San Benito River. Functioning in this manner, the Soap Lake floodplain is a natural detention basin in the upper Pajaro River watershed, storing water and reducing peak flows that would otherwise increase flooding in the lower portions of the Pajaro River watershed. This SWRP boundary, along with neighboring South Santa Clara County and Santa Cruz County SWRB boundaries, is delineated on Figure 2-5.

Land Use

The land use agencies are the City of Hollister, City of San Juan Bautista, and County of San Benito. Development within this watershed is clustered around the City of Hollister and the City of San Juan Bautista. Land use in both of these cities is comprised of primarily residential development, with commercial development in and around the downtown area, and a heavy concentration of industrial development near the Hollister Municipal Airport at the northern end of the City of Hollister. The City of Hollister's and City of San Juan Bautista's land use is displayed on Figure 2-6 and Figure 2-7, respectively. The County of San Benito is primarily agricultural land use. Zoning for the portions of the County of San Benito within the SWRP are shown on Figure 2-8.

Water Quality Priorities

The Pajaro River has been extensively studied and found to be impaired with chemical and nutrients from storm water runoff originating from cities and agriculture. Table 2-1 summarizes the Total Maximum Daily Loads (TMDLs) within this SWRP.

Table 2-1 TMDLs

Water Body	TMDL
Pacheco Creek	Fecal Coliform: Resolution R3-2009-0008
Pajaro River	Nitrate: R3-2005-0131 Sediment: Resolution R3-2005-0132 Fecal Coliform: Resolution R3-2009-0008 Chlorpyrifos & Diazinon: R3-2013-0011 Nutrients: R3-2015-0004
San Benito River	Fecal Coliform: Resolution R3-2009-0008
Santa Ana Creek	Fecal Coliform: Resolution R3-2009-0008
Tequisquita Slough	Fecal Coliform: Resolution R3-2009-0008
San Juan Creek	Fecal Coliform: Resolution R3-2009-0008

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Water Body	TMDL
San Benito River	Sediment: Resolution R3-2005-0132

Fecal Coliform

Coliforms are a group of bacteria that are present in different environments. The presence of total coliforms in water is considered as less harmful, but the presence of fecal coliforms including Escherichia coli (E. coli), a subset of F. Coli bacteria, is considered as a level of fecal contamination, which can lead to different disease conditions. The water quality threshold for E. Coli is based on a minimum of five samples for any 30-day period, which shall not exceed a geometric mean of 126 MPN (most probable number) per 100mL.

The EPA establishes and periodically updates water quality controls to protect human health. These criteria were last updated in 2012 and continue to recommend use of Fecal Indicator Bacteria (FIB), namely E. coli and Enteroccoci, to assess attainment of recreational uses and to support NPDES permit limits. Pathogens are the top cause of receiving water impairments in the U.S. and receiving water impairments as defined by elevated levels of FIB frequently occurring in urbanized areas. Although the epidemiological linkage between elevated FIB in storm water and human health risk is less clearly understood than for sanitary sewage-impacted waters, Municipal Separate Storm Sewer Systems (MS4) permit holders and watershed stakeholders must address storm water system-related contributions of FIB to receiving waters to address MS4 storm water permit related requirements, particularly as required under TMDLs and associated implementation plans. Listed below are the likely sources of FIB in the City of Hollister.

- Wildlife-Avian sources
- Pet & Animal Wastes; Dog Parks
- Failing private sewer laterals
- Industrial & Commercial facilities: Food processing & service facilities, material stockpiles
- Restaurants-grease bins (food grease & oil recycle/disposal containers), trash bins/enclosures, facility power washing
- Illicit Discharges-dumping
- Urban/Residential Point Sources-Sediment transport

Sediment

Sediment is reported as Suspended-Sediment Concentration (SSC) and is a common and well-researched storm water quality pollutant. There is extensive literature and national datasets documenting the ranges of SSC concentrations in land use and mixed urban runoff. While SSC loading from urban catchments may or may not exceed regulatory thresholds, there is a well-documented range of concentrations emanating from urban lands that are maintained from good to poor condition. In addition, storm water improvement actions implemented to reduce sources of SSC or treat SSC loads entrained in storm water are, in many instances, also effective at reducing the concentrations and loads of other common urban pollutants particularly FIB for which the City Hollister has a TMDL requirement on their receiving waters, as discussed above. Processes commonly used to treat urban storm water via structural Best Management Practices (BMPs)—infiltration, particle capture, and media filtration, are equally effective at treating most hydrophobic pollutants. Hydrophilic pollutant load reduction (i.e., nitrate) are assumed to occur concurrently with effective storm water volume reductions.

Sediment has long been a TMDL in many of the Pajaro River watershed tributaries as well as many other water courses statewide. Sediment causes turbidity in receiving waters which interferes with fish reproductive processes. Sediment is also linked to the City's other TMDL, Fecal Coliform, as it is a sink for most pollutants.

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Additionally, coliform type bacteria may survive longer in sediments/organic litter than in the water column. Therefore, sediment or organic litter, if mobilized, could be an important source of bacteria, and removal of water column particulate-bound or free coliform bacteria may not constitute a reliable permanent removal mechanism in some cases. For these reasons, sediment is also considered a proxy for bacteria and other types of pollutants. During the 2013 MS4 term, many of the municipalities in California focused on sediment as a high priority pollutant of concern (POC) and many of the City's existing storm water program features utilize BMPs for reducing discharge of sediment as well.

The San Benito River Watershed Study was prepared as part of the Pajaro River Watershed IRWMP Update. This study found the San Benito River to be a significant source of sediment for the lower Pajaro River. Modeling results showed that during 25-year and 100-year storm events, 50-64% of the lower Pajaro River's sediment load comes from the San Benito River, and during the 10-year events and smaller, the San Benito River contributions increase to 80-100% of the sediment load. Based on these results, the Pajaro River Watershed IRWMP recommended erosion and sediment reduction to be carried out on the San Benito River.

Surface Water

The San Benito County Water District (SBCWD) manages the surface water within the SWRP. It is important to note that the Pacheco Reservoir, managed by Valley Water, has been included in this discussion because of its downstream effect on communities in San Benito County. The following reservoir information was discussed in the Pajaro River Watershed IRWMP.

San Justo Reservoir

The San Justo Reservoir, owned by the United States Bureau of Reclamation, is located 3 miles southwest of Hollister. San Justo Reservoir provides elevated operational storage and flexibility for the SBCWD Central Valley Project (CVP) system. This reservoir has a capacity of 10,000 AF.

Hernandez Reservoir

The Hernandez Reservoir stores runoff from the upper San Benito River and has a tributary watershed of about 85 square miles. The reservoir covers about 610 acres. The reservoir is operated to facilitate groundwater recharge in the Gilroy-Hollister Groundwater Basin and provide flood protection. The capacity of this reservoir is 18,300 acre-feet (AF). This reservoir is not within the SWRP boundary.

Paicines Reservoir

The Paicines Reservoir is an off-stream reservoir located between the San Benito River and Tres Pinos Creek and is filled by water diverted from the San Benito River, with some water coming from water stored and released from Hernandez Reservoir. The capacity of this reservoir is 2,870 AF. This reservoir is not within the SWRP boundary.

Pacheco Reservoir

Pacheco Reservoir is managed by Valley Water and owned and operated by Pacheco Pass Water District. Although this reservoir is in Santa Clara County, the reservoir discharges to the Lower Pacheco Creek in San Benito County. This reservoir is noted because of the Pacheco Reservoir Expansion Project and the downstream benefits this project will have to reduce flood risk along Pacheco Creek and within communities in San Benito County. More information on this project can be found in Chapter 5 of this report.

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Imported Water Supply

SBCWD purchases CVP surface water from the United States Bureau of Reclamation, which is imported through the Sacramento River-San Joaquin River Delta to the San Luis Reservoir and conveyed through the Hollister Conduit. The Hollister Conduit has a design capacity of 83 cubic feet per second (cfs) and extends approximately 19.5 miles from the Santa Clara Conduit to the terminus at San Justo Reservoir, located southwest of the City of Hollister. The imported surface water is delivered to agricultural, municipal, and industrial customers in the SBCWD Zone 6, which overlies portions of the Hollister and San Juan Management Areas of the North San Benito Groundwater Basin.

Potable Water Treatment and Supply

Water service within the SWRP area is provided by the City of Hollister, the City of San Juan Bautista, and three special districts: Sunnyslope County Water District (SSCWD), Aromas Water District, and Pacheco Pass Water District. The City of Hollister supplies water service to the western half of the City, while SSCWD supplies water service to the eastern half. The City of San Juan Bautista is the area's municipal water supplier. Aromas Water District is a multi-county special district that provides water service to approximately 950 connections in Monterey and San Benito Counties. Pacheco Pass Water District is responsible for operating Pacheco Reservoir, mainly to promote groundwater recharge within the District's service area.

Lessalt Water Treatment Plant

The Lessalt Water Treatment Plant (WTP) is owned by SBCWD and operated under contract by SSCWD. The plant was placed into operation in January 2003 and was upgraded in 2014 in compliance with the Disinfectants and Disinfection Byproducts (D/DBP) Rule. Imported CVP water undergoes greensand, membrane filtration, granular activated carbon (GAC) filtration, and disinfection. The plant has a rated capacity of 2.0 million gallons per day (MGD) and a short-term production capacity of up to 2.5 MGD.

West Hills Water Treatment Plant

Construction of the West Hills WTP, also owned by the SBCWD and operated under contract by SSCWD, was completed at the end of 2017. CVP surface water is delivered from the San Justo Reservoir to the West Hills WTP, where it undergoes treatment using ballasted flocculation, dual media gravity filtration, and disinfection. The treated water is stored and distributed by gravity into the City of Hollister's water distribution system. The plant has a current capacity of 4.5 MGD, with associated transmission facilities designed for an ultimate capacity of 9.0 MGD.

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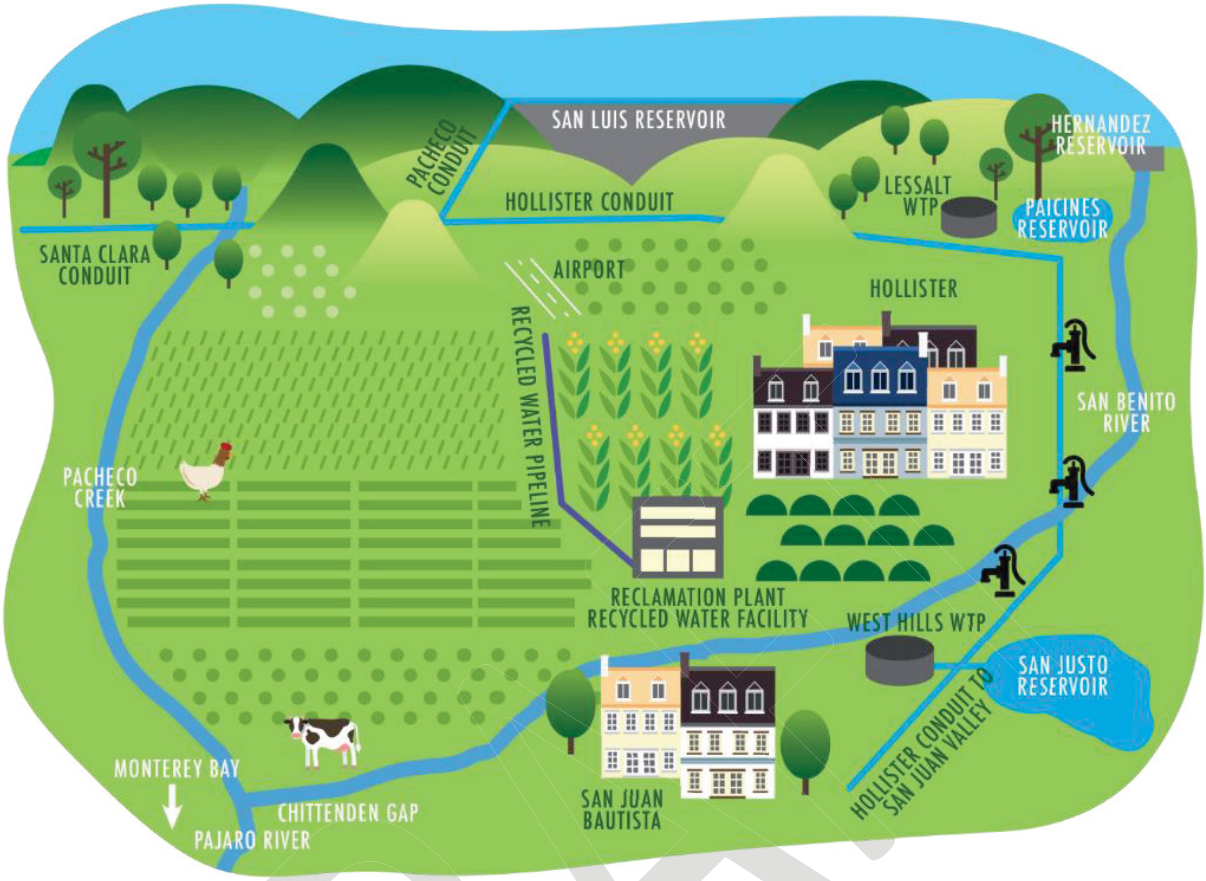

Figure 2-10 San Benito County's Water System

www.sbcwd.com

The water service areas and treatment facilities are shown on Figure 2-9. Figure 2-10 above graphically represents San Benito County's water system.

Wastewater Treatment

The following are wastewater treatment facilities serving the SWRP area: City of Hollister Regional Domestic Wastewater Treatment Plant, City of Hollister Industrial Wastewater Treatment Plant, Sunnyslope County Water District – Cielo Vista Estates and Ridgemark Estates, and the City of San Juan Bautista. All service areas are shown on Figure 2-11.

Hollister RDWTP

The Regional Domestic Wastewater Treatment Plant (RDWTP) was completed in 1980 and provides wastewater collection service to residential, industrial, and commercial customers. The City of Hollister completed a substantial upgrade to their wastewater treatment plant in 2008, including a plant expansion and upgrade, a seasonal storage pond system, and recycled water distribution system, allowing the City to accept additional wastewater flow from new customers. In 2016, the City replaced and upgraded the membranes which increased actual treatment capacity but did not increase the permitted capacity of 4.0 MGD for dry weather flow conditions and 5.0 MGD for wet weather flow conditions.

The City of Hollister completed a Water Reclamation Facility (WRF) at the RDWTP in 2010 to comply with waste discharge requirement (WDR). The 4.5 MGD capacity WRF replaced the RDWTP and produces Title 22 effluent as recycled water. This water is being used for park irrigation in the City and agricultural irrigation within San Benito County Water District. New pipelines were recently constructed to deliver recycled water to parcels in the northern end of the City, and a storage pond at the WRF was lined to store up to 15 AF of recycled water. Treated effluent not being used for recycled water is percolated to the groundwater basin.

Hollister IWTP

The City of Hollister also operates an Industrial Wastewater Treatment Plan (IWTP) which was completed in 1971. The IWTP was originally designed to treat high-strength wastewater from local industrial facilities. The IWTP receives industrial wastewater during the summer canning season (mid-June thru mid-October) and storm water during the winter/spring non-canning season. Treated wastewater from the IWTP is disposed of by percolation/evaporation, with percolation recharging the underlying aquifer. Over the last 30 years the number of industrial dischargers and corresponding wastewater flows to the IWTP have subsided. Currently there is only one (1) cannery discharging industrial wastewater to the IWTP. This has left the IWTP with additional available treatment and disposal capacity, which the City intends to use to treat and percolate storm water runoff diverted from the storm water collection system.

Alternative compliance for Post-Construction Storm Water Management Requirements (PCR) is currently under review by the Central Coast Regional Water Quality Control Board (RWQCB). This alternative compliance, proposed in the City's Watershed Plan, would allow Requirement 3 of the PCRs (Runoff Retention) to be met offsite for applicable developments that drain to the San Benito River. Offsite compliance would be met through diversion of runoff to the City's IWTP for infiltration. The 95th percentile runoff volumes from existing development and buildout conditions were calculated based on equations included in the Central Coast PCRs.

As part of the preliminary design for the IWTP Pond Upgrades, a water balance analysis was performed for the site. This water balance looks at inflow, outflow, and accumulation during an average year and a wet year for the recommended project. Inflows and outflows were analyzed monthly to determine if accumulation would occur at the site. Additionally, total inflow and outflow over the course of a year was evaluated to determine if the facility has adequate disposal capacity. Based on the analysis, the monthly water balance shows that for wet year and maximum wastewater flow to the IWTP, no ponding or accumulation should occur. This assumes that the percolation ponds are operated and maintained. The monthly water balance indicated the most limiting scenario for disposal occurs during the summer where the discharger sends the maximum allowed wastewater flow to the IWTP for the full canning season (3.2 MGD for 107 consecutive days). Table 5-1 summarizes the annual water balance and shows that the facility has the capacity to infiltrate industrial wastewater and storm water year-round with an acceptable factor of safety for the percolation ponds.

Table 2-2 IWTP Water Balance Summary

Condition	Total Inflow (MG)	Total Outflow Available (MG)	Factor of Safety
Average Year[1]	492.6	1,108.3	2.25
Wet Year[2]	627.2	1,108.3	1.8

1. Average year based on the 95th percentile storm and peak wastewater flow during the canning season (3.2 MGD for 107 days)
2. Wet year based on the maximum annual rainfall record of 26.26" in 1983 with peak wastewater flow during the canning season (3.2 MGD for 107 days)

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As part of this analysis, it was determined that the worst-case storm event for this site is multiple back-to-back storms during the wet season (based on historical record). If this worst-case storm event were to occur again, the site would have adequate storage capacity to retain the storm with an additional 100 AF of storage capacity available. Ponding would occur from the accumulation of stormwater during this event, and it is estimated that it would take approximately 1-2 months to percolate the water from the storm (assuming the percolation ponds are properly maintained).

SSCWD Ridgemark Wastewater Treatment Plant

Sunnyslope County Water District operated two wastewater treatment plants serving residential and commercial businesses in the Ridgemark area. In 2013, the two plants were replaced with a 0.35 MGD wastewater treatment plant. This facility produces undisinfected secondary effluent, which is disposed of through evaporation and/or percolation.

Cielo Vista Estates Wastewater Treatment Plant

Cielo Vista Estates consists of approximately 70 acres of residential development with approximately 76 residences. The wastewater treatment facility has a capacity to treat up to 30,000 gallons per day (GPD). The effluent is disposed of via leach fields.

San Juan Bautista Wastewater Treatment Plant

The City of San Juan Bautista provides sewer services to most properties within the City. Residents in the unincorporated area of the City are on septic systems. The City's treatment plant is a 0.2 MGD tertiary treatment facility that includes a mechanical screen and influent pump station, sequencing batch reactor (SBR) pond, flow equalization tanks, a denitrification pond, pressure sand filters, and ultraviolet (UV) disinfection. Sludge is stored in lagoons and filtered effluent sent through UV disinfection is discharged into a drainage channel that is tributary to San Juan Creek. While there is some buffering capacity available in the SBR, the available volume is not enough to equalize the excess daily flow during peak flow conditions. For long term compliance, the tertiary treatment train needs to be expanded to accommodate higher flow rates.

Groundwater

Groundwater is a source of supply for the SWRP area, especially during time of drought. Figure 2-12 shows the North San Benito Subbasin of the Gilroy-Hollister Groundwater Basin, which encompasses the SWRP area and is a shared water resource for urban suppliers, agriculture, rural well owners, and environmental beneficial uses. Both Hollister and SSCWD pump directly from wells located within their jurisdiction.

SBCWD is the Groundwater Sustainability Authority (GSA) for the Bolsa, Hollister, San Juan Bautista, and Tres Pinos groundwater basins. Currently, a Groundwater Sustainability Plan (GSP) is being prepared for the North San Benito subbasin in accordance with the Sustainable Groundwater Management Act (SGMA). This GSP evaluates sustainability in terms of criteria including groundwater levels, storage, land subsidence, groundwater quality, and interconnected surface water and groundwater dependent ecosystems. It presents the hydrogeologic setting, groundwater conditions, and water budget and establishes sustainability criteria, monitoring, and management actions for continued sustainable management.

Groundwater recharge occurs through natural and artificial methods, including infiltration, direct runoff, CVP water and other surface water percolation, and percolation from treated wastewater effluent. The San Benito River contributes some groundwater base flow upstream of its confluence with the Pajaro River, while the Hernandez Reservoir, located upstream of the basin on the San Benito River, is operated to enhance flow in the

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river and recharge the groundwater basin. SBCWD also uses off stream basins to recharge local groundwater with imported water; this provides water quantity and quality benefits.

The quality of groundwater in the Gilroy-Hollister groundwater basin is highly mineralized and of marginal quality for drinking water and agriculture. SBCWD imports relatively high-quality water from the CVP for agricultural use, municipal use, and recharge.

Flood Management

FEMA National Flood Hazard Layer

The floodplain within the SWRP area, as mapped by the Federal Emergency Management Authority (FEMA), has the following flood hazard zones:

- Zone A: Areas subject to inundation by the 1-percent-annual-chance (100-year) flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.
- Zone AE: Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. Base Flood Elevations (BFEs) are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.
- Zone AO: Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply.
- Zone X Shaded: Moderate flood hazard areas, subject to inundation by the 0.2-percent-annual-chance (500-year) flood event. Mandatory flood insurance purchase requirements and floodplain management standards do not apply.
- Zone X Un-Shaded: Low risk flood hazard area, above the elevation of the 0.2-percent-annual-chance (500-year) flood event. Mandatory flood insurance purchase requirements and floodplain managements standards do not apply.

Figure 2-13 illustrates potential flood hazard extents within the SWRP area.

Pajaro River Watershed Study

The Pajaro River Watershed Flood Prevention Authority (PRWFPA) was established in July 2000 by State Assembly Bill 807 in order to "identify, evaluate, fund, and implement flood prevention and control strategies in the Pajaro River Watershed, on an intergovernmental basis." This watershed covers areas of four counties and four water districts. The Board is comprised of one representative from each of the eight following agencies:

- County of Monterey
- County of San Benito
- County of Santa Clara
- County of Santa Cruz
- Monterey County Water Resources Agency
- San Benito County Water District
- Santa Clara Valley Water District
- Santa Cruz County Flood Control and Water Conservation District, Zone 7

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The Pajaro River Watershed Study (PRWS) has been the primary body of work through which the PRWFPA has started to accomplish its mission. The PRWFPA has been involved in all aspects of the study including providing direction for the study, reviewing results of the work completed for the PRWS, making critical decisions, and adopting the selected project recommended and developed through the PRWS.

Phase 1 of the PRWS consisted of modeling both the hydrologic and sediment regimes of the watershed. The results of Phase 1 provided a better understanding of the characteristics of the watershed and changes over time that affect flooding frequency and flooding potential in the downstream reaches of the Pajaro River.

Phase 2 identified project alternatives that would provide flood protection for the Pajaro River from Chittenden to Monterey Bay from the 100-year flood flows identified in Phase 1. The Phase 2 Study projects were developed to coordinated with a concurrent Army Corps of Engineers (Corps) Lower Pajaro River flood protection project.

After the conclusion of Phase 2, the Corps identified a 100-year flood protection project for the Lower Pajaro River without any upstream projects. The Corps 100-year flood protection project assumes that the upstream watershed conditions are maintained. The Phase 1 model results highlighted the natural flood attenuation benefits of Soap Lake and the critical importance of maintaining those benefits as part of any Pajaro River flood protection solution.

The focus of the PRWFPA shifted to ensure that the flows passing through the Lower Pajaro River Project in Santa Cruz and Monterey Counties would not increase above the currently predicted levels. The most direct way to achieve this goal was to preserve Soap Lake and its attenuation capabilities.

Phases 3 and 4 define and document the preferred method to maintain the Soap Lake attenuation and storage capacity through the Soap Lake Floodplain Preservation Project. In Phase 3, Soap Lake was hydraulically modeled, and the floodplain boundaries were defined. The impacts of flooding and land use preservation were examined in compliance with the California Environmental Quality Act (CEQA) and the cost of the Project estimated.

All phases of the PRWS were completed by 2005. The Soap Lake Floodplain Preservation Project has been listed on the IRWMP's 2019 Project Priority List and is included in this SWRP.

Hollister Municipal Code

For the City of Hollister, most of the land area within the San Benito River flood zone is currently used for agriculture, industrial, or is vacant land. A few developed parcels adjacent to the San Benito River are susceptible to 100-year flooding, including the California Aggregate and Mining facility and the City's IWTP. The Santa Ana Creek flood zone extends over approximately 140 acres of commercial and industrial development southeast of the Airport. In addition, the floodplain covers approximately 550 acres of agricultural land on the west side of Santa Ana Creek. The 500-year flood zone covers isolated low-lying areas of the City, including the southern portion of the downtown core. Areas potentially affected by the 500-year flood are mostly residential and commercial uses.

The Hollister Municipal Code Chapter 15.20 "Flood Damage Prevention Regulation" specifies standards of construction within flood hazard areas and outlines the duties and responsibilities of the City's floodplain administrator. Code Section 17.14.040 "Flood Hazard Overlay Zone" specifies that residential development within the floodplain is designed to avoid 100-year flood zones, and that industrial development within the

floodplain shall comply with the City's floodplain ordinance. The FEMA National Flood Insurance Program (NFIP) requires that the City's floodplain management regulations meet or exceed the minimum requirements as includes in Chapter 44 of the Code of Federal Regulations.

San Juan Bautista Municipal Code

Northern San Benito County tends to encounter flooding problems. In San Juan Bautista, damage reported as a result of these folds largely consists of agricultural losses with planting, field working delays, and crop damages. As shown on Figure 2-13, the 100-year floodplain on San Juan Hollister Road follows San Juan Creek and the San Andreas fault towards Highway 101.

Chapter 12-1, "Flood Hazard Prevention", of the San Juan Bautista's Municipal Code specifies general provisions, administration, provisions for flood hazard reduction, and appeals and variances. The code specifies that all development or land disturbance shall be set back a minimum of fifty (50) feet from the annual high-water mark of San Juan Creek and twenty-five feet (25) from the annual high water mark of the San Juan Tributary.

Natural Watershed Processes

Nearly 80% of the unincorporated land in San Benito County is in some form of open space; however, natural watershed processes have been disrupted mainly in the SWRP area due to urbanization in and around the City of Hollister. Figure 2-14 provides a map of the national hydrography data within the SWRP boundary. As discussed previously, the majority of land use in the City is residential and commercial development. The increase in impervious areas results in less infiltration and groundwater recharge and more overland flow.

Best Management Practices

Best Management Practices (BMPs) are scheduling of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants. Increased runoff from impervious surfaces and urbanization can cause downstream erosion with increases of fine sediment accumulation in creeks and rivers. Best management practices and low-impact developments help to maintain the natural infiltration and runoff rates. The City of Hollister maintains several BMPs which include dry basins, wet basin, infiltration basins, treatment vaults, bed filters, settling basins, biofilters, infiltration features (rock lined channel), porous pavement, and sediment traps.

Post-Construction Requirements

Post-construction requirements (PCR) are needed for areas undergoing new development or redevelopment since runoff from these types of areas can significantly affect receiving waterbodies. BMPs in these developments can help minimize pollutant in post-construction storm water discharge. The PCRs through the Central Coast Regional Water Quality Control Board (RWQCB) categorize the Central Coast Region into Watershed Management Zones, to define geographic areas where specific performance requirements apply. The City of Hollister is within Watershed Management Zones 1 and 4. Based on these zones, the following requirements may apply to Regulated Projects, dependent on project size and thresholds for impervious surface.

- Performance Requirement 1: Site Design
- Performance Requirement 2: Water Quality Treatment
- Performance Requirement 3: Runoff Retention
- Performance Requirement 4: Peak Management

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Alternative compliance for PCR is currently under review by the RWQCB for the City of Hollister. This alternative compliance, proposed in the City's Watershed Plan, would allow Requirement 3 of the PCRs to be met offsite for applicable developments that drain to the San Benito River. Offsite compliance would be met through diversion of runoff to the City's IWTP for infiltration.

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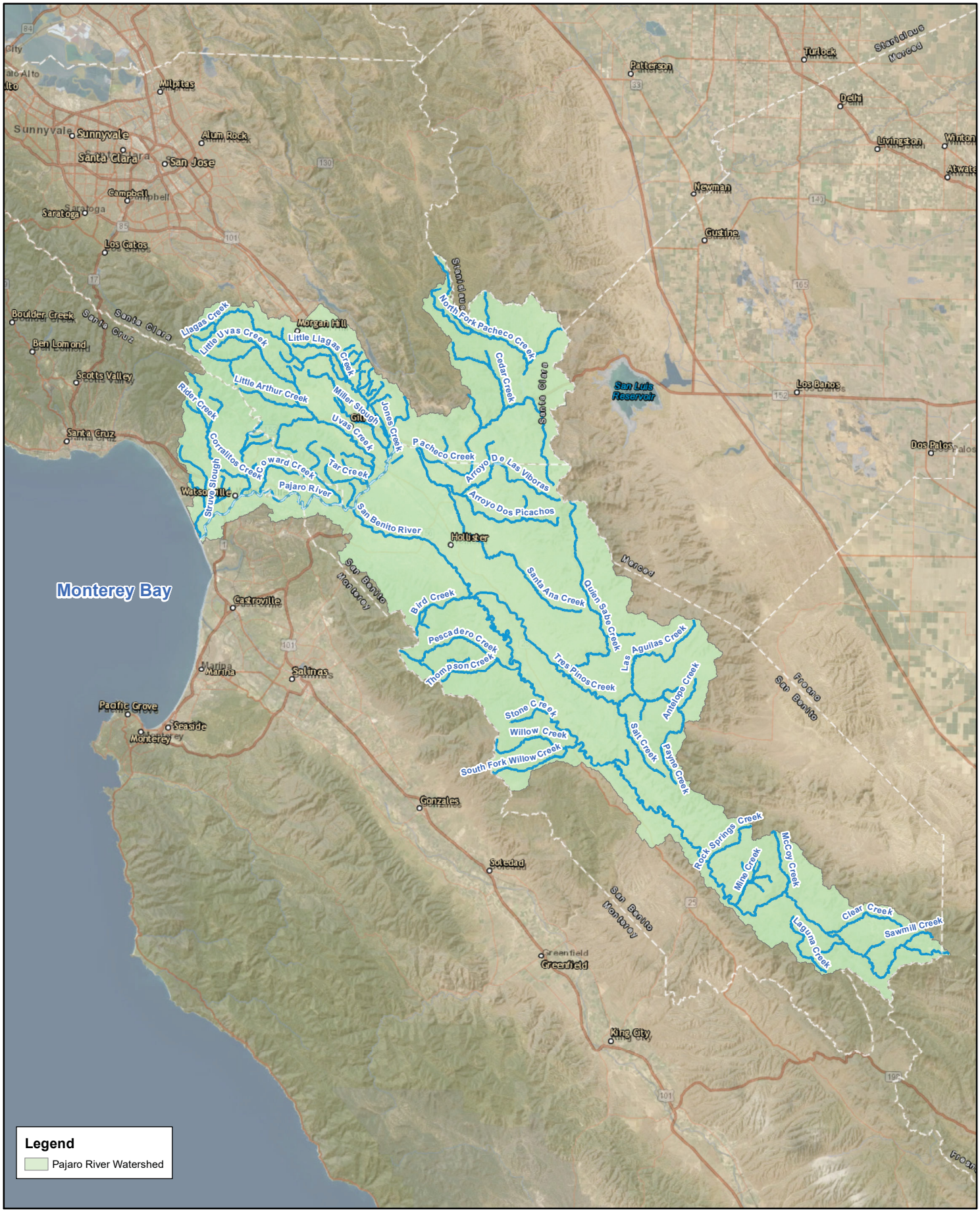

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1 inch = 60,000 feet

GREATER HOLLISTER AREA STORM WATER RESOURCE PLAN

FIGURE 2-1: PAJARO RIVER WATERSHED

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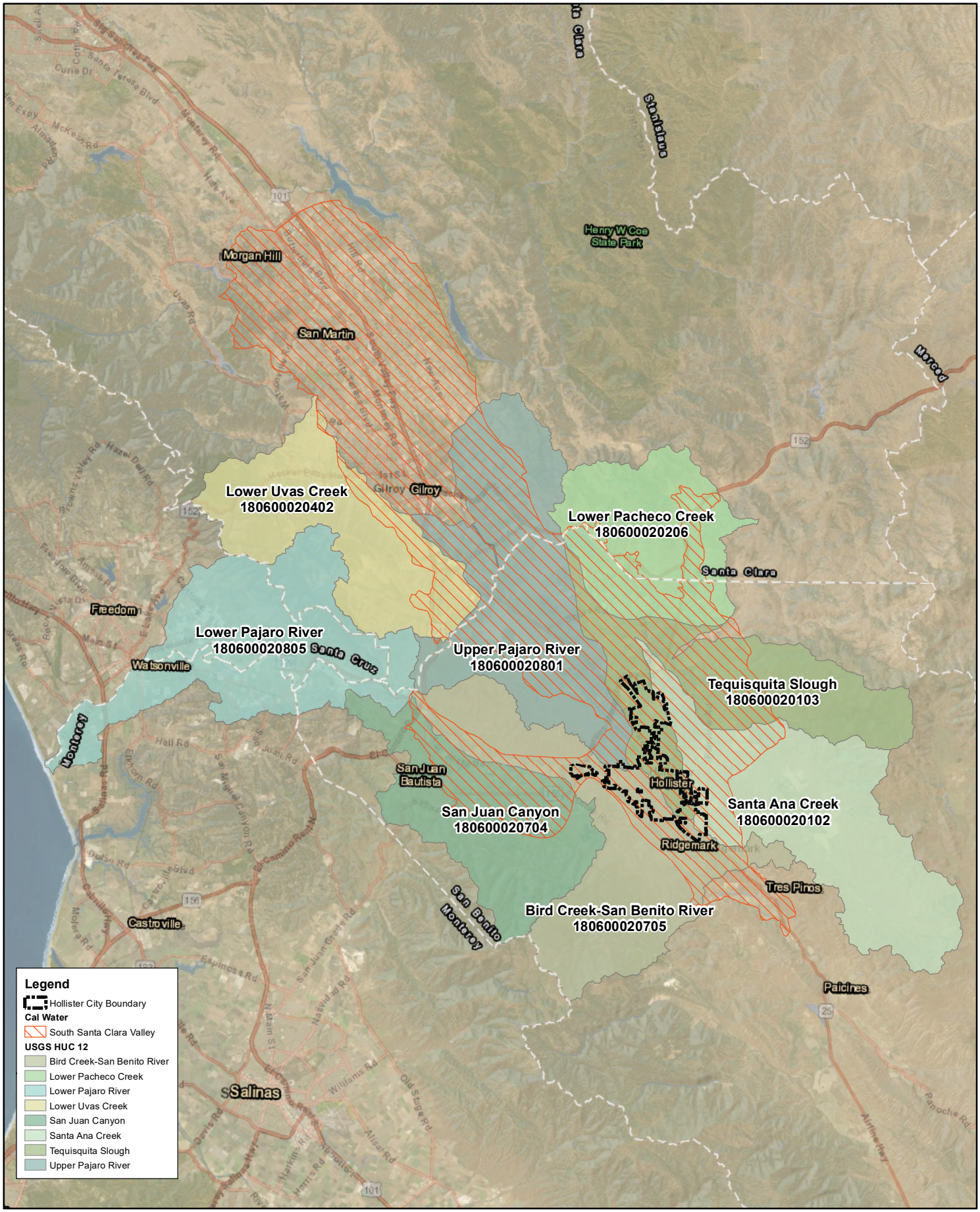

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1 inch = 25,000 feet

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FIGURE 2-2: CALWATER AND USGS HYDROLOGIC UNIT DESIGNATIONS

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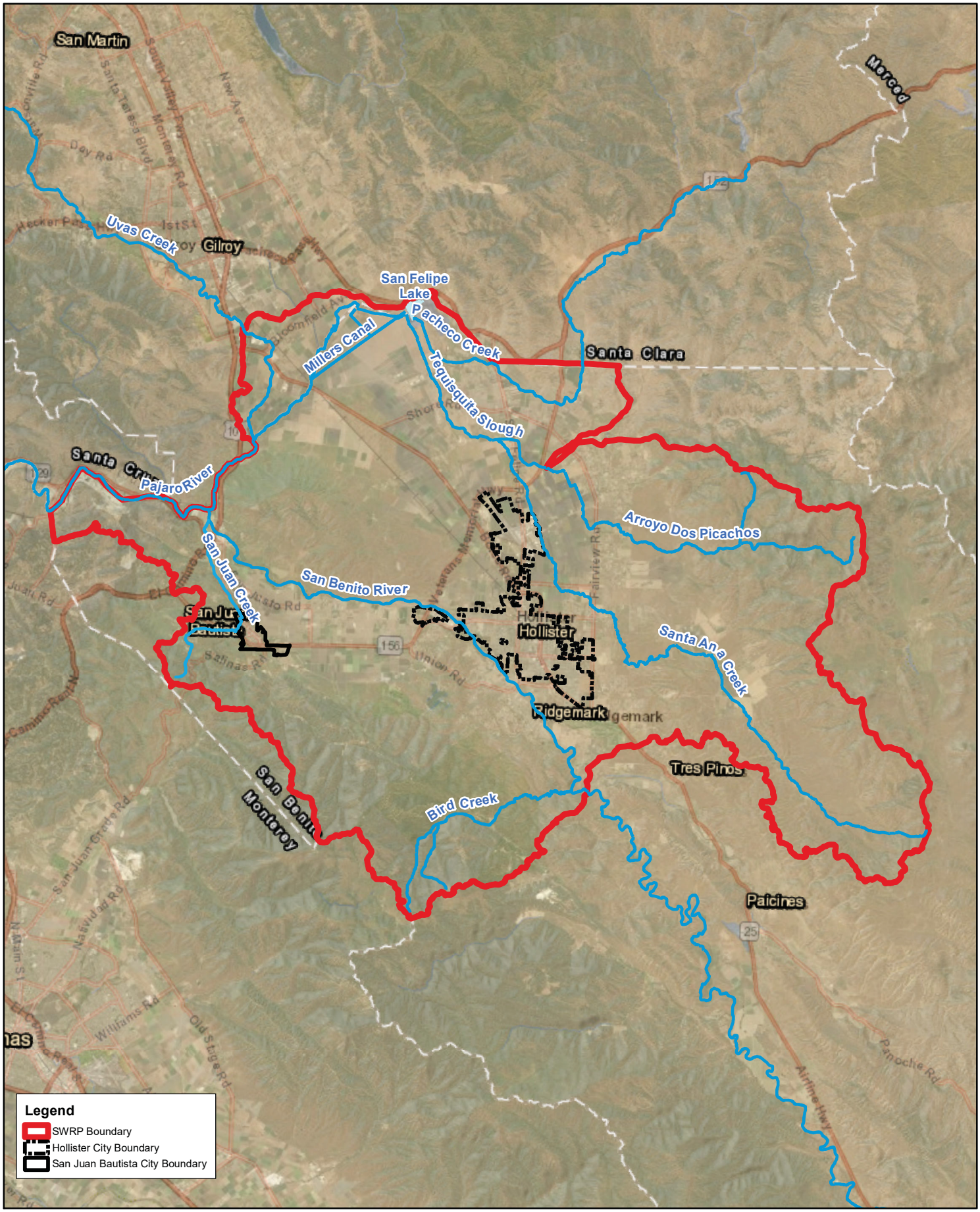

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1 inch = 19,000 feet

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FIGURE 2-3: SWRP BOUNDARY

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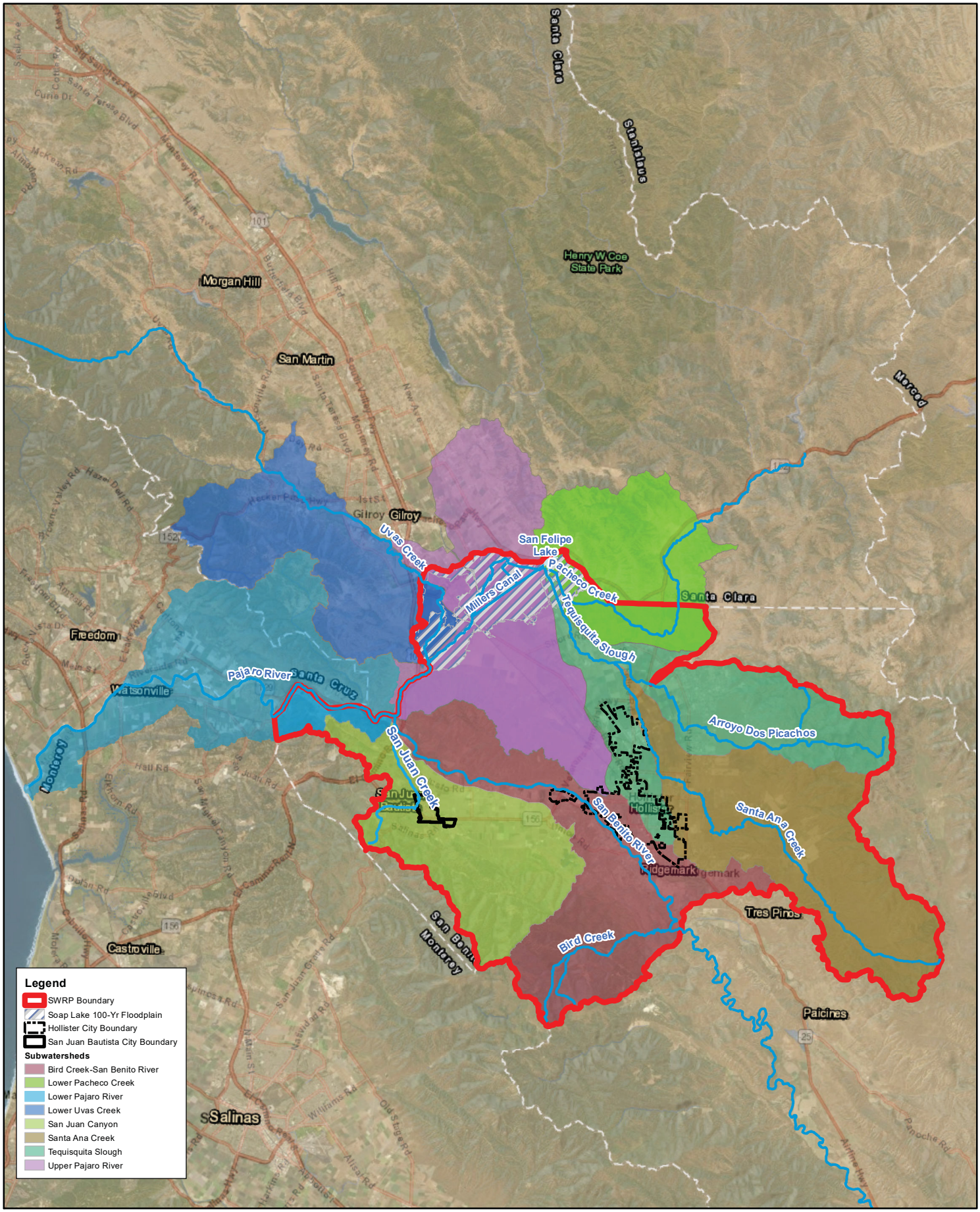

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1 inch = 25,000 feet

GREATER HOLLISTER AREA STORM WATER RESOURCE PLAN

FIGURE 2-4: SWRP SUBWATERSHEDS

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1 inch = 25,200 Feet

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FIGURE 2-5: NEIGHBORING SWRP BOUNDARIES

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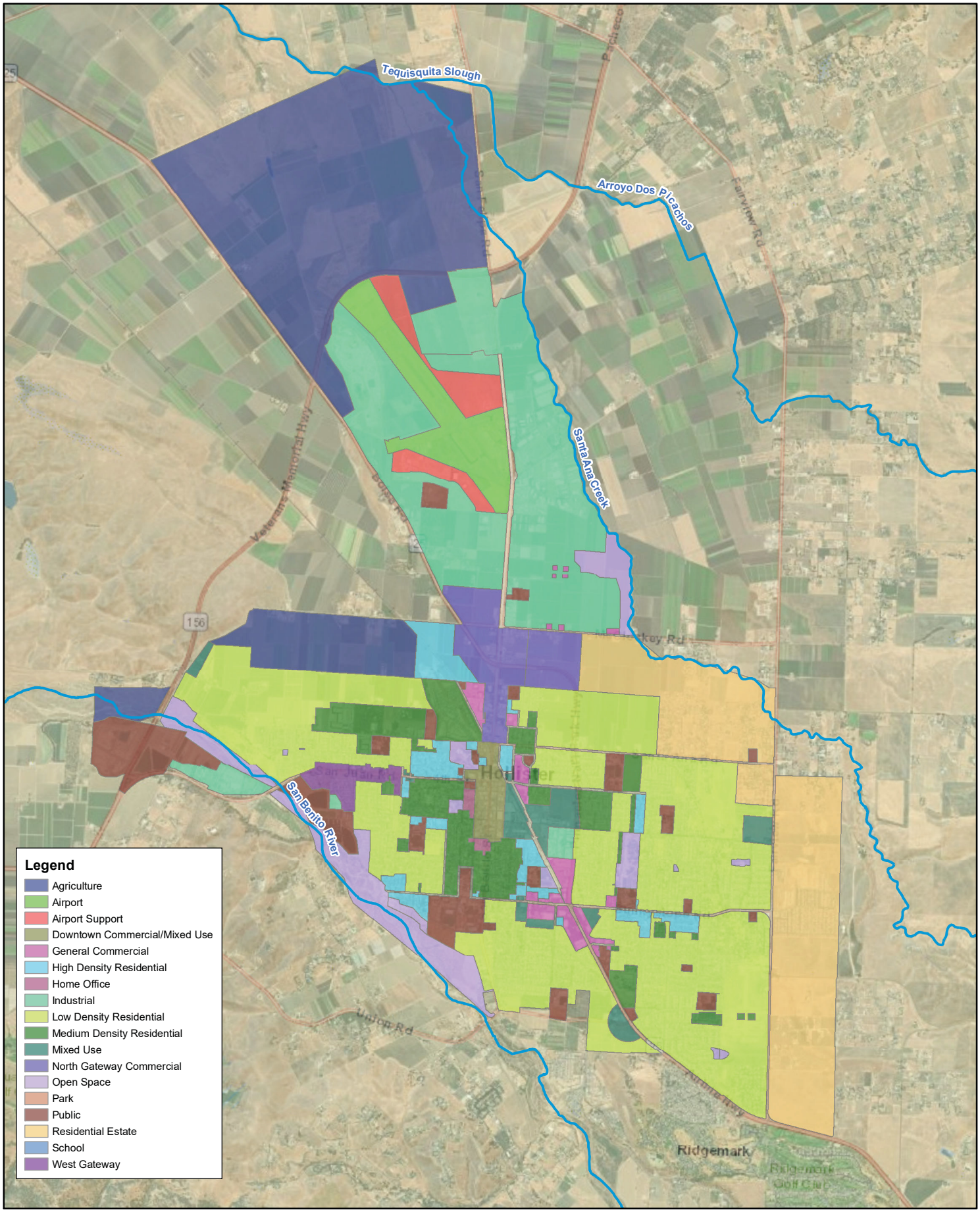

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1 inch = 5,000 feet

GREATER HOLLISTER AREA STORM WATER RESOURCE PLAN

FIGURE 2-6: HOLLISTER LAND USE

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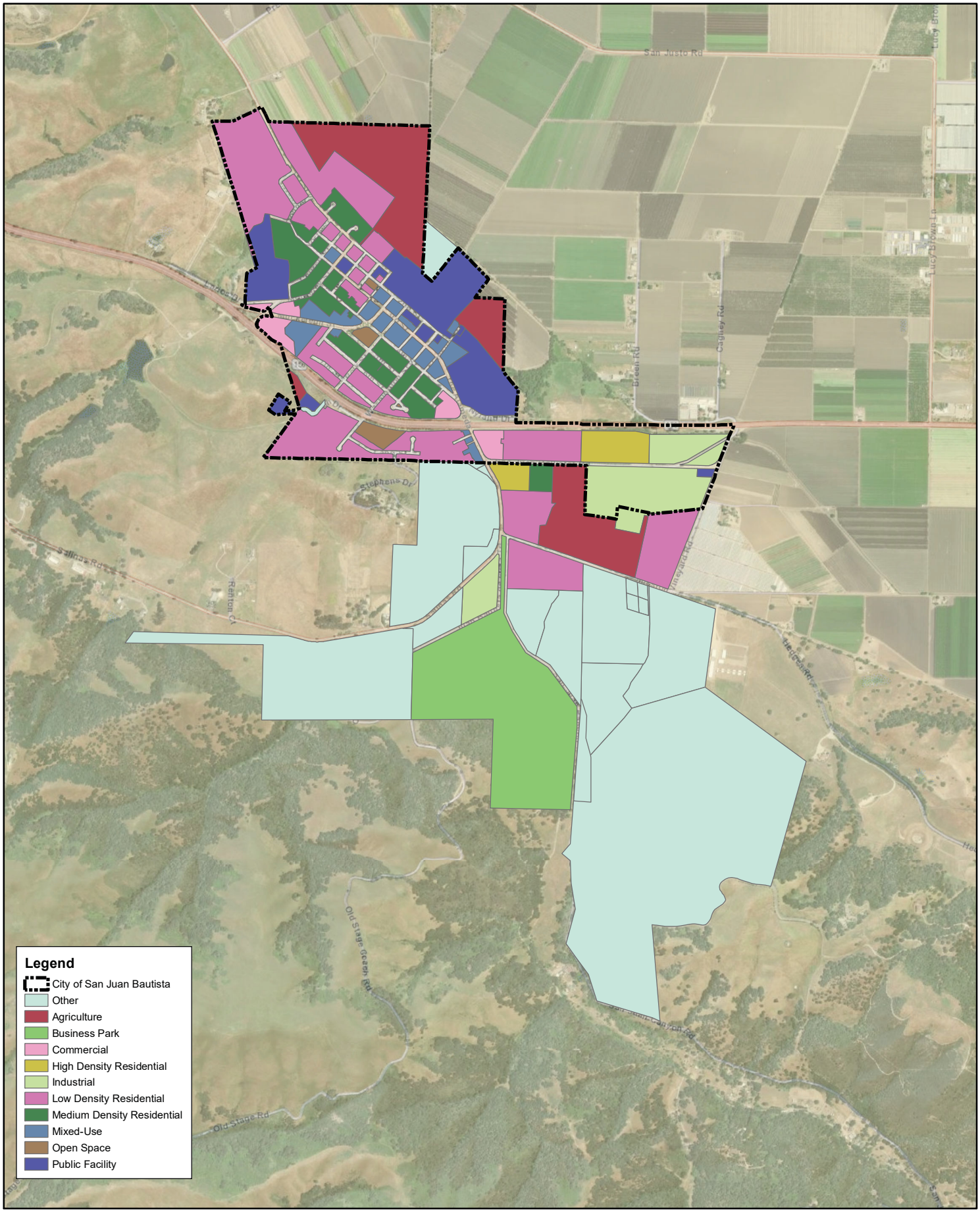

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1 inch = 2,000 feet

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FIGURE 2-7: SAN JUAN BAUTISTA LAND USE

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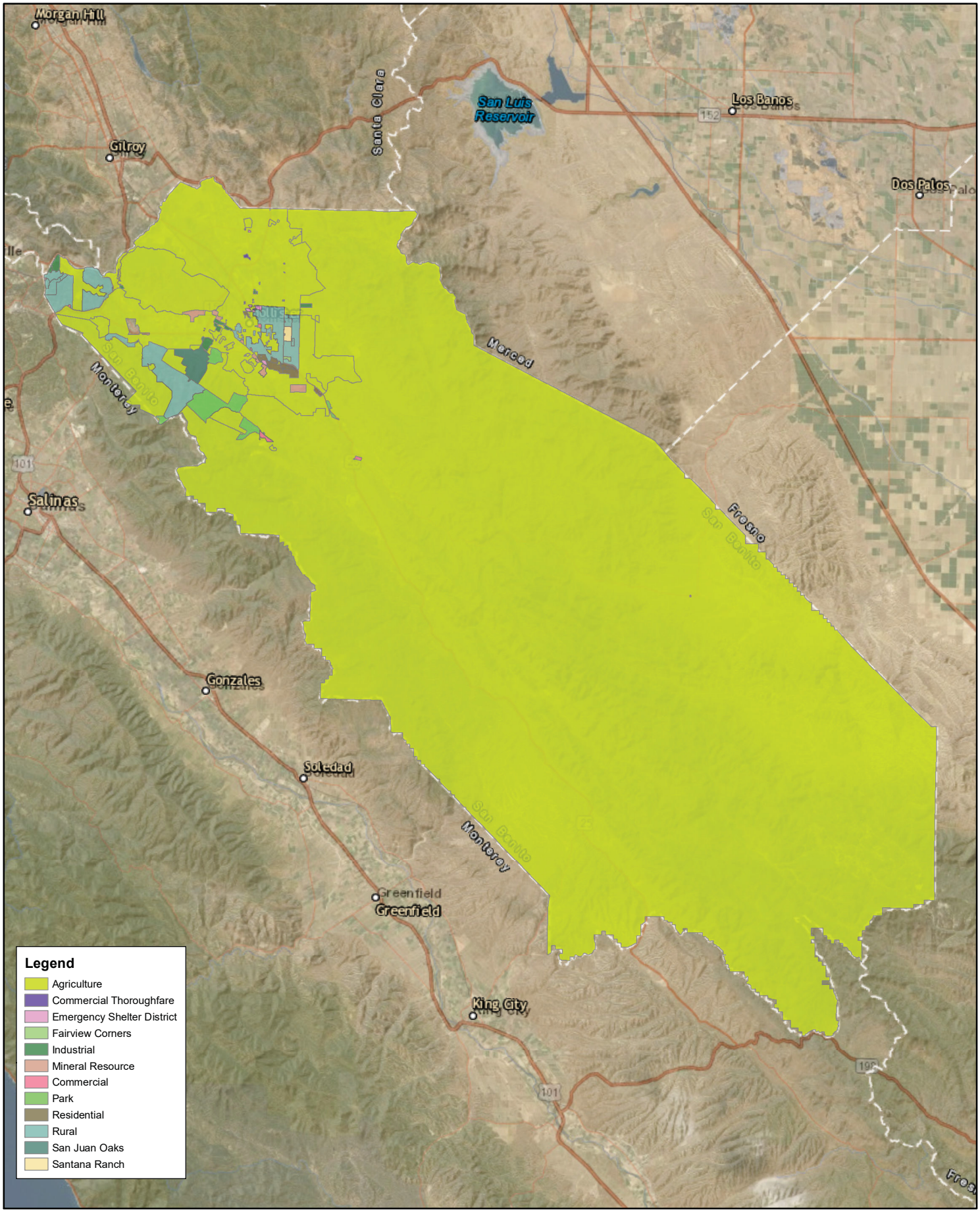

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1 inch = 43,000 feet

GREATER HOLLISTER AREA
STORM WATER RESOURCE PLAN

FIGURE 2-8: SAN BENITO COUNTY ZONING

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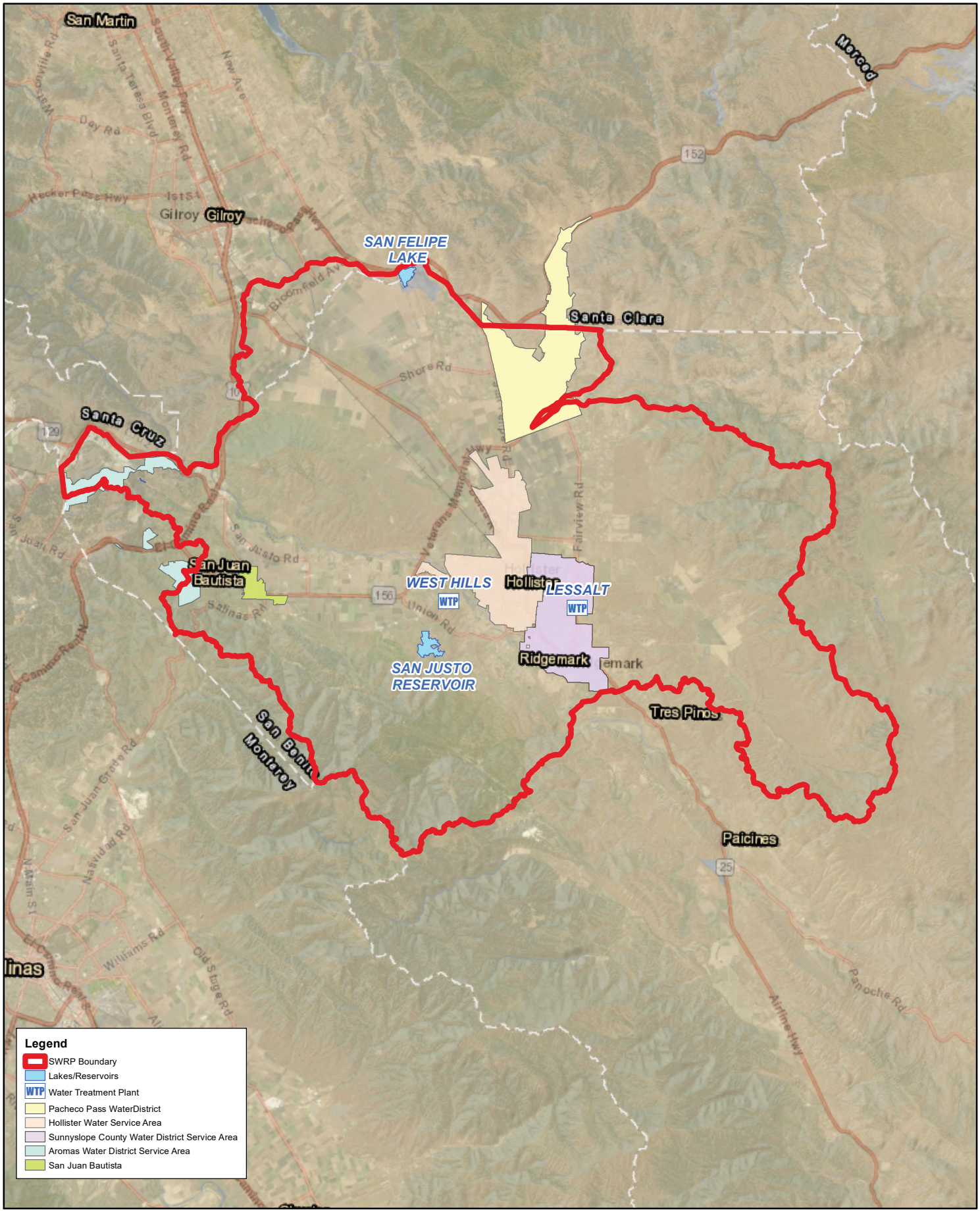

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1 inch = 20,000 feet

GREATER HOLLISTER AREA
STORM WATER RESOURCE PLAN

FIGURE 2-9: WATER SERVICE AREAS

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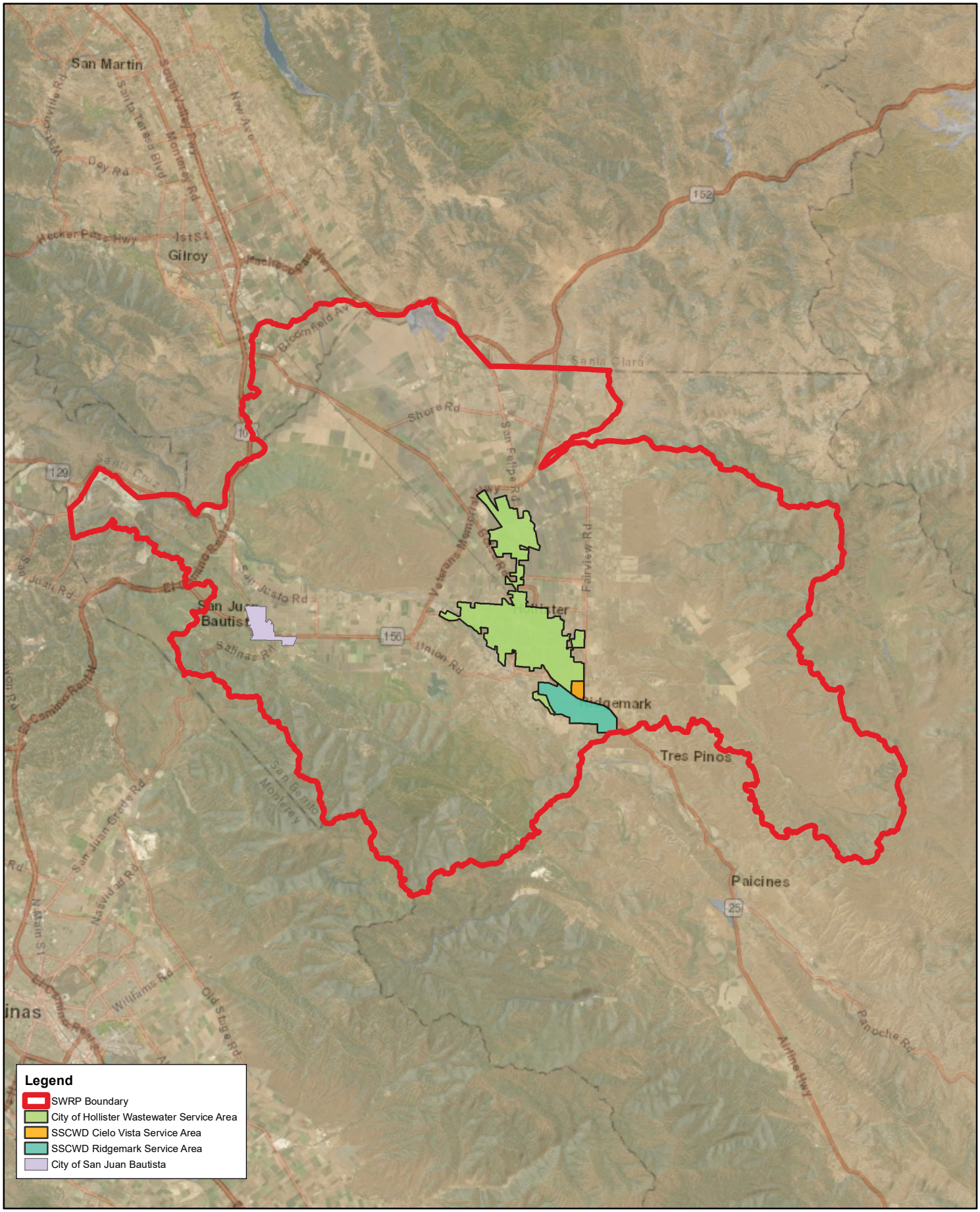

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1 inch = 20,000 feet

GREATER HOLLISTER AREA
STORM WATER RESOURCE PLAN

FIGURE 2-11: WASTEWATER SERVICE AREAS

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1 inch = 23,000 feet

GREATER HOLLISTER AREA STORM WATER RESOURCE PLAN

FIGURE 2-12: NORTH SAN BENITO GROUNDWATER SUBBASIN

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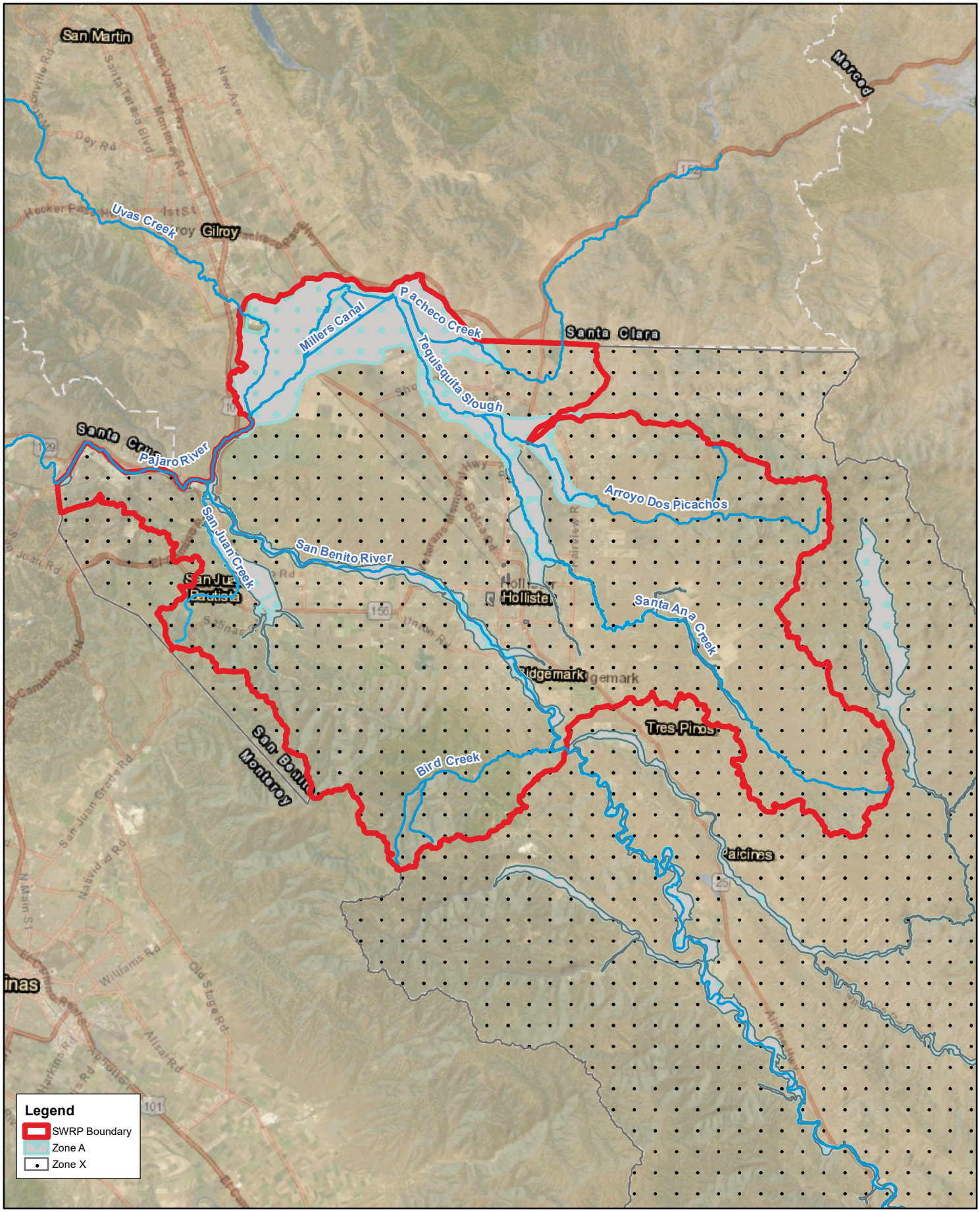

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1 inch = 20,000 feet

GREATER HOLLISTER AREA STORM WATER RESOURCE PLAN

FIGURE 2-13: FEMA FLOOD MAP

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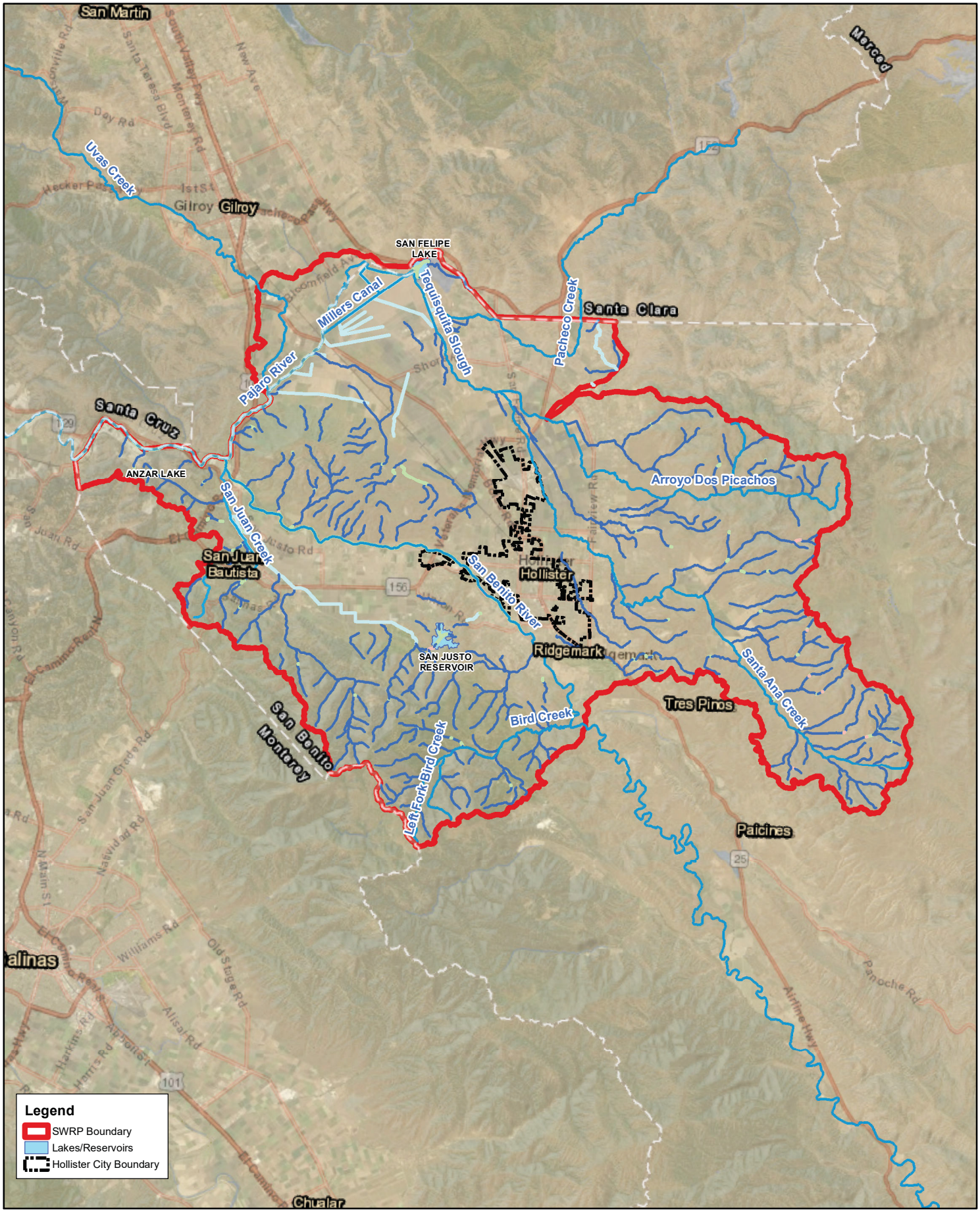

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1 inch = 20,000 feet

GREATER HOLLISTER AREA STORM WATER RESOURCE PLAN

FIGURE 2-14: USGS NATIONAL HYDROGRAPHY DATASET

NOTES:
BASEMAP PROVIDE BY SAN BENITO COUNTY. WALLACE GROUP DID NOT PERFORM BOUNDARY SURVEY SERVICES FOR THIS MAP. NOT A LEGAL DOCUMENT. MAP PRODUCED JUNE 2021.

CHAPTER 3
WATER QUALITY COMPLIANCE

Contributors to Storm Water Pollution

Urban runoff is widely regarded as the nation's leading threat to water quality. Urban development often results in the degradation of water quality due to alteration of the watershed hydrology and the introduction of pollutants. Primary causes of pollutants to surface waters are often associated with land use practices. This SWRP watershed includes residential, commercial, industrial, and agricultural land uses. Urban pollutants are also introduced as a result of development and intensified population growth. Effective storm water management practices are critical in reducing these pollutants to receiving water bodies.

Specifically, significant sources and examples of activities that may generate pollutants are listed below:

- *Agricultural Business:* application of pesticides, irrigation water, and fertilizer; plowing; and poorly managed animal feeding operations
- *Industrial Facilities:* industrial chemical processes; chemical and waste storage; fleet maintenance and vehicle washing; and landscaping
- *Commercial business including food and vehicle service facilities:* vehicle and equipment maintenance; food processing; vehicle washing; landscaping; and chemical and waste storage
- *Residential dwellings:* vehicle washing; home vehicle repair; home painting and construction projects; chemical and waste storage; and landscaping
- *Construction and remodeling projects:* grading; vegetation removal; concrete washout; vehicle and equipment fluids; landscaping; and material and waste storage
- *Municipal sewer system and private sewer laterals:* exfiltration from leaking, cracked and debilitated pipelines; and overflows from blocked pipelines

Regulatory Plans and Permits

This SWRP was written in accordance with existing permits. Applicable plans and permits, such as National Pollutant Discharge Elimination System (NPDES) permits and Total Maximum Daily Load (TMDL) implementation plans, are summarized in the following discussion. Currently, there are no applicable storm water permits for San Benito County.

Section 303(d) of the Clean Water Act (CWA) requires the identification of water bodies that do not meet, or are not expected to meet, water quality standards. Table 3-1 summarizes the water bodies within the SWRP that are noted on this list.

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Table 3-1 303(d) Impaired Water Bodies

Water Body	Pollutant/Stressor	Potential Sources
Millers Canal	Chlorophyll-a	Agriculture, domestic animals/livestock, natural sources
	Toxicity	Source Unknown
	E. Coli	Source Unknown
	Fecal Coliform	Collection system failure, domestic animals/livestock, urban runoff/storm sewers
	Low Dissolved Oxygen	Agriculture, domestic animals/livestock, natural sources
	Temperature	Source Unknown
	Turbidity	Source Unknown
	pH	Source Unknown
Pacheco Creek	Fecal Coliform	Collection system failure, domestic animals/livestock, urban runoff/storm sewers
	Low Dissolved Oxygen	Source Unknown
	Turbidity	Source Unknown
Pajaro River	Boron	Source Unknown
	Chlordane	Source Unknown
	Chloride	Source Unknown
	Chlorpyrifos	Agriculture
	Chromium	Source Unknown
	DDD	Source Unknown
	DDE	Source Unknown
	DDT	Source Unknown
	Diazinon	Agriculture
	Dieldrin	Source Unknown
	E. Coli	Source Unknown
	Fecal Coliform	Collection system failure, domestic animals/livestock, urban runoff/storm sewers
	Low Dissolved Oxygen	Source Unknown
	Nitrate	Agriculture, domestic animals/livestock, natural sources
	PCBs	Source Unknown
	Sedimentation/Siltation	Agriculture, domestic animals/livestock, grazing-related sources, habitat modification, land development, logging road construction/maintenance, urban runoff/storm sewers
	Sodium	Source Unknown
	Turbidity	Source Unknown
	Toxicity	Source Unknown
	pH	Source Unknown

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Water Body	Pollutant/Stressor	Potential Sources
San Benito River	Boron	Source Unknown
	Electrical Conductivity	Agriculture, grazing-related sources, natural sources, other urban runoff, resource extraction, source unknown
	E. Coli	Agriculture, grazing-related sources, natural sources, other urban runoff
	Fecal Coliform	Collection system failure, domestic animals/livestock, urban runoff/storm sewers
	Sedimentation/Siltation	Agriculture, grazing-related sources, harvesting, restoration, residue management, high/road/bridge runoff, hydromodification, road, construction, surface mining, urban runoff/storm sewers
	pH	Source Unknown
San Juan Creek	Fecal Coliform	Collection system failure, domestic animals/livestock, urban runoff/storm sewers
	Low Dissolved Oxygen	Source Unknown
	E. Coli	Source Unknown
	Turbidity	Source Unknown
	Toxicity	Source Unknown
Tequisquita Slough	Fecal Coliform	Collection system failure, domestic animals/livestock, urban runoff/storm sewers
	Low Dissolved Oxygen	Source Unknown
	Turbidity	Source Unknown
	Toxicity	Source Unknown
	Ammonia	Source Unknown
	pH	Source Unknown

National Pollutant Discharge Elimination System (NPDES) Permit

In 1972, the Federal Water Pollution Control Act, which established the National Pollutant Discharge Elimination System (NPDES) program, was adopted. The NPDES program regulates the discharge of wastes from point sources to surface waters. The Federal Water Pollution Control Act was amended in 1977 and became known as the Clean Water Act (CWA). In 1987, the CWA was again amended to add Section 402, which established a framework for regulating discharges from Municipal Separate Storm Sewer Systems (MS4) as a special category of point source under the NPDES Program.

In 1990, the EPA announced regulations for permitting MS4s serving a population of 100,000 people or more. These regulations, known as Phase I regulations, require operators of medium and large MS4s to obtain storm water permits. In 1999, the EPA adopted the NPDES Phase II Storm water regulation, which expanded the NPDES program to cover smaller MS4s. The State of California adopted the EPA's NPDES Phase II Final Rule and the SWRCB Order No. 2003-00005-DWQ, NPDES General Permit No. CAS000004, "Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems General Permit (referred to as the MS4 General Permit) on April 30, 2003.

The City of Hollister falls under the category of a small MS4. A small MS4 is defined by the RWQCB as a system of conveyance (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) designed or used for collecting or conveying storm water, which is not a

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combined sewer, and which is not part of a Publicly Owned Treatment Works (POTW) as defined in Title 40 of the Code of Federal Regulations (CFR) Section 122.2. The City's MS4 boundary is depicted on Figure 3-1.

The City of San Juan Bautista operates under NPDES No. CA0047902. The City has been in violation of the average monthly discharge limits for chloride, sodium, and total dissolved solids (TDS) for several years. These high effluent levels are due to agricultural processes and a large number of City residents using residential water softeners to treat the naturally hard water from the City wells. On October 13, 2020 the San Juan Bautista City Council voted on a compliance project to meet the EPA's deadline. This compliance project will send wastewater to the City of Hollister RDWTP and import water from the West Hills WTP.

TMDL Wasteload Attainment Allocation Plan (WAAP)

Through the MS4 permit, the City of Hollister is required to protect water quality of its waterways. The City is currently required to maintain TMDLs for Fecal Coliform to the San Benito River and Santa Ana Creek and Sediment to the San Benito River. TMDLs require the City to develop and implement Waste Allocation Attainment Plans (WAAP) which focus the City's Storm Water Program to reduce these pollutants. Table 3-2 summarizes the wasteload allocations for each parameter.

Table 3-2 TMDLs for San Benito River and Santa Ana Creek

Receiving Water	Parameter	Wasteload Allocation/Threshold
San Benito River Santa Ana Creek	E. Coli	Geomean of 126 MPN[1]/100 mL nor shall more than 10% of total samples during any 30-day period exceed 410 MPN/100 mL
San Benito River Santa Ana Creek	Fecal Coliform (TMDL)	Geomean of 200 MPN/100 mL (5 samples min.); or not more than 10% of samples collected within 30 days shall exceed 400 MPN/ 100 mL
San Benito River	Sediment	The Central Coast Water Board has determined that compliance with Phase II MS4 permit requirements tailored to focus on reduction of sediment discharges to the affected waterbodies is sufficient to achieve the wasteload allocations

[1]MPN: Most Probable Number

Program Effectiveness Assessment and Improvement Plan (PEAIP)

The City of Hollister is currently working on a 5-year term update to its Program Effectiveness Assessment and Improvement Plan (PEAIP). This PEAIP is a reiterative improvement tool for municipal storm water programs. It provides focus and improvement through effectiveness assessments (EAs) and reiterative follow-up implementation actions. The end goals of the PEAIP are to ensure program effectiveness by continuing to improve municipal efforts towards reducing pollutant levels in storm water runoff, which end up in receiving waters. This report is in compliance with the requirements of the NPDES Phase II Small MS4 Permit.

The PEAIP is focused on the impact that the storm water program is having rather than the strict implementation of the program. By focusing the EA on this manner, the City will increase their ability to understand if its storm water program is achieving the intended outcomes and can identify necessary modifications to the program to make it more effective.

The California Storm Water Quality Association (CASQA) utilizes a series of six categories of outcomes to establish a logical and consistent organizational scheme for assessing and relating individual outcomes. The outcome levels represent a general progression of conditions that are assumed to be related in a sequence of causal relationships, as described in the following:

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- **Outcome Level 6 (Receiving Water Conditions):** Level 6 Outcomes describe receiving water conditions. They can apply either to existing conditions or to improvements that will be sought over time through program implementation.
- **Outcome Level 5 (MS4 Contributions):** Level 5 Outcomes may be measured within the MS4 or as discharges from it. Evaluation typically focuses on pollutant concentrations and/or loads. Level 5 Outcomes provide a direct linkage between upstream sources and receiving waters and are a critical expression of program success.
- **Outcome Level 4 (Source Contributions):** Level 4 Outcomes measure reductions in the discharge of pollutants from sources.
- **Outcome Level 3 (Target Audience Actions):** Level 3 Outcomes address the actions of target audiences and whether changes are occurring over time. The major categories of target audience actions are pollutant-generating activities (PGAs), best management practices (BMPs), and supporting behaviors.
- **Outcome Level 2 (Barriers and Bridges to Action):** Level 2 Outcomes provide a means of gauging whether activities are producing changes in the awareness, knowledge, or attitudes of target audiences. Level 2 Outcomes are often used to gauge progress in, or to refine approaches for, achieving Level 3 Outcomes.
- **Outcome Level 1 (Storm Water Program Activities:** Level 1 Outcomes, which are often defined by specific storm water permit requirements, address a variety of storm water program activities. This outcome level measure the implementation of the program, not the impact that the storm water program is having.

Table 3-3 summarizes the outcome levels that are presented in the PEAIP.

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Table 3-3 PEAIP Outcome Levels

SOURCES AND IMPACTS			TARGET AUDIENCES		IMPLEMENTATION
LEVEL 6	**LEVEL 5**	**LEVEL 4**	**LEVEL 3**	**LEVEL 2**	**LEVEL 1**
RECEIVING WATER CONDITIONS	**URBAN RUNOFF AND MS4 CONTRIBUTION**	**SOURCE CONTRIBUTION**	**TARGET AUDIENCE ACTIONS**	**BARRIERS & BRIDGES**	**PROGRAM ACTIVITIES**
Pollutants of Concern (POCs)	*Is Urban Runoff A Significant Source of The High Priority POCs?*	*Urban Source*	*Target Audiences*	*Barriers & Bridges to Action*	*Priority BMPs*
Pathogens (Indicator Bacteria)	Yes	• Industrial & Commercial: Food processing facilities • Restaurants-grease bins (Food Grease & Oil), Trash Bins/Enclosures, power washing • Pet & Animal Wastes; Dog Parks • Urban/Residential Point Sources • Failing Septic Systems • SSOs	• Commercial/Industrial Business/Property Owners • Pet Owners, Veterinarians, Dog Parks, Kennels, and similar • Residential Homeowners/Renters, Landscapers • City Staff	• Education, Policies, Costs	• Conduct TMDL Monitoring • Conduct IDDE Inspections • Conduct surveys of Target Audiences to gauge understanding • Prepare and distribute Focused Education materials • Training- Municipal operations & Illicit Discharge detection
Sediment	Yes	• Construction Sites • Road Maintenance • Unmaintained/Aging Stormwater collection system	• Public-Residential Property Owners • Construction Site Owner/Operators/Contractors • Municipal Staff • School Districts	• Staff and Public Education, Policies, Costs • Staffing levels • Creation of a Consolidated Erosion & Sediment Control Ordinance	• Construction design requirements adherence to Central Coast Post Construction Requirements • Post Construction Requirements Stormwater Control Measures conduct inspections after 2 years • Municipal Conduct Site Inspections & Enforcement • Municipal Staff-attend training for erosion/sedimentation control BMPs; Attend Post Construction SCM installation sign off and inspection training

Waste Discharge Permit

The City of Hollister owns and operates the Industrial Wastewater Treatment Plant (IWTP) that provides treatment for wastewater from one industrial facility within the City and captures and infiltrates storm water runoff from a portion of the City. The IWTP operates under Waste Discharge Requirements (WDR) Order No. 00-020, issued by the RWQCB. The facility is permitted for an average flow of 3.5 million gallons per day (MGD) wastewater during the canning season and 1.72 MGD wastewater and storm water during the non-canning season (where average flow is equal to daily influent flow averaged over each month).

Salt and Nutrient Management Plan

The SWRCB requires a completion of a Salt and Nutrient Management Plan (SNMP) for all groundwater basins in California to identify and manage sources of salts and nutrients to ensure that groundwater is safe for drinking and other beneficial uses. Todd Groundwater prepared a SNMP in 2014 for San Benito County Water District, of which the City of Hollister was part of the study area.

Groundwater basins were assessed based on available assimilative capacity. This is the difference between average salt and nutrient concentrations in the basin and the respective basin plan objectives. Total Dissolved Solids (TDS) and nitrates were selected as the most appropriate indicators of salts and nutrients. A TDS benchmark objective of 1,200 milligrams per liter (mg/L) was used in subbasins without a Basin Plan. According to the SNMP, each subbasin in the study area has available assimilative capacity for both TDS and nitrate.

Spatially Based Storm Water Volume and Pollutant Loading Estimation System

Per the MS4 Permit requirements and further through an executive order from the Water Board (13267 Letter), the City of Hollister was required to use a spatially based storm water volume and pollutant loading estimation system to determine urban runoff and MS4 contribution priorities and as a starting point for focusing the City's storm water program on a few prioritized pollutants and high priority source areas. Second Nature, a local consultant, developed the Tool to Evaluate Load Reduction (TELR) Model. The City uses the TELR Model rather than water quality monitoring since monitoring can be costly, is sensitive to climate conditions (drought), difficult to maintain consistent and robust dataset, and would need a large amount of date over time to better understand program improvements. The TELR approach quantifies pollutant loading on an urban (MS4) catchment basis and ranks all MS4 catchments by pollutant loading rates to the receiving waters.

Two primary water quality parameters are used in the model: volume and sediment. Runoff volume varies by land use density and distribution of impervious surface and is a large indicator of sediment. If there is little to no volume of runoff, then there will be no pollutant loading in the receiving water. Sediment can be observed as a standalone pollutant as well as a proxy for other pollutants. Various bacteria, metals, and nutrients can attach and be transported with fine sediment particulates to local receiving waters.

Table 3-4 summarizes the current pollutant loads based on 2020 annual reporting input into the software. Figures 3-2 and 3-3 show the catchment drainage areas in the City with the highest opportunity to reduce particulates and volume per the Second Nature software.

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Table 3-4 City of Hollister Pollutant Loadings

Outfall Catchment Areas	Drains To	Load (afy)	Rate (ft/yr)	Load (ton/yr)	Rate (ton/acre/yr)
C11-1OF	San Benito River	325.8	4.48	32.87	0.442
D12-1OF	San Benito River	76.9	0.83	7.75	0.083
E13-1OF	San Benito River	7.20	0.50	0.79	0.054
E13-2OF	San Benito River	95.4	0.95	8.5	0.077
E14-1OF	San Benito River	136.9	1.57	12.79	0.150
E5-1&E4-2	Terminal Basin	16.8	0.23	1.54	0.021
F15-1OF	San Benito River	16.9	0.3	1.72	0.030
F5-25	Terminal Basin	16.7	0.25	1.68	0.025
G16-1OF	San Benito River	99.3	0.92	9.04	0.084
G2-1OF	Santa Ana Creek	4.5	0.5	0.52	0.057
G3-1OF	Santa Ana Creek	15.9	0.79	1.78	0.090
G3-2OF	Santa Ana Creek	37.5	0.69	3.97	0.074
G4-1OF	Santa Ana Creek	77.1	1.29	9.24	0.148
G5-1OF	Santa Ana Creek	14.1	0.59	1.61	0.059
G6-1	Santa Ana Creek	8.7	0.42	0.85	0.041
H10-1OF	Santa Ana Creek	42.7	0.39	3.52	0.033
H8-1OF	Santa Ana Creek	3.9	0.24	0.55	0.034
I12-1OF	Santa Ana Creek	16.8	0.85	1.58	0.079
I13-1OF	Santa Ana Creek	4.5	0.43	0.33	0.031
I13-2OF	Santa Ana Creek	26.1	0.40	2.24	0.034
I14-1OF	Santa Ana Creek	15.7	0.39	1.16	0.033
IWTP	Terminal Basin	26.9	0.95	2.83	0.103
RSP	Terminal Basin	11.3	0.54	1.04	0.053

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1 inch = 20,000 feet

GREATER HOLLISTER AREA
STORM WATER RESOURCE PLAN

FIGURE 3-1: MS4 BOUNDARY

NOTES:
BASEMAP PROVIDE BY SAN BENITO COUNTY.
WALLACE GROUP DID NOT PERFORM BOUNDARY SURVEY SERVICES FOR THIS MAP. NOT A LEGAL DOCUMENT.
MAP PRODUCED JUNE 2021.

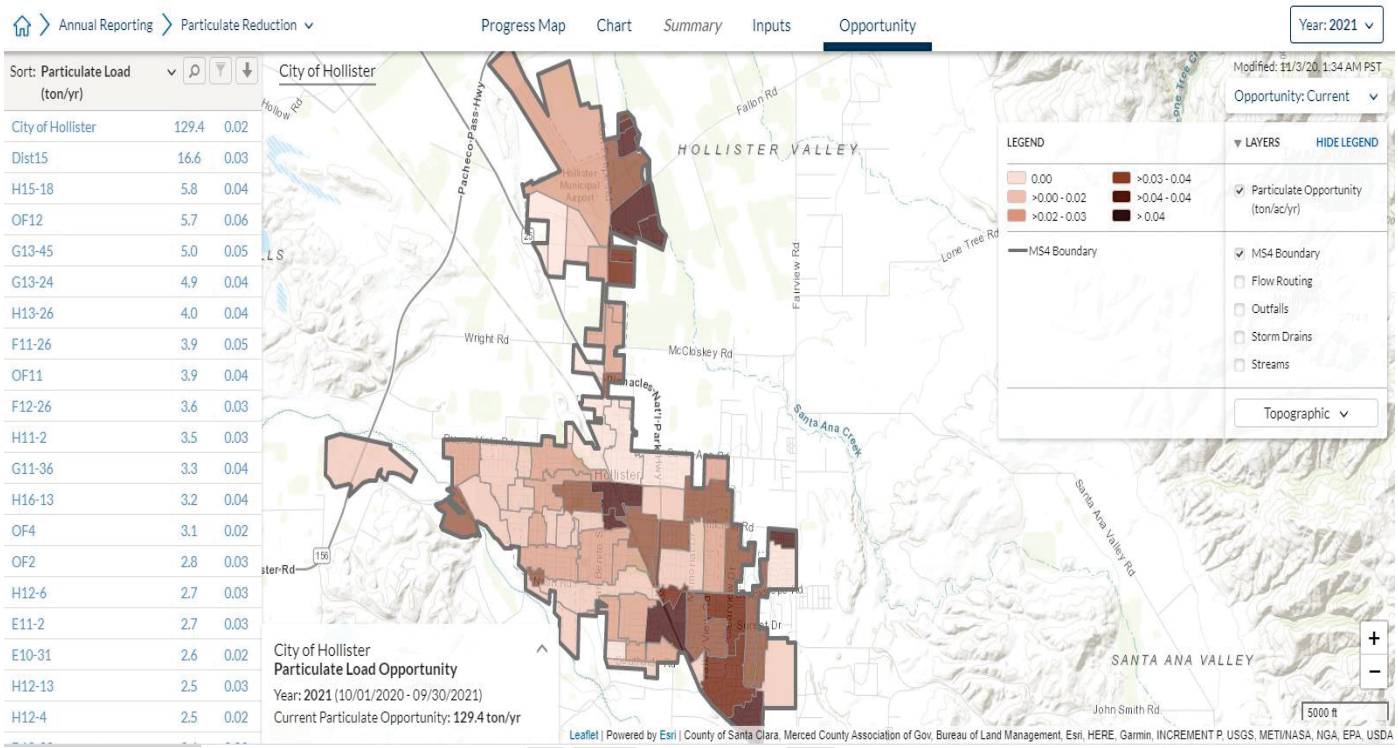

Figure 3-2 Opportunities for Particulate Load Reduction

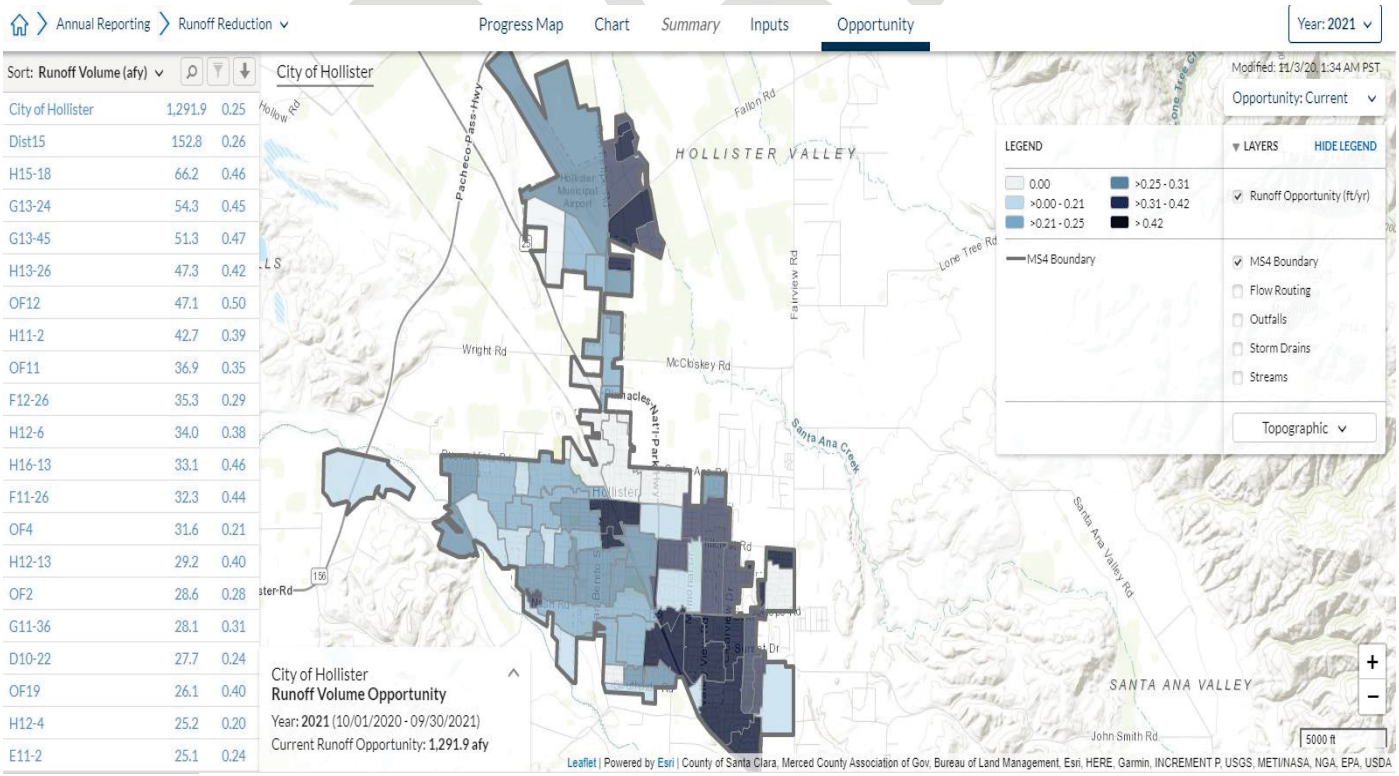

Figure 3-3 Opportunities for Stormwater Volume Reduction

CHAPTER 4
ORGANIZATION, COORDINATION, COLLABORATION

Regional Water Management Group

The Regional Water Management Group (RWMG) is made up of three agencies: Pajaro Valley Water Management Agency (PV Water), San Benito County Water District (SBCWD), and Santa Clara Valley Water District (Valley Water). In October 2004, these three agencies entered into a Memorandum of Understanding (MOU) to coordinate water resource planning efforts and watershed-wide implementation activities. Collectively, they are known as the Pajaro River Watershed Collaborative responsible for the development and implementation of the 2007 Pajaro River Watershed Integrated Regional Water Management Plan (IRWMP). On October 22, 2019, the RWMG adopted the most recent 2019 Pajaro River Watershed Integrated Regional Water Management Plan.

Local Agency and Organization Collaboration

This SWRP was prepared in close coordination with local agencies and non-governmental organizations in the surrounding Hollister, north San Benito County, and Pajaro River Watershed areas. These agencies include those involved in the Pajaro River Watershed Flood Prevention Authority (PRWFPA). Representatives from the following agencies and organizations provided critical feedback in the development of this SWRP:

- City of Hollister
- Sunnyslope County Water District
- County of Monterey (PRWFPA)
- County of San Benito (PRWFPA)
- County of Santa Clara (PRWFPA)
- County of Santa Cruz (PRWFPA)
- Monterey County Water Resources Agency (PRWFPA)
- San Benito County Water District (PRWFPA)
- Santa Clara Valley Water (PRWFPA)
- Santa Cruz County Flood Control and Water Conservation District Zone 7 (PRWFPA)

The PRWFPA was vital in providing input on technical aspects of the SWRP and effectiveness of planned projects or new multi-benefit programs and opportunities to include. They were key advocates in pushing for a regional approach to delineating this SWRP boundary for not only the City of Hollister's limits, but also the major tributaries to the Pajaro River within San Benito County.

Table 4-1 summarizes critical feedback received throughout the development of the SWRP.

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Table 4-1 SWRP Development Feedback

Date	Participants	Items Discussed
12/17/2020	TODD Groundwater on behalf of San Benito County Water District and the Groundwater Sustainability Plan (GSP)	Discussed the purpose of the SWRP and how the GSP would provide support where projects in the SWRP positively impact groundwater sources. A memorandum of support for the preparation of this SWRP was sent from TODD Groundwater on behalf of SBCWD and is included in Appendix B.
01/28/2021	City of Hollister, City of Watsonville, and County of Santa Cruz on behalf of the PRWFPA	Prior to and outside of this meeting, the PRWFPA discussed with their Staff Working Group how this SWRP would affect the Pajaro River watershed. The topic of discussion for this meeting was focused on expanding the SWRP boundary to the tributaries of the Pajaro River watershed and incorporating multi-benefit storm water programs and opportunities into the SWRP.
02/16/2021	PRWFPA Staff Working Group: AMBAG, County of Monterey, County of Santa Clara, Santa Clara Valley Water, Santa Cruz County, San Benito County Water District, and City of Watsonville	The PRWFPA expressed a desire to expand the boundary to include portions of the upper and lower Pajaro. This meeting discussed the City of Hollister and County of San Benito's involvement in the SWRP and what their level of interest would be from the PRWFPA in expanding the SWRP boundary to include portions of the Pajaro watershed between the South Santa Clara County SWRP and the Santa Cruz County SWRP. This expansion would allow the PRWFPA to apply for grant funding for the Soap Lake Floodplain Preservation Project.
3/24/2021	PRWFPA Staff Working Group: AMBAG, County of Monterey, County of Santa Clara, Santa Clara Valley Water, Santa Cruz County, San Benito County Water District, and City of Watsonville	This meeting was for the Staff Working Group to approve the expanded scope into the PRWFPA Board's consent agenda. This expansion would allow the SWRP to include the Soap Lake Floodplain Preservation Project into the list of projects for the Greater Hollister Area SWRP.

Public Engagement and Community Participation

Community participation is important during the development of the SWRP to engage the general public, affected communities, and other interested stakeholders. Public outreaches will include posting on the City and County website and a public virtual workshop. Further discussion of public engagement and community participation can be found in Chapter 7 of this report.

Existing Planning Documents

The SWRP is consistent with other existing planning documents and ordinances. There are several plans overlapping the SWRP boundary that address storm water resource management. These types of plans include storm water management plans, storm drain master plans, watershed management plans, urban water management plans, groundwater management and sustainability plans, flood management plans, hazard

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mitigation plans, and others. The following is a summary that includes but is not limited to the overlapping planning documents and ordinances associated with the SWRP.

- **Hollister Watershed Plan (Draft 2021):**
  The Hollister Watershed Plan provides an alternative compliance program for new and redevelopment projects within the City of Hollister in accordance with the Central Coast RWQCB Post-Construction Requirements. The Plan provides background on the City of Hollister's geographic features, the soils and hydrology of the watershed, and proposed regional projects for the City to accommodate storm water runoff from future development.
- **Wasteload Allocation Attainment Program (Draft 2021):**
  The City of Hollister's Wasteload Allocation Attainment Program outlines the activities to be implemented by the City to achieve TMDL allocations in the San Benito River and Santa Ana Creek for fecal coliform and sediment. The Program outlines a strategy for BMP selection, prioritization and implementation, source identification, allocation monitoring, reporting, effectiveness assessment, coordination with other agencies, and engagement with the public and other stakeholders.
- **Groundwater Sustainability Plan for North San Benito Groundwater Subbasin (Draft 2021):**
  The Groundwater Sustainability Plan (GSP) provides background on groundwater conditions and sustainable management. Under preparation in 2021, the GSP also involves evaluation of potential projects for managed aquifer recharge, which are being defined in terms of sites, sources of water, methods, and technical feasibility.
- **City of San Juan Bautista Wastewater Master Plan (2020):**
  The purpose of this Wastewater Master Plan is to document the planned land use for the City of San Juan Bautista, identify existing and future flows generated within the City, and to plan wastewater infrastructure to provide adequate levels of service to the customers at the lowest lifecycle cost feasible.
- **City of San Juan Bautista Water Master Plan (Draft 2020):**
  This master plan documents the existing distribution facilities and projected water demands necessary to develop a hydraulic water model of the City of San Juan Bautista. This model evaluates the capacity of the existing water system with improvements to mitigate existing deficiencies and to accommodate future growth with a Capital Improvement Program.
- **Pajaro River Watershed Integrated Regional Water Management Plan (2019):**
  The Pajaro River Watershed Integrated Regional Water Management Plan provides a forum for identifying and evaluating water supply, water quality, groundwater and surface water management, ecosystem restoration, flood management, and other watershed issues. The IRWMP identifies urban runoff management strategies to manage both stormwater and dry weather runoff to minimize soil erosion and sedimentation problems, reduce surface water pollution, protect natural resources, protect and augment groundwater supplies, and improve flood protection. The ongoing nature of this plan collaborates with stakeholders to facilitate conflict identification and resolution of issues within the watershed.
- **City of Hollister Water Distribution System Master Plan (2018):**
  The City of Hollister Water Distribution System Master Plan documents and helps prioritize the current and future needs of the City's water service and fire suppression systems. The Plan includes a prioritized capital improvement program and list of recommended projects to address existing deficiencies and future requirements.

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- **Hollister Urban Area Water and Wastewater Master Plan (2017):**
  The Hollister Urban Area Water and Wastewater Master Plan provides guidance in achieving drinking and recycled water quality goals, increasing reliability of local water supply, and coordinating infrastructure improvements for water systems, among others. The Plan area includes the City of Hollister and the adjacent unincorporated areas of San Benito County designated for urban development.
- **Hollister Urban Area Urban Water Management Plan (2016):**
  The Hollister Urban Area Urban Water Management Plan guides the Hollister Urban Area's future water management efforts. The Plan presents a water loss audit, current and projected water demand, a water use reduction plan, information on current and future water supply facilities, and discussion on drought contingency plans and increasing drought resistance. The Plan area includes the City of Hollister and the adjacent unincorporated areas of San Benito County designated for urban development.
- **San Benito County 2035 General Plan (2015):**
  The San Benito County General Plan contains the County's official policies on land use, economic development, transportation, community design, housing, resource protection, public services, and health and safety. The Plan describes long-range goals for the community's future and guides daily decision making. This Plan is the basis for the County's zoning, subdivision, and public works decisions. This General Plan encourages open space preservation and discourages development with detrimental downstream effects on the Pajaro River.
- **San Juan Bautista 2035 General Plan (2015):**
  The City of San Juan Bautista General Plan represents the official adopted goals and policies of the City. This General Plan is a product of broad community participation by residents and stakeholders of San Juan Bautista including the City Council, the Planning Commission, the Strategic Planning Committee, and City staff aided by a planning team of second year graduate students pursing Master's Degrees in the field of City and Regional Planning under the supervision of Dr. Cornelius, from the California Polytechnic State University (Cal Poly) in San Luis Obispo, California. Public meetings, street surveys, filed work, and secondary research were methods used to gather information to inform the planning process on existing conditions and to identify emerging directions, which in turn guided the development of goals, objectives, policies, and programs and the Preferred Growth Scenario of the General Plan.
- **Environmental Impact Report for the City of San Juan Bautista 2035 General Plan (2015)**
  This Final Environmental Impact Report (EIR) provides an analysis of the potential environmental effects that may result from the proposed Project, which is the adoption and implementation of the City of San Juan Bautista 2035 General Plan. This is a program level EIR which evaluates the implications on the environment as a result of adopting a planning document, such as a general plan, which provides direction for long-term visioning and broad community goals.
- **Salt and Nutrition Management Plan (2014):**
  The Salt and Nutrient Management Plan identifies and manages salt and other nutrient sources in Northern San Benito County to ensure that groundwater is safe for drinking and other beneficial uses. The plan evaluates the assimilative capacity for salt and nutrient concentrations through a stakeholder driven process and establishes a program to monitor these parameters as they apply to water quality objectives.

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- **City of Hollister Storm Drain Master Plan (2011):**
  The City of Hollister Storm Drain Master Plan documents the City's storm drain system and is intended to assist the City in prioritizing both existing and future storm water system needs through repair, replacement, and expansion. The Plan includes analysis of the City's storm drain system, known drainage problem areas, storm water management program, storm drain design standards, industrial wastewater treatment plant, and a prioritized capital improvement program.
- **Sanitary Sewer Collection System Master Plan (2010):**
  The Sanitary Sewer Collection System Master Plan was prepared for the City of Hollister to evaluate their wastewater flows, inform the City in prioritizing repair, replacement, and expansion of their sanitary sewer collection system, and model the existing and future developments that affect the system.
- **City of Hollister General Plan (2005):**
  The City of Hollister's General Plan is the guidance and statement of shared vision for future land use and planning decisions within the City. The Plan directs and coordinates these decisions and documents the current state of the City as it strives to preserve its historical character and traditions while rising to new challenges.
- **Pajaro River Watershed Study (2002-2005):**
  The Pajaro River Watershed Study has been the primary body of work through which the Pajaro River Watershed PRWFPA acts as a governing body through which each member organization can participate and contribute to finding a method to provide flood protection in the watershed and promote general watershed interest. Phase 1 of the study modeled both the hydrologic and sediment regimes of the watershed to provide a better understanding of the effects that land use changes over time have on flooding frequency and magnitude. Phase 2 identified project alternatives that would provide protection for the Pajaro River from the 100-year flood flows identified in Phase 1. Phase 3 identified the Soap Lake Floodplain Preservation Project as critical to the Corps' downstream flood prevention projects. Lastly, Phase 4 developed an implementation plan for the selected project, finalized the CEQA document, and completed studies examining sediment impacts, flood forecasting capabilities, and a fisheries study.

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CHAPTER 5
IDENTIFICATION & PRIORITIZATION OF PROJECTS

Quantitative Benefit Methods

Projects identified in the SWRP should benefit water quality while contributing to compliance with applicable permit and/or TMDL requirements, water supply through groundwater management and/or runoff capture and use, flood management practices, environmental concerns, and the local community. The following are tools were used for quantitative analysis.

Storm Sewer Modeling and Analysis

Projects identified within the City of Hollister are consistent with hydrologic and hydraulic analyses that were prepared for both the City's Storm Drain Master Plan and the City's Watershed Plan. The hydrologic and hydraulic model was created using the computer program InfoSWMM® by Innovyze®. InfoSWMM is a fully dynamic geospatial stormwater modeling and management software application.

Tool to Estimate Load Reductions (TELR)

As discussed in Chapter 3, Second Nature has developed the Tool to Estimate Load Reductions (TELR) which provides a tracking system for urban land management and receiving water qualities. The outputs are estimates of pollutant loads. Inputs such as precipitation data, soil type, slope, and land use are utilized to calculate runoff volumes and suspended sediment, which are linked to the outcomes of urban storm water improvement actions.

Best Management Practices Rapid Assessment Methodology (BMP RAM)

Second Nature has also developed the Best Management Practices Rapid Assessment Methodology (BMP RAM) Tool. This is a web-based application that can be used to inventory structural BMPs, assess their performance based on field observations, and prioritize any maintenance actions. BMP RAM evaluates the relative treatment performance of BMPs intended to reduce runoff volumes and/or pollutant loads from impervious surfaces.

Disadvantaged Community

Disadvantaged Communities (DAC) are defined in the California Public Resource Code as a community with an annual mean household income (MHI) that is less than 80% of the statewide MHI. The statewide MHI for this dataset is $71,228. The DAC threshold is 80% of that MHI or $56,982 and the severely disadvantaged community (SDAC) is 60% or $42,737. Environmental justice concerns are evident when projects fail to benefit disadvantaged communities or lack the ability to convey the benefits to these areas.

Projects and programs that benefit DAC and SDAC within the SWRP boundary are identified as a benefit metric value. Downstream DAC in the lower Pajaro River watershed (Watsonville and Pajaro communities) also benefit from these projects and programs through increased water quality and flood risk reduction. Figure 5-1 shows the disadvantaged communities both within the SWRP boundary and in the downstream lower Pajaro River watershed, according to the Census American Community Survey (ACS) 2018 dataset.

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Benefit Metrics

Consistent with the Water Code requirements, benefits to the watershed were analyzed using metrics-based and integrated evaluation and analyses. Table 3 in the SWRCB Guidelines identifies examples of appropriate metrics for each benefit type.

TABLE 3. BENEFIT METRICS

Benefit	Example	Metric Unit(s)
Water Quality *while contributing to compliance with applicable permit and/or TMDL requirements*	Increased filtration and/or treatment of runoff Nonpoint source pollution control Reestablished natural water drainage and treatment	**Pollutant Load Reduction** pounds (lbs)/day kilograms (kg)/day milligram/Liter microgram /Liter most probable number of bacteria or indicator organisms (mpn)/mL **Volume Treated** million gallons per day (mgd) acre-feet per year (afy)
Water Supply *through groundwater management and/or runoff capture and use*[11]	Water supply reliability Water conservation Conjunctive use	**Volume Captured** *in terms of augmentation/replacement of water supply, or reduced dependence on imported water* million gallons per day (mgd) acre-feet per year (afy) **Cost** dollars per volume per year (of augmented water supply)
Flood Management	Decreased flood risk by reducing runoff rate and/or volume Reduced sanitary sewer overflows	**Rate, Volume, and/or Size** cubic feet per second (cfs) acre-feet (af) cubic feet (cf) acres or linear feet
Environmental	Environmental and habitat protection and improvement, including: - wetland enhancement/creation; - riparian enhancement; and/or - instream flow improvement	**Size and/or Rate** acres cubic feet per second (cfs) carbon sequestration (megagrams of carbon per area)

TABLE 3. BENEFIT METRICS		
Benefit	**Example**	**Metric Unit(s)**
Environmental ***(continued)***	Increased urban green space	**Other**[12] area units of landscape and buffer measure of improved hydrology number of biotic structure number of physical structures reduced temperature (degrees)
	Reduced energy use, greenhouse gas emissions, or provides a carbon sink	
	Reestablishment of the natural hydrograph	
	Water temperature improvements	
Community	Enhanced and/or created recreational and public use areas	**Size** size of population served number of people number of jobs acres
	Community involvement	
	Employment opportunities provided	

Multiple Benefits

According to the SWRCB Guidelines, each project should at minimum address: (1) at least two or more Main Benefits in Table 4 within the watershed or sub-watershed, and (2) as many as feasible Additional Benefits for the same project. See Table 4 from the Guidelines below.

TABLE 4. STORM WATER MANAGEMENT BENEFITS		
Benefit Category	**Main Benefit**	**Additional Benefit**
Water Quality *while contributing to compliance with applicable permit and/or TMDL requirements*	Increased filtration and/or treatment of runoff	Nonpoint source pollution control
		Reestablished natural water drainage and treatment
Water Supply *through groundwater management and/or runoff capture and use*	Water supply reliability	Water conservation
	Conjunctive use	
Flood Management	Decreased flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows
Environmental	Environmental and habitat protection and improvement, including; - wetland enhancement/creation; - riparian enhancement; and/or - instream flow improvement	Reduced energy use, greenhouse gas emissions, or provides a carbon sink
		Reestablishment of the natural hydrograph
	Increased urban green space	Water temperature improvements
Community	Employment opportunities provided	Community involvement
	Public education	Enhance and/or create recreational and public use areas

Proposed SWRP Projects, Programs, and Opportunities

The following projects, programs, and opportunities have been identified and evaluated for multi-use storm water management benefit purposes. The nature of these projects included storm water diversion for infiltration and retention, water quality treatment, flood risk reduction, and floodplain preservation. Retention and infiltration opportunities benefit the Gilroy-Hollister Valley Groundwater Basin. Treatment of discharge to receiving waters, specifically the San Benito River or Santa Ana Creek within the City of Hollister and San Juan Creek in City of San Juan Bautista, ultimately flows to and benefits the downstream Pajaro River. Floodplain detention and peak flow reductions reduce flood risks and benefit the Lower Pajaro River communities.

A total of eight (8) projects, three (3) programs, and four (4) opportunities were identified for this SWRP. Five (5) of the projects are within the City of Hollister's jurisdiction and directly affect the San Benito River, which ultimately benefits the lower Pajaro River. The Soap Lake Floodplain Preservation Project was also identified in this SWRP since it is considered a necessary project for the US Army Corps of Engineer's Lower Pajaro River Project in Santa Cruz and Monterey Counties. The Pacheco Reservoir Expansion Project was identified in the South Santa Clara County SWRP and the Pajaro River Watershed IRWMP and has been listed in this SWRP due to flood control benefits this project has by reducing peak flows in Pacheco Creek. Lastly, San Juan Bautista's WWTP Regionalization Project with the City of Hollister WWTP has been identified in this SWRP based on pollutant load reductions in San Juan Creek, and ultimately San Benito River and Pajaro River.

Projects were ranked based on their quantifiable benefit metrics discussed later in this chapter. Programs and opportunities were not ranked. Project locations within the City of Hollister are shown of Figure 5-2. The Soap Lake Floodplain Preservation Project is shown on Figure 5-7. A map of the Pacheco Reservoir Expansion from the Initial Study and Notice of Preparation is included as Figure 5-8. Figure 5-9 shows the San Juan's Regional Connection Alternatives to Hollister's WWTP.

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Below is a summary of the recommended upgrades at the IWTP.

Project: Storm Water Upgrades at the IWTP

Agency

City of Hollister

Benefit Categories Met

Water Quality
Water Supply
Environmental
Community

Benefit Metric Value

Pond 2: Retention Capacity Equivalent to 10-year storm event (54 acre-feet)

Apricot Lane: Divert 11.4% (10.5 acre feet) of San Benito River tributary flows from the City to the IWTP during the 95th percentile storm

Environmental Habitat Created

Apricot Lane: DAC Population= 2,039 persons

Project Description

South Street Diversion Structure

This project will replace the existing 8-foot diameter manhole and a portion of IWTP influent line with a 10-feet L x 10-feet W x 10-feet D slide gate diversion structure. The diversion structure will allow storm water to be sent directly to Pond 3 using a 54-inch reinforced concrete pipe and slide gate during the non-canning season. During the canning season, the 54-inch slide gate will be shut and a 24-inch slide gate will be opened to send industrial wastewater to Pond 1. The diversion structure will allow for greater flexibility in the operation of Pond 1 and minimize comingling of storm water and industrial wastewater.

Pond 2 Outlet Structure and Emergency Spillway

In order to convert Pond 2 into a storm water detention pond, the interconnecting pipes between Pond 1 and Pond 2 will be disconnected. This will separate Pond 1 (industrial wastewater) from Pond 2 (storm water) and prevent comingling of wastewater in Pond 2.

Storm events larger than the 10-year storm will overflow through an outlet structure to the existing outfall D12-1OF (Apricot Lane). In the event the overflow structure clogs, an emergency spillway will allow water to flow into the existing outfall before overtopping the pond berm.

Apricot Lane Trash Capture & Emergency Spillway

This project will construct new storm drain infrastructure to divert runoff from Outfall D12-10F (Apricot Lane) to the IWTP. Storm water will be sent directly to Pond 2 instead of the Outfall by removing the existing Apricot Lane slide gate structure and installing a new trash capture system and 60-inch storm drain to Pond 2. To help prevent levee erosion, the trash capture system includes an emergency spillway to direct storm water into Pond 2 in the event the outlet of the trash capture system clogs.

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Project: IWTP Upgrade (cont.)

It is important to note that the Pond 2 Outlet Structure and Emergency Spillway would need to be constructed prior to this project. The drainage area for this system includes two disadvantaged communities equal to a population of 2,039 persons.

Re-purpose Sewer Pump Station to Storm Water Pump Station

Storm water that flows from the Apricot Lane diversion structure will be pumped from the north end of Pond 2 using the existing duplex pump station. The pump station consists of two (2) 6,000 gpm vertical turbine pumps mounted on a three-sided wet well along the shoreline. The existing pumps will be upgraded to 8,000 gpm each and the discharge upsized from 16-inch to 18-inch. The discharge piping pumps approximately 30 linear feet to a 36-inch gravity distribution system. Only one pump is required to operate during the 10-yr, 24-hr storm, with one in standby for redundancy. The pumps will be controlled using a level transducer based on pond level and will pump to Percolation Ponds 3-6. This pump station and distribution piping will be repurposed for storm water use only. An emergency backup generator will allow one pump to operate during power outages.

Floating Islands and Decorative Fountains

Three (3) floating island clusters and three (3) fountain water features will be installed to visually enhance Pond 2, provide natural habitat for wildlife, and improve water quality.

Percolation Pond Spillway

The existing interconnecting piping and overflow structures between percolation Ponds 3-6 are undersized for the potential storm water peak flows that would be directed into Pond 3 from the South Street Diversion structure. Three (3) concrete spillways will be constructed between Ponds 3-6 allowing for storm water to overflow from one Pond to another in the event interconnecting piping is clogged or peak flow during a storm exceeds pipe capacity.

See Figure 5-3 for the IWTP Upgrade Project configuration.

Project Cost Breakdown

Estimated Project Cost	$ 1,750,000

DRAFT

Project: Nash Road Diversion

Agency

City of Hollister

Benefit Categories Met

Water Quality

Water Supply

Benefit Metric Value

Divert 8.2% (7.5 acre feet) of San Benito River tributary flows from the City to the IWTP during the 95th percentile storm

Pollutant Load Reduction=44%

DAC Population= 2,464 persons

Project Cost Breakdown

Estimated Project Cost	$ 450,000

Project Description

The Nash Road Diversion would construct new storm drain infrastructure to divert runoff from OF E13-2OF to the IWTP through the Apricot Lane outfall. Storm water would be diverted through a new storm drain in Homestead Avenue. The construction of the new storm drain would split flows at the existing manhole in Nash Road at Homestead Avenue (MH E13-6). The invert elevation of the existing manhole E13-6 is 282.2 ft. The existing manhole in Homestead Avenue at C Street (MH E12-37) has an invert of 279.0 ft. These two manholes are approximately 675 feet apart. A new 24-inch storm drain with a fall of just under 0.5% can be constructed to connect the two systems together. Final design will divert low flows in the storm drain to the IWTP to the extent possible. Homestead Avenue is tributary to OF D12-1OF, which is described in the Apricot Lane Diversion to also be diverted to the IWTP.

See Figure 5-4 for the project configuration. It is important to note that the Apricot Lane Diversion would need to be constructed prior to this project. Additionally, the drainage area for this system includes two disadvantaged communities equal to a population of 2,464 persons.

DRAFT

Project: San Benito Street Diversion

Agency

City of Hollister

Benefit Categories Met

Water Quality

Water Supply

Benefit Metric Value

Divert 11.0% (10.1 acre feet) of San Benito River tributary flows to the IWTP during the 95th percentile storm

Pollutant Load Reduction=68%

Project Cost Breakdown

Estimated Project Cost	$ 450,000

Project Description

This project would construct a new storm drain infrastructure to divert runoff from OF E14-10F to the IWTP through the Apricot Lane outfall. Storm water could be diverted through a new storm drain in San Benito Street. The construction of the new storm drain would split flows at the existing manhole in San Benito Street at Bundeson Drive (MH F13-11). The invert elevation of the existing manhole F13-11 is 290.0 feet. The existing manhole in San Benito Street at Nash Road (MH F13-6) has an invert of 288.8 feet. These two manholes are approximately 640 feet apart. A new 24-inch storm drain with a minimal slope of 0.2% can be constructed to connect the two systems together. Final design will divert low flows in the storm drain to the IWTP to the extent possible. Nash Road is tributary to OF E13-20F, which is described in the Nash Road Diversion to be diverted to the IWTP.

See Figure 5-5 for the project configuration. It is important to note that the Nash Road Diversion would need to be constructed prior to this project.

DRAFT

Project: Bridge Road Trash Capture

Agency

City of Hollister

Benefit Categories Met

Water Quality
Environmental
Community

Benefit Metric Value

Pollutant Load Reduction=76%

DAC Population= 1,793 persons

Project Cost Breakdown

Estimated Project Cost	$	4,262,500

Project Description

A Full Capture System (FCS) such as a CDS Unit by Contech Engineered Solutions or approved equal uses a combination of swirl concentration and indirect screening to separate and trap debris, sediment, and hydrocarbons from runoff. The unit captures and retains 100% of floatables and neutrally buoyant debris that is 2.4 mm or larger in a separation chamber, and sediment settles into an isolated sump. This unit will meet the intent of the MS4 permit Trash Capture Requirements. Diversion weirs on each side of the chamber bypass any excess flow due to large storm events. The Bridge Road Outfall will need four (4) precast model units in parallel and ancillary connecting pipelines to treat up to 205 cfs. Three new manholes and a 54-inch storm drain will be required for the project. These facilities are necessary to allow room to construct the FCS prior to the outfall.

Approximately 45% of the runoff in the City's San Benito River watershed is tributary to this outfall. The treated runoff is expected to significantly reduce the volume of pollutants that would have previously reached the San Benito River. According to preliminary trash reduction modeling in the Second Nature software, there is a total pollutant load reduction of 76% within the Bridge Road Trash Capture drainage area. Additionally, the drainage area for this system includes a disadvantaged community of 1,793 persons. See Figure 5-6 for project configuration.

DRAFT

Project: Powell Street Underground Detention

Agency

City of Hollister

Benefit Categories Met

Flood Management
Water Quality

Benefit Metric Value

Retention Capacity Equivalent to 25-year storm event (5.2 acre-feet)

Project Cost Breakdown

Estimated Project Cost	$ 1,556,408

Project Description

The intersection at Powell Street and South Street is a sump condition that collects surface flow from a relatively large drainage area. Ponding that occurs at this intersection blocks traffic on both Powell Street and South Street and potentially damages nearby homes if drainage water reached depths more than 1-foot.

This project will construct a new underground storm water retention/detention facility at the City ballpark on Powell St. and 7th Street. The construction of new storage will provide flood protection for the 25-yr storm event and has the potential to improve storm water quality if the underground facility is used to infiltrate storm water from lesser storm events. The project will also reduce sanitary sewer overflows based on limiting the surface flooding in the intersection.

This project was studied and identified as part of the City's Storm Drain Master Plan.

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Project: Soap Lake Floodplain Preservation

Agency

Pajaro River Watershed Flood Prevention Authority

Benefit Categories Met

Flood Management
Environmental
Water Quality

Benefit Metric Value

9,100 acres of Habitat Protected

Maintains flood protection by protecting against a 35% increase (16,000 cfs) in 100-year peak flows

DAC Population= 5,003 persons

5 of the 15 points assigned for Project Location based on several of the existing conservation easements having already been acquired for the Project

Project Cost Breakdown

Estimated Project Cost	$23-$70 million

Project Description

Soap Lake is a floodplain that acts like a natural detention basin, storing water and reducing peak flows that would otherwise increase flooding in the lower Pajaro River. The proposed project would not build any structural facilities, but instead would include obtaining flood easements for the land within the Soap Lake floodplain in order to maintain the current flood protection benefits by protecting the area from changes that would impact the flood protection properties of the floodplain.

The purchase of easements would restrict development and preserve agriculture and open space in the approximately 9,100 acre floodplain. This project would maintain the current hydrologic and hydraulic conditions at the project site and adjacent properties to minimize the effects of flooding on developments both within and downstream of the study area by preventing development on the property and additional flooding downstream. By maintaining the flow conditions in the Pajaro River, proposed downstream flood improvements will not have to increase in size and capacity, saving hundreds of millions of dollars and directly benefiting the Disadvantaged Communities of Watsonville and Pajaro. Flood prone land acquisition could also help create recreational opportunities, maintain agricultural land and open space, preserve riparian habitat and enhance ground water quality.

As of February 2017, approximately 4,564 acres of conservation easements (50%) have been acquired. Based on recent acquisitions in the floodplain, the estimated project costs range from $23 million to $70 million. The range represents the cost of acquiring floodplain easements or purchasing the property in fee title for the remaining 4,500 acres. See Figure 5-7 for a map of the existing conservation easements.

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Project: Pacheco Reservoir Expansion

Agency

Santa Clara Valley Water
San Benito County Water District
Pacheco Pass Water District

Benefit Categories Met

Flood Management
Environmental
Water Quality

Benefit Metric Value

Reduces flood risk by 60% (4,700 cfs) in 100-year peak flows

Project Cost Breakdown

Estimated Project Cost	$2.5 billion total ($496 million funded by CA Prop 1)

Project Description

This collaborative project will boost Pacheco Reservoir's operational capacity from 5,500 acre-feet to up to 140,000 acre-feet, which is enough to supply up to 1.4 million residents with water for one year in an emergency. The project will also reduce frequency and severity of water shortages during droughts, protect our drinking water supply and infrastructure, and improve fish habitat.

The project includes construction and operation of a new dam and reservoir, pump station, conveyance facilities, and related miscellaneous infrastructure (e.g. access roads). The new dam and reservoir would be constructed on Pacheco Creek 0.5 miles upstream from the existing North Fork Dam and would inundate most of the existing Pacheco Reservoir. Water will be collected in the new reservoir during the winter months from runoff from the local watershed area, and diversion of CVP supplies from Pacheco Pipeline, when needed.

Although this project has been listed in the South Santa Clara County SWRP and the Pajaro River Watershed IRWMP, the project also benefits the Greater Hollister Area, which includes portions of Pacheco Creek in San Benito County. The project does not specifically dedicate flood space in the new reservoir; however, it will provide flood control benefits by reducing flows in Pacheco Creek by 60% through incidental available storage and facility design. Based on a preliminary HEC-HMS hydrologic model, the project could reduce flows downstream from the Pacheco Reservoir and into San Benito County by approximately 4,700 cfs for the 100-year return period flood.

See Figure 5-8 for a map of the project from the Initial Study and Notice of Preparation.

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Project: San Juan Bautista WWTP Regionalization with Hollister WWTP

Agency

City of San Juan Bautista
City of Hollister

Benefit Categories Met

Water Quality

Benefit Metric Value

Pollutant Load Reduction=69%

Project Cost Breakdown

Estimated Project Cost	$ 18,515,000

Project Description

The City of San Juan Bautista WWTP currently operates under NPDES permit CA0047902. The City's WWTP has received repeated violation notices from the Regional Water Quality Control Board for high levels of contaminants in the effluent. The secondary and tertiary treatment facilities are undersized for the current loading rates and the existing treatment facility is not designed to remove salinity from the wastewater.

Stantec prepared a Preliminary Engineering Report for the Wastewater Treatment Improvements Project in September 2020. After several alternatives were evaluated, the preferred solution included decommissioning the City's WWTP and rerouting wastewater flows to the City of Hollister's WWTP. This project would include decommissioning the existing SBR pond plant and converting it into an equalization basin. A new pump station will be constructed to deliver equalized and screened raw sewage to the City of Hollister WWTP. The anticipated salinity balance after the project is complete shows a 69-percent reduction in sodium. This compliance will be achieved through limiting industrial users to only discharging municipal wastewater into the City's sewer collection system, blending West Hills WTP source water with the City's well water at 60-percent ratio, and implementing a water softener buy-back program.

According to the Draft North San Benito Groundwater Sustainability Plan, the channel that the San Juan Bautista WWTP currently discharges to has little interaction with the groundwater and the remaining San Juan Creek reach to the Pajaro River is underlain by clay soils that do not support significant seepage fluxes to or from the channel. With this project, San Juan Bautista's wastewater will be used at the Hollister WWTP for recycled water and groundwater infiltration.

See Figure 5-9 for a map of the project from the City of San Juan Bautista's Wastewater Master Plan.

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Program: City Trash Capture

Agency

City of Hollister

Benefit Categories Met

Water Quality
Environmental
Community

Benefit Metric Value

Pollutant Load Reduction Varies

Project Cost Breakdown

Estimated Project Cost $ 10,770,000*

**amount from the Trash Amendment Technical Memorandum escalated to January 2021 dollar*

Program Description

In 2015, the SWRCB adopted the Trash Amendments to the Water Quality Control Plan for Ocean Waters of California in order to reduce the discharge of trash into State waters. The trash amendments require the municipality to adopt a plan to remove particles greater than 5 mm from their storm water stream prior to reaching the City's outfalls. The City of Hollister chose Track 1 which implements physical structures to remove trash from the storm water collection system prior to reaching river outfalls. Full compliance is expected no later than December 30, 2035.

In February 2018, a technical memorandum was prepared that analyzed the quantity of water in each of the City's outfall watersheds and provided recommendations for trash capture units that will meet the new regulations. Optimal locations were identified for installation of the full capture trash units based on their ease of constructability and access, proximity to overhead lines, and positioning within the City's jurisdiction. In most cases full capture trash units were recommended directly upstream of the river outfall to assure the largest capture of trash and debris before water enters San Benito River or Santa Ana Creek. In this memorandum, seven (7) trash capture units were recommended upstream of San Benito River outfalls and eleven (11) trash capture units were recommended upstream of Santa Ana Creek outfalls. Since two trash capture locations have been listed as projects in the SWRP, the remaining sixteen (16) locations are shown on Figure 5-10.

DRAFT

Program: Stormwater Information Network (SIN)

Agency

City of Hollister

Benefit Categories Met

Water Quality

Benefit Metric Value

TBD

Program Cost Breakdown

Estimated Program Cost	N/A

Program Description

The Stormwater information Network (SIN) is a local regional group of MS4 storm water quality program managers that meet routinely to participate on regional efforts. Most efforts include programmatic BMPs like cooperating on public education programs or pesticide/herbicide education and reduction tasks. The City is planning to increase participation in this group.

Program: Central Coast Ambient Monitoring

Agency

City of Hollister

Benefit Categories Met

Water Quality

Benefit Metric Value

TBD

Program Cost Breakdown

Estimated Program Cost	N/A

Program Description

Written into the City's WAAP is a recommendation for the City to join the Central Coast Ambient Monitoring Program (CCAMP). The CCAMP is the Central Coast Regional Water Quality Control Board's component of the Surface Water Ambient Monitoring Program (SWAMP). The CCAMP is a regionally scaled water quality monitoring and evaluation program. The purpose of the program is to provide scientific information to Central Coast Water Board staff and the public to protect, restore and enhance the quality of waters of central California.

The City's goal is to reduce F. Coli within its runoff by 10% total over the next five years of the permit cycle. The City will annually assess receiving water quality from data obtained by the CCAMP. The City's involvement with the CCAMP will assist in further characterizing Hollister's MS4 runoff impact on the San Benito River and Santa Ana Creek.

DRAFT

Opportunity: Assessment for Erosion Reduction

Agency/Organization

County of San Benito
Pajaro River Watershed Flood Prevention Authority

Benefit Categories Met

Water Quality
Environmental
Community

Benefit Metric Value

TBD

Project Cost Breakdown

Estimated Project Cost	TBD

Project Description

As outlined in the Pajaro IRWMP Update, the San Benito River Watershed Study found that the majority of sediment deposited in the lower Pajaro River is contributed by the San Benito River. Based on the study results, it was recommended that an opportunities and constraints assessment for erosion reduction be carried out on the San Benito River (between Hollister and the confluence with the Pajaro River). This assessment should include natural versus anthropogenic causes of erosion and sources of sediment and should focus on arresting potential knickzones that may migrate upstream and on stabilizing the banks and bed of the San Benito River.

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Opportunity: IWTP Wetland

Agency/Organization

City of Hollister

Benefit Categories Met

Environmental

Community

Benefit Metric Value

Habitat Created

Project Cost Breakdown

Estimated Project Cost	$ 2,500,000

Opportunity Description

The IWTP has a fairly high visual profile as it is visible from San Juan Road as you enter the City from the west. In addition, the City is planning to incorporate walking trails around the San Benito River and adjacent to the IWTP. Therefore, the City is looking at methods to improve the visual aesthetics of the IWTP and create a more natural habitat for wildlife, while maintaining the functionality of the treatment plant.

The City has an opportunity to incorporate a wetland environment along the San Benito River and the San Juan Road edge of the IWTP property. The wetland would meander along the edge of the property and would incorporate plants that are able to survive without year-round water. During the winter months, the wetlands would be filled with water. During the summer, the wetland area would be dry, but the plant life would still thrive. The wetland area would screen the IWTP, while providing a habitat for treatment and disposal of storm water.

It is not recommended to convert the IWTP to a wetland habitat until after the facility is no longer needed for wastewater treatment. Currently, maintaining the existing configuration provides the City with more flexibility with wastewater and storm water treatment options in the interim. Once the wastewater treatment process is no longer necessary, the facility can be converted to incorporate a meandering wetland along the edge of the facility.

DRAFT

Opportunity: Best Management Practices

Agency

County of San Benito
City of Hollister

Benefit Categories Met

Flood Management
Water Quality

Benefit Metric Value

TBD

Project Cost Breakdown

Estimated Project Cost	TBD

Opportunity Description

Unlike the City of Hollister, the County of San Benito is not a current participant in the Phase II municipal NPDES program. Per the Public Facilities and Services Element in the County of San Benito's General Plan, PFS-H states that the County shall prepare and adopt revised and updated standards and best management practices for new development projects as part of its storm water management and grading ordinance, project storm water pollution prevention plans, and NPDES general construction permits.

For the City of Hollister, the implementation of the Post Construction Stormwater Ordinance will provide opportunities to conduct strategic maintenance on large volume structural BMPs through the use of BMP RAM scoring. The City will also seek to install structural BMPs in high priority catchments through development projects where PCRs are required and will look to leverage this avenue of adding treatment BMPs.

Refer to Figures 3-2 and 3-3 in Chapter 3 for the catchments in the City's MS4 with the highest opportunity to reduce particulates and volume per the Second Nature software.

DRAFT

Opportunity: Focused Non-Structural BMPs

Agency

County of San Benito
City of Hollister

Benefit Categories Met

Flood Management
Water Quality

Benefit Metric Value

TBD

Project Cost Breakdown

Estimated Project Cost	TBD

Opportunity Description

The Central Coast Regional Water Quality Control Board issued this list of recommended BMPs to the Pajaro River Watershed dischargers to target bacteria and sediment. This list is primarily for the areas with hydrologic routing to the highest pollutant discharges.

- Eliminate over-watering and runoff of irrigation water into the street
- Wash cars at car washes or in locations where runoff will not enter the street
- Discharge wash water from carpet cleaning, mop buckets, etc. to sanitary sewer
- Clean up spills with mops or absorbent material rather than washing spills into a gutter or storm drain inlet
- Provide education regarding preventing discharges into storm drains
- Maintain a street sweeping program
- Regularly clean storm drains to remove silt and organic material accumulations, particularly before the first storm of the season
- Develop a pet waste ordinance and actively enforce it
- Develop management practices for dumpsters and trash receptacles serving restaurants and other commercial facilities within the MS4 service area
- Evaluate the contribution of FIB sources from private sewage laterals and develop appropriate measures to reduce and eliminate these sources
- Educate the public on best management practices for elimination of fecal coliform from stormwater runoff, targeting property and business owners. Items to be addressed include minimizing leaks from private sewer laterals and homeless encampment discharges
- Develop and implement low impact development (LID) principles and practices for new development and redevelopment that minimize the creation of new sources of FIB
- Introduction of the TMDL-WAAP to City Staff and decision makers emphasizing the need for focus on bacteria & erosion/sediment reduction
- Creation and implementation of the TMDL-WAAP dry and wet weather sampling programs
- Creation and implementation of new or revised bacteria & erosion/sediment reduction ordinances, such as a Pet and Wildlife waste ordinance and Fats, Oils, and Grease Control (Restaurant) with a formalized inspection plan and enforcement procedures and integration of enforcement procedures for pollution prevention from trash enclosures, oil recycling areas, and food loading areas.
- Creation of a strategized street sweeping plan and schedule focused on bacteria & erosion/sediment reduction
- Creation of a stormwater collection system maintenance and cleaning plan & schedule focused on bacteria & erosion/sediment reduction
- City Staff training and implementation of specific municipal operations BMPs for emphasizing bacteria & erosion/sediment reduction in runoff

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Prioritization of Projects

The SWRCB Guidelines recommend project prioritization based on measurable and non-measurable evaluations. The scoring criteria developed for this SWRP is based on project funding, project location, quantitative metrics, and multiple benefits analysis. As discussed previously, only the projects identified for this SWRP were ranked. Table 5-3 provides the projects identified in this SWRP prioritized by the following categories.

Project Funding

Projects or programs are prioritized that have permanent, local, or regional funding. This could include entities that have established a multi-year local or regional source of funding dedicated to storm water projects and who provide funds for both capital and operations and maintenance. A value of 10 points was assigned to the project if funding project funding was available.

Project Location

The SWRCB Guidelines recommend projects located on publicly owned lands and easements in accordance with the Water Code. Projects were assigned a value of 15 points if land access or agreements were available per City or County guidance.

Quantitative Metrics Value

Benefit Metrics from Table 3 of the SWRCB Guidelines were used to capture measurable benefits for each project. In order to directly compare each project, metrics were assigned for each of the quantitative metric values, as shown in Table 5-2.

Multiple Benefits Analysis

As discussed previously, the multiple benefits outlined in the SWRCB Guidelines can be seen in Table 4 of the SWRP Guidelines. The main benefits are divided into water quality, water supply, flood management, environmental, and community. Projects are required to meet at least two or more main benefits and as many secondary benefits as possible. Main benefits were assigned 4 points and secondary benefits were assigned 2 points.

Table 5-1 Quantitative Metrics Summary

Benefit Category	Water Quality	Water Supply		Flood Management	Environmental	Community
	Pollutant Load Reduction (%)	Volume Diverted to Treatment Plant (%)	Retention Capacity (Storm Event)	Peak Flow Managed (% Difference)	Habitat Created/Maintained	Serves DAC (pop.)
Score						
5	81-100	60-100	100-year	80-100	YES	over 5,000
4	61-80	40-60	50-year	60-80	-	3,001-5,000
3	41-60	20-40	25-year	40-60	-	1,001-3,000
2	21-40	10-20	10-year	20-40	-	500-1,000
1	1-20	0-10	95th percentile	0-20	-	1-500
0	0	0	0	0	NO	0

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Table 5-2. SWRP Project Prioritization Table

	Project Funding	Project Location	Quantitative Metrics			Multiple Benefits Analysis																	
						Water Quality			Water Supply			Flood Management		Environmental					Community					
Project Title	Permanent Funding? (10 points)	Project located on Public Lands? (15 points)	Quantitative Benefit Analysis Type	Quantitative Benefit Metrics Value	Points Assigned	**Increased infiltration and/or treatment of runoff (4 pts)**	Nonpoint source pollution control (2 pts)	Reestablished natural water drainage and treatment (2 pts)	**Water supply reliability (4 pts)**	**Conjunctive use (4 pts)**	Water conservation (2 pts)	**Decreased flood risk by reducing runoff rate and/or volume (4 pts)**	Reduced sanitary sewer overflows (2 pts)	**Environmental and habitat protection and improvement (4 pts)**	**Increased urban green space (4 pts)**	Reduced energy use, greenhouse gas emissions, or provides a carbon sink (2 pts)	Reestablishment of the natural hydrograph (2 pts)	Water temperature improvements (2 pts)	**Employment opportunities provided (4 pts)**	Community Involvement (2 pts)	**Public Education (4 pts)**	Enhance and/or create recreational and public use areas (2 pts)	Points Assigned	**Project Scoring**
IWTP Upgrade: South Street Diversion Structure Pond 2 Outlet Structure and Emergency Spillway Apricot Lane Trash Capture & Emergency Spillway Re-purpose Sewer PS to Stormwater PS Floating Islands & Decorative Fountains Percolation Pond Spillway	0	15	Storage Capacity Volume Diverted Environment DAC Population	Two 95th Percentile Storms (54 acre-feet) 11.4% of San Benito River tributary (10.5 acre-feet) Habitat Created 2,039 persons	12	×	×		×					×		×						×	18	**45**
Soap Lake Floodplain Preservation Project	0	5	Peak Flow Managed Environment DAC Population	35% Difference Habitat Managed 5,003 persons	12	×		×	×			×		×		×	×					×	24	**41**
Pacheco Reservoir Expansion	0	15	Peak Flow Managed	60% Difference	4	×			×			×		×			×				×		22	**41**
San Juan Bautista WWTP Regionalization with Hollister WWTP	0	15	Volume Diverted Pollutant Load Reduction	100% of San Juan Bautista WW Flows 69%	9	×			×		×												10	**34**
Nash Road Diversion	0	15	Volume Diverted Pollutant Load Reduction DAC Population	8.2% of San Benito River tributary (7.5 acre-feet) 44% 2,464 persons	7	×	×		×														10	**32**
Bridge Road Trash Capture	0	15	Pollutant Load Reduction DAC Population	76% 1,793 persons	7	×	×							×									10	**32**
San Benito Street Diversion	0	15	Volume Diverted Pollutant Load Reduction	11.0% of San Benito River tributary (10.1 acre-feet) 68%	6	×	×		×														10	**31**
Powell Street Underground Detention	0	15	Storage Capacity	25-year Storm Event (5.2 acre-feet)	3	×						×											8	**26**

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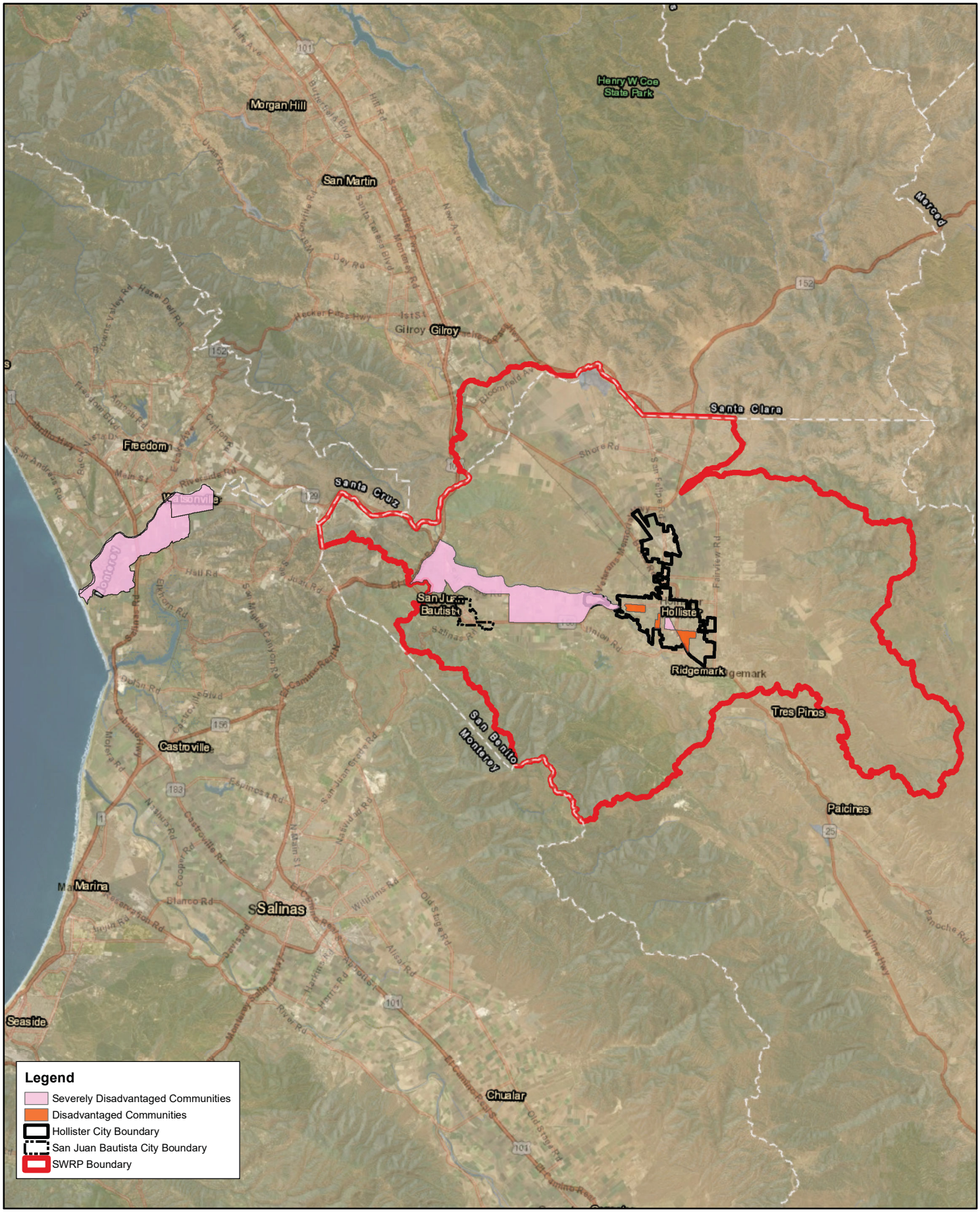

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GREATER HOLLISTER AREA
STORM WATER RESOURCE PLAN

FIGURE 5-1: DISADVANTAGED COMMUNITIES

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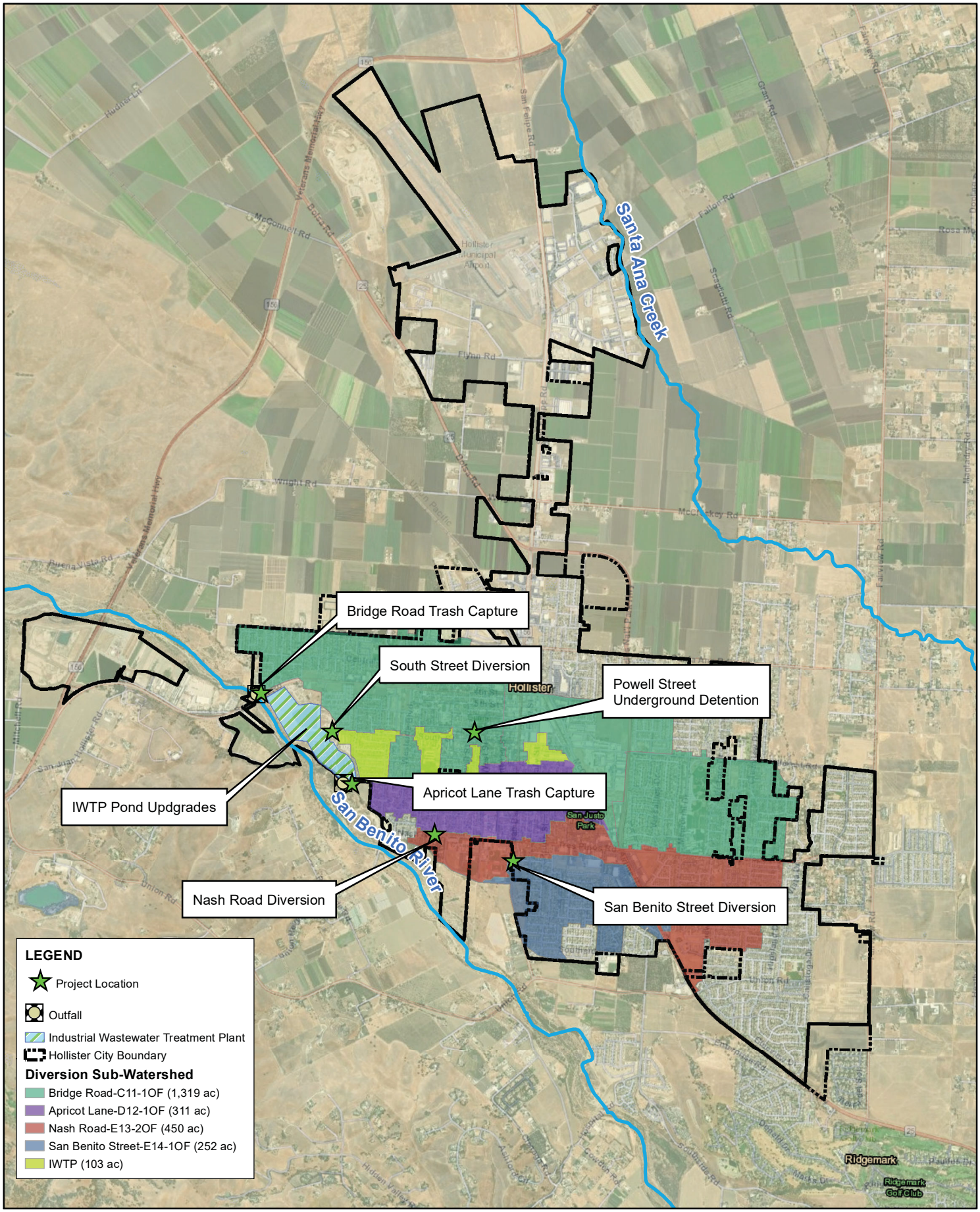

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FIGURE 5-2: CITY OF HOLLISTER PROJECT OVERVIEW

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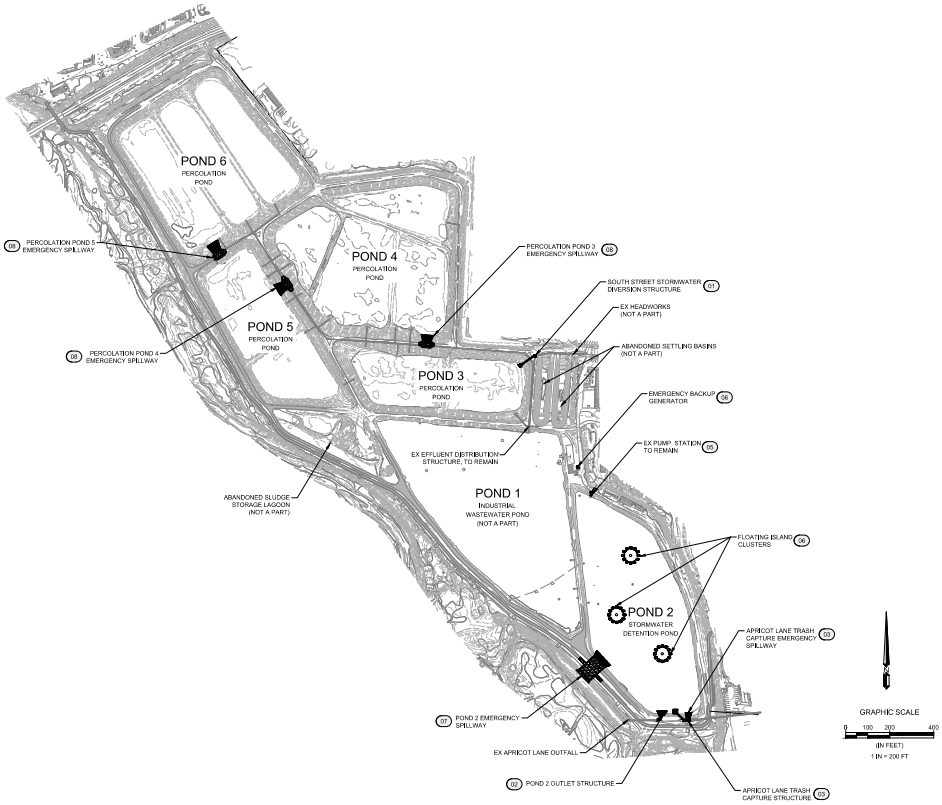
FILE NAME: 1011-003-04-IT-8.DWG

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2 3



REFERENCE KEYNOTES

XX	DESCRIPTION
01	SOUTH STREET DIVERSION STRUCTURE, SEE SHEET C-3.2 FOR DETAILS.
02	POND 2 OUTLET STRUCTURE SEE SHEET C-4.1 FOR DETAILS.
03	APRICOT LANE TRASH CAPTURE STRUCTURE, SEE SHEET C-4.5 FOR DETAILS.
04	APRICOT LANE TRASH CAPTURE STRUCTURE EMERGENCY SPILLWAY, SEE SHEET C-4.4 FOR DETAILS
05	EX EFFLUENT PUMP STATION TO BE RE-PURPOSED TO A STORMWATER PUMP STATION, SEE SHEET C-5.0 FOR DETAILS.
06	EMERGENCY BACKUP GENERATOR, SEE SHEET C-3.1 FOR DETAILS.
06	10' X 10' FLOATING ISLANDS, EXACT LOCATION TO BE DETERMINED BY CITY, SEE SHEET C-4.6 FOR DETAILS
07	POND 2 EMERGENCY SPILLWAY, SEE SHEET C-4.3 FOR DETAILS
08	PERCOLATION POND SPILLWAY, SEE SHEET C-6.1 FOR DETAILS.

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SIGNATURE

DATE SIGNED

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CITY OF HOLLISTER
HOLLISTER IWTP IMPROVEMENTS
OVERALL SITE & UTILITY PLAN

REV.	DATE	DESCRIPTION OF REVISIONS	BY
B	3/25/2021	60% SUBMITTAL	NFW
A	7/3/2020	30% SUBMITTAL	ESR

JOB # 1011-003-05
DESIGNED BY: ROD
DRAWN BY: NFW
DATE: 3/25/2021

DRAWING NO.
C-3.0

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GREATER HOLLISTER AREA STORM WATER RESOURCE PLAN

FIGURE 5-4: NASH ROAD DIVERSION

HOLLISTER Hometown, California Est. 1872

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FIGURE 5-5: SAN BENITO ROAD DIVERSION

HOLLISTER Hometown, California Est. 1872

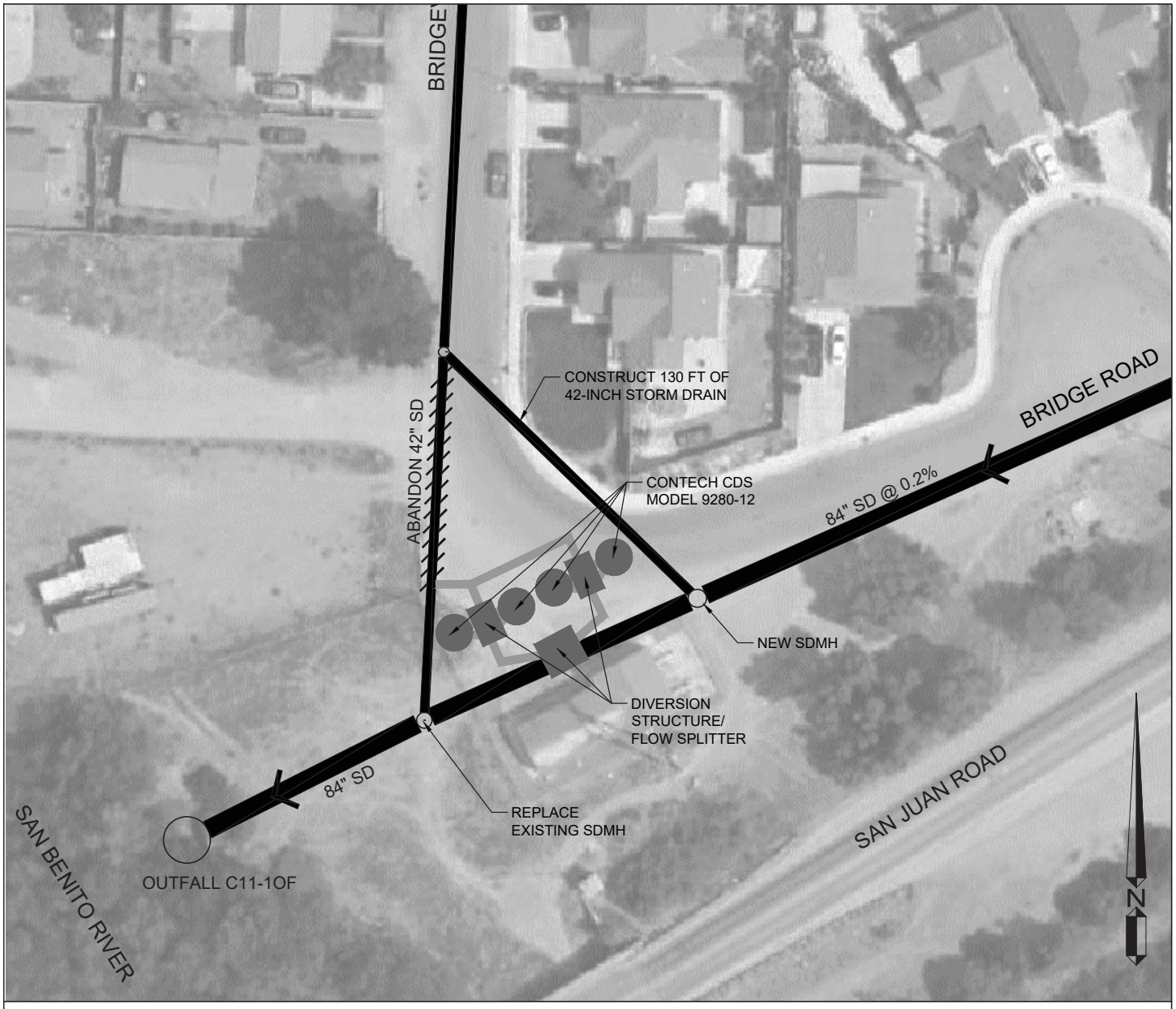

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FIGURE 5-6: BRIDGE ROAD TRASH CAPTURE

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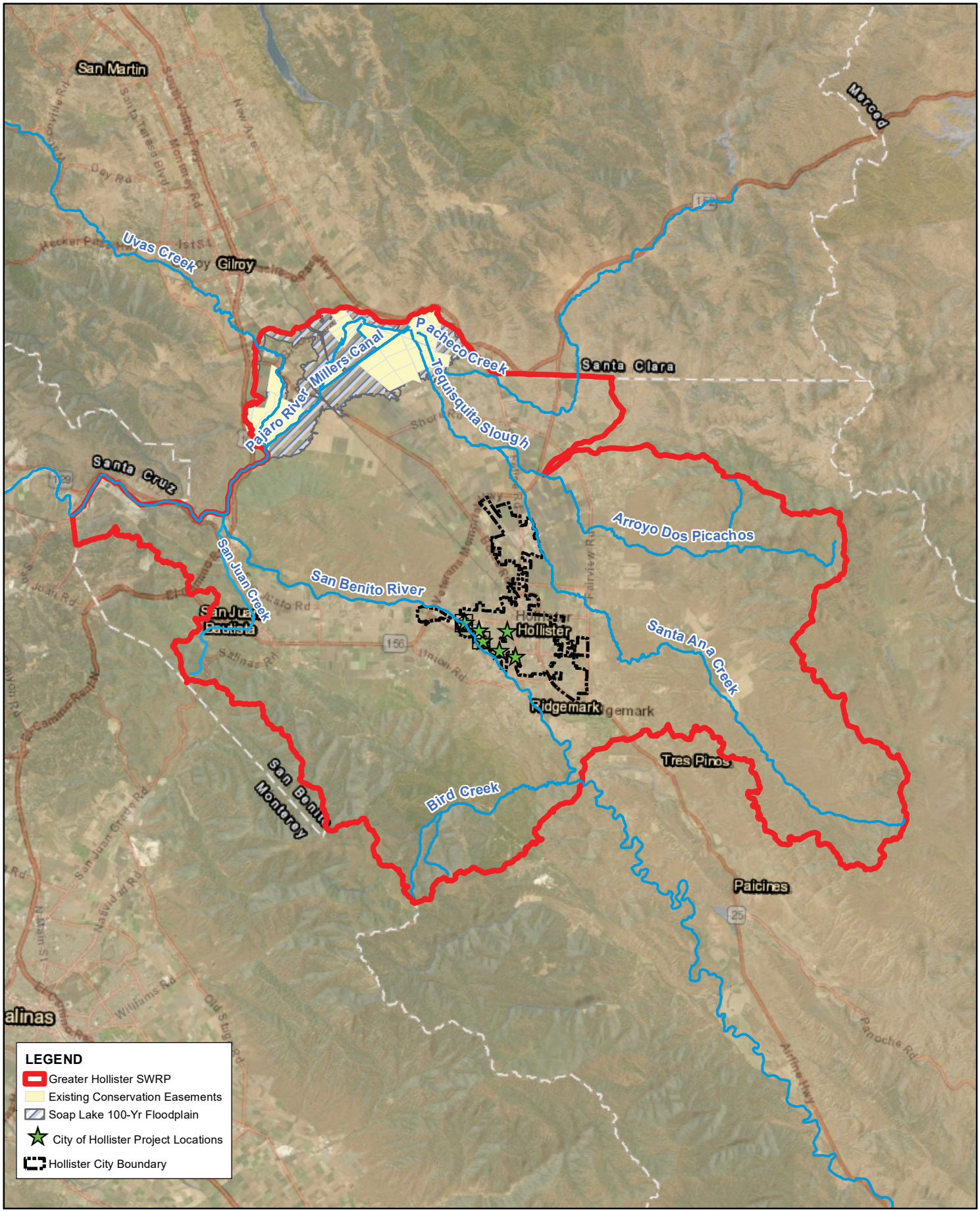

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FIGURE 5-7: SOAP LAKE FLOODPLAIN
EXISTING CONSERVATION EASEMENTS

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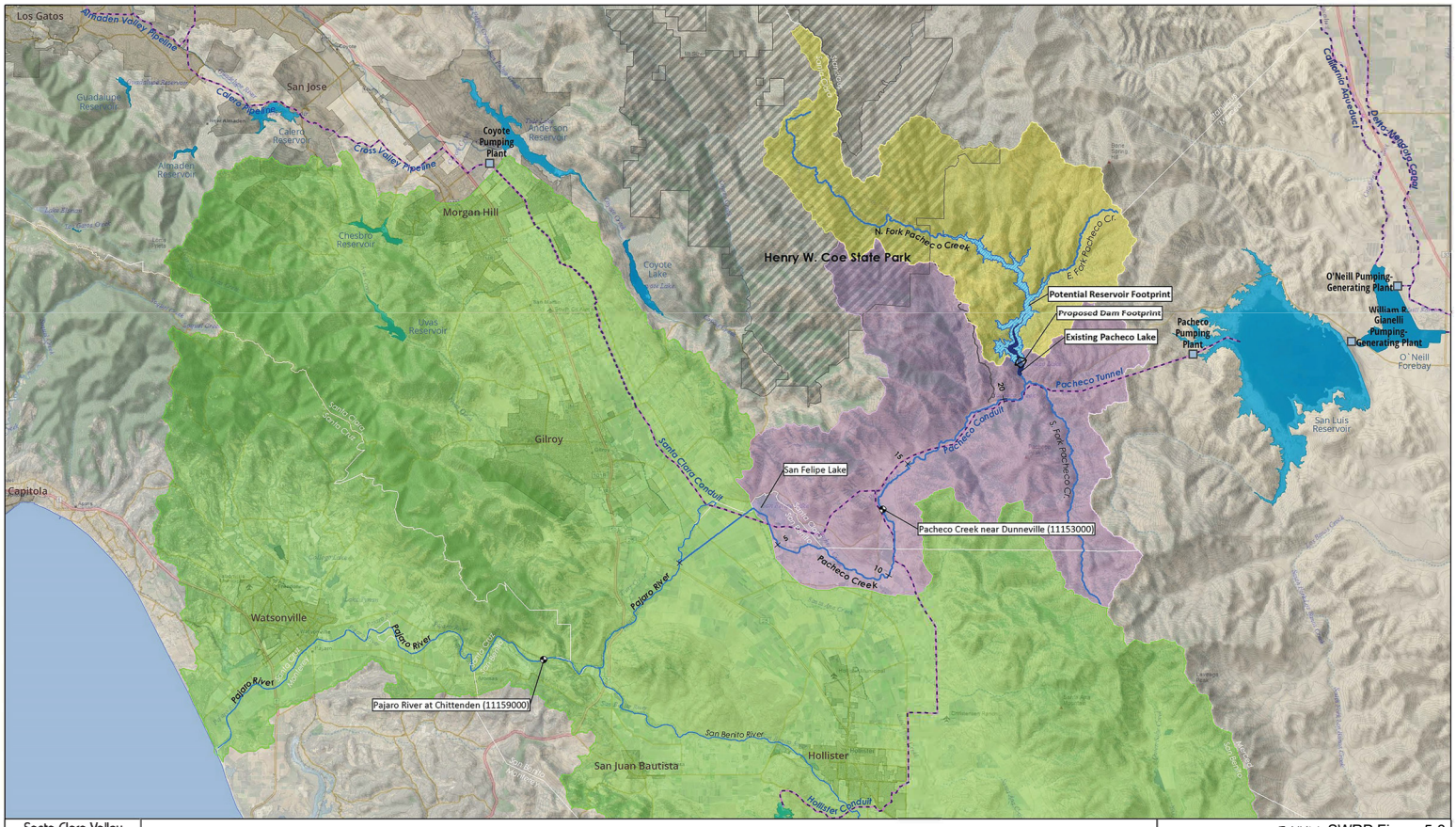
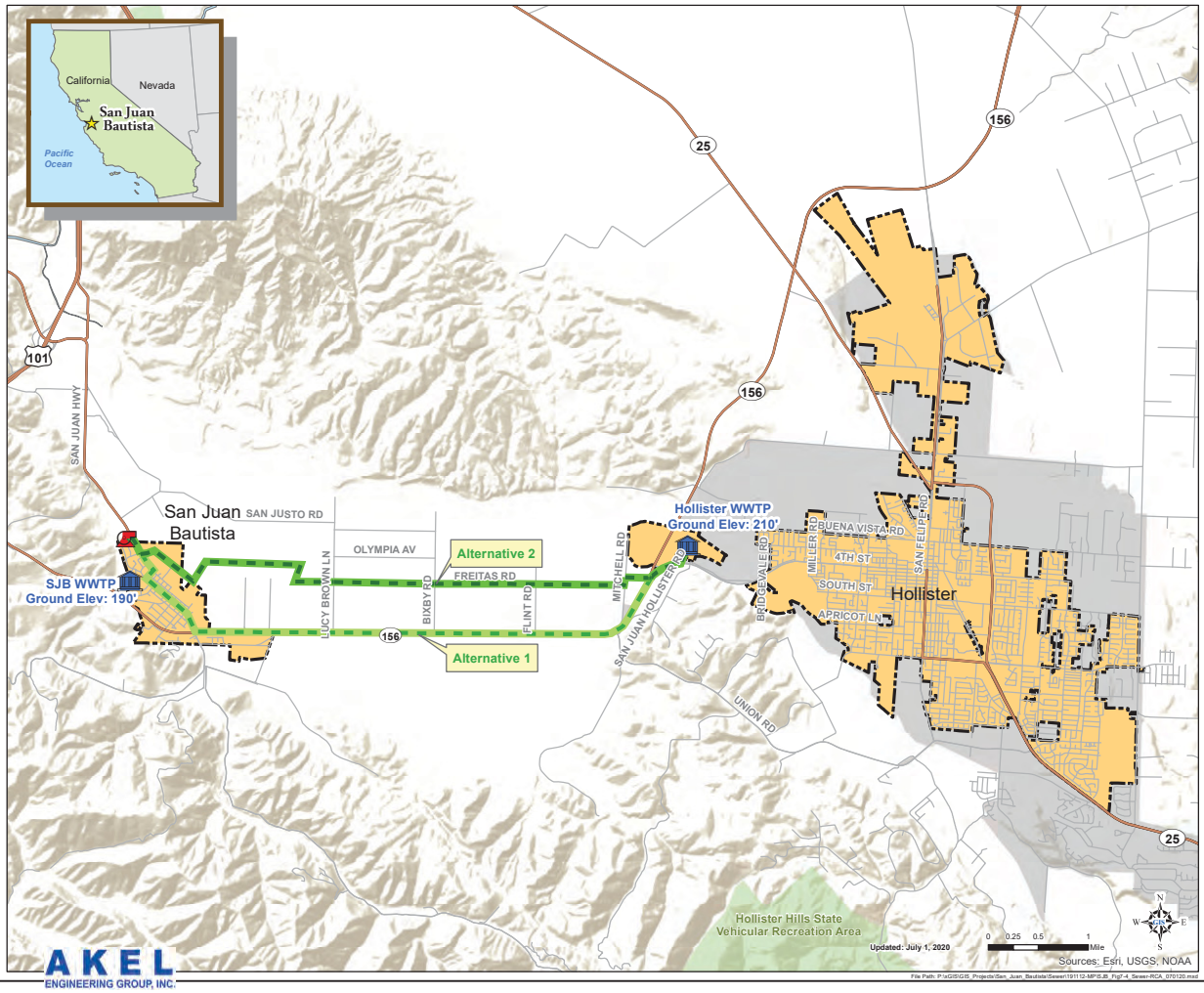


Exhibit 1 SWRP Figure 5-8

PROJECT GEOGRAPHIC OVERVIEW

PACHECO RESERVOIR EXPANSION PROJECT
AUGUST 2017



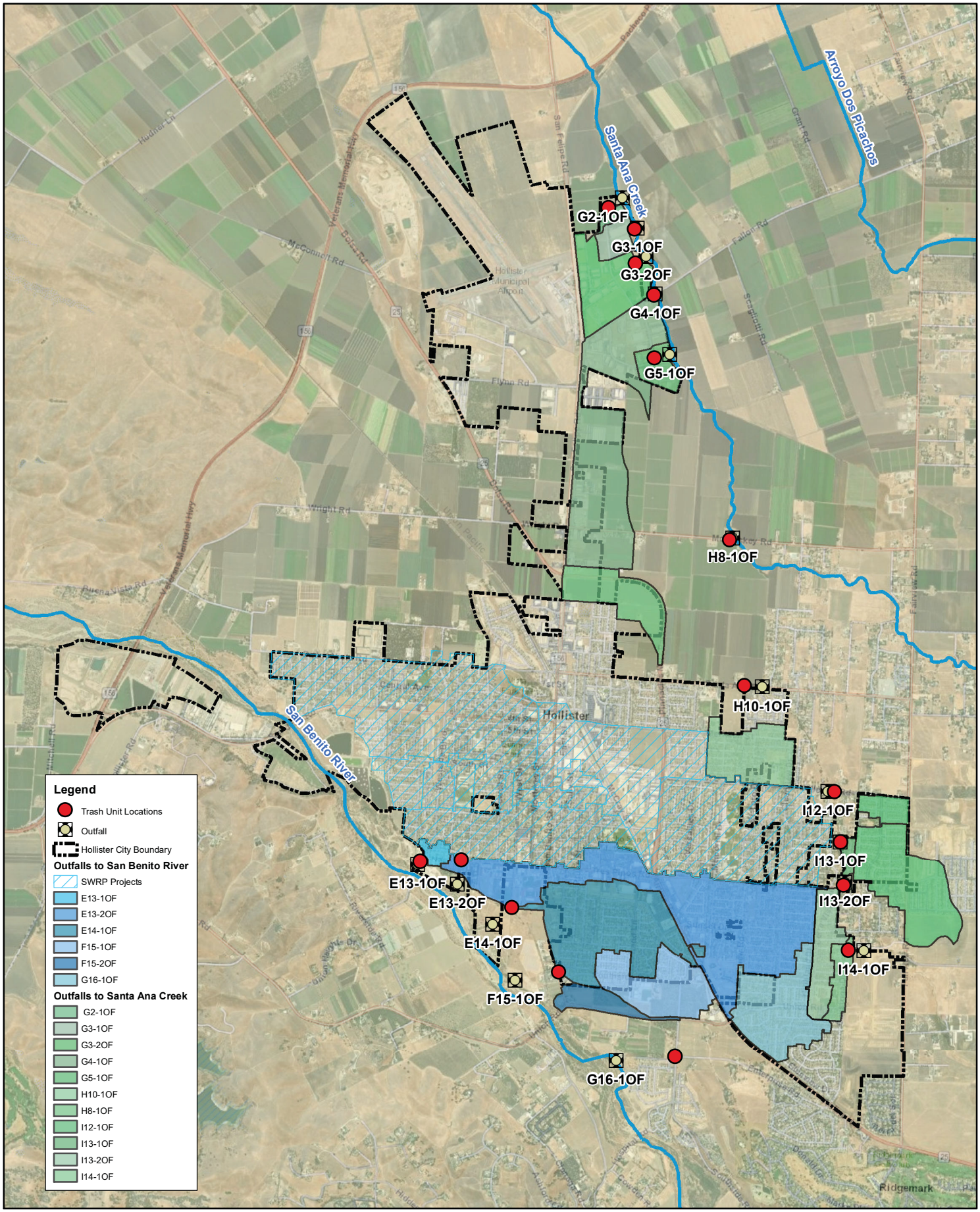
Legend

- Potential Lift Station
- Alternative Connection Alignments
- Major Highways
- City Limits
- Urbanized Area
- Protected Open Space
- Rivers/Streams
- Waterbodies

PRELIMINARY

SWRP Figure 5-9

Figure 21
Regional Connection Alternatives
Wastewater System Master Plan
City of San Juan Bautista



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GREATER HOLLISTER AREA STORM WATER RESOURCE PLAN

FIGURE 5-10: TRASH CAPTURE PROGRAM POTENTIAL LOCATIONS

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CHAPTER 6
IMPLEMENTATION STRATEGY AND SCHEDULE

Funding Resources

Funding is one of the main obstacles for implementing the projects identified in the SWRP. Possible funding sources can include user rates/fees, capacity/impact fees, special assessments, general or capital improvement funds, revenue bonds, local, state, or federal grant programs, low-interest loans, and philanthropic funding. These SWRP projects will be eligible for grant funds to support storm water and dry weather runoff capture project through California Proposition 1 Storm Water Grant Program. Through Proposition 1 (Section 79747) the Department of Water Resources will award up to $200 million in grant funds for multi-benefit storm water management projects.

Members of the Regional Water Management Group, the City of Hollister, and the PRWFPA continue to work to identify sources of funding which include private foundation grants, State IRWM, storm water grant funds, and federal, state, and local water quality funds.

Plan Implementation

The SWRP will be updated, evaluated, and revised periodically dependent upon public input, funding opportunities, and updates to project objectives.

Integrated Regional Water Management Plan

This SWRP will be submitted to the RWMG for incorporation into the Pajaro River Watershed IRWMP. According to the Pajaro River Watershed IRWMP, formal plan review occurs at least every five years with more frequent updates occurring based on the availability of new information or the integration of a SWRP.

Review, Updates, and Management

The SWRP is considered a living document that will allow the RWMG, the City of Hollister, and the County of San Benito to review, update, track plan performance and evaluate future projects. Reasons for SWRP updates may include new or additional water quality information, adding or removing projects, and quantitative assessments of completed projects. Available decision support tools for SWRP updates include the quantitative benefit methods and metrics discussed in Chapter 5.

Project Implementation

This SWRP has been prepared by agencies and organizations with experience in developing projects and ensuring effective implementation of the project objectives described in this Plan.

Responsible Entities

The implementation of the SWRP projects and programs are the responsibility of individual project proponents should funding become available.

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Project Status Tracking

Project status will be assessed every two years as part of the biennial IRWM progress report. This responsibility to update the project status falls on the RWMG to monitor and evaluate plan and project implementation.

Project Timelines

All projects outlined in the SWRP are dependent on available funding and access to property.

Federal, State, and Local Permit Timeline

The projects described in this SWRP are responsible for their own environmental review and obtainment of the necessary permits. Potential permits may include but are not limited to:

- National Environmental Policy Act (NEPA)
- Clean Water Act
- California Environments Quality Act (CEQA) Section 4040 and 401
- California Department of Fish and Wildlife Streambed and Lake Alteration Agreement
- General Permit for Discharges of Storm water Associated with Construction Activity
- Regional Water Quality Control Board NPDES permits and/or WDR
- City/County development and encroachment permits
- Municipal storm water compliance
- Caltrans encroachment permits

Permitting timelines will vary on each project, but it is recommended to use the following timeline for securing permits at each level:

- Local Permits: 3 to 6 months
- State Permits: 6 to 18 months
- Federal Permits: 12 to 18 months

Community Participation Strategy

Community Participation will continue throughout project implementation. See Chapter 7 for more description on Public Education and Outreach.

Implementation Performance Measures

The projects listed in Chapter 5 outline quantitative benefits that will be used as performance measures throughout project implementation. Each project design will be evaluated based on water quality, water supply, flood management, environmental impacts, and community impacts. With every IRWM review and update, the objective and performance will be reviewed.

Per the Pajaro River Watershed IRWMP, the RWMG will outreach to the project proponents to ensure that data is collected for each project on a regular basis. The RWMG will enter specific project related information and upload documents, such as project-specific monitoring plans and reports, project design documents, feasibility studies, reports, and information gathered for a specific project in any phase of development including the planning, design, construction, operation, and monitoring of a project.

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CHAPTER 7
EDUCATION, OUTREACH, PUBLIC PARTICIPATION

Storm Water Public Outreach

The City of Hollister has established opportunities for the public to actively participate in storm water pollution prevention efforts. The primary avenue for the public is the City's Storm Water Management Website. This site has links for information and documentation regarding the Storm Water Management Plan and subsequent reports. There are also several informational links to infographics about storm water management and tips for residents and businesses on how to minimize water pollution. The website also has direct links to a Storm Water Comment Card, a City Storm Water YouTube Channel, and City Storm Water Facebook Page. Residents can even report illegal dumping activities anonymously to their WeTIP Hotline.

Community Participation in Plan Development

Public Communication

Providing the public with opportunities to engage in the development of this Plan is an important aspect of this process. A final draft of the Plan will be available on the City and County's website for the public to provide comments.

Public Meetings

Due to the COVID-19 Pandemic, no physical public meetings were coordinated for the development of this SWRP. The report will be presented via teleconference to the City of Hollister City Council, Pajaro River Watershed Flood Prevention Authority Board of Directors, and San Benito County Water District Board of Directors. All meetings have the opportunity for the public to provide comments. Additionally, a storm water public workshop for the City of Hollister is being planned for August 2021. This workshop is aimed to provide the public and applicable stakeholders with updates on the City's storm water program. The purpose and findings of the SWRP will be presented at this workshop.

Engagement in Project Design and Implementation

Community engagement will occur during each project's design and implementation, depending on where the project is located and the community it benefits. Concerns from affected residents and businesses will be taken into consideration during the design and implementation process. The goal of public outreach during design and implementation is to educate the residents and visitors of Hollister and San Benito County as to why the local agencies care about pollution control, what is being done to help protect and improve the water quality, and what the public can do to share in the responsibility of protecting the waters of San Benito County and the Pajaro River Watershed. The community plays a large role in protecting the environment. The more the public can be educated about the impacts of their actions and encouraged to participate in keeping the community and environment a high priority, the better the City and County can achieve the goals of maintaining and improving the water quality of the community's water supply sources. The primary objectives of the Public Education and Outreach during project design and implementation are as follows:

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- Develop informational flyers about the water ways in the area. These flyers will be sent out to the residents and businesses and will educate and identify ways that the community can assist the City and County in protecting the water ways.
- Provide public workshops that allow the community to learn about what the City of Hollister is doing to protect the waters in the City of Hollister and allow for public input during the Project term.

IWTP Improvement City of Hollister Council Meetings

Since December 2018, the IWTP Improvements summarized in Chapter 5 have been presented and discussed to the public and City Council in several meetings. Table 7-1 is a summary of what was discussed at the City Council meetings.

Table 7-1 City of Hollister Council Meetings

Date	Agenda Items
12/17/2018	Discussed the need to update the IWTP permit to allow storm water.
10/7/2019	Approved the start of IWTP improvements design based on a stipulated agreement with the Water Board to modify the Apricot Lane Outfall and the IWTP.
11/18/2019	Authorized CEQA consultant to be hired for the project to complete a mitigated negative declaration study.
6/15/2020	Supported the need for an Alternatives Analysis and Economic Feasibility Study, recommended by the Regional Water Board, to evaluate treatment options to meet Basin Plan Objectives and source control measures.
6/23/2020	Authorized staff to solicit sealed bids to remove 2,000 dry tons of organic waste from the IWTP Pond 2.
9/8/2020	Designated the lowest responsive bidder to remove 2,000 dry tons of organic waste from IWTP Pond 2 in preparation for the IWTP storm water improvements.

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CHAPTER 8
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APPENDIX A

Checklist and Self-Certification

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Appendix A: Checklist and Self-Certification

Checklist Instructions:

For each element listed below, review the applicable section in the Storm Water Resource Plan Guidelines and enter ALL of the following information.

A. Mark the box if the Storm Water Resource Plan, or a functional equivalent Plan, meets the provision
B. In the provided space labeled References, enter:

1. **Title of document(s) that contain the information;**
2. **The chapter/section, and page number(s) where the information is located within the document(s);**
3. **The entity(ies) that prepared the document(s);**
4. **The date the document(s) was prepared, and subsequent updates; and**
5. **Where each document can be accessed[1] (website address or attached).**

STORM WATER RESOURCE PLAN CHECKLIST AND SELF-CERTIFICATION		
Mandatory Required Elements per California Water Code are Shaded		
Y/N	**Plan Element**	**Water Code Section**

WATERSHED IDENTIFICATION (GUIDELINES SECTION VI.A)		
■	Plan identifies watershed and subwatershed(s) for storm water resource planning.	10565(c) 10562(b)(1) 10565(c)
References: *Greater Hollister Area Storm Water Resource Plan.* Chapter 2, SWRP Boundary, pg. 2-1. July 2021. Report attached.		
■	Plan is developed on a watershed basis, using boundaries as delineated by USGS, CalWater, USGS Hydrologic Unit designations, or an applicable integrated regional water management group, and includes a description and boundary map of each watershed and sub-watershed applicable to the Plan.	
References: *Greater Hollister Area Storm Water Resource Plan.* Chapter 2, SWRP Boundary, pg. 2-1; Figure 2-2 CalWater and USGS Hydrologic Unit Designations. July 2021. Report attached.		

[1] All documents referenced must include a website address. If a document is not accessible to the public electronically, the document must be attached in the form of an electronic file (e.g. pdf or Word 2013) on a compact disk or other electronic transmittal tool.

WATERSHED IDENTIFICATION
(GUIDELINES SECTION VI.A)

■	Plan includes an explanation of why the watershed(s) and sub-watershed(s) are appropriate for storm water management with a multiple-benefit watershed approach;

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 2, SWRP Boundary, pg. 2-1. July 2021. Report attached.

■	Plan describes the internal boundaries within the watershed (boundaries of municipalities; service areas of individual water, wastewater, and land use agencies, including those not involved in the Plan; groundwater basin boundaries, etc.; preferably provided in a geographic information system shape file);

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 2, Land Use, pg. 2-3; Water Quality Priorities, pg. 2-3, Surface Water, pg. 2-5; Potable Water Treatment and Supply, pg. 2-5; Wastewater Treatment, pg. 2-6; Groundwater, pg. 2-8; Flood Management, pg. 2-9. July 2021. Report attached.

■	Plan describes the water quality priorities within the watershed based on, at a minimum, applicable TMDLs and consideration of water body-pollutant combinations listed on the State's Clean Water Act Section 303(d) list of water quality limited segments (a.k.a impaired waters list);

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 2, Water Quality Priorities, pg. 2-3; Chapter 3, Regulatory Plans and Permits, pg. 3-1. July 2021. Report attached.

■	Plan describes the general quality and identification of surface and ground water resources within the watershed (preferably provided in a geographic information system shape file);

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 2, Surface Water, pg. 2-5; Groundwater, pg. 2-8. July 2021. Report attached.

■	Plan describes the local entity or entities that provide potable water supplies and the estimated volume of potable water provided by the water suppliers;

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 2, Surface Water, pg. 2-5. July 2021. Report attached.

■	Plan includes map(s) showing location of native habitats, creeks, lakes, rivers, parks, and other natural or open space within the sub-watershed boundaries; and

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 2, Figure 2-13. July 2021. Report attached.

■	Plan identifies (quantitative, if possible) the natural watershed processes that occur within the sub-watershed and a description of how those natural watershed processes have been disrupted within the sub-watershed (e.g., high levels of imperviousness convert the watershed processes of infiltration and interflow to surface runoff increasing runoff volumes; development commonly covers natural surfaces and often introduces non-native vegetation, preventing the natural supply of sediment from reaching receiving waters).

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 2, Natural Watershed Processes, pg. 2-11. July 2021. Report attached.

WATER QUALITY COMPLIANCE
(GUIDELINES SECTION V)

■	Plan identifies activities that generate or contribute to the pollution of storm water or dry weather runoff, or that impair the effective beneficial use of storm water or dry weather runoff.	10562(d)(7)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 3, Contributors to Storm Water Pollution, pg. 3-1. July 2021. Report attached.

■	Plan describes how it is consistent with and assists in, compliance with total maximum daily load implementation plans and applicable national pollutant discharge elimination system permits.	10562(b)(5)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 3, Regulatory Plans and Permits, pg. 3-1. July 2021. Report attached.

■	Plan identifies applicable permits and describes how it meets all applicable waste discharge permit requirements.	10562(b)(6)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 3, Regulatory Plans and Permits, pg. 3-1. July 2021. Report attached.

ORGANIZATION, COORDINATION, COLLABORATION
(GUIDELINES SECTION VI.B)

■	Local agencies and nongovernmental organizations were consulted in Plan development.	10565(a)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 4, Local Agency and Organization Collaboration, pg. 4-1. July 2021. Report attached.

■	Community participation was provided for in Plan development.	10562(b)(4)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 7, Community Participation in Plan Development, pg. 7-1. July 2021. Report attached.

■	Plan includes description of the existing integrated regional water management group(s) implementing an integrated regional water management plan.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 4, Regional Water Management Group, pg. 4-1. July 2021. Report attached.

ORGANIZATION, COORDINATION, COLLABORATION
(GUIDELINES SECTION VI.B)

■	Plan includes identification of and coordination with agencies and organizations (including, but not limited to public agencies, nonprofit organizations, and privately owned water utilities) that need to participate and implement their own authorities and mandates in order to address the storm water and dry weather runoff management objectives of the Plan for the targeted watershed.

References:
Greater Hollister Area Storm Water Resource Plan. Chapter 4, Local Agency and Organization Collaboration, pg. 4-1. July 2021. Report attached.

□	Plan includes identification of nonprofit organizations working on storm water and dry weather resource planning or management in the watershed.

References:
Unavailable resources.

■	Plan includes identification and discussion of public engagement efforts and community participation in Plan development.

References:
Greater Hollister Area Storm Water Resource Plan. Chapter 7, Community Participation in Plan Development, pg. 7-1. July 2021. Report attached.

■	Plan includes identification of required decisions that must be made by local, state or federal regulatory agencies for Plan implementation and coordinated watershed-based or regional monitoring and visualization

References:
Greater Hollister Area Storm Water Resource Plan. Chapter 4, Local Agency and Organization Collaboration, pg. 4-1. July 2021. Report attached.

■	Plan describes planning and coordination of existing local governmental agencies, including where necessary new or altered governance structures to support collaboration among two or more lead local agencies responsible for plan implementation.

References:
Greater Hollister Area Storm Water Resource Plan. Chapter 4, Local Agency and Organization Collaboration, pg. 4-1. July 2021. Report attached.

■	Plan describes the relationship of the Plan to other existing planning documents, ordinances, and programs established by local agencies.

References:
Greater Hollister Area Storm Water Resource Plan. Chapter 4, Local Agency and Organization Collaboration, pg. 4-1. July 2021. Report attached.

□	(If applicable)Plan explans why individual agency participation in various isolated efforts is appropriate.

References:
Not Applicable.

QUANTITATIVE METHODS
(GUIDELINES SECTION VI.C)

■	**For all analyses:** Plan includes an integrated metrics-based analysis to demonstrate that the Plan's proposed storm water and dry weather capture projects and programs will satisfy the Plan's identified water management objectives and multiple benefits.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

■	**For water quality project analysis (section VI.C.2.a)** Plan includes an analysis of how each project and program complies with or is consistent with an applicable NPDES permit. The analysis should simulate the proposed watershed-based outcomes using modeling, calculations, pollutant mass balances, water volume balances, and/or other methods of analysis. Describes how each project or program will contribute to the preservation, restoration, or enhancement of watershed processes (as described in Guidelines section VI.C.2.a)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

■	**For storm water capture and use project analysis (section VI.C.2.b):** Plan includes an analysis of how collectively the projects and programs in the watershed will capture and use the proposed amount of storm water and dry weather runoff.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

■	**For water supply and flood management project analysis (section VI.C.2.c):** Plan includes an analysis of how each project and program will maximize and/or augment water supply.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

■	**For environmental and community benefit analysis (section VI.C.2.d):** Plan includes a narrative of how each project and program will benefit the environment and/or community, with some type of quantitative measurement.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

■	**Data management (section VI.C.3):** Plan describes data collection and management, including: a) mechanisms by which data will be managed and stored; b) how data will be accessed by stakeholders and the public; c) how existing water quality and water quality monitoring will be assessed; d) frequency at which data will be updated; and e) how data gaps will be identified.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 6, Implementation Performance Measures, pg. 6-2. July 2021. Report attached.

IDENTIFICATION AND PRIORITIZATION OF PROJECTS
(GUIDELINES SECTION VI.D)

■	Plan identifies opportunities to augment local water supply through groundwater recharge or storage for beneficial use of storm water and dry weather runoff.	10562(d)(1)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

■	Plan identifies opportunities for source control for both pollution and dry weather runoff volume, onsite and local infiltration, and use of storm water and dry weather runoff.	10562(d)(2)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

■	Plan identifies projects that reestablish natural water drainage treatment and infiltration systems, or mimic natural system functions to the maximum extent feasible.	10562(d)(3)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

■	Plan identifies opportunities to develop, restore, or enhance habitat and open space through storm water and dry weather runoff management, including wetlands, riverside habitats, parkways, and parks.	10562(d)(4)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

■	Plan identifies opportunities to use existing publicly owned lands and easements, including, but not limited to, parks, public open space, community gardens, farm and agricultural preserves, school sites, and government office buildings and complexes, to capture, clean, store, and use storm water and dry weather runoff either onsite or offsite.	10562(d)(5), 10562(b)(8)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects. July 2021. Report attached.

IDENTIFICATION AND PRIORITIZATION OF PROJECTS
(GUIDELINES SECTION VI.D)

■	For new development and redevelopments (if applicable): Plan identifies design criteria and best management practices to prevent storm water and dry weather runoff pollution and increase effective storm water and dry weather runoff management for new and upgraded infrastructure and residential, commercial, industrial, and public development.	10562(d)(6)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 2, Natural Watershed Processes, pg. 2-11. July 2021. Report attached.

■	Plan uses appropriate quantitative methods for prioritization of projects. (This should be accomplished by using a metrics-based and integrated evaluation and analysis of multiple benefits to maximize water supply, water quality, flood management, environmental, and other community benefits within the watershed.)	10562(b)(2)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Prioritization of Projects, pg. 5-18. July 2021. Report attached.

■	*Overall:* Plan prioritizes projects and programs using a metric-driven approach and a geospatial analysis of multiple benefits to maximize water supply, water quality, flood management, environmental, and community benefits within the watershed.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects; Table 5-3. July 2021. Report attached.

■	*Multiple benefits:* Each project in accordance with the Plan contributes to at least two or more **Main Benefits** and the maximum number of **Additional Benefits** as listed in Table 4 of the Guidelines. (Benefits are not counted twice if they apply to more than one category.)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Identification & Prioritization of Projects; Table 5-3. July 2021. Report attached.

IMPLEMENTATION STRATEGY AND SCHEDULE
(GUIDELINES SECTION VI.E)

■	Plan identifies resources for Plan implementation, including: 1) projection of additional funding needs and sources for administration and implementation needs; and 2) schedule for arranging and securing Plan implementation financing.	

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 6, Funding Resources, pg 6-1. July 2021. Report attached.

■	Plan projects and programs are identified to ensure the effective implementation of the storm water resource plan pursuant to this part and achieve multiple benefits.	10562(d)(8)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 6, Project Implementation, pg 6-1. July 2021. Report attached.

■	The Plan identifies the development of appropriate decision support tools and the data necessary to use the decision support tools.	10562(d)(8)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 6, Plan Implementation, pg. 6-1. July 2021. Report attached.

■	Plan describes implementation strategy, including: a) Timeline for submitting Plan into existing plans, as applicable; b) Specific actions by which Plan will be implemented; c) All entities responsible for project implementation; d) Description of community participation strategy; e) Procedures to track status of each project; f) Timelines for all active or planned projects; g) Procedures for ongoing review, updates, and adaptive management of the Plan; and h) A strategy and timeline for obtaining necessary federal, state, and local permits.	

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5 Identification of Prioritization of Projects and Chapter 6, Implementation Strategy and Schedule. July 2021. Report attached.

■	Applicable IRWM plan: The Plan will be submitted, upon development, to the applicable integrated regional water management (IRWM) group for incorporation into the IRWM plan.	10562(b)(7)

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 6, Plan Implementation, pg. 6-1. July 2021. Report attached.

IMPLEMENTATION STRATEGY AND SCHEDULE
(GUIDELINES SECTION VI.E)

■	Plan describes how implementation performance measures will be tracked.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 6, Project Implementation, pg. 6-1. July 2021. Report attached.

EDUCATION, OUTREACH, PUBLIC PARTICIPATION
(GUIDELINES SECTION VI.F)

■	Outreach and Scoping: 10562(b)(4) Community participation is provided for in Plan implementation.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 6, Project Implementation, pg. 6-1. July 2021. Report attached.

■	Plan describes public education and public participation opportunities to engage the public when considering major technical and policy issues related to the development and implementation.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 7, Community Participation in Plan Development pg. 7-1. July 2021. Report attached.

■	Plan describes mechanisms, processes, and milestones that have been or will be used to facilitate public participation and communication during development and implementation of the Plan.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 7, Engagement in Project Design and Implementation pg. 7-1. July 2021. Report attached.

■	Plan describes mechanisms to engage communities in project design and implementation.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 7, Engagement in Project Design and Implementation pg. 7-1. July 2021. Report attached.

■	Plan identifies specific audiences including local ratepayers, developers, locally regulated commercial and industrial stakeholders, nonprofit organizations, and the general public.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 7, Engagement in Project Design and Implementation pg. 7-1. July 2021. Report attached.

EDUCATION, OUTREACH, PUBLIC PARTICIPATION
(GUIDELINES SECTION VI.F)

■	Plan describes strategies to engage disadvantaged and climate vulnerable communities within the Plan boundaries and ongoing tracking of their involvement in the planning process.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Disadvantaged Community pg. 5-1; Table 5-2 Quantitative Metrics Summary. July 2021. Report attached.

■	Plan describes efforts to identify and address environmental injustice needs and issues within the watershed.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 5, Disadvantaged Community pg. 5-1; Table 5-2 Quantitative Metrics Summary. July 2021. Report attached.

■	Plan includes a schedule for initial public engagement and education.

References:

Greater Hollister Area Storm Water Resource Plan. Chapter 7, Engagement in Project Design and Implementation pg. 7-1. July 2021. Report attached.

DECLARATION AND SIGNATURE

I declare under penalty of perjury that all information provided is true and correct to the best of my knowledge and belief.

DRAFT FOR REVIEW		
Signature	Title	Date
DRAFT FOR REVIEW		
Signature	Title	Date

APPENDIX B

North San Benito Storm Water Programs & Opportunities
GSP Support Memorandum

DRAFT

March 2, 2021

MEMORANDUM

To: Andrea Kingsbury and Kari Wagner, Wallace Group

From: Iris Priestaf, PhD, President

Maureen Reilly, PE, Senior Engineer

cc: Jeff Cattaneo, SBCWD

Re: North San Benito Stormwater Programs and Opportunities

San Benito County Water District (SBCWD) supports the City of Hollister in its preparation of a Storm Water Resource Plan (SWRP). To that end, we appreciate the opportunity to have reviewed a draft of the SWRP and provided comments (under separate cover). We also understand that the Pajaro River Flood Prevention Authority has suggested expanding the scope of the SWRP to include watersheds in the greater Hollister area (as delineated on Figure 1) and to include storm water programs and opportunities that may have been identified in the development of the GSP. To support this expanded effort, we have reviewed the GSP and related basin management documents.

The GSP has identified projects and management measures to ensure groundwater sustainability. One of these is to increase stormwater recharge by supporting the SWRP and by identifying opportunities to increase recharge using local storm runoff. The IWTP Upgrade has been identified previously (for example, in the 2014 Salt and Nutrient Management Plan) as a key project and along with the other projects in the SWRP is being included in the GSP. One of the tasks of the GSP process is a Managed Aquifer Recharge (MAR) study currently underway. This study considered stormwater as a potential source along with local streamflow and imported CVP supply. However, for the objectives of this effort, CVP water was selected for analysis. Nonetheless, stormwater is recognized as a potential supply for replenishment and for potential improvement of groundwater quality with regard to salinity and nitrate.

The Water Resources Association of San Benito County, a non-profit organization dedicated to water conservation, provides water workshops and school programs, landscaping hardware rebate programs, free model water-wise landscape plans, and landscape plan review.

We also note that San Benito County has General Plan policies that support stormwater recharge. The GSP section on Plan Area includes a summary of these policies, available at: https://www.sbcwd.com/wp-content/uploads/2019/02/DraftGSPIntroPlanAreawithTablesFigures12202018.pdf

Please don't hesitate to contact us if you have question or comments.