North San Benito County Groundwater Sustainability Plan Draft: Introduction and Plan Area

December 2018

TODD GROUNDWATER

2490 Mariner Square Loop, Suite 215
Alameda, CA 94501
510.747.6920
www.toddgroundwater.com

This page is intentionally blank.

SIGNATURE PAGE

Iris Priestaf, PhD
President

Table of Contents

List of Tables (following text unless otherwise noted)

List of Figures (following text)

Appendices (following text)

1. INTRODUCTION

Since its founding in 1953, San Benito County Water District (SBCWD or District) has actively managed water resources in San Benito County. This management, focused on conjunctive use of groundwater and surface water sources, was formalized in 1998 through adoption of its Groundwater Management Plan (GWMP), subsequently updated in 2004. In 2014, the State of California passed the Sustainable Groundwater Management Act (SGMA) to empower local agencies to adopt Groundwater Sustainability Plans (GSPs) that are tailored to the resources and needs of their communities. SGMA also empowers local agencies to form a Groundwater Sustainability Agency (GSA) for managing groundwater resources in a sustainable manner. Accordingly, the San Benito County Water District GSA (SBCWD GSA) was formed to continue groundwater management with the goal of achieving sustainability in accordance with SGMA.

Figure 1-1 shows the Plan Area for this GSP, which encompasses the historically-defined Bolsa, Hollister, and San Juan Bautista Subbasins of the Gilroy-Hollister Basin and the Tres Pinos Valley Basin. The Plan Area is predominantly in San Benito County with small portions of the Hollister and San Juan Bautista subbasins extending into Santa Clara County.

In May 2017, SBCWD became the GSA for the Bolsa Subbasin and for the Hollister and San Juan Bautista Subbasins within San Benito County. In August 2018, SBCWD became GSA for the Tres Pinos Valley. **Appendix A** provides the SBCWD Notices of Decision to become a Groundwater Sustainability Agency. Santa Clara Valley Water District (SCVWD) is the GSA for the portions of the Hollister and San Juan Bautista subbasins in Santa Clara County.

Wishing to provide a framework for cooperative groundwater management efforts, in July 2017, SBCWD and SCVWD executed a Memorandum of Understanding (MOU), which sets forth their respective roles and responsibilities in GSP preparation for the shared subbasins. These include data sharing and coordinated outreach, among other responsibilities. Per the MOU, SBCWD is responsible for executing contracts with consultants to undertake development of the GSP. This MOU is reproduced in **Appendix B**.

These four groundwater basins, defined by the California Department of Water Resources (DWR) in its Bulletin 118 (DWR, 2004a, b, c, d), have been managed and monitored by SBCWD (in cooperation with SCVWD) since at least 1976, although the definition of basin boundaries and the focus of various studies have differed over the years. Recognizing that the basins are contiguous, hydraulically connected, and comprehensively managed, SBCWD submitted a request to DWR to consolidate the four basins into a single basin, termed the North San Benito Groundwater Basin.

1.1. PURPOSE OF THE GROUNDWATER SUSTAINABILITY PLAN

The purpose of this GSP is to assess water resource and land use conditions within the Plan Area, through an open and collaborative process, and to implement management activities to achieve (or maintain) long-term groundwater sustainability as defined by SGMA.

1.2. SUSTAINABILITY GOAL

To be added (TBA) later

1.3. AGENCY INFORMATION

Two GSAs—SBCWD and SCVWD—are collaborating on preparation of this GSP, as described in the July 2017 MOU between the two districts. SCVWD is the exclusive GSA for groundwater basins within its jurisdiction, per §10723 of the Water Code. SBCWD GSA was formed through the following processes for the Bolsa, Hollister, and San Juan Bautista basins and for the Tres Pinos Valley:

Bolsa/Hollister/San Juan Bautista

- A properly noticed public hearing was held by SBCWD on February 8, 2017 to determine whether to become a GSA for the Bolsa, Hollister, and San Juan Bautista basins within San Benito County. The SBCWD Board of Directors adopted Resolution 2017-03 to form a GSA.
- On February 24, 2017, SBCWD submitted to DWR a Notice of Decision to Become a Groundwater Sustainability Agency, along with required information including a boundary map of the GSA and a list of interested parties.
- After the 90-day review period, on May 30, 2017, SBCWD GSA became exclusive groundwater sustainability agency.

Tres Pinos Valley

- On April 25, 2018, a properly noticed public hearing was held by SBCWD to determine whether to become a GSA for the Tres Pinos Valley. The SBCWD Board of Directors adopted Resolution 2018-06 to form a GSA for the Tres Pinos Valley.
- On May 4, 2018, SBCWD submitted to DWR a Notice of Decision to Become a Groundwater Sustainability Agency, along with the required information including a boundary map and list of interested parties.
- After the 90-day review period, on August 2, 2018, SBCWD GSA became exclusive groundwater sustainability agency for Tres Pinos Valley.

As required by GSP Regulations §354.6 and SGMA §10723.8, the Notices of Decision to become a Groundwater Sustainability Agency are included in **Appendix A**. These each include the resolution, list of interested parties, and boundary map.

The point of contact for the SBCWD GSA is:

Jeff Cattaneo, General Manager
San Benito County Water District
30 Mansfield Rd
Hollister, Ca 95024
(831) 637-8218
jcattaneo@sbcwd.com

1.4. GROUNDWATER SUSTAINABILITY AGENCY INFORMATION

Preparation of this GSP is under the authority of SBCWD and SCVWD, which are GSAs for the Plan Area and are working together with SBCWD serving as lead agency.

San Benito County Water District is a special district formed in 1953 under State law (California Water Code Appendix 70) pursuant to the San Benito County Water District Act. It originally was formed as the San Benito County Water Conservation and Flood Control Act. The name was changed from the San Benito County Water Conservation and Flood Control District to San Benito County Water District in 1989.

SBCWD is the county-wide manager of water resources, the owner and operator of local surface water reservoirs (Hernandez and Paicines) and associated recharge operations, and the wholesaler for Central Valley Project (CVP) supplies from the U.S. Bureau of Reclamation (USBR). SBCWD has established three Zones of Benefit reflecting these responsibilities, as described in **Table 1-1**. While Zone 1 is the entire San Benito County, the extents of Zones 3 and 6 are shown in **Figure 1-2. Zone 6 is the area where CVP water is provided; remaining areas rely on groundwater wells.**

Table 1-1. SBCWD Zones of Benefit

Zone	Area	Provides
1	Entire County	Specific District administrative expenses
3	San Benito River Valley (Paicines to San Juan) and Tres Pinos Creek Valley (Paicines to San Benito River)	Operation of Hernandez and Paicines reservoirs and related groundwater recharge and management activities
6	San Juan, Hollister East, Hollister West, Pacheco, Bolsa SE, and Tres Pinos subbasins	Importation and distribution of CVP water and related groundwater management activities

SBCWD is governed by a five-person Board of Directors that elects a president from its members and appoints a secretary. The SBCWD Board of Directors serves as the Board of Directors for the SBCWD GSA. The Board meets monthly at its office, located at 30 Mansfield Road, Hollister. Meetings are announced, and agenda are posted on the SBCWD website; the meetings are open to the public. The board (except as otherwise specifically provided in the California Water Code) manages and conducts the business and affairs of SBCWD and the GSA. The vote of a majority of directors present at any meeting attended by a quorum is necessary to determine any proposition or resolution presented. The Board is supported by operations staff and by Administrative Staff, including the General Manager who is the GSA Point of Contact (see above) and Project Manager for the GSP.

Santa Clara Valley Water District is the GSA for the portion of the GSP area in Santa Clara County. SCVWD is a special district with jurisdiction throughout Santa Clara County. It

formed in 1951 as the Santa Clara County Flood Control and Water District; its name subsequently was changed to Santa Clara Valley Water District. SCVWD provides wholesale water supply, stream and watershed stewardship, and flood protection for Santa Clara County. In addition, SCVWD manages the County's groundwater basins. SCVWD is a CVP and State Water Project (SWP) contractor and receives water from the San Felipe Division facilities through the Pacheco and Santa Clara Conduits, with imported water customers in the Santa Clara County portion of the GSP area along Pacheco Creek.

SCVWD's Board of Directors includes seven members, each elected from equally-divided districts drawn through a formal process. The Board of Directors holds regular meetings twice monthly on the second and fourth Tuesday. All meetings are held in the SCVWD Headquarters Board Room, at 5700 Almaden Expressway, San Jose, unless otherwise noted on the meeting agenda.

1.4.1. Legal Authority of the GSA

SBCWD is a public agency overlying all or portions of the Tres Pinos Valley, Bolsa, Hollister, and San Juan Bautista basins within San Benito County. SCVWD is a public agency overlying portions of the Hollister and San Juan Bautista basins in Santa Clara County. Both are qualified exclusive GSAs and have the authority to develop and implement SGMA within their respective service areas. Based on their respective legislation, each has broad powers and authorities for water management. SGMA specifies additional enabling powers; for example, GSAs may choose to adopt standards for measuring and reporting water use, develop and implement metering, and manage extraction from individual wells.

1.4.2. GSP Development Costs and Funding Sources

In November 2017, SBCWD applied for a Sustainable Groundwater Management Planning (SGMP) Grant to fund preparation of this GSP. In April 2018, DWR awarded SBCWD with full funding of $830,366.

To be added later: the estimated cost of **implementing** the GSP and how GSA will fund it

1.5. GSP Organization

This GSP is organized generally to follow the Groundwater Sustainability Plan (GSP) Annotated Outline provided by DWR as one of its Guidance Documents. Major sections include:

- Executive Summary
- Introduction (including Agency Information)
- Plan Area and Communication Plan (in Appendix D)
- Hydrogeologic Conceptual Model and Groundwater Conditions
- Water Budget

- Groundwater Model
- Sustainable Management Criteria and Management Areas
- Management Actions and Projects
- Plan Implementation and Monitoring
- References

A Preparation Checklist demonstrating compliance with SGMA is attached in **Appendix C.**

2. PLAN AREA

The following sections, consistent with GSP Regulations §354.8, provide a description of the Plan Area.

2.1. DESCRIPTION OF THE PLAN AREA

The following provides a general description of the North San Benito GSP Area, including local jurisdictions, water resource management and monitoring programs, well permitting procedures, general plans and other land use plans, and additional groundwater management elements.

2.1.1. Geographic Area

Figure 1-1 shows the boundaries of the Plan Area along with other groundwater basins in San Benito County. **Figure 1-1** also shows the adjacent Llagas Basin in Santa Clara County, which shares a common boundary along the Pajaro River, and the Pajaro Valley Basin which extends into San Benito County but is not adjacent to North San Benito.

Figure 1-1 shows the boundaries of GSAs in San Benito County; Santa Clara Valley Water District is the GSA for all groundwater basin areas in Santa Clara County. No adjudicated areas exist in the basin, or in San Benito County and adjacent Santa Clara County. In addition, no areas of the North San Benito basin are covered by an Alternative Plan. Alternative Plans are equivalent to GSPs and represent options for basins with documented sustainability for the ten years but were due by January 1, 2017. Alternative Plans were submitted to DWR by SCVWD for the adjacent Llagas Basin and by Pajaro Valley Water Management Agency for the nearby Pajaro Basin.

2.1.2. Jurisdictional Agencies

This section identifies agencies with land use management responsibilities.

Counties. The GSP area overlaps two counties: San Benito and Santa Clara. Through the Resource Management Agency (RMA), San Benito County has jurisdiction for land use planning for unincorporated areas. San Benito County also has responsibility for small water systems and for on-site wastewater treatment systems (OWTS) through its Department of Environmental Health. The San Benito County Code of Ordinances (Title 15 Public Works, Chapter 15.05 Water, Article 1) also asserts groundwater aquifer protections and appoints SBCWD as the enforcing agency.

Similarly, the Santa Clara County Department of Planning and Development has jurisdiction for land use planning in unincorporated areas, including all Santa Clara County portions of the GSP Area. The Santa Clara Department of Environmental Health is responsible for small water systems and for OWTS. While SCVWD is responsible for regulation of the construction, destruction, and maintenance of wells, Santa Clara Department of Environmental Health provides review of all new well construction applications for domestic

and agricultural uses prior to submittal to SCVWD; this review ensures adequate separation of wells from OWTS.

Cities. Figure 2-1 shows the boundaries of other jurisdictions that have land use management responsibilities. These include two municipalities: City of Hollister and the City of San Juan Bautista. These have land use planning responsibilities within their respective planning areas. General plan elements relevant to the GSP are discussed in **Section 2.1.3**. In addition to land use planning, the City of Hollister Public Works Department is responsible for stormwater management, for sewage collection, and for producing and distributing potable water for the western half of the City; the eastern portion of the City and the Ridgemark community are served by Sunnyslope County Water District (SSCWD). The City of San Juan Bautista provides water and sewer service within its service area.

State Parks. California State Parks has jurisdiction for the Hollister Hills State Vehicular Recreation Area (SVRA). Park facilities are mostly in Cienega Valley, but the eastern park overlaps the GSP Plan Area (see **Figure 2-1**). The overlapping portion of the SVRA is mostly designated as non-motorized special use area and buffer area and is open space with some ranch buildings. The Hollister Hills SVRA is guided by its Resource Management Plan and General Development Plan, completed in 1978 (California Department of Parks and Recreation, 1978). Planning relevant to water is generally to provide safe, serviceable water systems for picnic and camping areas; to protect habitat associated with seeps, springs, ponds and riparian areas; and to control water pollution.

California Department of Fish & Wildlife. Also relevant are state wildlife refuges, lands owned by the California Department of Fish & Wildlife (CDFW), and lands with conservation easements. Of these in the GSP Area, the Wildlife Heritage Foundation/Wildlands manages the Pajaro River Wetland Mitigation Bank along the Pajaro River just downstream from San Felipe Lake.

Federal Lands. Federal lands within the GSP Area include parcels around and providing access to San Justo Reservoir. The reservoir is part of the US Bureau of Reclamation's Central Valley Project and the land is administered by the Bureau of Land Management. No other federal lands overlie the Plan Area, such as military installations or United States Forest Service lands. No tribal lands are known within the GSP Area, but to the west, the U.S. Bureau of Indian Affairs administers an area of Tribal Trust Land along Harlan Creek, a tributary to Cienega Valley.

2.1.2.1. Water Supply Sources

Water supply for agricultural, Municipal and Industrial (M&I), and domestic uses is from groundwater, local surface water, imported water from the Central Valley Project (CVP), and recycled water; groundwater is the major source of supply.

Water Providers. While SBCWD and SCVWD have jurisdiction for water management throughout their respective counties, much of the population in the GSP area is served by local water agencies. The largest of these (in terms of permanent population) include the City of Hollister, Sunnyslope County Water District (SSCWD), Aromas Water District, City of San Juan Bautista, Tres Pinos Water District, and Community Service Area (CSA) No. 31-Stonegate Water System. Other small systems are operated by private mutual water

companies and some communities do not have water purveyors and systems that provide water service. These small systems and communities—plus rural businesses, schools, parks, and residents—rely on private wells and groundwater.

- **City of Hollister.** The City of Hollister is the largest incorporated city in San Benito County with a population of about 37,000. The City provides groundwater from four active production wells in the GSP Area, treated CVP water through the Lessalt and West Hills Water Treatment Plants (WTPs), and recycled water for non-potable uses.
- **Sunnyslope County Water District (SSCWD).** Sunnyslope County Water District is a water purveyor whose service area includes part of the City of Hollister and unincorporated areas including the Ridgemark community. Serving a population over 20,000, SSCWD provides groundwater from five active wells located in the GSP Area and treated imported CVP water from the Lessalt WTP.
- **Aromas Water District.** Aromas Water District supplies groundwater to approximately 2,700 residents located in and around Aromas. While overlying a portion of the GSP Area, most of its customers and its three production wells are located outside the area.
- **City of San Juan Bautista.** The City of San Juan Bautista serves water to a population of about 1,900 residents. The City operates four wells located within the GSP Area.
- **Tres Pinos Water District.** Tres Pinos Water District (TPWD) serves groundwater to the community of Tres Pinos, which has a population of about 500. TPWD has one active well.
- **CSA No. 31-Stonegate.** CSA No. 31 serves about 250 people in a residential community located along Pinnacles Highway. SBCWD provides Stonegate with CVP surface water and groundwater from one well that is located within the GSP Area.
- **Pacheco Pass Water District.** The service area of Pacheco Pass Water District (PPWD) is in the northern GSP Area along Pacheco Creek. PPWD owns and operates Pacheco Reservoir on North Fork Pacheco Creek in Santa Clara County. With a design capacity of 6,000 AF, the reservoir currently is operated by PPWD for groundwater recharge along the downstream creek channel. PPWD also holds surface water rights for impoundment along Arroyo de las Viboras and for diversion into the adjacent Frog Ponds for percolation.

Groundwater. Groundwater currently is the main source of water supply in the GSP Area. Groundwater provides supply to municipal, agricultural, and domestic users through an estimated 1,026 production wells located throughout the GSP Area (DWR, 2018a). The other major source is CVP water that is delivered to municipal water suppliers as noted above and to agricultural customers in Zone 6. In Zone 6, the relative proportions of groundwater and CVP water use are affected primarily by the availability of CVP water from USBR; in recent years, CVP supply has ranged from less than 20 percent to more than 50 percent of total Zone 6 supply.

Water Supply Wells. Figure 2-2 shows the density of water supply wells in and around the Plan Area; this map is based on the DWR Well Completion Report Map Application tool (DWR, 2018). As indicated, the density of supply wells is generally less than 20 wells per section. Relatively high densities generally occur around the northern margins of the basin,

in areas including low density residential development. **Figures 2-3**, **2-4**, and **2-5** show the estimated density of domestic wells, production wells, and public wells. Most of the production wells, as classified by DWR, are presumably irrigation wells but also include some industrial and commercial wells.

Beyond the service areas of the City of Hollister and SSCWD (Hollister and Ridgemark), and the Stonegate community, communities and rural residents depend on groundwater. The largest of the groundwater dependent communities in the GSP Area is the City of San Juan Bautista, where a population of about 1,900 depends solely on groundwater. Other communities depending on groundwater in the GSP Area include Tres Pinos (served by Tres Pinos Water District), Paicines, and Dunneville.

As shown in **Figure 2-6,** economically distressed areas, disadvantaged communities, and severely disadvantaged communities exist in the area.

Local Surface Water. SBCWD owns and operates two reservoirs along the San Benito River. Hernandez Reservoir (capacity 17,200 AF) is located on the upper San Benito River in southern San Benito County. Paicines Reservoir (capacity 2,870 AF) is an offstream reservoir between the San Benito River and Tres Pinos Creek. It is filled by water diverted from the San Benito River, with some of the diversions consisting of natural runoff and some consisting of water released from Hernandez Reservoir. Water stored in the two reservoirs is released for percolation in Tres Pinos Creek and the San Benito River to augment groundwater recharge during the dry season. Zone 3 is the zone of benefit for local surface water (see **Figure 1-2)**.

Local surface water also is diverted from Arroyo de las Viboras into the adjacent Frog Ponds for percolation, based on PPWD surface water rights.

Pacheco Reservoir, owned by PPWD, is in Santa Clara County just north of the northernmost tip of the GSP Area. Water released from the reservoir flows down Pacheco Creek and provides groundwater recharge. In 2018, SCVWD was awarded $484.5 million in funding from the State of California for the Pacheco Reservoir Expansion Project, which is a collaborative effort of SCVWD, SBCWD, and PPWD. The project includes construction of a new, larger reservoir and a pipeline providing a connection to the Pacheco Conduit, the CVP pipeline that delivers water into Santa Clara and San Benito counties from San Luis Reservoir. The expanded reservoir, when filled by a combination of Central Valley Project supplies and local inflows, would expand the storage of CVP water available to SCVWD and SBCWD, provide more flexibility for use of CVP water, enhance the continuity of flows in Pacheco Creek, and benefit downstream habitats along Pacheco Creek and the local steelhead population.

Imported Water. The Central Valley Project (CVP) is a Federal water system operated by the U.S. Bureau of Reclamation (USBR) with multiple uses including irrigation water supply for agricultural and urban uses, flood control, navigation improvement on the Sacramento River, water quality enhancement, hydroelectric power, fish and wildlife, and recreation. The CVP consists of 20 dams and reservoirs, 11 power plants, and 500 miles of major canals, conduits, and tunnels. While mostly serving the Central Valley, the San Felipe Division diverts water supply from San Luis Reservoir (shared with the State Water Project or SWP)

through the Pacheco Tunnel and Pacheco Conduit to Santa Clara and San Benito counties. The Santa Clara Conduit conveys water to the Santa Clara Valley and the San Benito (Hollister) Conduit conveys water to San Justo Dam, an offstream storage reservoir in San Benito County.

SBCWD has a 40-year contract (to February 29, 2028 with options for renewal) for a maximum of 8,250 AFY of M&I water and 35,550 AFY of agricultural water. Actual CVP deliveries are modified on an annual basis by USBR, reflecting hydrologic conditions (e.g., drought), reservoir storage, and the environmental status of the Sacramento-San Joaquin Delta.

SBCWD distributes CVP water to agricultural, municipal, and industrial customers in Zone 6 through 12 subsystems containing approximately 120 miles of pressurized pipeline laterals (SBCWD 2011). Zone 6, SBCWD's zone of benefit for CVP water, overlies northern portions of the GSP Area (see **Figure 1-2**). SBCWD also has recharged groundwater with CVP water through offstream recharge ponds.

The City of Hollister and SSCWD purchase CVP water as the primary M&I CVP customers. Other M&I uses of CVP water include urban irrigation, golf courses, and potable supply for the Stonegate community. Treatment of CVP water for potable M&I supplies within the Hollister Urban Area (HUA) is provided by the Lessalt and West Hills Water Treatment Plants (WTPs) on the east and west sides of Hollister, respectively. Lessalt WTP, a facility owned by SBCWD and operated by SSCWD, was placed into operation in 2003. An expansion was completed in 2015 that increased the operational capacity of Lessalt to 2.0 million gallons per day (MGD), treating an annual total of 2,240 AFY. West Hills WTP, with an initial design capacity of 4.5 MGD, began operation in late 2017. West Hills WTP not only provides additional treatment capacity for CVP water, but also improves the quality of water delivered on the west side. Together the WTPs enhance the reliability of HUA water supply, improve the water quality delivered to customers, and improve the quality of wastewater effluent and thereby support water recycling.

Recycled Water. Water recycling is a cooperative effort of SBCWD and the City of Hollister. Recycled water has been provided by the City of Hollister for landscape irrigation since 2010. As of 2016, SBCWD has been delivering recycled water from the City water reclamation facility for agricultural irrigation. Recycled water use is a relatively small but increasing supply.

2.1.3. Water Use Sectors

Water use sectors are defined in the GSP Regulations as categories of water demand based on the general land uses to which the water is applied, including urban, industrial, agricultural, managed wetlands, managed recharge, and native vegetation. In the GSP Area, these are summarized as follows.

- Urban water use sectors are focused in the City of Hollister and City of San Juan Bautista.
- Areas of industrial water use are mostly in the City of Hollister, with some in City of San Juan Bautista. Industrial sites in unincorporated San Benito County are generally

near Hollister, but also include a light industrial park on Union Road west of Hollister and industry near the San Benito River at Highway 101.

- Agricultural land uses comprise extensive areas in the San Juan, Bolsa, Pacheco, Hollister, Tres Pinos, and Paicines valley areas.
- Managed wetlands include the Pajaro River Wetland Mitigation Bank (see Figure 2-1) that encompasses 273 acres of land along the Pajaro River south of San Felipe Lake and currently includes uplands, seasonal marsh, and semi-permanent emergent marsh habitat.
- Managed aquifer recharge is conducted by SBCWD along the channels of the San Benito River and Tres Pinos Creek and at offstream basins including the Union Road Pond near the San Benito River and the Frog Pond on Arroyo de Las Viboras (see Figure 1-1 for stream locations).
- Native vegetation, including rangeland, accounts for the remainder including upland areas and along streams.

2.1.4. Water Resources Monitoring and Management Programs

This section summarizes water resources monitoring and management in the GSP Area. SBCWD has been managing water resources since its inception, has monitored groundwater levels since 1976, and since 1996 has provided summaries of its management and monitoring activities in its Annual Groundwater Reports. SBCWD also has conducted numerous special investigations over the decades; while these have contributed to the overall understanding and management of local water resources, they are not summarized here.

2.1.4.1. Water Resource Monitoring

Water resource monitoring programs considered in this section include:

- Climate
- Surface water flows
- Imported water deliveries
- Groundwater recharge
- Water recycling
- Land use and cropping
- Wells and groundwater pumping
- Groundwater levels
- Land subsidence
- Water quality

Monitoring programs undertaken by local, state, and federal agencies are summarized below as they are relevant to the GSP. Much of this information is compiled regularly for the Annual Groundwater Reports.

Climate. Climate data are regularly compiled from DWR's California Irrigation Management Information System (CIMIS) and include: total solar radiation, soil temperature, air temperature/relative humidity, wind direction, wind speed, and

precipitation. Two CIMIS stations are active in the GSP Area, both of which also measure evapotranspiration (ETo):

- #126 San Benito, located at the SBCWD office on Mansfield Road with a record beginning in June 1994
- #143, San Juan Valley, located at the San Juan Golf Course with a record beginning January 1998.

Historical rainfall data are available for Hollister dating back to 1874. For the Annual Groundwater Reports, historical annual precipitation has been compiled and reported using the Hollister rain gage for water years 1875-1995 and the CIMIS San Benito station thereafter.

Several maps are available showing the geographic distribution of annual rainfall across the GSP Area. These include the state-wide map by USGS (Rantz, 1969), which used data from 1907-1956; the SCVWD map (SCVWD, 1989) that used data through 1988; and maps created using data from the PRISM Climate Group, Oregon State University, http://prism.oregonstate.edu.

Surface water flows. Surface water monitoring is summarized in the Annual Groundwater Reports. An appendix includes location maps of active and inactive USGS stations in and near the San Benito River system with the respective period of record; streamflow data are regularly downloaded. The sites for SBCWD miscellaneous surface water measurements are shown, including data from Pacheco Creek in Santa Clara County.

Imported water deliveries. Imported water deliveries began in September 1987 (L&S, 1991). The Annual Groundwater Reports summarize annual CVP allocations, deliveries of CVP water to Zone 6, and San Justo reservoir water budgets. Delivery data are generated according to distribution subsystems; for historical reporting purposes, these data have been subsequently allocated to groundwater subbasins and to agricultural and municipal/domestic uses.

Groundwater recharge. The Annual Groundwater Reports summarize managed percolation activities. Information on SBCWD percolation of local surface water include annual reservoir budgets and releases for Hernandez and Paicines reservoirs. Percolation of CVP water also is tabulated, as is percolation of municipal wastewater from local wastewater treatment plants. In addition to regular monitoring, SBCWD also has conducted special studies of percolation along selected streams.

Recycled water. Recycled water use is documented in the Annual Groundwater Reports, with annual tabulation.

Wells and groundwater pumping. Groundwater pumping information is summarized in the Annual Groundwater Reports; this includes annual amounts from municipal providers (who measure groundwater production at least monthly).

Information also is provided on irrigation pumping in Zone 6, where SBCWD monitors groundwater pumping from major irrigation wells (with discharge pipes 3 inches in diameter or greater). Pumping amounts are calculated semiannually by metering the number of hours of operation and multiplying by the average discharge rate, which is measured a few times

per year. This monitoring program began in about 1990 (soon after CVP imports started) and was based on recognition that CVP imports resulted in reduced pumping, increased recharge, and recovering groundwater storage with regional benefits. This contrasts with other California basins where imported water was used to increase irrigated acreage (L&S, 1991). Irrigation pumping beyond Zone 6 is not monitored but has been estimated for regular water budget updates based on land use information and water use factors.

Groundwater levels. SBCWD has had a semi-annual groundwater level monitoring program since Water Year (WY) 1977; groundwater level data gathered by USGS and other agencies are available as early as 1913 (Clark, 1924). The Annual Groundwater Reports provide quarterly groundwater level data for each year. The data are the basis for groundwater level contour maps, change maps, hydrographs, groundwater level profiles, and storage change computations presented in the Annual Reports. These are focused on Zone 6, where SBCWD delivers CVP water and maintains a relatively intensive monitoring program; the adjacent Bolsa area also is addressed. The SBCWD monitoring program includes wells in the Pacheco Valley in Santa Clara County. SCVWD's monitoring program provides data for the southern Llagas Basin; these shared data are used in the SBCWD annual groundwater level maps.

SBCWD is the designated CASGEM monitoring agency for the GSP Area; CASGEM data are available from DWR's online Groundwater Information Center Interactive Map (GICIMA).

Land use. Land use maps have been prepared by DWR for San Benito County, with the earliest maps in 1967. GIS-based land use maps are available online for 1997, 2002, and 2014 with the DWR Land Use Viewer (DWR, 2018b). In 2012, SBCWD prepared an update of the 2002 map to 2010 using 2010 aerial photography. The 1997, 2002, and 2010 maps were used in preparing the Salt Nutrient Management Plan (Todd, 2014) and in updating water budgets for the 2014 Annual Groundwater Report.

Land subsidence. While the potential for subsidence was recognized in the 2003 Groundwater Management Plan, it has not been a known issue in the GSP Area and ground surface elevations have not been monitored. This also recognizes the tectonic activity in the GSP area. Groundwater levels have been managed to stay above historical low levels to minimize the potential for ground settlement.

Water quality. In 1997, SBCWD initiated a program for monitoring nitrate and electrical conductivity (EC) in wells. In 2004, SBCWD established a comprehensive water quality database that contains over 450,000 records from water systems and regulated facilities. The database is updated on a triennial basis as part of the Annual Reports with maps and data provided in an appendix. SBCWD surface water quality monitoring sites also are identified. Monitoring for the Salt Nutrient Management Plan is closely coordinated.

State-wide sources of groundwater quality data include the Water Data Library (WDL), Geotracker/GAMA program, and the State Water Resources Control Board's Division of Drinking Water. These are accessed for the triennial update of the SBCWD Water Quality Database.

2.1.4.2. Incorporation of Existing Monitoring into GSP.

The monitoring program for the GSP is described in Section 3.5.

Description of how monitoring networks/programs will be incorporated into the GSP will be added later

2.1.4.3. Water Resources Management

This section describes the water resources management plans developed by SBCWD for the Plan Area; note that monitoring is addressed in Section 2.1.2.1.

Groundwater Management Plan, 1998 and 2003. The groundwater management planning process in San Benito County was initiated in May 1997 as a collaborative effort among local water agencies and other organizations. The involved water agencies included the Aromas Water District, City of Hollister, City of San Juan Bautista, SBCWD, SSCWD, and TPWD. The other cooperating organizations included San Benito County, San Benito County Farm Bureau, San Benito County Builders and Developers Association, Granite Rock Company and the Sierra Club. This collaboration resulted in the Groundwater Management Plan for the San Benito County Part of the Gilroy-Hollister Groundwater Basin (Jones & Stokes, 1998) which was adopted on April 29, 1998 pursuant to Water Code Appendix Section 70-7.

The 1998 Groundwater Management Plan addressed San Benito County portions of the Gilroy-Hollister Basin and extended southward to include the Tres Pinos Valley Basin. The 1998 plan summarized the local hydrogeology, water budgets, water quality, water supply and demand, and regulatory setting. It developed management objectives, identified issues, and presented 32 management actions with an implementation plan.

Recognizing that groundwater management is an ongoing process that is best accomplished on a collaborative basis, four key agencies (SBCWD, City of Hollister, City of San Juan Bautista, and SSCWD) formalized their relationship in June 1998 as the Water Resources Association (WRA) of San Benito County. This association was granted the power to coordinate the study and planning of water programs, to undertake studies and programs to implement the groundwater plan, and to update the Groundwater Management Plan.

Accordingly, the WRA embarked on a process of expanding the groundwater management plan and developing an associated program environmental impact report (PEIR) to inform decision makers and the general public of the environmental effects that might result from approval of the plan. SBCWD served as the lead agency in this effort, which culminated in the August 2003 Groundwater Management Plan Update for the San Benito County Portion of the Gilroy-Hollister Groundwater Basin (GWMP Update; Kennedy/Jenks, 2003). The GWMP Update and PEIR were approved by SBCWD on July 28, 2004.

The 2003 Update focused on northern portions of the Gilroy-Hollister basin in San Benito County. It described groundwater basin conditions, defined basin management objectives, identified nine major issues, and presented numerous management elements. Overall, it provided the basis for subsequent activities and related management planning, including

- Urban water conservation and agricultural irrigation efficiency programs
- Salt and nitrate management programs (e.g., water softener rebate program)

- Enhancement of data management and monitoring programs (e.g., dedicated monitoring well and water quality database)
- Update and application of regional groundwater flow model
- Surface water importation
- Water transfers and banking
- Management of groundwater recharge operations
- Surface water treatment (e.g., Lessalt and subsequent West Hills Plants)
- Management of municipal wastewater percolation and water recycling.

Most of these have been cooperative efforts involving multiple agencies.

Numerical Groundwater Modeling. In 2001, SBCWD developed a groundwater flow model of the San Benito County part of the Gilroy-Hollister Groundwater Basin (Yates and Zhang, 2001). The model has been applied for various water and wastewater planning, design and environmental impact studies since then. It has evolved "organically," with incremental addition of new features and localized recalibration to meet the needs of individual studies. Examples of these enhancements include the addition of particle-tracking to estimate subsurface travel time of percolated wastewater, linking of the flow model to a solute transport model to simulate salt accumulation and movement in groundwater, and expansion of the simulated flow domain to include some of the hills adjacent to the valley floor areas.

In 2015, a systematic update and enhancement of the groundwater model and the pre- and post-processing programs was conducted (Todd, 2015). This overhaul included:

- Extending the simulation base period by 10 years, to cover water years 1975-2014.
- Replacing the previous set of spreadsheet tools for estimating rainfall recharge, irrigation pumping and return flow, and stream flow with a more flexible and integrated set of spreadsheets and Fortran programs that better represent surface hydrologic processes.
- Eliminating data-preparation procedures that had been introduced for specific past projects but were deemed not necessary for current and future model applications.
- Adding the capability to easily simulate evolving land use or incorporate variable stress period durations.

Integrated Regional Water Management Plan, 2007. The IRWMP is a collaborative effort by the Pajaro Valley Water Management Agency (PVWMA), SBCWD, and SCVWD to identify regional and multi-benefit projects for the Pajaro River Watershed. Adopted in 2007 (SBCWD and others, 2007), the IRWM Plan describes the region, provides goals and objectives, and identifies and evaluates projects and programs, including assessment of climate change. On an individual basis, PVWMA, SBCWD, and SCVWD have each investigated and evaluated various resource, environmental, and management options for the overall health and well-being of the watershed within their jurisdictions. The IRWMP integrates these various efforts and investigates the greater Pajaro River Watershed area to identify and prioritize integrated regional projects for the watershed to maximize benefits to the broadest group of stakeholders in the region. A major component of the IRWMP has been the Hollister Urban Area (HUA) water and wastewater master planning process, summarized below.

Hollister Urban Area Water Project. The Hollister Urban Area Water Project (HUAWP) is an ongoing collaborative effort by the City of Hollister, SBCWD, and SSCWD to improve drinking water quality for residents and businesses and to help meet wastewater discharge requirements and protect the groundwater basin. The area of the HUAWP includes the City of Hollister and nearby unincorporated areas of San Benito County designated for urban development. Information is available at http://hollisterwaterproject.com/.

This effort was initiated in 2004 with an MOU among the three entities to develop the HUA Water and Wastewater Master Plan (HDR, 2008), which identified projects or program elements for water, wastewater, and recycled water with implementation defined out through 2023. The HUA water projects have included: (1) purchases or transfers of imported water supplies, (2) North County Groundwater Bank, (3) new urban wells, (4) upgrade of the Lessalt Water Treatment Plant, (5) new surface water treatment plant [West Hills], (6) demineralization of urban wells, (7) a new pipeline to Ridgemark, and (8) new treated water storage. Wastewater elements include (1) Ridgemark Wastewater Treatment Plant upgrades, (2) expansion of the City of Hollister Water Reclamation Facility, and (3) the Cielo Vista Estates connection to the City of Hollister Water Reclamation Facility. Recycled water elements include (1) Phase 1 recycled water facilities (2) Phase 2a and Phase 2b recycled water facilities, and (3) Ridgemark recycled water facilities. Non-structural solutions include water conservation, salinity education, water softener ordinance, new development connections to the city sewer, and other measures.

Salt and Nutrient Management Plan (SNMP), 2014. SNMPs are required for groundwater basins throughout California and are intended to help streamline permitting of new recycled water projects while ensuring attainment of water quality objectives and protection of beneficial uses. The San Benito SNMP (Todd Groundwater, 2014) was developed in accordance with the Recycled Water Policy adopted by the California State Water Resources Control Board. The San Benito SNMP addresses the Bolsa, Hollister, San Juan Bautista, and Tres Pinos Valley groundwater basins as defined by DWR. It includes:

- Definition of water recycling goals and objectives
- Identification of salt and nutrient sources
- Estimation of the salt and nutrient loading to groundwater basins and their capacity to assimilate the additional loading
- Development of salt and nutrient loading mitigation strategies
- Improvement of ground water quality monitoring.

The SNMP provides projected salt/nutrient balances for twelve subareas and found that all but two (Bolsa and Tres Pinos Valley) have predicted stable or decreasing trends in total dissolved solids (TDS) concentrations. Most areas had predicted increasing trends in nitrate concentrations in groundwater, but predicted increases are small. Potential adverse water quality impacts of recycled water irrigation projects were found to be minimal, and in some cases, impacts were positive.

Agricultural Water Management Plan (AWMP), 2015. SBCWD prepared AWMPs in compliance with Water Code Section 10826. The AWMP (SBCWD, 2015) provides a description of SBCWD, the agricultural water supplier, its Zone 6 service area for CVP supply, and local conveyance, storage, and distribution facilities. The AWMP also documents the

quantity of water used for agricultural irrigation, recreational purposes (e.g., at San Justo Reservoir until closed in 2008 due to Zebra Mussel infestation), and municipal / industrial purposes. Groundwater recharge operations and transfers/exchanges also are summarized. Water supplies are documented, and the reliability of water sources is assessed, including consideration of climate change. The AWMP presents SBCWD's implementation of efficient water management practices.

Irrigated Lands Regulatory Program (ILRP). The Irrigated Lands Regulatory Program (ILRP) of the Central Coast Regional Water Quality Control Board (RWQCB) regulates waste discharges from irrigated lands through its Waste Discharge Requirements (WDRs) including Order No. R3-2012-0011 for Discharges from Irrigated Lands (Agricultural Order), and Monitoring and Reporting Program Order Nos. R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03 (MRPs). In response, the Central Coast Groundwater Coalition (CCGC) was founded in July 2013 to represent landowners and growers who operate in Monterey, San Benito, Santa Clara, Santa Cruz, San Luis Obispo and Santa Barbara counties, and the northern portion of Ventura County. CCGC is a non-profit organization whose primary function is to fulfill groundwater quality regulatory requirements in the ILRP of the RWQCB.

CCGC developed a plan for groundwater monitoring that was approved by RWQCB in July 2013. A key component of the plan is sampling of drinking water wells with a focus on nitrate. In June 2015, CCGC submitted to a groundwater characterization report (L&S, June 2015) for the northern counties, including the Salinas, Pajaro, and Gilroy-Hollister valleys. This report, documenting nitrate concentrations in groundwater, was approved by the RWQCB in 2015. Subsequent sampling was scheduled for 2017 and 2019.

Water Quality Control Plan for the Central Coast Basins. The Water Quality Control Plan for the Central Coastal Basin (Basin Plan) provides the framework for how surface water and groundwater quality in the Central Coast Region should be managed to provide the highest water quality reasonably possible. The Basin Plan lists beneficial uses, describes the water quality which must be maintained to allow those uses, provides an implementation plan, details SWRCB and RWQCB plans and polices to protect water quality, and presents surveillance and monitoring programs. The most recent update in 2017 presents revised Total Maximum Daily Loads (TMDLs) for nitrogen compounds and orthophosphate in streams of the Pajaro River Basin, including the Pajaro River, San Juan Creek, and Tequisquita Slough of the GSP Area.

Urban Water Management Plans (UWMPs). The California Urban Water Management Planning Act requires preparation of UWMPs by urban water providers with 3,000 or more connections. The UWMPs, generally required every five years, provide information on water supply and water demand—past, present, and future—and allow comparisons as a basis for ensuring reliable water supplies. UWMPs examine water supply and demand in normal years and during one-year and multi-year droughts. UWMPS also provide information on per-capita water use, encourage water conservation, and present contingency plans for addressing water shortages. UWMPs have been prepared for the Hollister urban area since 1991; the most recent was a joint effort of City of Hollister, SBCWD, and SSCWD (Todd Groundwater, 2016). Much of the coordination and community participation regarding water conservation within the HUA is achieved through the Water Resources Association

(WRA) of San Benito County, which serves water customers of Hollister, SSCWD, SBCWD, and the City of San Juan Bautista.

According to the 2016 UWMP, total water demand will increase as population grows, but per-capita water demand has been responsive to water conservation efforts and has successfully met State guidelines. Water demands are satisfied with a combination of local groundwater and imported CVP water. Construction of water treatment plants as part of the HUA Water Project allows direct use of imported water, which improves delivered water quality, conserves groundwater for use during drought, and improves wastewater quality and thereby supports water recycling.

Despite challenges of drought, climate change, and environmental and legal factors, the HUA agencies have been able to provide reliable supply. This has been achieved by actively managing the portfolio of water supplies (groundwater, imported water, recycled water), by improving facilities (e.g., water treatment plants), and by promoting conservation.

SBCWD Annual Groundwater Reports. The San Benito County Water District Act authorizes the SBCWD Board of Directors to require SBCWD staff to prepare an annual groundwater report; this report addresses groundwater conditions and the zones of benefit for the water year. The Board has consistently ordered preparation of Annual Reports, and the reports have included contents specified in the Act:

- An estimate of the annual overdraft for the current water year and for the ensuing water year
- Information for the consideration of the Board in its determination of the annual overdraft and accumulated overdraft as of September 30 of the current year
- A report as to the total production of water from the groundwater supplies of the District and its zones as of September 30 of the current year
- Information for the consideration of the Board in its determination of the estimated amount of agricultural water and the estimated amount of water other than agricultural water to be withdrawn from the groundwater supplies of the District and its zones
- The amount of water the District is obligated to purchase during the ensuing water year
- A recommendation as to the quantity of water needed for surface delivery and for replenishment of the groundwater supplies of the District and its zones during the ensuing water year
- A recommendation as to whether or not a groundwater charge should be levied in any zone(s) of the District in the ensuing water year and if so, a rate per acre-foot for all water other than agricultural water for such zone(s)
- Any other information the Board requires.

Annual Groundwater Reports generally provide information on a Water Year basis (October 1-September 30) with completion of the report in December of that year and presentation at a Board of Directors meeting on the second Monday of the following January.

The Annual Groundwater Reports have served for decades as a reliable “state of the basin” report. The Annual Reports also have been used to conduct and summarize selected

groundwater investigations, for example addressing issues such as water quality, salt loading, shallow wells, and others. In recent years, water balance and water quality updates have been provided on a triennial basis. Recent Annual Reports (Todd Groundwater are provided on the SBCWD website. The Annual Reports for 2015 and 2016 are in **Appendix E**.

Adaptation of Existing Monitoring and Management to SGMA. SBCWD has been actively monitoring and managing water resources throughout the GSP Area for decades. This management generally has been successful, especially where supplemental surface water supplies have been developed and where zones of benefit—namely Zone 3 and Zone 6—have been established. Some considerations for adaptation to SGMA include:

- Compliance with SGMA will require extension of monitoring and management activities to encompass all areas within the DWR-defined basin boundaries.
- The numerical model will need to be updated to include 2015 and recently available data, expanded to encompass the entire GSP area, and potentially modified to address specific sustainability criteria.
- Some adaptations may be considered about the timing of activities during the year. For example, historical computation of storage change has been based on autumn conditions, SGMA requires analysis of seasonal high and low conditions.
- SBCWD Annual Groundwater Reports have specific content and timing; SBCWD may consider how best to effectively fulfill requirements of Annual Reports (as ordered by the Board) and SGMA.
- Monitoring and management activities have addressed groundwater management issues as defined at the time; compliance with SGMA will involve re-visiting issues with the procedures laid out in the GSP Requirements.

TBA: Expand discussion on how existing programs may limit operation flexibility in the basin and how the GSP has been developed to adapt to the limits.

2.1.5. General Plans, Land Use Planning, and Well Permitting

This section presents relevant elements of General Plans and other land use planning in the GSP Area as relevant to groundwater sustainability. It summarizes the goals, objectives, policies, and implementation measures as variously described in the General Plans for San Benito County, Santa Clara County, City of Hollister, City of San Juan Bautista, and Hollister Hills SVRA which together encompass the GSP Area. This section also summarizes local well permitting procedures and well ordinances.

2.1.5.1. Land Use

The GSP area includes highly developed agriculture on prime farmland, mostly in valley areas, and rangeland with some vineyards on surrounding hills.

Figure 2-4, Important Farmland, provides an overview of land uses in the GSP Area that emphasizes the importance of local agriculture. The California Department of Conservation, Farmland Mapping and Monitoring Program identifies lands that have agricultural value and maintains a statewide map in its Important Farmlands Inventory (IFI). IFI classifies land

according to its productive capabilities, which is based on many characteristics, including fertility, slope, texture, drainage, depth, salt content and availability of water for irrigation. Farmland categories are based on their suitability for agriculture:

> **Prime Farmland.** This land has the best combination of physical and chemical characteristics for crop production. When treated and managed, its soil quality, growing season, and irrigation supply produce sustained high crop yields.
> **Unique Farmland.** This land does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, but has produced specific crops with high economic value.
> **Farmland of Statewide Importance.** This is land that does not qualify as Prime Farmland but has a good combination of irrigation and physical and chemical characteristics for crop production.
> **Farmland of Local Importance.** This land is either currently producing crops or has the capability to produce crops but does not meet the criteria above.
> **Grazing Land.** This is land with vegetation that is suitable for grazing livestock.

Other lands include semi-agricultural land and rural commercial land.

Figure 2-5 documents land use as mapped by DWR in 2015 (DWR, 2018b). As shown, the GSP Area is characterized by extensive truck crops with areas of grain and hay, vineyards, and deciduous fruits and nuts. Urbanization is mostly in the Hollister-Ridgemark and San Juan Bautista areas.

2.1.5.2. General Plans

Land use planning within the GSP Area is guided by the General Plans for San Benito County, Santa Clara County, City of Hollister, and City of San Juan Bautista.

San Benito County General Plan. The San Benito County General Plan, adopted in 2015, states that water is a critical resource for San Benito County's economy and residents. Of the three main sources (groundwater, Central Valley Project, and local surface water), groundwater is recognized as the largest source of water used in the county. The General Plan recognizes that such a valuable resource must be appropriately planned and managed and acknowledges SBCWD as having jurisdiction over water management throughout the County.

The San Benito County 2035 General Plan provides a summary of 21 Guiding Principles. One of these is to encourage new growth in communities that are clustered to preserve prime farmland and rangeland, protect natural habitats, and reduce impacts of urban sprawl. The County General Plan presents four New Community Study Areas: Bolsa, Fairview, San Juan, and Union. These broad areas are presented as opportunities for the County to accommodate some future growth in new unincorporated communities, although new community proposals are not limited to the Study Areas. The General Plan indicates that New Communities are typically master-planned communities, but also states that proposals would be considered on a case-by-case basis.

Another principle is to ensure that agriculture and agriculture-related industries remain a major economic sector. In fact, the General Plan has a strong statement that the County is

determined to protect and support the agricultural and ranching industries in the county. This determination is expressed in part through identification of a Wine/Hospitality Priority Area, where activities related to the wine industry are encouraged including vineyards, wineries, tasting rooms, hotels, restaurants, stores, and processing facilities.

Regarding water resources, other guiding principles encourage future growth near available water and sewer infrastructure and encourage future growth that can be supported by adequate, long-term access to water. Guiding principles also call for protection of natural resources and open space areas from incompatible uses, and for preservation of the county's environmental quality and diverse natural habitats. A final guiding principle is to coordinate County planning efforts with those of the City of Hollister and the City of San Juan Bautista.

Figure 2-6 shows general Land Use Planning Designations of the San Benito County General Plan throughout the GSP Area. As indicated, broad areas are designated as agriculture and rangeland; urban uses are mostly within city spheres of influence.

Relevant land use planning goals and policies are summarized in **Table 2-1.** This table is a summary and may not include all General Plan policies relevant to the GSP; accordingly, specific issues will likely involve consultation with Planning Department staff. **Table 2-1** also indicates how the County will implement policies and programs; this is accomplished in the General Plan through reference to eight categories of implementation:

- Regulation and Development Review (RDR)
- Infrastructure and Service Master Plans, Strategies, and Programs (MPSP)
- Financing and Budgeting (FB)
- Planning Studies and Reports (PSR)
- County Services and Operations (SO)
- Inter-Governmental Coordination (IGC)
- Joint Partnerships with the Private Sector (JP)
- Public Information (PI)

Two ongoing implementation programs for the Public Facilities and Services element of the General Plan are the following:

- **PFS-E: Groundwater Monitoring Program.** The County shall work with water purveyors, groundwater basin managers, and willing landowners to improve groundwater monitoring including quality, yields, and groundwater elevations. This should include identifying monitoring sites, installing monitoring wells, identifying gaps in the monitoring network, establishing monitoring protocols and developing a groundwater budget. This implements Policy PFS-4.1; the responsible department is the Environmental Health Division, supported by Planning and Building Inspection Services.
- **PFS-F: Regional Planning Group.** The County shall participate in regional water, wastewater, and watershed planning groups designed to discuss and solve water supply, water quality, watershed, and other water/wastewater-related issues within

the county, and to identify and pursue alternative funding sources for future projects. This implements Policies PFS-4.1 through PFS-4.8, and PFS-5.1 through PFS-5.6; the responsible department is the Environmental Health Division, supported by Public Works.

Santa Clara County General Plan. Figure 2-7 is the 2013 Santa Clara County Land Use Plan. The Santa Clara County General Plan, adopted in 1994, is organized into two parts; Book A presents county-wide issues and policies and Book B focuses on rural areas. Both are relevant to those portions of the Plan Area that extend into Santa Clara County. This discussion focuses on the Resource Conservation section of Book A, particularly the section on Water Supply Resources, but acknowledges that strategies and policies relevant to groundwater may be presented in other parts of the General Plan.

The Santa Clara County General Plan presents goals for responsible resource conservation; goals particularly relevant to groundwater sustainability include:

Water Supply Resources Conserved and Protected

- An adequate supply of high quality water to meet domestic and economic needs.
- Water resources used efficiently and protected from contamination, particularly water supply watersheds and groundwater aquifers.

Special Water Environments Protected and Restored

- Healthy, well-functioning creek, streamside, Bay, and Bay wetlands ecosystems capable of providing stable wildlife habitat, corridors linking habitat areas, and protection for endangered species; passive recreational and interpretive nature study; and aesthetic enhancement of urban and rural settings.

Table 2-2 summarizes selected strategies, policies, and implementation measures from the Water Supply Resources, Water Quality and Watershed Management, and Safety and Noise/ Waste Water Disposal sections. **Table 2-2** also presents selected water supply, water quality, and Development Hazards/Environmental Safety policies from the South County Joint Area Plan. As a summary, this table does not include all policies relevant to the GSP and some issues may require consultation with County planning staff.

City of Hollister General Plan. The City of Hollister General Plan (Moore et al, 2005) was adopted in 2005 and subsequently amended in 2007. It is scheduled for update beginning in 2019. **Figure 2-8** shows the planning area that surrounds the City of Hollister and includes portions of the GSP area.

Goals, policies, and implementation measures with relevance to groundwater sustainability are summarized in **Table 2-3**. Implementation measures are listed with each goal; these are one-sentence summaries with a designation (e.g., H.B) and each General Plan element (e.g., Housing) provides a detailed discussion of each measure. As a summary, this table may not include all relevant General Plan policies and specific issues may arise that will likely involve consultation with City planning staff.

City of San Juan Bautista General Plan. The City of San Juan Bautista General Plan was adopted in 2015 (Cal Poly CRV, 2015). **Figure 2-9** shows the planning area, sphere of influence, and area of concern that surround the City of San Juan Bautista and overlap portions of the GSP area.

Goals, objectives, policies, and programs with specific relevance to groundwater sustainability are summarized in **Table 2-4**, drawing from the Land Use, Conservation, Open Space, Public Facilities and Services, and Health elements of the General Plan. This table may not include all relevant policies and specific issues will likely involve consultation with City planning staff.

2.1.5.3. General Plan Influences on GSA Ability to Achieve Sustainability

To be added later: how land use plans could affect the ability of the GSA to achieve sustainable groundwater management over the planning and implementation horizon

San Benito County. The San Benito County General Plan addresses the importance of groundwater and acknowledges SBCWD as having water management jurisdiction throughout the County. The General Plan also restates the California Water Code requirements for developments to prepare Water Supply Assessments. However, review of the goals in Table 2-1 indicates an emphasis on needed future growth and on needs of existing and future agriculture and development. The policies and implementation of the land use and public facilities/services elements indicate that the County role is only to support and encourage SBCWD and local water agencies in ensuring that water supply is available. Similarly, with wastewater issues and protection of water quantity and quality, the County role is limited to encouragement of other agencies, developers, and landowners. The General Plan contains little policy to manage land use within the constraints of available water supply.

Santa Clara County. Review of Table 2-2 summarizing the Santa Clara County General Plan and South County Plan indicates that the County is proactive in water management. The strategies, policies, and implementation measures are coordinated with the overall water supply planning of SCVWD to maximize long term dependability of water supply. Most importantly, the General Plan states clearly that land use and growth management planning should be coordinated with water supply planning; this is an important distinction from general plans that emphasize land use planning and growth and then place the responsibility for water supply on water agencies. Given the historical and ongoing collaboration between SCVWD and SBCWD, the relevant Santa Clara County general plans and GSP are mutually supportive.

City of San Juan Bautista. The City of San Juan Bautista serves a population that is predicted to increase from 1,862 in 2010 to about 2,105 residents by 2035 (Cal Poly CRV, 2015). While State housing mandates are larger and present a challenge, the General Plan indicates that growth can be accommodated within the City with smart growth, that local groundwater is sufficient, and that water resources can be kept for surrounding agriculture. In recent years, water issues for the City have mostly concerned water quality; to provide residents with good quality water now and in the future, the City has recently constructed two new wells. City land use policies generally are protective of agricultural land and hillsides, and

conservation policies address water efficiency, water recycling, sustainability measures, and coordination with other agencies including WRA and San Benito County. The City of San Juan Bautista General Plan and GSP are compatible.

City of Hollister. The City of Hollister is the County Seat and the largest city in San Benito County. In the 1990s, the City experienced rapid growth resulting in loss of agricultural land and severe constraints on City infrastructure, including wastewater capacity issues. Subsequently in 2002 Hollister voters enacted a growth cap of 244 homes per year. For planning purposes, DWR provides an online population tool that indicates City growth from 41,922 in 2015 to 80,659 in 2035 (Todd, 2016); these population values were used in the 2015 UWMP, prepared by City of Hollister, SBCWD, and SSCWD. As summarized in the UWMP, the City has reliable supply (assuming continued availability of imported water) and moreover, the three HUA agencies are collaborating closely on water and wastewater issues. With this coordination, which is specified in the City General Plan, the Hollister General Plan and GSP are compatible and mutually supportive.

2.1.5.4. GSP Influences on General Plans

TBA how GSP implementation will affect water supply assumptions of land use plans.

City of San Juan Bautista. Implementation of the GSP will support the City of San Juan Bautista in providing good quality water in sufficient quantities to serve its residents into the future, including drought periods. In light of historical water resources management by SBCWD, the GSP will be supportive of City of San Juan Bautista policies regarding water conservation, water recycling, other sustainability measures, and inter-agency cooperation.

City of Hollister. Implementation of the GSP will support the City of Hollister in providing good quality water in sufficient quantities to serve its residents into the future, including drought periods. In light of historical water resources management by SBCWD, the GSP will be supportive of City of Hollister policies regarding water conservation, water recycling, other sustainability measures, and inter-agency cooperation.

Santa Clara County. Implementation of the GSP will support Santa Clara County in its land use planning that prioritizes water supply and incorporates cooperation with SCVWD.

San Benito County. The San Benito County General Plan generally assumes that local water agencies can ensure adequate high-quality water supplies into the future. The GSP provides additional, specific information, documents potential challenges to water supply, and explores undesirable results that may occur with future agricultural expansion and rural development. Undesirable results will be defined with sustainability criteria, and if identified, will be addressed with management actions. These management actions may have ramifications for County land use planning. For example, GSPs are authorized within the GSP Plan Areas to impose well spacing requirements and control groundwater pumping and control extractions by regulating, limiting, or suspending extractions from individual groundwater wells. Such regulation may present a constraint on potential land uses.

2.1.5.5. Well Permitting

In San Benito County, permitting of wells (including new, replacement, cathodic, and geothermal wells) is administered by SBCWD; well permit forms are provided, and

procedures are described on the SBCWD website. The process includes an application by the property owner and certified well driller, a site inspection by SBCWD, and an annular well seal inspection by SBCWD. Timely submittal of a Well Completion Report is required. SBCWD also requires registration of a water producing facility. Well standards are California Well Standards, Combined.

In Santa Clara County, any person planning to dig, bore, drill, deepen, modify, repair or destroy a water well, cathodic protection well, observation well, monitoring well, geothermal heat exchange well, exploratory boring, or other deep excavation intersecting groundwater must first obtain a permit from SCVWD. The well permitting process is described on the SCVWD website and forms are provided. SCVWD regulates the construction and destruction of wells based on its Standards for the Construction and Destruction of Wells and Other Deep Excavations in Santa Clara County and on the California Well Standards.

2.1.6. Additional GSP Elements

To be considered later as-needed

- Control of saline water intrusion
- Wellhead protection
- Migration of contaminated groundwater
- Well abandonment and well destruction program
- Replenishment of groundwater extractions
- Conjunctive use and underground storage
- Well construction policies
- Groundwater contamination cleanup, recharge, diversions to storage, conservation, water recycling, conveyance, and extraction projects
- Efficient water management practices
- Relationships with State and federal regulatory agencies
- Land use plans and efforts to coordinate with land use planning agencies to assess activities that potentially create risks to groundwater quality or quantity
- Impacts on groundwater dependent ecosystems.

2.1.7. Notice and Communication

As described in this section, groundwater is the major source of supply in the GSP Area and supports a range of beneficial uses: agricultural, municipal, rural, and environmental. To some degree in the GSP area, all land and property owners, residents, businesses, employees, farmers, and visitors are potentially affected by groundwater use. This reflects the agricultural orientation of the GSP area, its Central Coast setting, and its amenities for small-city living and rural residence and recreation. While recognizing the critical importance of imported CVP supply, reliable groundwater is essential.

The two GSAs have encouraged public participation in the ongoing planning and development activities supporting the GSP process. SBCWD organized a Technical Advisory

Committee to support the GSP process; regularly scheduled TAC meetings have been announced on the SBCWD website and have been open to the public. In addition, public workshops regarding development of the GSP have been conducted to encourage public participation and to provide educational outreach. Meeting notices have been provided to the list of interested parties that is maintained pursuant to Water Code Section 10723.2. Additionally, GSP development information and meeting notices have been posted to the SBCWD website.

Recognizing the importance of communication, multiple and diverse agencies and interested parties have been identified. These are listed in the SBCWD GSA Communication Plan, which is included as **Appendix D.**

Appendix D also includes a list of public meetings at which the GSP was discussed, along with comments and a summary of responses.

The Communication Plan in Appendix D also provides an overview of outreach to the public by means of informational materials (e.g., fact sheets), regular and special GSA Board meetings, public Technical Advisory Committee meetings, workshops, and the GSA website. These inform the public about the GSP development and implementation process and encourage active involvement by interested parties. [To be added later as part of draft GSP with outreach documentation]

3. REFERENCES

California Department of Parks and Recreation, 1978, Hollister Hills State Vehicular Recreation Area (SVRA) Resource Management Plan and General Development Plan, December, accessed August 2018 http://www.parks.ca.gov/pages/21299/files/244.pdf

California Irrigation Management Information System (CIMIS), http://www.cimis.water.ca.gov/, station 126, Last accessed: November 20, 2017.

California Polytechnic State University, City and Regional Planning Department (Cal Poly CRP), 2015, San Juan Bautista 2035 General Plan, November.

Clark, W. 0., 1924, Ground water in Santa Clara Valley, California: USGS Water-Supply Paper 519, 209 p.

Department of Water Resources, California (DWR), 2004a, Gilroy-Hollister Valley Groundwater Basin, San Juan Bautista Subbasin, California's Groundwater, Bulletin 118, Last update February 27.

_____, 2004b, Gilroy-Hollister Valley Groundwater Basin, Bolsa Subbasin, California's Groundwater, Bulletin 118, Last update February 27.

_____, 2004c, Gilroy-Hollister Valley Groundwater Basin, Hollister Subbasin, California's Groundwater, Bulletin 118, Last update February 27.

_____, 2004d, Tres Pinos Valley Groundwater Basin, California's Groundwater, Bulletin 118, Last update February 27.

_____, 2018a, 2018 SGMA Basin Prioritization Draft Results Spreadsheet, May 18.

_____, 2018b, DWR Land Use Viewer, accessed August https://gis.water.ca.gov/app/CADWRLandUseViewer/

_____, 2018c, DWR Well Completion Report Map Application Tool, accessed July (https://www.water.ca.gov/Programs/Groundwater-Management/Data-and-Tools

HDR, 2008, Hollister Urban Area Water and Wastewater Master Plan, November. http://www.sbcwd.com/reports/Hollister%20Urban%20Area%20Water%20&%20WasteWater%20Master%20Plan%20110308.pdf

Jones & Stokes Associates, 1998, Groundwater Management Plan for the San Benito County Part of Gilroy-Hollister Groundwater Basin, April.

Kennedy/Jenks Consultants, 2003, Groundwater Management Plan Update for the San Benito County Part of Gilroy-Hollister Groundwater Basin, July.

Luhdorff & Scalmanini (L&S), 1991. San Benito County Ground-Water Investigation.

_____, 2015, Northern Counties (Monterey, Santa Cruz, Santa Clara, San Benito Counties) Characterization Report http://www.centralcoastgc.org/coalition-reports/

Moore Iacofano Goltsman, Inc., 2005, City of Hollister General Plan, Adopted December 2005, amended June 2007.

Rantz, S.E., 1969, *Mean Annual Precipitation in the California Region, Basic-Data Compilation*, U.S. Geological Survey (USGS) Isohyetal Map, Scale 1:1,000,000.

San Benito County Water District (SBCWD) and others, 2007, Pajaro River Watershed, Integrated Regional Water Management Plan.

San Benito County Water District (SBCWD), 2015, Agricultural Water Management Plan, October. Accessed August 2018 https://www.sbcwd.com/reports/2015%20SBCWD%20AWMP-USBR%20FINAL%20PLAN.pdf

Santa Clara Valley Water District (SCVWD), 1989, Mean Annual Precipitation Map for San Francisco & Monterey Bay Region, Hydrology Open File Report, October.

Todd Groundwater (Todd), 2014, San Benito County Salt and Nutrient Management Plan, April. https://www.sbcwd.com/reports/Final%20Salt%20and%20Nutrient%20Management%20Plan.pdf

_____, 2015, Northern San Benito County Groundwater Model Update and Enhancement. June 12.

_____, 2016, Hollister Urban Area 2015 Urban Water Management Plan, July. https://www.sbcwd.com/reports/2015%20Public%20Draft%20Urban%20Wtr%20Mgmt%20Plan.pdf

_____, 2017, San Benito County Annual Groundwater Report 2017. December. https://www.sbcwd.com/reports/Annual_GW_Report_2017.pdf

Yates, G. and C-M Zhang, Groundwater flow and solute transport models for the San Benito County portion of the Gilroy-Hollister groundwater basin. May 11. Davis, CA, and Denver, CO. Prepared for San Benito County Water District and San Benito County Planning Department, Hollister, CA, 2001.

TABLES

Table 2-1. Selected San Benito County General Plan Goals, Policies, and Implementation Measures	
Goal	**Policy and Implementation (see footnote)**
LU-1 To maintain San Benito County's rural character and natural beauty while providing areas for needed future growth.	***LU-1.10* Development Site Suitability** The County shall encourage specific development sites to avoid natural and manmade hazards, including, but not limited to, active seismic faults, landslides, slopes greater than 30 percent, and floodplains. Development sites shall also be on soil suitable for building and maintaining well and septic systems (i.e., avoid impervious soils, high percolation or high groundwater areas, and provide setbacks from creeks). *(RDR)*
PFS-3 To ensure reliable supplies of water for unincorporated areas to meet the needs of existing and future agriculture and development, while promoting water conservation and the use of sustainable water supply sources.	**PFS-3.1 Water District Support** The County shall support efforts of the San Benito County Water District to ensure that adequate high-quality water supplies are available to support current residents and businesses and future development projects. *(MPSP/IGC)* **PFS-3.2 Interagency Coordination** The County shall cooperate with public and private water agencies in order to help address existing and future water needs for the county. *(IGC)* **PFS-3.3 Water Rights Protection** The County shall support public and private water agencies in their efforts to protect their water rights and water supply contracts, including working with Federal and State water projects to protect local water rights. *(IGC)* **PFS-3.4 Drought Response** The County shall encourage all public and private water agencies to develop and maintain drought contingency and emergency services plans, emergency inter-ties, mutual aid agreements and related measures to ensure adequate water services during drought or other emergency water shortage. *(MPSP/IGC)* **PFS-3.5 Water Supply Development** The County shall support plans to develop new reliable future sources of supply, including, but not limited to, the expansion of surface water storage and conjunctive use of surface water and groundwater, while promoting water conservation and water recycling/reuse. *(RDR/MPSP/IGC)* **PFS-3.6 Conjunctive Use** The County shall support conjunctive use of groundwater and surface water to improve water supply reliability. *(MPSP/IGC)* **PFS-3.7 Groundwater Management** The County shall support cooperative, regional groundwater management planning by water resource agencies, water users, and other affected parties to ensure a sustainable, adequate, safe, and economically viable groundwater supply for existing and future uses within the county. *(MPSP/IGC)* **PFS-3.8 Integrated Management** The County shall support and participate in the integrated management of surface water and groundwater resources, wastewater, stormwater treatment and use, and the use of reclaimed water. *(MPSP/IGC)* **PFS-3.9 Sufficient Water Supply for New Development** The County shall require new developments to prepare a source water sufficiency study and water supply analysis for use in preparing, where required, a Water Supply Assessment per SB 610 and a Source Water Assessment per Title 22. This shall include studying the effect of new development on the water supply of existing users. The County encourages the development of integrated regional water management plans or similar plans. *(RDR)*
PFS-4 To maintain an adequate level of service in the water systems serving unincorporated areas to meet the needs of existing and future agriculture and development, while improving water system efficiency.	**PFS-4.1 Adequate Water Treatment and Delivery Facilities** The County shall ensure, through the development review process, that adequate water supply, treatment and delivery facilities are sufficient to serve new development and are able to be expanded to meet capacity demands when needed. Such needs shall include capacities necessary to comply with water quality and public safety requirements. *(RDR)* **PFS-4.2 Water Facility Infrastructure Fees** As a condition of approval for discretionary developments, the County shall not issue approval for a final map until verification of adequate water and wastewater service has been provided, which may include verification of payment of fees imposed for water and wastewater infrastructure capacity per the fee payment schedule from the water and wastewater provider. *(RDR)* **PFS-4.3 Minimum Lot Size** The County shall require a minimum lot size for properties that have on-site septic systems to minimize adverse water quality impacts on groundwater. *(RDR)* **PFS-4.4 Single User Well Consolidation** The County shall encourage consolidation of single user wells into public water districts. *(RDR/MPSP)* **PFS-4.5 Water System Rehabilitation** The County shall encourage the rehabilitation of irrigation systems and other water delivery systems to reduce water losses and increase the efficient use and availability of water. *(RDR/MPSP)*

	PFS -4.6 New Community Water Systems The County shall require any new community water system, in the unincorporated area of the county, serving residential, industrial, or commercial development to be owned and operated by a public or private entity that can demonstrate to the County adequate financial, managerial, and operational resources. *(RDR/IGC)* **PFS-4.7 Consistent Fire Protection Standards for New Development** The County, in coordination with public and private water purveyors and fire protection agencies, shall ensure consistent and adequate standards for fire flows and fire protection for new development, with the protection of human life and property as the primary objectives. *(RDR/IGC)* **PFS-4.8 Water Supply Planning** The County shall encourage water purveyors to develop plans for responding to droughts and the effects of global climate change, including contingency plans, the sharing of water resources to improve overall water supply reliability, and the allocation of water supply to priority users. *(MPSP/IGC)*
PFS-5 To ensure wastewater treatment facilities and septic systems are available and adequate to collect, treat, store, and safely dispose of wastewater.	**PFS-5.1 Water and Sewer Expansion** The County shall encourage public wastewater system operators to maintain and expand their systems to meet the development needs of the county. *(MPSP/IGC)* **PFS-5.2 Reclaimed Water** The County shall encourage public wastewater system operations to upgrade existing wastewater treatment systems to produce reclaimed water suitable for unrestricted reuse. *(MPSP/IGC)* **PFS-5.6 Septic System Design** The County shall require individual septic systems to be properly designed, constructed, and maintained to avoid degradation of ground and surface water quality. *(RDR)*
PFS-6 To manage stormwater from existing and future development using methods that reduce potential flooding, maintain natural water quality, enhance percolation for groundwater recharge, and provide opportunities for reuse.	**PFS-6.1 Adequate Stormwater Facilities** The County shall require that stormwater drainage facilities are properly designed, sited, constructed, and maintained to efficiently capture and dispose of runoff and minimize impacts to water quality. *(RDR)* **PFS-6.2 Best Management Practices** The County shall require best management practices in the development, upgrading, and maintenance of stormwater facilities and services to reduce pollutants from entering natural water bodies while allowing stormwater reuse and groundwater recharge. *(RDR)* **PFS-6.3 Natural Drainage Systems** The County shall encourage the use of natural stormwater drainage systems (e.g., swales, streams) to preserve and enhance the environment and facilitate groundwater recharge. *(RDR)* **PFS-6.4 Development Requirements** The County shall require project designs that minimize stormwater drainage concentrations and impervious surfaces, complement groundwater recharge, avoid floodplain areas, and use natural watercourses in ways that maintain natural watershed functions and provide wildlife habitat. *(RDR)* **PFS-6.5 Stormwater Detention Facilities** Where necessary, the County shall require on-site detention/retention facilities and/or velocity reducers to maintain pre-development runoff flows and velocities in natural drainage systems. *(RDR)* **PFS-6.6 Stormwater Detention Basin Design** The County shall require stormwater detention basins be designed to ensure public safety, be visually unobtrusive, provide temporary or permanent wildlife habitat, and where feasible, provide recreation opportunities. *(RDR)* **PFS-6.7 Runoff Water Quality** The County shall require all drainage systems in new development and redevelopment to comply with applicable State and Federal non-point source pollutant discharge requirements. *(RDR)* **PFS-6.8 Reduce Erosion and Sedimentation** The County shall ensure that drainage systems are designed and maintained to minimize soil erosion and sedimentation and maintain natural watershed functions. *(RDR)*
NCR-2 To protect and enhance wildlife communities through a comprehensive approach that conserves, maintains, and restores important habitat areas.	**NCR-2.5 Mitigation for Wetland Disturbance or Removal** The County shall encourage the protection of the habitat value and biological functions of oak woodlands, native grasslands, riparian and aquatic resources, and vernal pools and wetlands. The County shall require that development avoid encroachment and require buffers around these habitats to the extent practicable. The County shall further require mitigation for any development proposals that have the potential to reduce these habitats. Recreational trails and other features established within natural wetlands and aquatic and riparian buffer areas shall be, as long as such areas are not required to meet the Americans with Disabilities Act, located along the outside of the sensitive habitat whenever possible to minimize intrusions and maintain the integrity of the habitat. Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, public boat ramps, and similar uses. In all cases where intrusions into these buffers are made, only the minimum amount of vegetation necessary to construct the feature shall be removed. *(RDR)*
NCR-4 To protect water quantity and quality in natural water bodies and	**NCR-4.1 Mitigation for Wetland Disturbance or Removal** The County shall consider implementing Regional Water Quality Control Board Basin Plan policies to improve areas of low water quality, maintain water quality on all drainage, and protect and enhance habitat for fish and other wildlife on major tributaries to the Pajaro River (San Benito River, Pacheco Creek) and the Silver Creek watershed. *(RDR/MPSP/IGC)*

groundwater basins and avoid overdraft of groundwater resources.	**NCR-4.2 Water Quality Tests** The County shall require new development to prepare water quality tests prior to project approval, demonstrating whether proposed domestic water supply will meet State primary and secondary drinking water standards. (*RDR)* **NCR-4.3 Agricultural Water** The County shall require well tests for nonagricultural development to provide evidence that 100 percent of the water needs may be met without connecting to the San Felipe Water system. *(RDR)* **NCR-4.4 Open Space Conservation** The County shall encourage conservation and, where feasible, creation or restoration of open space areas that serve to protect water quality such as riparian corridors, buffer zones, wetlands, undeveloped open space areas, and drainage canals. *(RDR/MPSP)* **NCR-4.5 Groundwater Recharge** The County shall encourage new development to preserve, where feasible, areas that provide important groundwater recharge and stormwater management benefits such as undeveloped open spaces, natural habitat, riparian corridors, wetlands, and natural drainage areas. *(RDR)* **NCR-4.6 Groundwater Studies for New Development** To ensure an adequate water supply, large-scale development projects that meet the criteria in California Water Code section 10912 shall prepare an analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project in accordance with SB 610. *(RDR)* **NCR-4.7 Best Management Practices** The County shall encourage new development to avoid significant water quality impacts and protect the quality of water resources and natural drainage systems through site design, source controls, runoff reduction measures, and best management practices (BMPs). *(RDR)* **NCR-4.8 Water Education** The County shall encourage water districts to provide public education to encourage existing homeowners to adopt water conservation practices for landscaping and interior plumbing. *(IGC/PI)* **NCR-4.9 Water Conservation Plan** The County shall maintain and implement the San Benito County Water Conservation Plan as necessary to promote water conservation and efficient use. *(MPSP)* **NCR-4.10 Water Efficient Landscape Ordinance** The County shall develop, maintain, and implement a Water Efficient Landscape Ordinance, consistent with the Model Water Efficient Landscape Ordinance prepared by the California Department of Water Resources, to require greater use of regionally native drought-tolerant vegetation, limitations on the amount of turf in residential development, and other measures as appropriate. *(RDR)* **NCR-4.11 Reclaimed Water** The County shall require, where feasible, the use of reclaimed water irrigation systems in new development wherever possible. *(RDR)* **NCR-4.12 Rainwater Catchment** The County shall encourage homeowners to install roof catchment systems and use rainwater for non-potable uses in order to reduce the need for groundwater. *(RDR)* **NCR-4.13 Shared Water Systems** The County shall develop, maintain, and implement an ordinance to allow for shared water systems to facilitate the clustering of homes and preservation of agricultural land, where an entity is established to provide maintenance or financing for the maintenance of the water system. *(RDR)* **NCR-4.14 Wastewater Treatment** The County shall require wastewater treatment systems to be designed to promote the long-term protection of groundwater resources in San Benito County. Domestic wastewater treatment systems shall be required to use tertiary wastewater treatment as defined by Title 22. *(RDR/MPSP)* **NCR-4.15 Septic Systems** The County shall require septic systems to be limited to areas where sewer services are not available and where it can be demonstrated that septic systems will not contaminate groundwater. *(RDR)* **NCR-4.16 Develop in Existing Areas** The County shall encourage development to occur in or near existing developed areas in order to reduce the use of individual septic systems in favor of domestic wastewater treatment in an effort to protect groundwater quality. *(RDR)*

* Implementation Categories: RDR - Regulation and Development Review
MPSP - Infrastructure and Service Master Plans, Strategies, and Programs
IGC - Inter-Governmental Coordination

Table 2-2. Selected Santa Clara County General Plan Strategies, Policies and Implementation	
Strategy	**Policy and Implementation**
Water Supply Resources	
Conserve and Reclaim Water	**C-RC 5** An adequate, high quality water supply for Santa Clara County should be considered essential to the needs of households, business and industry. **C-RC 6** A comprehensive strategy for meeting long term projected demand for water should at a minimum include the following: • Continued conservation and increased reclamation; • Securing additional sources as supplemental supply; • System and local storage capacity improvements; and • Drought contingency planning and groundwater basin management programs. **C-RC 7** Countywide land use and growth management planning should be coordinated with overall water supply planning by the SCVWD in order to maximize dependability of long term water supply resources. **C-RC 8** Environmental impacts of all state and local water supply planning and decision-making should be taken into full consideration. **C-RC 9** Conservation should continue to be considered an integral component of local water "supply" resources, effectively minimizing the amount of supplemental supplies which must be obtained from other sources. **C-RC 10** Educational measures should be continued/increased in order inform the public of the need for conservation over the long term, rather than as a temporary response to periodic drought. **C-RC 11** Domestic conservation should be encouraged throughout Santa Clara County by a variety of means, including reduced flow devices, drought-resistant landscaping, and elimination of wasteful practices. **C-RC 12** More efficient use of water for agricultural irrigation and industrial processes should be promoted through improved technology and practices. **C-RC 13** Use of reclaimed wastewater for landscaping and other uses, including groundwater recharge if adequately treated, should be encouraged and developed to the maximum extent possible.
Obtain Additional Sources of Imported Water	**C-RC 14** Reforms of the state-wide system of water allocation and distribution should be encouraged which facilitate the ability of urban area water suppliers to purchase needed supplies through market mechanisms.
Make System and Local Storage Capacity Improvements	**C-RC 15** Potential for new and/or expanded local reservoirs should be thoroughly examined as a part of any long term strategy for assuring adequate water supply, taking into full account environmental and financial feasibility. **C-RC 16** Seismic safety considerations for new and existing reservoirs should be addressed in order to ensure water supply and public safety in the event of earthquake.
Maintain Drought Contingency and Groundwater Basin Management Plans	**C-RC 17** Drought contingency plans and groundwater basin management programs should be reviewed and updated to prepare for the likelihood of future periods of short-term drought and to minimize: • the potential adverse impacts of drought upon households, business, and industry, and • the possibility of groundwater overdraft and land subsidence.
Water Quality and Watershed Management	
Reduce Non-Point Source Pollution	**C-RC 18** Water quality countywide should be maintained and improved where necessary to ensure the safety of water supply resources for the population and the preservation of important water environments and habitat areas. **C-RC 19** The strategies for maintaining and improving water quality on a countywide basis, in addition to ongoing point source regulation, should include: • effective non-point source pollution control; • restoration of wetlands, riparian areas, and other habitats which serve to improve Bay water quality; and • comprehensive Watershed Management Plans and "best management practices" (BMPs). **C-RC 20** Adequate safeguards for water resources and habitats should be developed and enforced to avoid or minimize water pollution of various kinds, including: • erosion and sedimentation; • organic matter and wastes; • pesticides and herbicides; • effluent from inadequately functioning septic systems; • effluent from municipal wastewater treatment plants; • chemicals used in industrial and commercial activities and processes; • industrial wastewater discharges; • hazardous wastes; and • non-point source pollution.

	C-RC 21 Multi-jurisdictional, countywide programs and regulatory efforts to address water pollution problems should have the full support and participation of each jurisdiction within Santa Clara County, including cities, special districts, state and federal agencies, and County government.
Protect the Biological Integrity of Critical Habitat Areas	**C-RC 31** Areas of habitat richest in biodiversity and necessary for preserving threatened or endangered species should be formally designated to receive greatest priority for preservation, including baylands and riparian areas, serpentine areas, and other habitat types of major significance. **Implementation Recommendations** ***C-RC(i)15*** Explore opportunities for restoration of habitat, particularly with respect to wetland, riparian, and other habitat types rich in diversity or needed to protect threatened and endangered species. {Implementors: Cities, County, RWQCB, state agencies}
Encourage Habitat Restoration	**C-RC 34** Restoration of habitats should be encouraged and utilized where feasible, especially in cases where habitat preservation and flood control, water quality, or other objectives can be successfully combined.
Safety and Noise: Waste Water Disposal	
Prevent Waste Water Contamination of Groundwater Supplies	**C-HS 42** The long-term viability and safety of underground aquifers and groundwater systems countywide shall be protected to highest degree feasible. **C-HS 43** Urban land uses should be in cities and served by centralized wastewater treatment systems. **C-HS 44** All new on-site wastewater treatment systems should be located only in areas where: • there is reasonable assurance that they will function well over a long period; • they can be designed to have a minimum negative impact on the environment; and • they will not contaminate wells, groundwater or surface water. **C-HS 45** On-site wastewater treatment systems should not be allowed in areas where soil characteristics impede their operation (e.g., areas of high groundwater conditions, areas with saturated soils, areas with limited depth to bedrock, etc.). **C-HS 46** Hazardous materials, whether commercial, industrial, agricultural, or residential in character, should not be disposed of in any wastewater or on-site wastewater treatment system. **Implementation Recommendations** **C-HS(i) 42** Develop and implement standards for land subdivision and development which must rely on using on-site wastewater treatment systems so as to minimize negative environmental impacts and maximize the useful life of such systems. (Implementors: County and cities.) **C-HS(i) 43** Prevent overdevelopment requiring on-site wastewater treatment systems in areas where groundwater quality has been so impacted as to pose a discernible threat to the long term integrity and safety of underground water supplies. (Implementors: County and cities.)
Monitor Groundwater Quality	**C-HS 47** Groundwater quality should be monitored to ensure the long-term integrity of countywide water resources. **Implementation Recommendations** **C-HS(i) 44** Monitor the groundwater quality throughout the county to insure the long-term integrity of the aquifers and the safety of water supplies to all users. (Implementors: County and Cities.) **C-HS(i) 45** Maintain low cost laboratory access for well water testing. (Implementors: County and Cities.)
South County Joint Area Plan Policies	
Water Supply	***SC 7.0*** New development should not exceed the water supply, and management of water should be made more efficient through appropriate means, such as watershed protection, percolation, reclamation, and conservation. ***SC 7.1*** Programs to identify and seal abandoned and unused wells should be continued, as such wells may be prime sources for transferring contaminants from the upper to lower aquifer. ***SC 7.2*** The South County jurisdictions should develop a program to track existing water quality, water supply and water flow monitoring programs. This information should be used to evaluate current regulations and procedures, and to assess the need for new monitoring programs or for revisions or consolidation of existing programs. ***SC 7.3*** Each jurisdiction and agency pumping water from wells should be responsible for knowing the demand that its well pumping imposes on the direction of flow of water and how it affects others that are pumping from the same aquifer, and to prevent any adverse impacts on existing groundwater contamination problems. ***SC 7.4*** All jurisdictions and agencies pumping water from wells should cooperate in managing the aquifer so as to preserve the natural ecology of the region, securing the aquifer's utility as a water resource and ensuring the water's quality. ***SC 7.5*** Streambeds and other appropriate percolation areas should be protected. ***SC 7.6*** There should be continuing coordination among the South County jurisdictions and the Santa Clara Valley Water District to assure that the South County will get sufficient deliveries of San Felipe water as needs require. ***SC 7.7*** The water district should continue developing programs to assure effective management of the water resources, such as well monitoring, percolation of imported water, reclamation and conservation. ***SC 7.8*** New development should not exceed the water supply, and use of water should be made more efficient through appropriate means, such as conservation and reclamation. ***SC 7.9*** The development of water reclamation facilities should be encouraged, where feasible, in order to make reclaimed water available to help meet the growing needs of the South County region.

Water Quality	***SC 8.0*** Water quality should be protected from contamination, and should be monitored to assure that present policies and regulations are adequate. Such uses as waste facilities, septic systems and industries using toxic chemicals should be prohibited where polluting substances may come in contact with groundwater, floodwaters, and creeks or reservoir waters. ***SC 8.1*** Land use policies should be continued that limit the number of individual septic systems in areas vulnerable to groundwater contamination, because of the potential for cumulative degradation of water quality. ***SC 8.2*** In areas where future development is expected to be served by sewers, large lot policies (which allow minimal development and limited numbers of septic systems) should be continued. This approach increases the feasibility of designing future urban density subdivisions with smaller lots, which are more efficient for sewers in terms of service and cost. ***SC 8.3*** In the unincorporated area current County policies regarding septic systems and land use should be continued with no lessening of standards. ***SC 8.4*** Groundwater and surface water quality conditions throughout the South County should be monitored to determine if changes in regulations regarding septic systems and land use are needed. Protection of groundwater quality requires continued caution in the siting of landfills and transfer stations and rigorous enforcement of local and regional regulations. ***SC 8.6*** Continued caution should be taken as to the siting of landfills, the construction of landfills (i.e., they should have clay liners, etc.), and the waste allowed in a sanitary landfill in South County so as not to create hazards to groundwater quality. ***SC 8.7*** Solid waste and hazardous waste transfer stations should be sited and operated so as to minimize hazards to ground and surface water quality. ***SC 8.8*** Regulations relating to solid waste disposal should continue to be rigorously enforced by the local jurisdictions and by the Regional Water Quality Control Boards. ***SC 8.11*** Properties located in areas that have soils with rapid water percolation shall be protected from future development in order to ensure existing water quality. Such development should not begin until preceded by the inclusion within the Cities' and County's Hazardous Materials Storage Ordinance a section specifically related to high percolation rates. ***SC 8.12*** Commercial and industrial developments proposed to be located in areas that have soils with rapid water percolation should be permitted only under the strict safety limitations as may be required by the Cities' and/or County's Hazardous Materials Specialists. ***SC 8.13*** In order to provide greater protection of the aquifers which supply drinking water to the South County, special consideration should be given to the management of contaminants (e.g., hazardous materials, sanitary effluents) in groundwater recharge areas where no protective aquitard layer exists. ***SC 8.14*** Each agency and jurisdiction responsible for well monitoring should continue to monitor wells and provide results to a central agency (yet known) which would coordinate the data and make it available to all jurisdictions and agencies. ***SC 8.15*** Programs for monitoring private wells should continue to expand the scope of testing by including tests of more wells and including tests on constituents not yet tested in private wells (i.e., volatile organics, bacteriological, radiological, etc.), and periodic retesting of selected private wells
Development Hazards/Environmental Safety	***SC 15.8*** Natural streamside and riparian areas should be left in their natural state, in order to preserve their value as percolation and recharge areas, natural habitat, scenic resources, recreation corridors and for bank stabilization. If flood control projects needed to protect presently existing development make this infeasible, disruption should be minimized, maintaining slow flow and stable banks through design and other appropriate mitigation measures.

Table 2-3. Selected City of Hollister General Plan Goals, Policies, and Implementation Measures		
Goal	**Policy**	**Implementation Measures**
Housing Element		
H1 Work together to build a sense of community and achieve housing goals	**H1.4 Timing of Housing and Infrastructure** Continue to support the timing of new housing with needed infrastructure improvements.	Expand sewer and water system capacity to meet housing needs [H.B]
Community Services and Facilities Element		
CSF1 Coordinate with other agencies and plan for the provision of adequate infrastructure, facilities and services	**CSF1.1 Adequate Capabilities and Capacity of Local Public Services** Ensure that future growth does not exceed the capabilities and capacity of local public services such as wastewater collection and treatment, local water supply systems, fire and police protection, maintenance of streets and roads, local school systems, parks and recreational facilities, and landfill capacity, and ensure that public services meet Federal and State standards and are available in a timely fashion. **CSF1.6 Other Infrastructure Planning** Require the preparation of infrastructure master plans in areas outside the designated Sphere of Influence as a prerequisite to annexation. Such plans shall contain, but not be limited to, plans for sewer services, water service, storm drainage, traffic circulation, recreation facilities, school facilities and funding alternatives for police and fire services. **CSF1.7 Development Review Criteria for Public Services** Prior to granting approval, evaluate each new development in terms of the following criteria: 1. Would the proposed development share a common border with a property that has already been developed? 2. Would the proposed development be adequately served by infrastructure (water, sewer, streets, schools, parks, etc.), which is already in place or mitigated? 3. Would the proposed development be located within the existing service areas of local service providers (fire protection, police protection, solid waste disposal, schools, etc.), and not result in a reduction in their current capabilities?	Maintain an up-to-date CIP [CSF.CC] Adopt a performance standards ordinance [CSF.D] Coordinate with the San Benito County Water District, San Benito County and the Sunnyslope County Water District in water and wastewater system expansion needs [CSF.F]
CSF 2 Plan for adequate sewer and water facilities	**CSF2.1 Sewer and Water Facilities** Coordinate with responsible districts and agencies to assure that sewer and water facility expansion and/or improvements meet Federal and State standards and occur in a timely manner. **CSF2.4 Local Water Supply System** Encourage development in those portions of the Hollister Planning Area which are already served by the local water supply systems or to which water supply systems can reasonably be extended. **CSF2.6 Provision of Water Service to New Development** Require developers who will require water service for their project to apply to the City of Hollister, the Sunnyslope County Water District and the San Benito County Water District, in that order, for service. Only if the proposed	Maintain data on sewer and water system capacity [CSF.DD] Monitor water quality at the wastewater treatment plant [CSF.EE] Establish requirements for water conservation in new development [CSF.I] Provide information on water conserving landscaping [CSF.M] Identify opportunities for water recycling [CSF.Q] Update the City's Water System Master Plan [CSF.R] Coordinate with the water resources association of San Benito County [CSF.V] Implement plans for a regional wastewater treatment facility [CSF.Z]

	development is denied service by all three agencies can it then be allowed to use groundwater as a source of water. **CSF2.7 Water Conservation Measures** Encourage water-conserving practices and features in the design of structures and landscaping, and in the operation of businesses, homes and institutions, and increase the use of recycled water.	
CSF3 Provide adequate drainage facilities, limit erosion and maintain clean water	**CSF3.3 Local, State and Federal Standards for Water Quality** Continue to comply with local, State and Federal standards for water quality. **CSF3.4 Water Quality Tests and Mitigation** As part of the development review process, require developers to conduct well and ditch tailwater tests to determine the presence of "Category I" herbicides and pesticides, and triazide herbicides, as well as other chemicals that have the potential to pollute the groundwater and cause health risks. Based on findings, and at the project applicant's expense, implement appropriate requirements to protect public health. **CSF3.5 Infiltration Areas** Require new development to identify sites which may be used for vegetated swales or strips, infiltration, media infiltration, water-oil separators, wet ponds, constructed wetlands, extended detention basins and multiple systems which may enhance water quality. **CSF3.6 Education and Outreach on Water Quality Programs** Support public education regarding water pollution prevention and mitigation programs. **CSF3.7 Pollution from Urban Runoff** Address non-point source pollution and protect receiving waters from pollutants discharged to the storm drain system by requiring Best Management Practices. This would include: 1. Support alternatives to impervious surfaces in new development, redevelopment, or public improvement projects to reduce urban runoff into storm drain system and creeks; 2. Require that site designs work with the natural topography and drainages to the extent practicable to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems; and, 3. Where feasible, use vegetation to absorb and filter fertilizers, pesticides and other pollutants.	Establish procedures and requirements for well and ditch tail water tests [CSF.H] Implement actions for pesticide and fertilizer management [CSF.L] Adopt a Storm Water Master Plan [CSF.O] Identify drainage system improvements [CSF.P] Prepare guidelines for water quality source control program [CSF.S] Conduct water quality education programs [CSF.T] Continue to require proper disposal of pollutants [CSF.U]
CSF4 Provide for an adequate level of community services and facilities to ensure the continued health, education, welfare and safety of all residents and businesses	**CSF4.3 Coordination with Utility Providers** Promote the availability and adequate delivery of reliable, modern, and competitively priced utilities necessary for businesses to prosper, such as power, water and telecommunications.	Require utility providers review [CSF.MM]
Natural Resources and Conservation Element		
NRC1 Assure enhanced habitat for native plants and animals, and special protection for threatened or endangered species	**NRC 1.1 Protection of Environmental Resources** Protect or enhance environmental resources, such as wetlands, creeks and drainageways, and habitat for threatened and endangered species. **NRC 1.5 Wetlands Preservation** Maintain existing riparian areas in their natural state to provide for wildlife habitat, groundwater percolation, water quality, aesthetic relief and	Require project mitigation for habitat [NRC.V] Require wetlands delineation [NRC.X] Require wetlands replacement plans [NRC.Y]

	recreational uses that are environmentally compatible with wetland preservation. Require appropriate public and private wetlands preservation, restoration and/or rehabilitation through compensatory mitigation in the development process for unavoidable impacts. Support and promote acquisition from willing property owners, and require those development projects, which may result in the disturbance of delineated seasonal wetlands to be redesigned to avoid such disturbance. **NRC 1.6 Enhancement of Creeks and Drainageways** Explore enhancement of, and support continuous upgrades to, drainageways to serve as wildlife habitat corridors for wildlife movement and to serve as flood control facilities to accommodate storm drainage. Require setbacks, creek enhancement and associated riparian habitat restoration/creation for projects adjacent to creeks to maintain storm flows, reduce erosion and maintenance and improve habitat values, where feasible. Generally, all new structures and paved surfaces should be set back 100 feet from wetlands and creeks.	
NRC3 Conserve and manage natural resources	NRC 3.1 Development Practices to Conserve Resources Promote development practices, which will result in the conservation of energy, water, minerals and other natural resources, and promote the use of renewable energy technologies (such as solar and wind) when possible. NRC 3.2 Resource-Efficient Organizations and Businesses Encourage businesses, commercial property owners, apartment building owners and non-profit organizations to be resource, energy and water efficient.	Encourage "green" building standards and processes [NRC.E] Apply Title 24 requirements [NRC.J] Implement the LEED program [NRC.O] Publicize energy conservation programs [NRC.Q]

Table 2-4. Selected City of San Juan Bautista General Plan Goals, Objectives, Policies, and Programs		
Goals and Objectives	**Policy**	**Program**
Land Use		
LU2 A town with a balanced and diversified set of land uses **LU 2.7** Prohibit land uses for, or in support of, oil and gas exploration and development in order to: • Preserve agricultural land and viewsheds; • Protect groundwater supplies, air and water quality, and wildlife habitat; • Expand tourism; • Encourage desired industries; and • Avoid incompatible land uses.	**LU 2.7.1** Prohibit development, construction, installation, or use of any facility or above ground equipment for, or in support of, oil or gas exploration or development on all lands within the City's boundaries.	**LU 2.7.1.1** Adopt a zoning ordinance to conform the zoning code to Policy LU 2.7.1 and adopt Hillside Development regulations. **LU 2.7.1.2** Encourage the County of San Benito to regulate land use within the City's Sphere of Influence and Planning Area (or Area of Concern) Boundary consistent with Policy LU 2.7.1.
Conservation		
CO 2 Clean air and water for residents and visitors **CO 2.1** Protect the quality of surface and groundwater resources.	**CO 2.1.1** Improve groundwater quality by maintaining high potable water quality standards.	**CO 2.1.1.1** Finish and implement plans for a 'pellet plant' that will treat water in central location before it is delivered to customers.
CO 3 Efficient use of energy and natural resources **CO 3.2** Practice sustainable water resource management.	**CO 3.2.1** Integrate water efficiency into local government operations and policies.	**CO 3.2.1.1** Provide resources for water efficient landscaping and fixtures in new developments. **CO 3.2.1.2** Retrofit municipal landscapes with water-efficient planting. **CO 3.2.1.3** Monitor municipal water use and develop water conservation goals. **CO 3.2.1.4** Retrofit municipal facilities with water efficient fixtures and appliances. **CO 3.2.1.5** Retrofit municipal facilities to utilize reclaimed water in landscaping. **CO 3.2.1.6** Install purple pipe infrastructure at future municipal facilities and parks to facilitate the use of reclaimed water for irrigation. **CO 3.2.1.7** Require new subdivisions and commercial development to utilize sustainability measures for capture and storage of rainwater for such appropriate uses as irrigation of public open space areas, parks, and lawns.
CO 4 Protection of wildlife, habitat, air quality, and water resources **CO 4.1** Protect all state and federally listed special-status species and their critical habitat. **CO 4.4** Meet state mandated per capita water consumption goals established in Senate Bill X7-7.	**CO 4.1.1** Comply with federal and state laws regarding the protection of special-status species and habitat, as defined by US Fish and Wildlife Service. **CO 4.4.1** Inform the public about city-wide water use and water conservation goals.	**CO 4.1.1.1** Provide a list of local native plant species for landscaping in order to prevent the introduction of invasive species. **CO 4.1.1.2** Establish tree protection guidelines. **CO 4.4.1.1** Incorporate information on current water use, water conservation goals, and ways to reduce water use with water bills for residents and businesses. **CO 4.4.1.2** Regularly monitor city-wide water use and include results in local government reporting. **CO 4.4.1.3** Work with the Water Resource Association of San Benito County and the State Water Resources Control Board to promote and expand water conservation programs to local residents and businesses.
Open Space		
OS 4 Preserve prime farmland with viable local agricultural operations **OS 4.1** Avoid or mitigate loss of prime farmland soils and conserve non-prime agricultural uses.	**OS 4.1.1** Promote City-centered and contiguous smart growth.	**Program OS 4.1.1.1** Keep existing water resources for agricultural activities.

Public Facilities and Services		
PF 1 A community with high quality water and sewer services provided in the most efficient, cost effective, and environmentally sound manner **PF 1.1** Improve the quality of water, water treatment facilities, and water services for residents and businesses. **PF 1.2** Manage groundwater resources to maintain a secure water supply for residents and businesses. **PF 1.3** Improve the quality of sewer treatment facilities and services for residents and businesses.	**PF 1.1.1** Maintain land uses around City wells that minimize the risk of groundwater contamination. When private development occurs around a City well, require the provision of a replacement well if the development could potentially have an adverse impact on well water quality. **PF 1.1.2** Improve potable water quality and groundwater quality by treating water to a higher standard before delivery to residents and businesses. **PF 1.2.1** Maintain adequate water capacity for residents and businesses. New development should only be permitted when water services can be provided without threatening the level of service to the rest of the city. **PF 1.2.2** Allow private water wells within the sphere of influence only where the City cannot feasibly provide public water service or where an established water system, such as the one serving San Juan School, has been determined adequate by the City Engineer. In the former case, the use of private wells should be discontinued when City water service becomes available. **PF 1.2.3** Provide extensions of City potable water service only to properties within the designated sphere of influence. Do not extend service or sell capacity to development on agricultural or open space lands outside the City's Urban Growth Boundary. **PF 1.3.1** Allow individual septic systems within the sphere of influence only where the City cannot feasibly provide sewer service and where the County Health Department has determined that sufficient area and soil conditions exist for a septic tank leach field or other accepted method of effluent disposal. In such cases, the use of septic systems should be discontinued when City sewer service becomes available within 600 feet of the property. **PF 1.3.2** Provide extensions of City sewer service only to properties within the designated sphere of influence. Do not extend service to development on agricultural or open space lands outside the City's sphere of influence.	**PF 1.1.2.1** Finish and implement plans for a 'pellet plant' that will treat water in a central location before it is delivered to customers. **PF 1.1.2.2** Promote and incentivize the removal of home water softeners once water quality goals are met to reduce the salinity of wastewater. **PF 1.1.2.3** Produce an annual report to the City Council on water quality. Use this information to determine whether the City is meeting state water quality standards. **PF 1.2.3.1** Produce an annual report to the City Council on water capacity and actual use. Use this information to determine where and when capital improvements are needed. **1.3.2.1** Produce an annual report to the City Council on sewer capacity and actual use. Use this information to determine where and when capital improvements are needed. **PF 1.3.2.2** As part of the City's Capital Improvements Program, reduce infiltration and inflow problems at the City's wastewater treatment plant by improving the trunk line leading from the collection system into the wastewater plant. Undertake other capital improvements as determined necessary by the plant operator and City Engineer. **PF 1.3.2.3** Develop a plan for the long-term expansion or relocation of the City's wastewater treatment plant or begin planning a second facility.
Health		
HE 6 Environmental quality to increase public health HE 6.2 Enhance air and water quality.	HE 6.2.1 Create design standards in the planning review process to enhance water quality. HE 6.2.2 Continue to work with residents, businesses, and the relevant environmental protection agencies to create a plan for improving water quality.	HE 6.2.1.1 Protect the quality of water sources, including cones of influence, water recharge areas, and water wells from future degradation through design standards. HE 6.2.1.2 Ensure that design standards for all stormwater retention and detention systems are adhered to in order to prevent the degradation of surface water bodies. HE 6.2.1.3 Require that impervious surfaces be limited and mitigated with low impact development in prime recharge areas. HE 6.2.2.1 Protect potable water well fields from man-made and natural sources of pollution. HE 6.2.2.2 Plan for emergency conservation and use of recycled water sources. HE 6.2.2.3 Create a San Juan Creek restoration program.

FIGURES

Please note that the figures in this section are designed for printing at 11x17 inches.

We recommend printing the pdf through Adobe Acrobat and selecting *Actual Size* and *Choose paper source by PDF page size*.

Santa Clara County
San Benito County
Pacheco Creek
Arroyo de las Viboras
Pacheco Creek
Pajaro River
San Benito River
San Benito River
Tres Pinos Creek
Santa Clara County
Santa Cruz County
Santa Cruz
Gilroy
Watsonville
Los Banos
Santa Cruz County
Monterey County
San Benito County
Monterey County
Merced County
San Benito County
Merced County
Fresno County
Salinas
Fresno County
San Benito County
Soledad
N
0
6,000
12,000
Scale in Feet

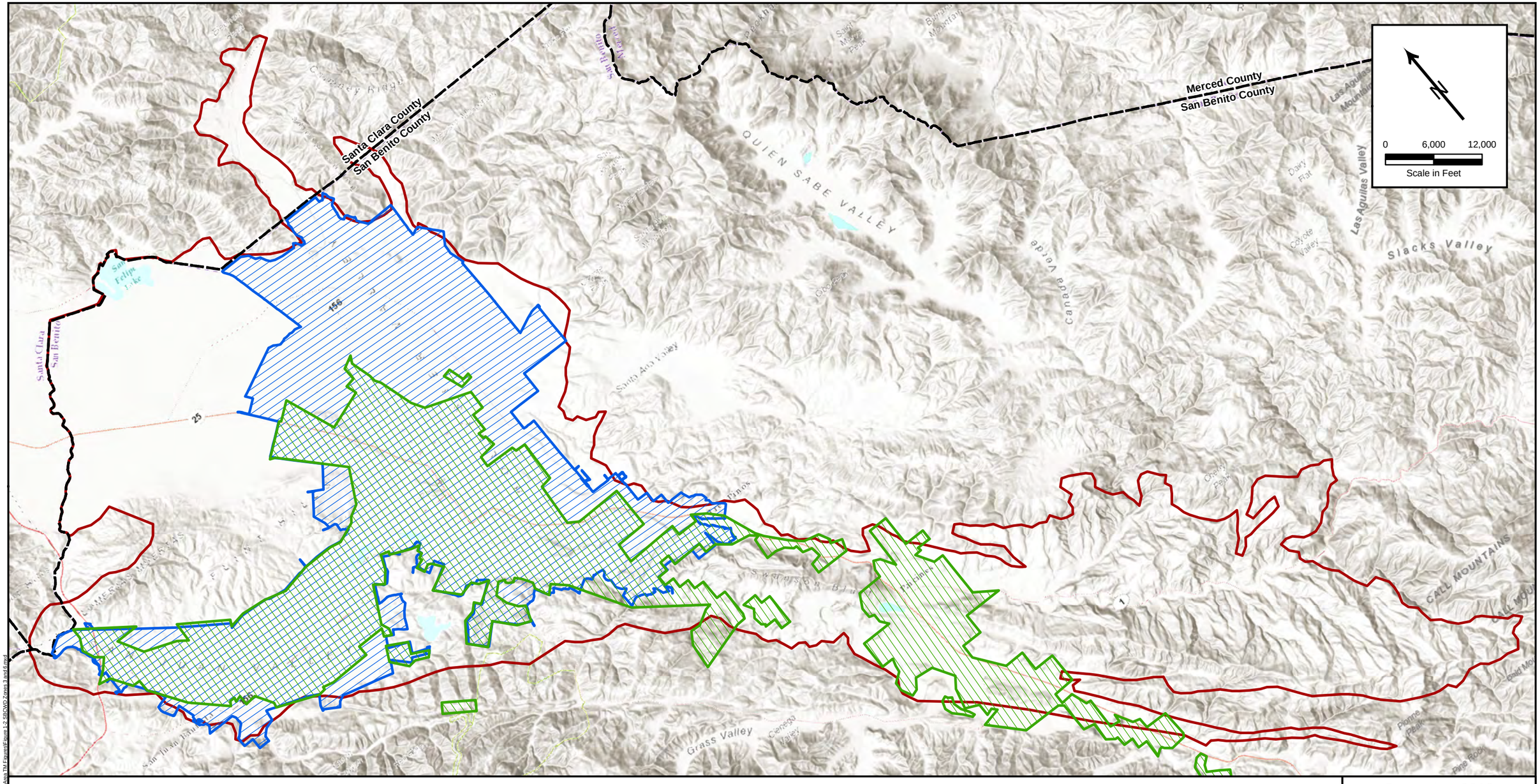
North San Benito Basin
Llagas Area Subbasin of the Gilroy-Hollister Basin
Pajaro Valley Subbasin of the Corralitos Basin
Quien Sabe Valley Basin
Santa Ana Valley Basin
Upper Santa Ana Valley Basin
San Benito River Valley Basin

December 2018

TODD GROUNDWATER

Figure 1-1
North San Benito Basin, Adjacent Basins, and SBCWD GSA

Path: P:\Projects\San Benito GSA\17043\GIS\Maps\Figures\GSP Figures\Plan Area TM Figures\Figure 1-1 Basin Adjacent Basins GSA.mxd



San Benito County Water District (SBCWD) Zone of Benefit 3

San Benito County Water District (SBCWD) Zone of Benefit 6

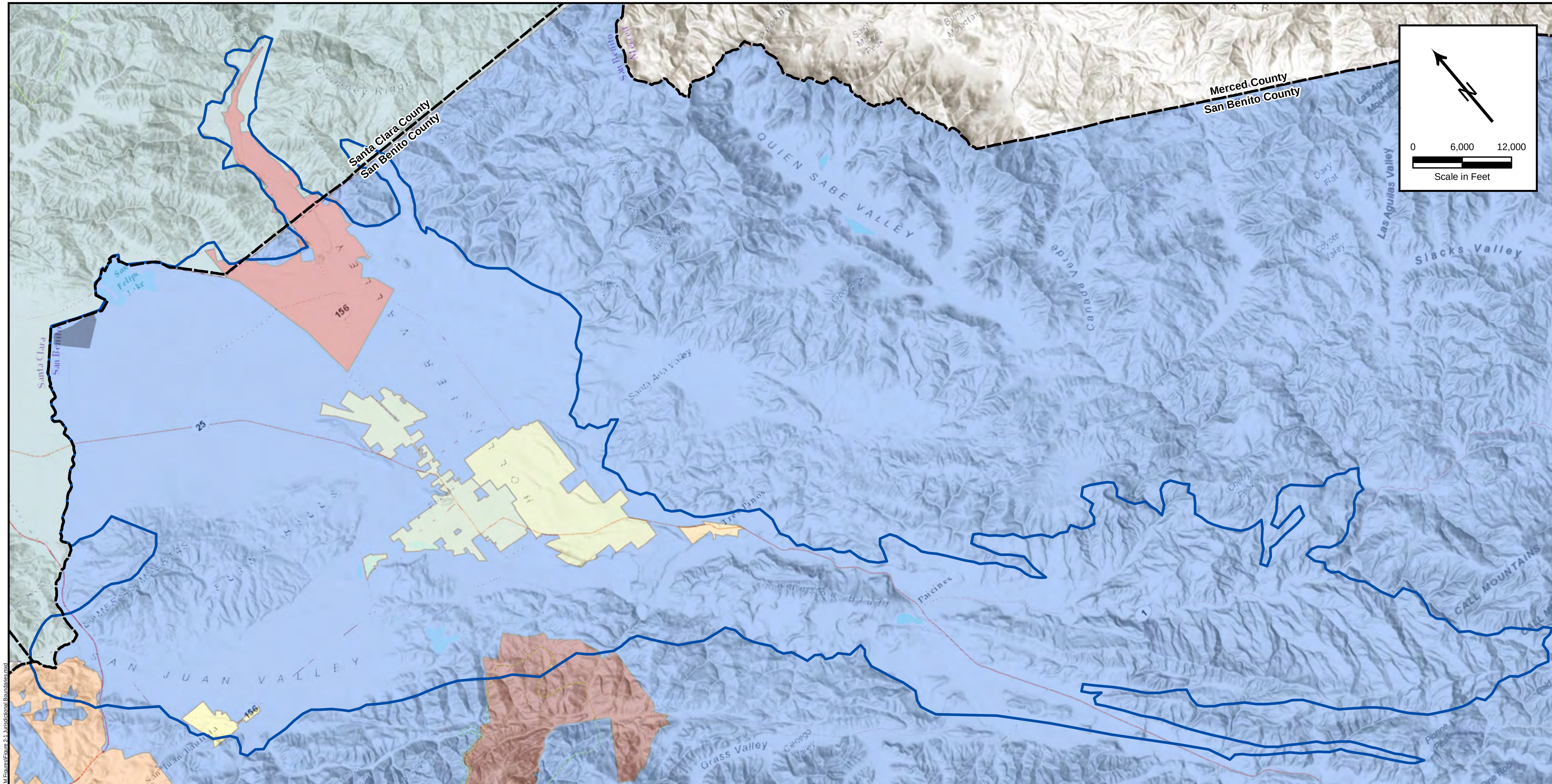
North San Benito Basin

December 2018

TODD GROUNDWATER

Figure 1-2
San Benito County Water District Zones of Benefit

Path: N:\Projects\San Benito GSP 1754\GIS\MXD\Figures\GSP Figures\Plan Area TM Figures\Figure 1-2 SBCWD Zones 3 and 6.mxd

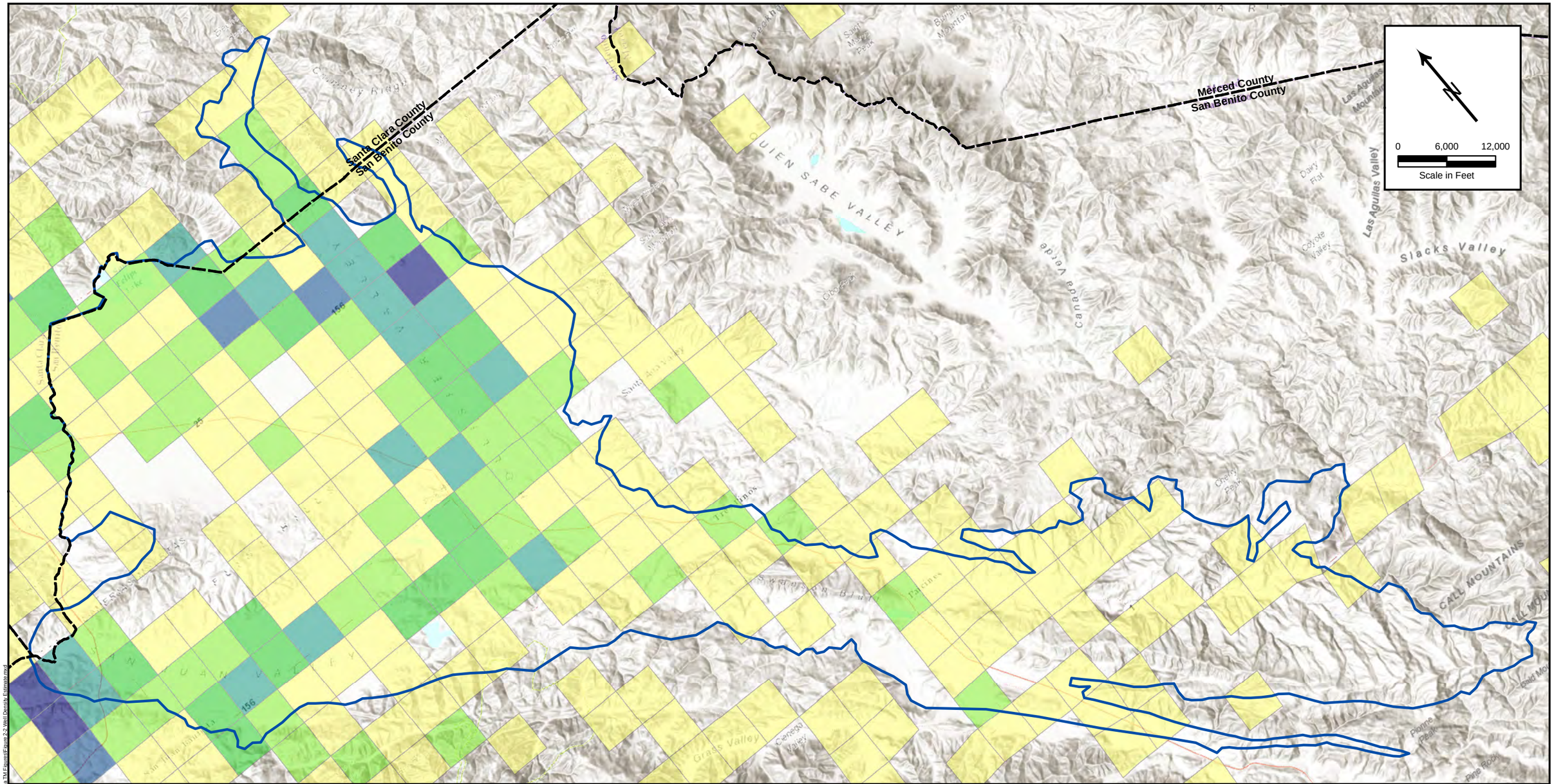


San Benito County Water District
Santa Clara Valley Water District
City of Hollister
Sunnyslope County Water District
City of San Juan Bautista
Tres Pinos County Water District
Aromas Water District
Paceheco Pass Water District
CA Parks And Recreation, Hollister Hills SVRA
Wildlife Heritage Foundation Pajaro River Mitigation Bank
North San Benito Basin

December 2018

TODD GROUNDWATER

Figure 2-1
Jurisdictional Boundaries



Estimated Well Density by PLSS Section* - All Wells

- 1 to 5 Wells Total
- 5 to 10 Wells Total
- 10 to 15 Wells Total
- 15 to 20 Wells Total
- 20 to 25 Wells Total
- 25 to 30 Wells Total
- North San Benito Basin

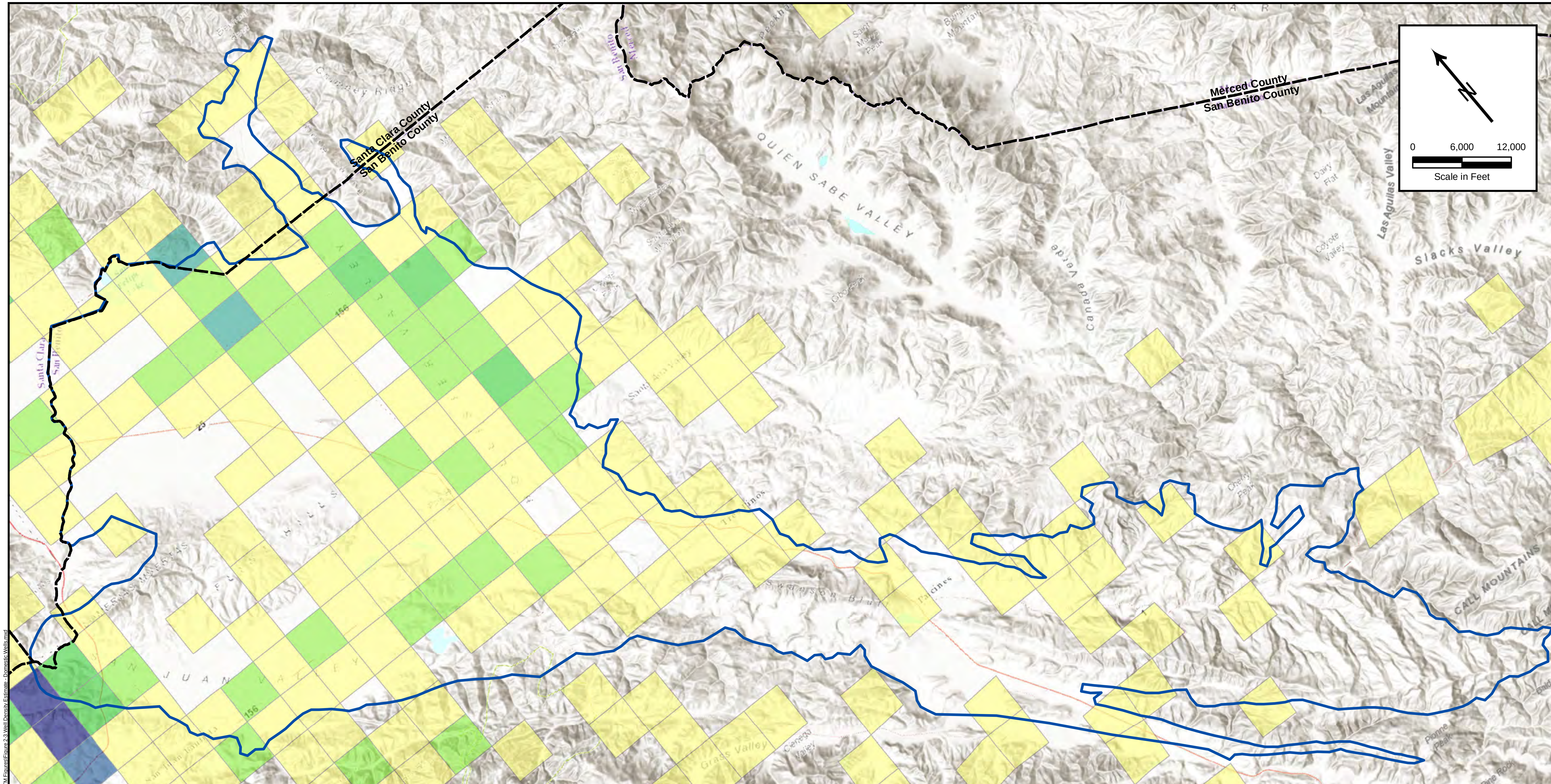
* The Public Land Survey System (PLSS) is a way of subdividing and describing land in the United States. PLSS Sections are one-mile square rectangular grids of 640 miles each. All lands in the public domain are subject to subdivision by this rectangular system of surveys, which is regulated by the U.S. Department of the Interior, Bureau of Land Management (BLM).

December 2018

TODD GROUNDWATER

Figure 2-2
Estimated Density of All Wells

Path: H:\Projects\San Benito GSA 3762\GIS\Maps\Figures\GSP Figures\Plan Area TM Figures\Figure 2-2 Well Density Estimate.mxd



Estimated Well Density by PLSS Section* - Domestic Wells

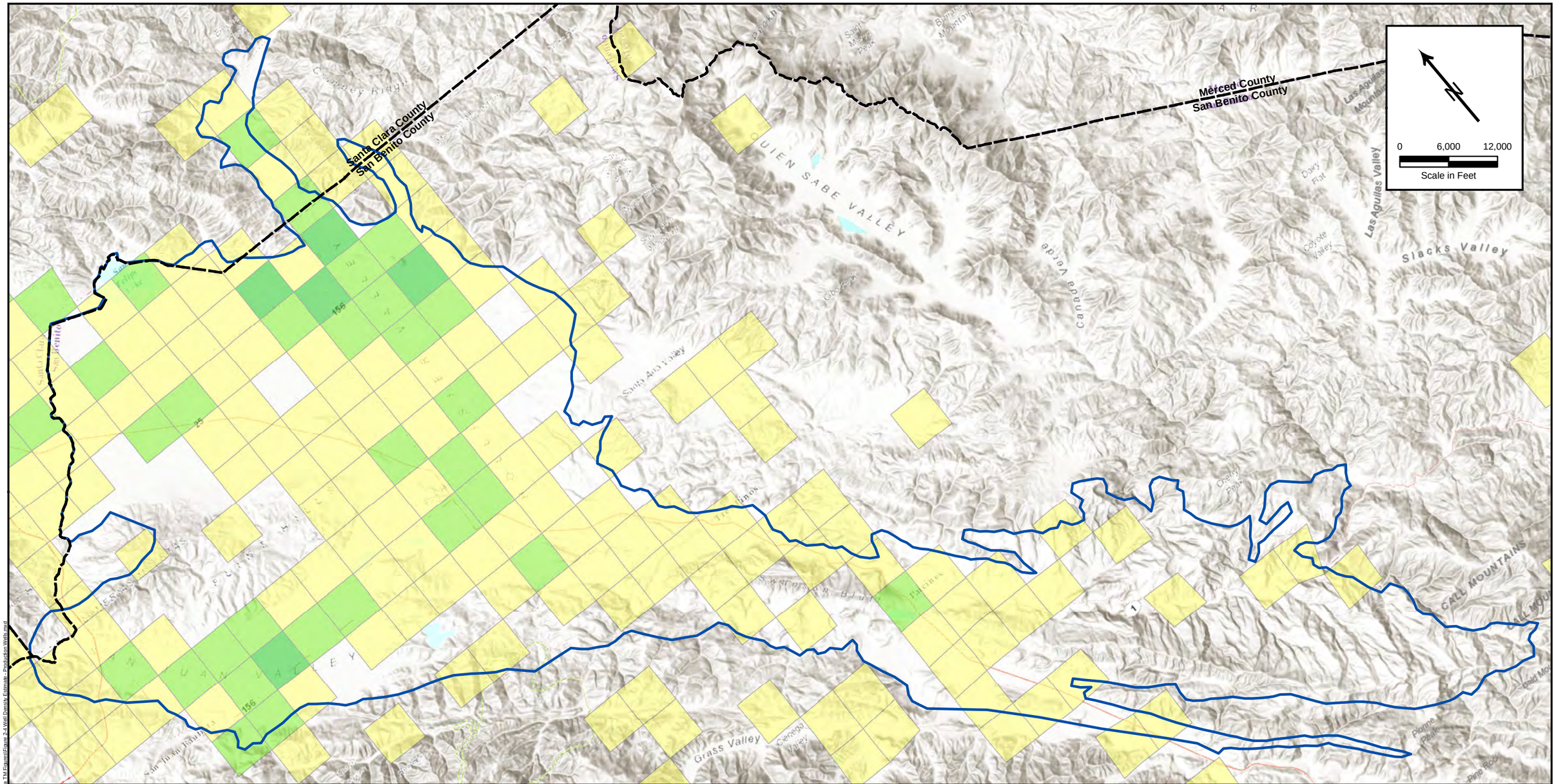
- 1 to 5 Domestic Wells
- 5 to 10 Domestic Wells
- 10 to 15 Domestic Wells
- 15 to 20 Domestic Wells
- 20 to 25 Domestic Wells
- 25 to 30 Domestic Wells
- North San Benito Basin

* The Public Land Survey System (PLSS) is a way of subdividing and describing land in the United States. PLSS Sections are one-mile square rectangular grids of 640 miles each. All lands in the public domain are subject to subdivision by this rectangular system of surveys, which is regulated by the U.S. Department of the Interior, Bureau of Land Management (BLM).

December 2018

TODD GROUNDWATER

Figure 2-3
Estimated Density of Domestic Wells



Estimated Well Density by PLSS Section* - Production Wells

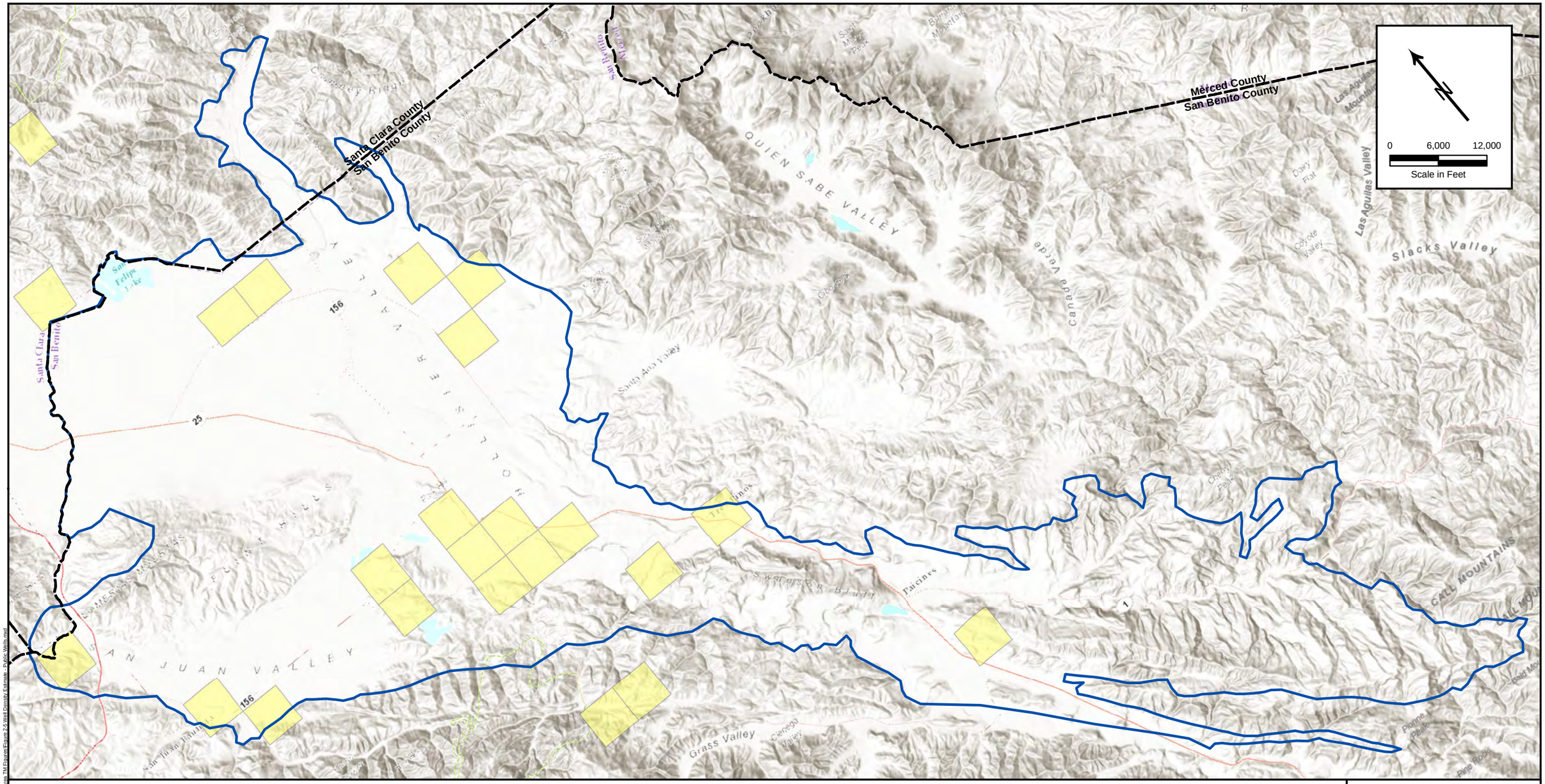
- 1 to 5 Production Wells
- 5 to 10 Production Wells
- 10 to 15 Production Wells
- 15 to 20 Production Wells
- 20 to 25 Production Wells
- 25 to 30 Production Wells
- North San Benito Basin

* The Public Land Survey System (PLSS) is a way of subdividing and describing land in the United States. PLSS Sections are one-mile square rectangular grids of 640 miles each. All lands in the public domain are subject to subdivision by this rectangular system of surveys, which is regulated by the U.S. Department of the Interior, Bureau of Land Management (BLM).

December 2018

TODD GROUNDWATER

Figure 2-4
Estimated Density of Production Wells



Estimated Well Density by PLSS Section* - Public Wells

- 1 to 5 Public Wells
- 5 to 10 Public Wells
- 10 to 15 Public Wells
- 15 to 20 Public Wells
- 20 to 25 Public Wells
- 25 to 30 Public Wells
- North San Benito Basin

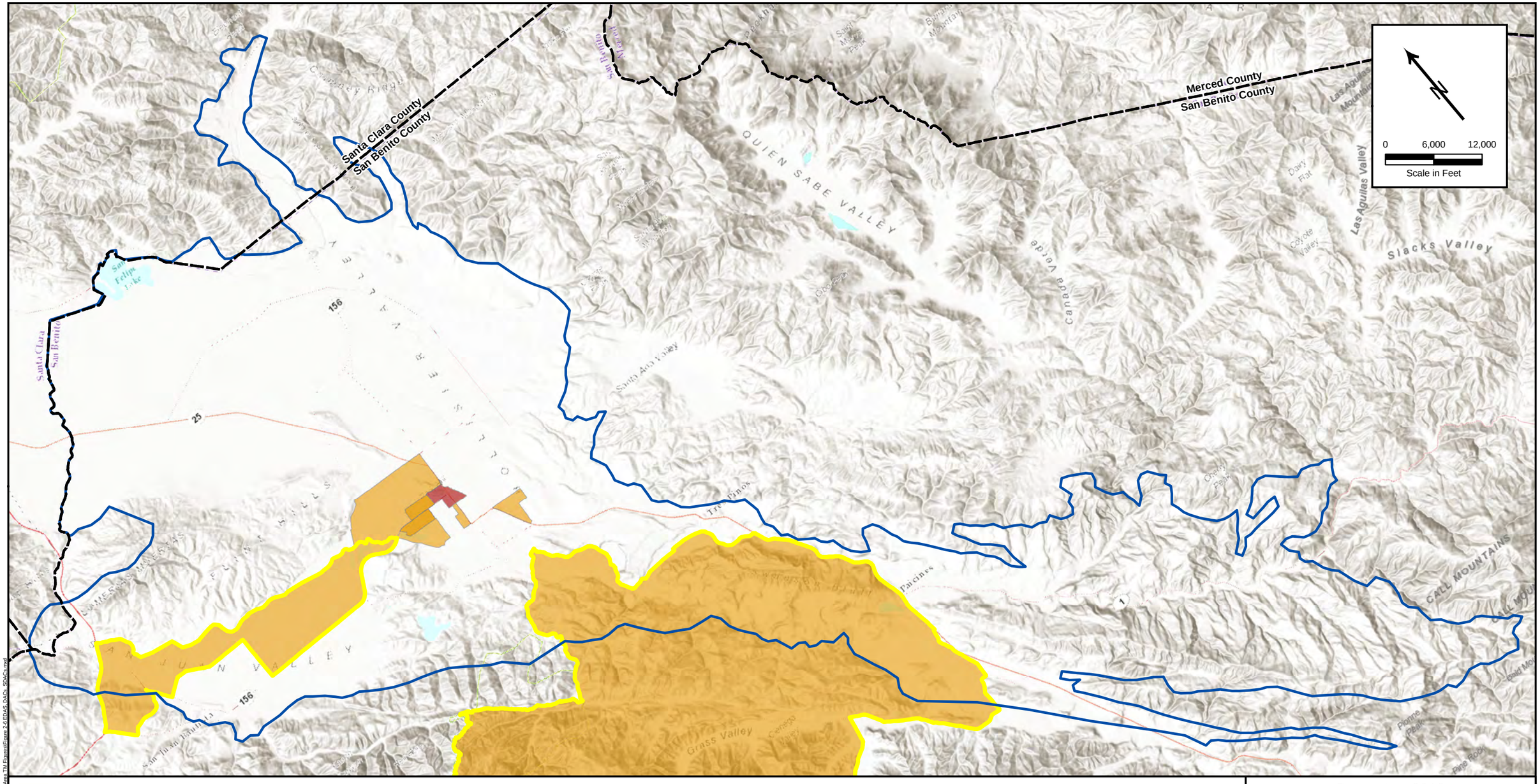
* The Public Land Survey System (PLSS) is a way of subdividing and describing land in the United States. PLSS Sections are one-mile square rectangular grids of 640 miles each. All lands in the public domain are subject to subdivision by this rectangular system of surveys, which is regulated by the U.S. Department of the Interior, Bureau of Land Management (BLM).

December 2018

TODD GROUNDWATER

Figure 2-5
Estimated Density of Public Wells

Path: H:\Projects\San Benito GSA\17043\GIS\Maps\Figures\GSP Figures\Plate Area TM Figures\Figure 2-5 Well Density Estimate - Public Wells.mxd



Economically Distressed Area (EDA)

Disadvantaged Community (DAC)

Severely Disadvantaged Community (SDAC)

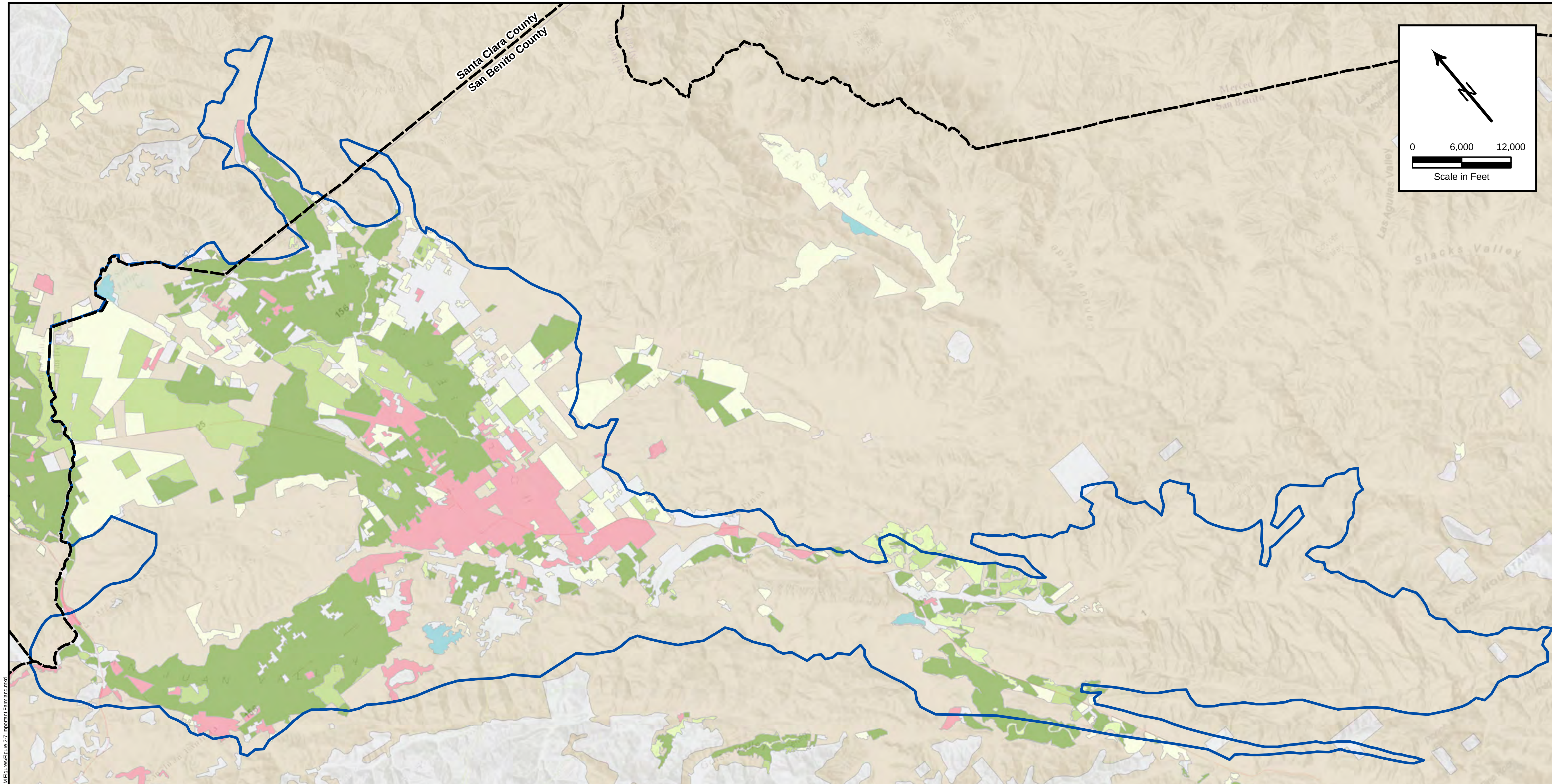
North San Benito Basin

December 2018

TODD GROUNDWATER

Figure 2-6
Economically Distressed Areas, Disadvantaged Comunities, and Severely Disadvantaged Comunities

Path: N:\Projects\San Benito GSP 1764\GIS\MXD\Final Figures\GSP Figures\Plan Area 7\Figure2Figure 2-6 EDAs, DACs, SDACs.mxd

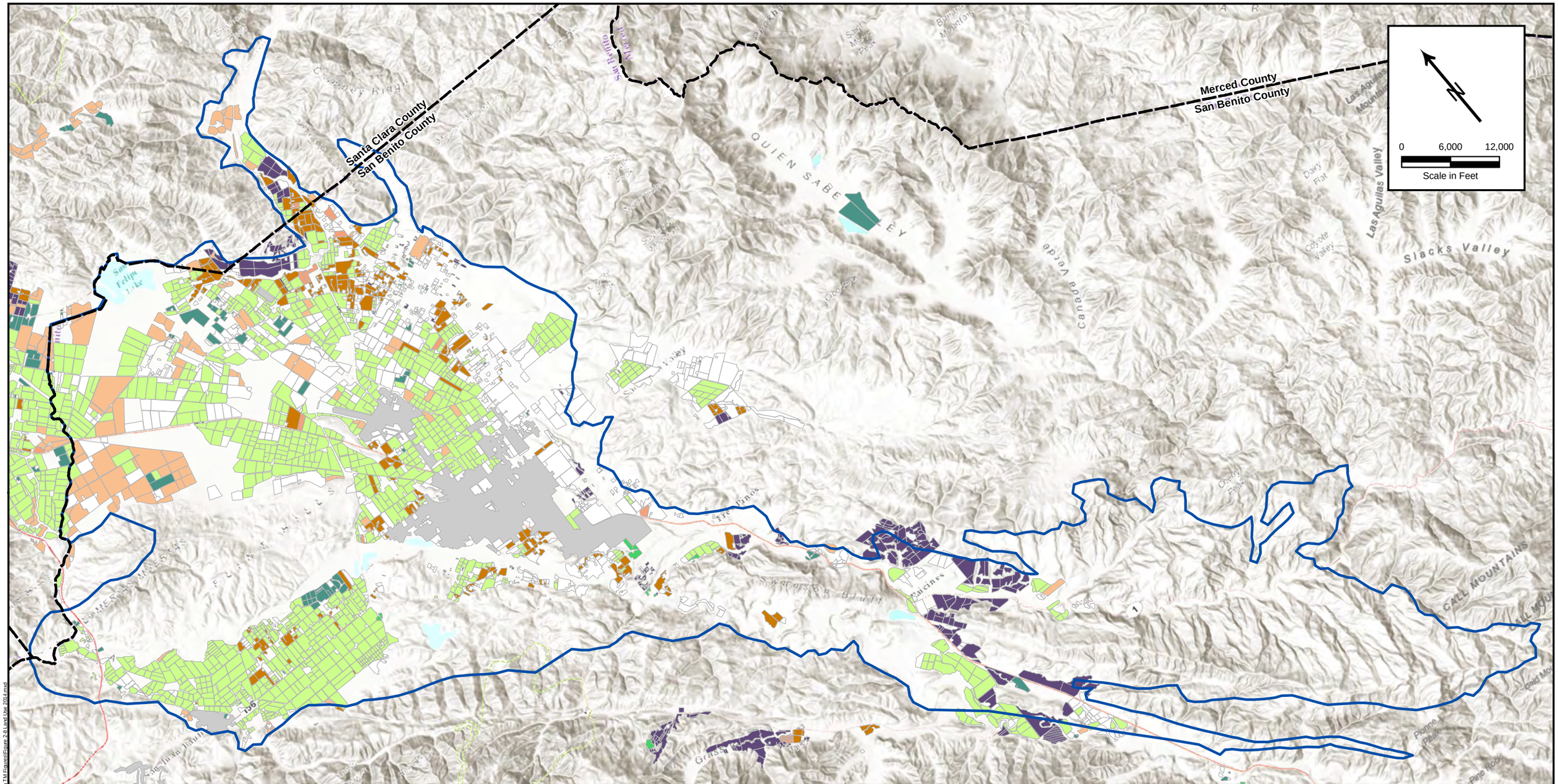


- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Farmland of Local Importance
- Grazing Land
- Urban and Built-Up Land
- Other Land
- Water Area
- North San Benito Basin

December 2018

TODD GROUNDWATER

Figure 2-7
Important Farmland



Statewide Crop Mapping 2014

DWR Standard Legend (modified for remote sensing)

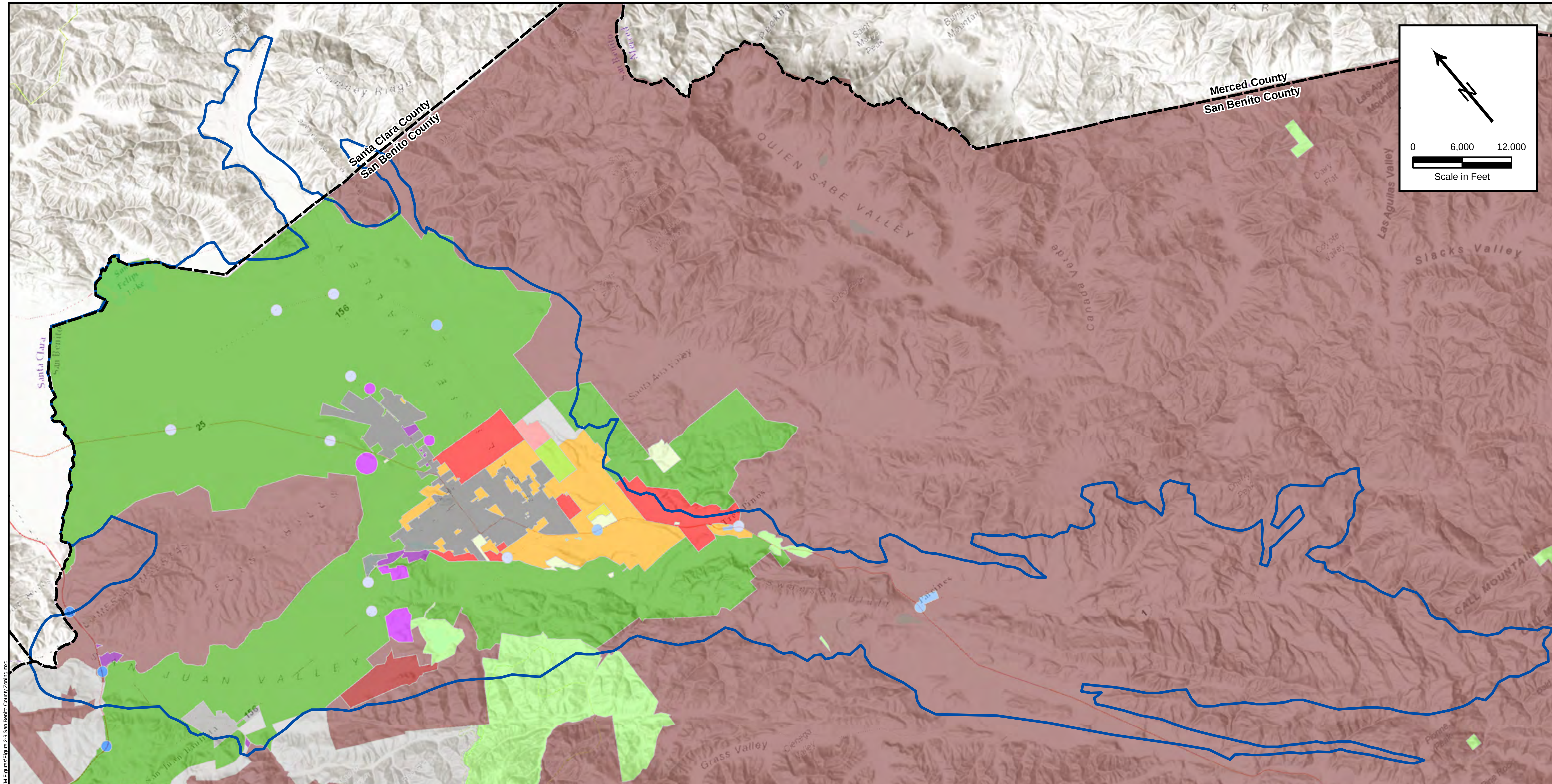
- R | Rice
- P | Pasture
- G | Grain and Hay Crops
- T | Truck, Nursery, and Berry Crops
- F | Field Crops
- C | Citrus and Subtropical
- D | Deciduous Fruits and Nuts
- V | Vineyard
- Y | Young Perennial
- I | Idle
- NR | Riparian Vegetation
- U | Urban
- North San Benito Basin

December 2018

TODD GROUNDWATER

Figure 2-8
Land Use 2014

Path: T:\Projects\San Benito GSP 37643\GIS\Maps\Figures\GSP Figures\Plan Area TM Figures\Figure 2-8 Land Use 2014.mxd



- City of Hollister
- City of San Juan Bautista
- Agriculture
- Commercial Thoroughfare
- Commercial Neighborhood
- Commercial Regional
- Industrial Light
- Industrial Heavy
- Park
- Public/Quasi Public
- Planned Development
- Residential Mixed
- Residential Rural
- Rural
- Rural Transitional
- Rangeland
- Rangeland Management Areas
- Fairview Corners Specific Plan
- Santana Ranch Specific Plan
- North San Benito Basin

December 2018

TODD GROUNDWATER

Figure 2-9
San Benito County
General Plan Land Use

Santa Clara County
San Benito County

Merced County
San Benito County

0 6,000 12,000
Scale in Feet

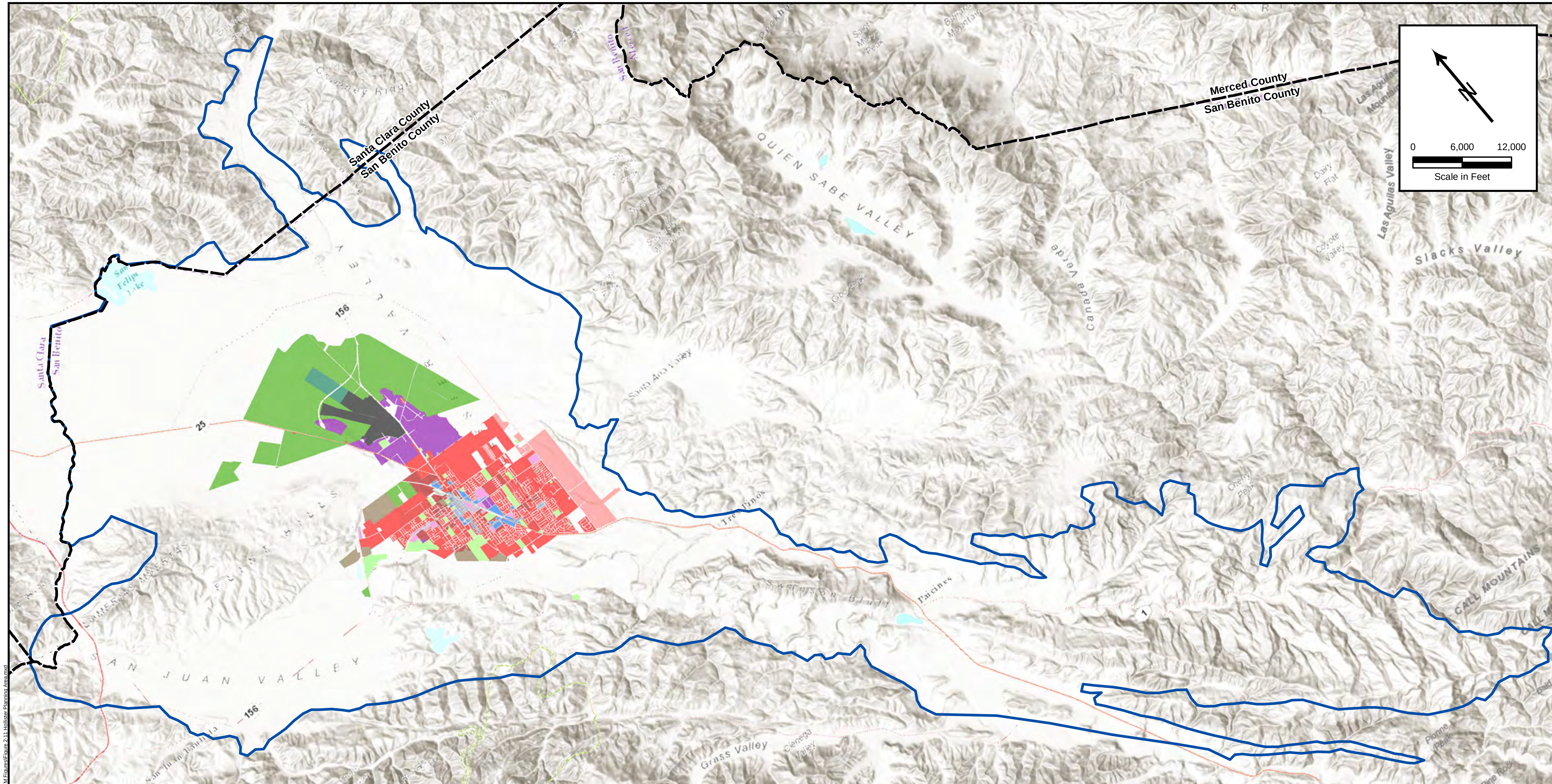
- Agriculture Medium Scale
- Agriculture Large Scale
- Major Educational & Institutional Uses
- Major Gas and Electric Utilities
- Public Facilities
- Transportation
- Roadside Services
- Regional Parks, Existing
- Rural Residential
- Ranchlands
- Open Space Reserve
- Other Public Open Lands
- Hillsides
- Baylands
- North San Benito Basin

December 2018

TODD GROUNDWATER

Figure 2-10
Santa Clara County
General Plan Land Use

Path: N:\Projects\San Benito GSP 2764\GIS\MXD\Final\Figures\GSP Figures\Plan Area TM Figures\Figure 2-10 Santa Clara County General Plan.mxd



Agriculture
Agriculture - Industrial
Commercial
Industrial
Airport
Mixed Use
Public Facility/Park
Low Density and Rural Residential
Medium Density Residential
High Density Residential
Residential Estate
West Gateway
Open Space
North San Benito Basin

December 2018

TODD GROUNDWATER

Figure 2-11
City of Hollister
Planning Area

Santa Clara County
San Benito County

Merced County
San Benito County

0 6,000 12,000
Scale in Feet

- Agriculture
- Commercial
- Industrial
- Mixed Use
- Public Facility/Park
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Open Space
- Other
- North San Benito Basin

December 2018

TODD GROUNDWATER

Figure 2-12
City San Juan Bautista Planning Area

Path: P:\Projects\San Benito GSA\174245\GIS\Maps\Figures\GSP Figures\Plan Area TM Figures\Figure 2-12 San Juan Bautista Planning Area.mxd