4.7 Flooding and Water Resources

This section addresses potential impacts associated with flooding and water resources as a result of buildout of proposed land uses and implementation of programs of the proposed Plan. This section also takes into account proposed Plan policies, development standards, and programs that are intended to minimize potential adverse environmental effects.

4.7.1 Setting

The watershed basins in the Plan Area provide essential supplies of water to the community for biological resources and residential, industrial, and agricultural use. The Jalama Creek and upper Gaviota Creek watersheds are located within the Central Western region. Numerous southerly-flowing creeks and their watersheds make up the Southwestern region, characterized by the Santa Ynez Mountains, the coastal plains of the Cojo-Jalama and Hollister Ranches, and the plains east of Gaviota Creek.

4.7.1.1 Surface Drainage

The Plan Area is located within the Jurisdiction of Central Coast Regional Water Quality Control Board (RWQCB; Region 3). As detailed in the Basin Plan (RWQCB 2011) for the Central Coast Region, the Plan Area is within the South Coast Hydrologic Unit of the Central Basin, within the Arguello Hydrologic Subarea in the watershed sub-basins of: Eagle Canyon, Dos Pueblos Canyon, Gato Canyon, Canada del Capitan, Canada del Corral, Tajiguas Creek, Arroyo Hondo, Canada de la Gaviota, Canada de las Cruces, Canada de Alegria, Arroyo El Bulito, Point Conception, Palo Alto Hill, Gasper Creek, Long Horn Canyon, and Upper Salsipuedes Creek.

The Plan Area is characterized by rugged mountains in the north, with foothills, lowland coastal areas, coastal bluffs, and coastal canyons that meet the ocean. As shown in in Figure 4.7-1, in the eastern portion of the Plan Area, large portions of the upper reaches of the Arroyo Hondo, Tajiguas Creek, Canada del Corral, Canada del Capitan, Gato Canyon, Dos Pueblos Canyon, and Eagle Canyon watersheds are located within the boundaries of the Los Padres National Forest. These lands include open space and dispersed rural residential and agricultural uses within private inholdings. The southern portions of these watersheds extend into the Coastal Zone where agriculture and recreation are the dominant land uses. In the western portion of the Plan Area, the dominant land use is cattle grazing, with limited residential land use, primarily within Hollister Ranch. Overall, the watersheds in the Plan Area are characterized by pervious surfaces and a lack of development.

The Basin Plan (RWQCB 2011) identifies beneficial uses for surface waters within the Plan Area. These beneficial uses are important to consider if surface waters are affected. For example, increases in runoff rates and volumes due to development may lead to erosion, scour, and deeper incising of the channel that could affect biological habitats throughout the downstream waters. Beneficial uses are identified specifically for each water body, but the

surface waters in the South Coast Hydrologic Unit include the following beneficial uses: municipal water supply; agricultural water supply; industrial process supply, industrial service supply, groundwater recharge; contact and non-contact water recreation; wildlife habitat, cold freshwater habitat; warm freshwater habitat; aquatic migration; spawning, reproduction, and/or early development; preservation of biological habitats of special significance; rare, threatened, or endangered species habitat; estuarine habitat, freshwater water replenishment; commercial and sport fishing, and shellfish harvesting.

4.7.1.2 Water Quality

Water quality of local surface waters and the ocean has been affected by human activities as well as existing environmental conditions. Although development within the Plan Area is limited, agricultural, residential, and recreational land uses can introduce contaminants in runoff such as sediment, suspended solids, nutrients, pesticides, heavy metals, toxicity, bacteria/pathogens, pet waste, litter, and floatable debris. The agricultural uses in the Plan Area in particular have potential to contribute runoff pollutants from pesticides, herbicides, and fertilizers use, as well as oils, solvents, and fuels from maintenance of equipment and vehicles. Cumulatively, contaminants from multiple sources combine as water flows through a watershed. Although the concentration of contaminants typically correlates directly with the density of development, the control of pollutants in runoff is important in all areas and covered through regulations such as the Clean Water Act (CWA) described further in Section 4.7.2.1 below. Contaminant levels are controlled through measures such as erosion control, draining to pervious areas with natural vegetation, storm drain system filters, and inserts, as well as measures to avoid contaminants from entering runoff. Existing environmental conditions may also contribute to water quality issues, such as the presence of minerals, landfills, and oil and gas facilities.

Surface Waters

Ambient conditions in creeks are monitored by the Central Coast RWQCB (Central Coast Ambient Monitoring Program 2014). This and other data are used to develop a list of impaired water bodies. According to the 2010 State Water Resources Control Board (SWRCB; 2010) Section 303d List, several stream segments within the Plan Area fail to meet water quality standards. These include: Canada De La Gaviota (boron, chloride, escherichia coli [E.coli], fecal coliform, sodium), Canada Del Refugio (chloride, fecal coliform, sodium), and Dos Pueblos Canyon Creek (sodium). The main sources of pollutants are grazing, agriculture, highway/road/bridge runoff, and natural sources.

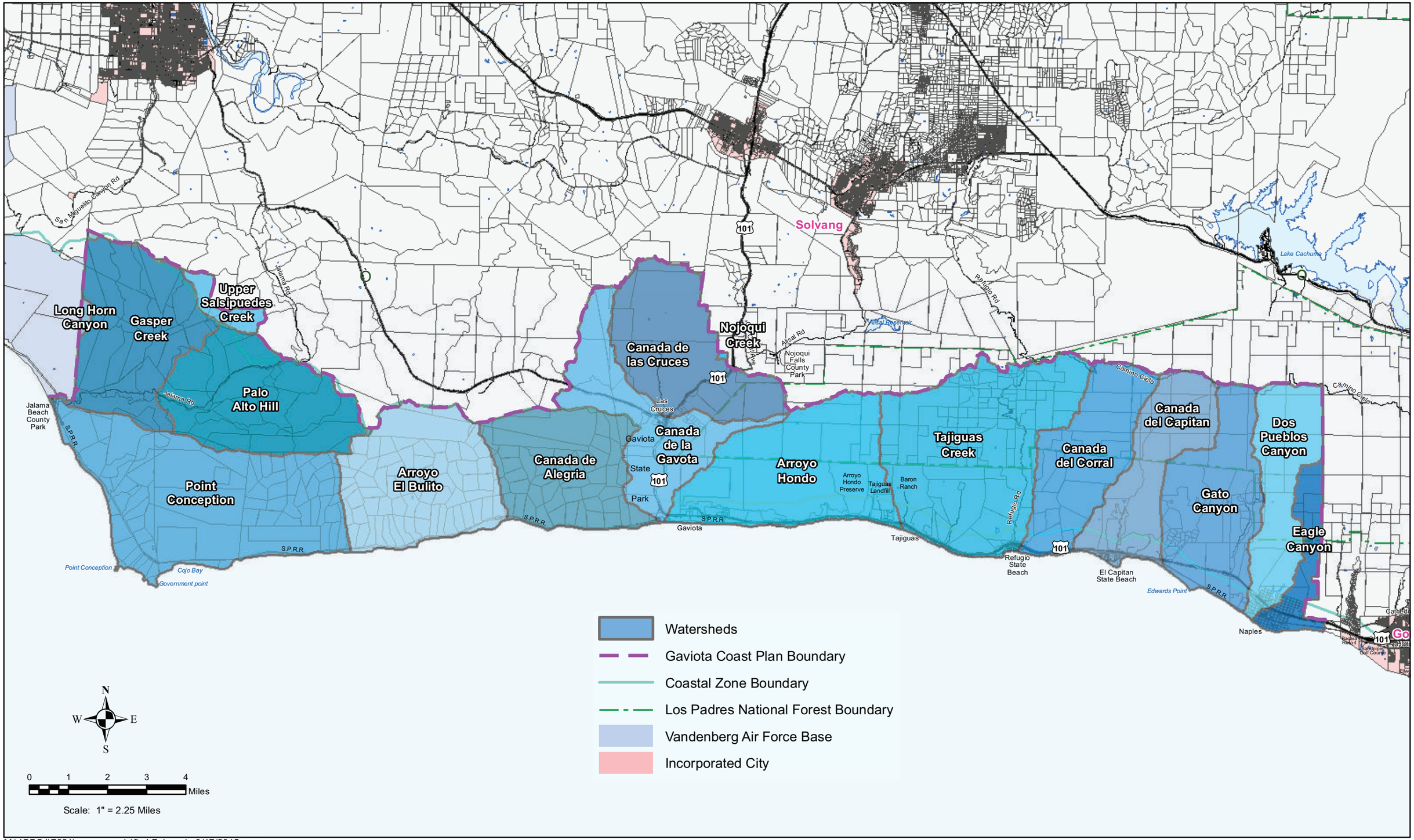

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FIGURE 4.7-1 Gaviota Coast Plan – Watersheds

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Groundwater

The principal concern with the quality of groundwater is its mineral content, which occurs naturally from surface runoff. The surface runoff dissolves minerals from the soil and rock with which it comes in contact. Within the Plan Area, another concern is the leaching of nitrates into groundwater from individual onsite septic systems. As there are no sewer services on the Gaviota Coast, sewage disposal is provided by individual onsite systems such as septic systems or dry wells. Within the Plan Area, septic systems are primarily used to manage solid waste. However, the amount of potential nitrate contribution to groundwater is small in relation to total water use, which is primarily agricultural.

Ocean and Beaches

The County Public Health Department administers an Ocean Water Monitoring Program. Sampling efforts by Environmental Health Services and other jurisdictions have demonstrated that high levels of bacteria in creeks and ocean water are often associated with storm water runoff. While indicator bacteria are not in themselves pathogenic, their presence indicates that disease causing bacteria may be present. Anecdotal reports have linked high levels of indicator bacteria with skin rashes, sinus infections, and other conditions.

In September 1996, Environmental Health Services began weekly year-round testing of 20 beaches between Rincon and Guadalupe dunes. Environmental Health Services currently tests 16 beaches between February 1 and October 31. Environmental Health Services distributes test results in weekly press releases to several media sources and interested groups and individuals, and indicates if a beach has an open, warning, or closed status. A computer database of past results is maintained to help understand trends and the results of tests for Coliform, Fecal Coliform, and Enterococcus levels. The monitoring results for February 2, 2015 for El Capitan State Beach, Gaviota State Beach, Jalama Beach, and Refugio State Beach indicated no exceedances of safe thresholds in the sampling results (County of Santa Barbara 2015a). For the week of May 4, 2015, El Capitan State Beach, Gaviota State Beach, Jalama Beach, and Refugio State Beach in the Plan Area indicated no exceedances of safe thresholds in the sampling results (County of Santa Barbara 2015b). As of May 4, 2015, all beaches received open status, except for Hope Ranch Beach located outside the Plan Area which exceeded safe Enterococcus standards. County sampling research from 2008-2013 showed each of the four beaches tested in the Plan Area were found to be at safe water quality levels for recreation.

4.7.1.3 Flood Hazard Areas

As discussed in the Comprehensive Plan, although the severity and type of flood hazards can vary greatly based on variables such as topography, soil type, depth of the water table, and microclimate, the County is subject to four major flood events: high flow rates in rivers, creeks, and other drainages; pooling and inundation; storm surge; and dam failure.

Hazardous flood events commonly occur in proximity to rivers, creeks, and other smaller drainage corridors. Localized drainage problems can result from increased flow as well as ponding, which causes flash flooding, inundation, and other flooding problems. Other high-hazard flood zones are concentrated in coastal areas, including bays, coastal inlets and estuaries, and in watershed areas connecting local mountain ranges to the coastal region where flash floods may occur. The most common flooding in Santa Barbara is due to riverine flooding and flash flood events.

Flooding hazards along the South Coast are primarily due to storm surge and high water flows in the numerous smaller streams, which discharge directly into the Pacific Ocean. These streams are subject to high flows following periods of intense precipitation, and the flood waters resulting from these high flows can impair the suitability of certain lands for various uses. Drainages in the South County are characterized by high intensity, short duration runoff events. These types of events can cause inundation along banks, debris that clogs culverts, erosion, and loss of channel capacity.

As discussed in the Seismic Safety and Safety Element of the County Comprehensive Plan, dam failure could pose a danger to land uses within dam inundation zones. The nearest dam is the Alisal Creek dam located northeast of the Las Cruces area. Other private dams located in the Plan Area include Edwards Reservoir, Dos Pueblos, and Rancho del Ciervo (County of Santa Barbara 2011b). Mapped flood hazard areas are defined by the 100-year floodplain. Flood hazard areas are present along the entire coastline and at the mouths of rivers near the coast at low elevations (Figure 4.7-2). The County has a Multi-jurisdictional Hazard Mitigation Plan (MJHMP) located in the Comprehensive Plan Seismic Safety and Safety Element, prepared pursuant to the Disaster Mitigation Act of 2000. The MJHMP focuses on the assessment of identified risks and implementation of loss reduction measures to ensure critical County services and facilities to serve a disaster. The MJHMP indicates several County flood “hot spot” locations where undersized culverts, low water crossings, and low capacity bridges can cause flooding problems that interrupt fire and emergency access. Within the Plan Area, this includes low water crossings at Refugio Road where several crossings have caused road closures in frequent events. Several low capacity bridges along Refugio Road also cause flooding and access problems. Heavy rainfall events in the past have caused Gaviota Creek to flood the Arizona-crossing of the creek, which provides the only access road to and from Hollister Ranch. Safety remains an issue in this area as people have reportedly walked across the railroad trestle spanning Gaviota Creek to exit the area during past flood events.

Flood hazards along coastal areas can also be associated with tsunamis. A tsunami is a series of long waves generated in the ocean by a sudden displacement of a large volume of water. Underwater earthquakes, landslides, volcanic eruptions, meteoric impacts, or onshore slope failures cause this displacement. The University of Southern California Tsunami Research Group has modeled areas in the County that could potentially be inundated in the event of a tsunami. The Plan Area is not highly susceptible to tsunami due to elevation differential between the ocean and land due to coastal bluffs, however there are several areas that may be subject

to inundation where lowland areas occur along the coast, such as the mouths of major streams at the beaches of Refugio, El Capitan, and Gaviota.

4.7.1.4 Santa Barbara County Coastal Resiliency Project

Sea level rise has the potential to cause flood hazards along coastal areas and communities, alter coastal ecosystems, change the amount of sediment delivered to coastal areas, cause erosion, increase flooding and the severity of storms, and damage wetlands. Coastal plains and bluffs in the Plan Area may be highly susceptible to impacts as a result of sea level rise. Sea level rise also has the potential to limit coastal access and lateral beach access.

The County of Santa Barbara, in collaboration with staff from the University of California at Santa Barbaraand the Cities of Carpinteria, Santa Barbara, and Goleta, are working with a consultant to model sea level rise and assess potential hazards associated with coastal erosion, coastal flooding, and fluvial flooding extents. Phase I of the Coastal Resiliency Project includes coastal hazard modeling, preparation of a vulnerability assessment, and development of two regional databases, which will provide useful information for making high resolution planning level decisions.

The sea level rise modeling results will support a vulnerability assessment to help analyze future impacts to the County's coastal zone under different climate scenarios. Maps created from models will illustrate potential future conditions and uncertainties associated with the projections. These maps can be incorporated into long-term policy decisions and short-term permit decisions by staff, decision-makers, and stakeholders to help develop scientifically sound and robust adaptation strategies and identify appropriate management options for dealing with coastal hazards, and ultimately help to develop new or enhance existing Local Coastal Program (LCP) policies and ordinances.

Phase II of the Coastal Resiliency Project includes developing a countywide Coastal Hazard Adaptation Plan and associated LCP amendment incorporating strategies and policies to address Phase 1. The modeling and mapping of the southern part of the County will be available in summer 2015. The modeling and mapping of the north part of the County will begin in the summer of 2015, as well. The vulnerability assessment will be available December 2015. The updated LCP policies will be available April 2017.

Sea level rise has the potential to affect more than just flooding. See Sections 4.2, Transportation, 4.6, Biological resources, 4.8, Cultural Resources, and 4.13, Parks, Recreation, and Trails, for further discussion of sea level rise and the potential impacts it could cause.

4.7.2 Regulatory Framework

4.7.2.1 Federal

Flooding

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) is the primary agency in charge of administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for delineating areas of flood hazards. It is then the responsibility of states and local agencies to implement the means of carrying out FEMA requirements.

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 made the purchase of flood insurance mandatory for the protection of property located in Special Flood Hazard Areas. FEMA provides subsidized flood insurance to communities that comply with FEMA regulations. The Special Flood Hazard Areas and other risk premium zones applicable to each participating community are depicted on Flood Insurance Rate Maps.

Water Quality

Water Pollution Prevention and Control Act (Clean Water Act)

The Clean Water Act (CWA), enacted in 1972, is intended to restore and maintain the integrity of the nation's water, including lakes, rivers, aquifers, and coastal areas, through a system of water quality standards, discharge limitations, and permits. The fundamental purpose of the CWA is the protection of designated beneficial uses of water resources. Implementation of the CWA is the responsibility of the U.S. Environmental Protection Agency (U.S. EPA), which has delegated much of that authority to the U.S. Army Corps of Engineers, as well as state and regional agencies.

Section 402 / 404 National Pollutant Discharge Elimination System

Section 402 of the CWA established the National Pollutant Discharge Elimination System (NPDES) Regulations for municipal, industrial, and construction related pollutant discharges. Section 402 implementation is delegated by U.S. EPA to the State Water Resources Control Board (SWRCB), as discussed further under SWRCB below. Facilities that discharge through a point source, including municipal and industrial sources, are regulated under the NPDES program and require permits for the discharge of pollutants. The NPDES permits specify discharge standards and monitoring and reporting requirements that a facility must achieve for each point source or outfall. The NPDES Municipal General Permit applies to certain designated "urban" areas, determined by census or as designated by the SWRCB. There are no NPDES-regulated urban areas within the Plan Area.

Section 404 of the CWA generally requires permits for the discharge of dredged or fill materials into the waters of the United States, including wetlands. However, certain activities are exempt from permit requirements under Section 404(f). Section 404(f) exempts "normal farming," ranching, and forestry operations that do not result in a point source from the requirement to obtain an NPDES permit. These activities may include plowing, cultivating, harvesting, and minor drainage for the production of food, fiber, and forest products or upland soil and water conservation practices. If an activity that is exempt represents a new use of the water, and the activity would result in a reduction in reach or impairment of flow or circulation of regulated waters, including wetlands, the activity is not exempt. Both conditions must be met in order for the activity to be considered non-exempt. Since the SWRCB is separate from and has different responsibilities than the California Department of Water Resources (DWR), farmers subject to DWR supplies must apply for a waiver from the SWRCB or Regional Board through the Porter-Cologne Water Quality Control Act. The DWR protects, conserves, develops, and manages much of California's water supply, including the State Water Project that provides water for 25 million residents, farms, and businesses. The Porter-Cologne Water Quality Control Act is discussed in detail below in Section 4.7.2.2 State and Region.

The Industrial Storm Water General Permit Order 97-03-DWQ (General Industrial Permit) is an NPDES permit that regulates discharges associated with ten broad categories of industrial activities. The General Industrial Permit requires the implementation of management measures that will achieve the performance standard of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT). The General Industrial Permit also requires the development of a Storm Water Pollution Prevention Plan (SWPPP) and a monitoring plan. Through the SWPPP, sources of pollutants are identified and the means to manage the sources to reduce storm water pollution are described. The new Industrial General Permit 2014-0057-DWQ is effective July 1, 2015 and will replace the current permit. The three main industrial developments in the Plan Area are required to have the General industrial Permit, which includes PXP Point Arguello (Gaviota Heating Facility), ExxonMobil's Las Flores Canyon Oil and Gas Processing Facility, and the Tajiguas Landfill.

NPDES stormwater program regulations also require a Construction General Permit (CGP) for stormwater discharges from construction activities such as clearing, grading, excavating, and stockpiling that disturb one or more acres, or smaller sites that are part of a larger common plan of development or sale. Prior to discharging storm water, construction operators must obtain coverage under an NPDES permit administered by the state or U.S. EPA. The CGP requires compliance with effluent limits and other permit requirements, such as development of a SWPPP. The Plan does not propose specific development activities and future development proposals would be subject to CGP requirements during the County development review.

Section 303(d) / Water Quality Standards

The CWA gives states the primary responsibility for protecting and restoring surface water quality. Under the CWA, States that administer the CWA must review, make necessary changes, and submit the CWA section 303(d) list to the U.S. EPA. CWA Section 305(b) requires each state to report biennially to the U.S. EPA regarding the condition of its surface water quality. The U.S. EPA requires both reports to be integrated. In California, the report is called the 303(d)/305(d) Integrated Report. Section 303(d) of the CWA defines water quality standards as consisting of both the uses of surface waters (beneficial uses) and the water quality criteria applied to protect those uses (water quality objectives).

The Section 303(d) process of the CWA requires State and Regional Water Boards to assess water quality monitoring data for the State's surface waters every two years to determine if pollutant levels exceed water quality standards. Water bodies with pollutants levels that exceed water quality standards are placed on the State's 303(d) List. Exceeding the water quality standards on the 303(d) List initiates the establishment of a Total Maximum Daily Load (TMDL). A TMDL must account for all sources of the pollutants that caused the water to be listed. At a minimum, Federal regulations require that the TMDL account for contributions from point sources and contributions from nonpoint sources. The U.S. EPA also reviews and approves the list of reported impaired waters and each TMDL. In some cases, a regulatory program will address the impairment instead of a TMDL. In California, the Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et. seq.) requires that implementation be addressed when TMDLs are incorporated into Basin Plans (water quality control plans). The Porter-Cologne Act and Basin Plans are discussed in detail in the next following Section, 4.7.2.2 State and Region.

The most recent U.S. EPA-approved Section 303(d) list of impaired waterbodies in California is the 2010 Integrated Report 303(d)/305(b), which assessed water quality data in California's waters to determine if they contain pollutants at levels that exceed protective water quality criteria and standards. As identified above in Section 4.7.1.2, several stream segments in the Plan Area are identified as impaired water bodies with an expected TMDL completion date in 2021.

Human activities and existing environmental conditions have the ability to affect the water quality of local surface waters and the ocean. The 303(d) listed waterbodies in the Plan Area are important to identify as impaired water bodies in order to receive a water quality control plan as a means to attain and maintain safe standards while allowing appropriate public health notification. Although development within the Plan Area is limited, water resources must receive state and federal regulations under the CWA and NPDES permitting process. The overall health and water quality of the streams in the Plan Area are important to maintain as they have the potential to pollute watersheds and water resources.

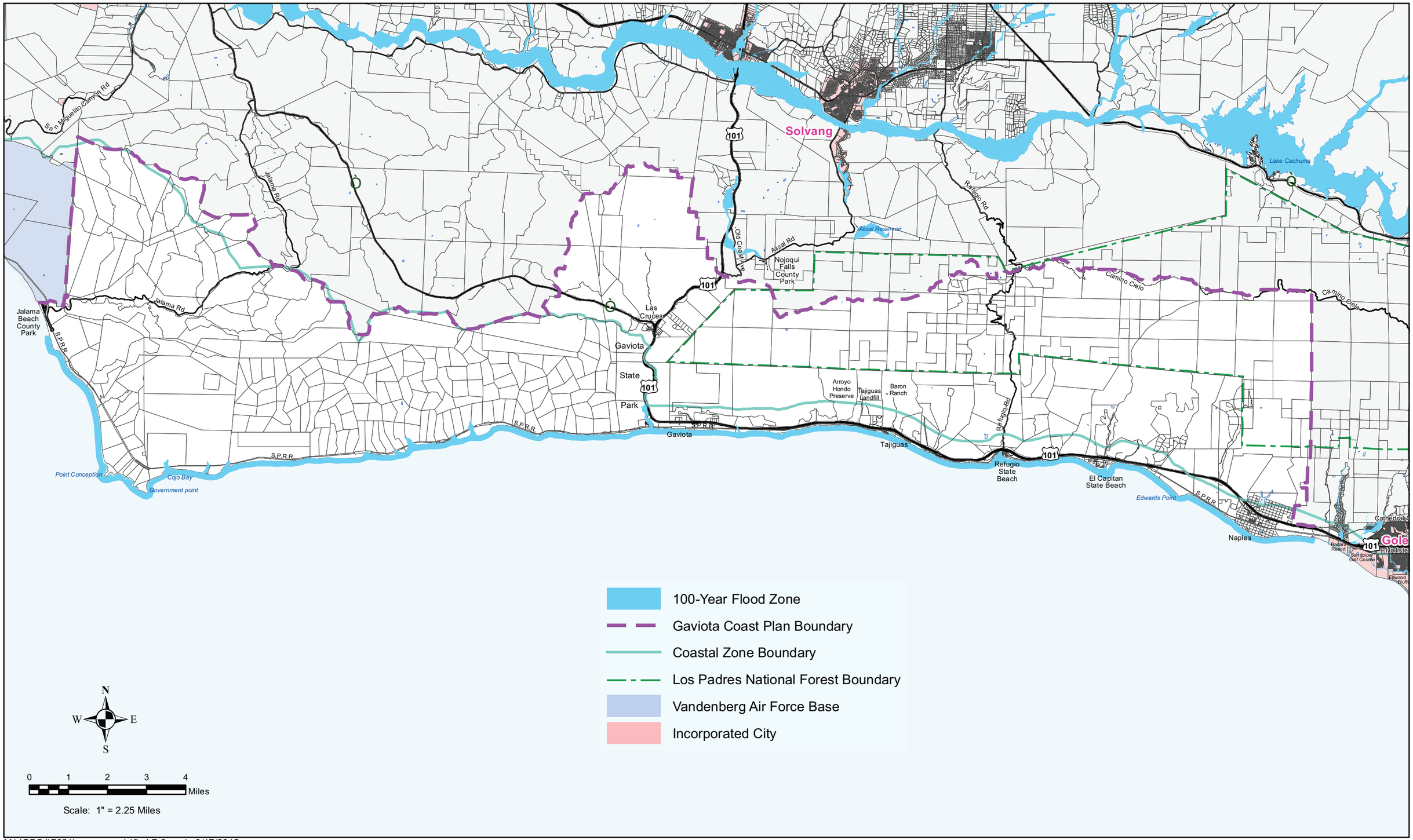

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FIGURE 4.7-2 Gaviota Coast Plan – Flood Hazard Areas

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4.7.2.2 State and Region

Water Quality

Porter–Cologne Water Quality Control Act

The 1969 Porter–Cologne Water Quality Control Act (Porter–Cologne Act) established the principal California legal and regulatory framework for water quality control, including waste discharge requirements pursuant to the federal NPDES program. The Porter–Cologne Act is embodied in Division 7 of the California Water Code, and established the SWRCB and nine Regional Water Quality Control Boards (RWQCBs) to coordinate and control the water quality within their respective jurisdictional boundaries. The Central Coast RWQCB is responsible for the water quality in Santa Barbara County and oversees permitting for the region. The Porter–Cologne Act also provides for the development and periodic review of Water Quality Control Plans (basin plans, described below) that designate beneficial uses of California's major rivers and groundwater basins and establish water quality objectives for those waters.

SWRCB / NPDES Municipal General Permit

As discussed above, the NPDES permitting authority is delegated to the SWRCB in California. The County is subject to SWRCB Water Quality Order No. 2013-0001-DWQ NPDES General Permit No. CAS0000004, which establishes the Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Municipal General Permit). The Municipal General Permit is renewed every five years and establishes certain unincorporated areas in which the County is responsible for discharges from storm drains, and sets standards for the design of new and redevelopment projects that the County must enforce through permit approvals. New and redevelopment projects located outside the NPDES permit area are held to different thresholds in the application of standard post-construction requirements than those within the NPDES permit area; nonetheless, all new and redevelopment over a certain size and type must meet design and performance criteria to prevent pollutants and downstream impacts from storm water runoff. These criteria are set by the County of Santa Barbara Public Works Department.

SWRCB / NPDES Construction General Permit

In addition to the Municipal General Permit, the SWRCB adopted a statewide General Permit for Storm Water Discharges Associated with Construction Activities (Order No. 99-08) reissued every five years. The NPDES Construction General Permit (CGP) requires all construction activities causing land disturbances greater than 1.0 acre to implement Best Management Practices (BMPs) to prevent the discharge of sediment-laden water off site. The site-specific plan to implement BMPs is with a SWPPP. Annual reports are due to the RWQCB each September, and include information about the site topography and the BMPs used to prevent erosion during the rainy season. Permitees are required to implement specific sampling and analytical procedures to determine whether BMPs implemented on a construction site are

preventing pollutant exceedances and further impairment of 303(d) listed water bodies. The CGP requires a risk-based permitting approach, dependent upon the likely level of risk imparted by a project. The CGP will help protect potential construction projects from significantly affecting the water quality of the Plan Area by requiring management and monitoring programs.

Regional Water Quality Control Boards (Regional 3 – Central Coast)

The state of California has established nine regions governed by RWQCBs. The RWQCBs implement and enforce provisions of the California Water Code and the CWA under the oversight of the SWRCB. The County is within the area regulated by the Central Coast RWQCB. The Central Coast RWQCB establishes region-specific requirements for point sources of waste discharge including discharges of municipal wastes, municipal stormwater, individual industrial waste discharges, and solid waste disposal sites. These waste discharge requirements establish the minimum acceptable quality of the wastes, as measured by those water quality parameters that are of significance for each water body to which regulated wastes are discharged.

The SWRCB, in cooperation with the regional boards, is charged with the responsibility for formulating overall water quality management programs. To accomplish this task, the SWRCB initiated the preparation of basin water quality management plans for each of the basins in the state. The Basin Plan for the Central Coastal Area was first adopted in April 1975. The current Basin Plan was adopted on June 8, 2011. This Basin Plan is the Central Coast RWQCB master water quality control planning document. The Basin Plan sets the water quality standards and objectives for determining beneficial uses, impairment, TMDL allocations for designated water bodies, and contains a recommended program for management of the quality of the water resources in the County, as well as encourage the use of reclaimed water.

Localized Basin Plans allow each region to focus on the unique and particular needs of an area. As stated previously, water bodies and pollutants that exceed protective water quality standards are placed on the State and Regional 303(d) List. Exceeding the protective water quality standards on the 303(d) List initiates the development of a Total Maximum Daily Load (TMDL), and must account for all sources of the pollutants that caused the water to be listed. There are no TMDLs for the 303(d) list of impaired water bodies in the Plan Area.

4.7.2.3 County of Santa Barbara

Comprehensive Plan

The County's Comprehensive Plan includes a Seismic Safety and Safety Element. It is intended to guide land use planning by providing pertinent data regarding geologic, soil, seismic, fire and flood hazards within the County. To address potential flood hazards, it also includes a discussion of the location and history of flood hazards in the County; common types of flood hazards in the County; measures used to mitigate potential flood hazards and the County's flood goals, policies and implementation measures. Policies regarding the protection of water

quality in the unincorporated areas of the County are also provided in the Comprehensive Plan Land Use Element and the Local Coastal Plan. Project approvals require a finding of consistency with all applicable flooding, drainage, and water quality policies in the Comprehensive Plan.

Hillside and Watershed Protection Policies are provided in the County Land Use Element and Local Coastal Plan. These policies help protect water resources by preventing the degradation of water quality from site development and waste disposal into waterbodies during or after construction. The Hillside and Watershed Protection policies also restrict grading and have requirements for sediment basins and landscaping. These policies and guidelines apply to all new development and redevelopment projects proposed in the urban and rural unincorporated areas of the County. In addition, Chapter 16 of the County *Environmental Thresholds and Guidelines Manual* (2008) includes Surface and Storm Water Quality Guidelines.

Flooding

Multi-jurisdictional Hazard Mitigation Plan

The County's MJHMP (September 2011) is "a tool for all stakeholders to increase public awareness of local hazards and risks, while at the same time providing information about options and resources available to reduce those risks." The MJHMP is located in the County's Seismic Safety and Safety Element. The emphasis of the MJHMP is on the assessment and avoidance of identified risks, implementing loss reduction measures for existing exposures, and ensuring that critical services and facilities survive a disaster. Hazard mitigation strategies and measures avoid losses by: limiting new exposures in identified hazard areas; altering the hazard by eliminating or reducing the frequency of occurrence; averting the hazard by redirecting the impact by means of a structure; or adapting to the hazard by modifying structures or standards. The 2011 MJHMP addresses hazards including flooding and coastal storm surge, coastal erosion, dam failure, and tsunamis.

Flood Control and Water Conservation District

The County Flood Control and Water Conservation District (Flood Control District) provides for the control of flood and storm waters Countywide as well as the conservation of such waters for beneficial and useful purposes. The Design Section of the Flood Control District designs and performs construction contract administration for flood control capital improvement projects located throughout the County. The Development Review Section of the Flood Control District reviews all projects for consistency with Chapter 15A and 15B of the County Code which contains the Floodplain Management Ordinance, Setback Ordinance (for development along watercourses), and has conditions that apply to any development that increases runoff. At minimum, projects are required to do a drainage analysis to show effects, and if there would be increased runoff, a project would need to show how it would reduce flood impacts, (i.e., by metering post-construction peak flows to match pre-development peak for specific storm events).

The Flood Control District is responsible for providing floodplain management for the unincorporated areas of the County. The Floodplain Management Program contains several components including, but not limited to: compliance with the National Flood Insurance Program (NFIP); implementation and enforcement of the Floodplain Management Ordinance (see below); construction and maintenance of flood control projects, and floodplain planning. Development in floodplain areas is subject to the standard conditions of approval of the District as well as requirements and development standards set forth in the County Floodplain Management Ordinance (Chapter 15-A of the County Code) and the Development Along Water Courses Ordinance (Chapter 15-B of the County Code). These conditions of approval typically include, but are not limited to: (1) anchoring of the structure, (2) special construction materials and methods to reduce flooding damage, and (3) flood proofing and elevation 2 feet above the Base Flood Elevation (BFE). This includes utility improvements that include siting design or installation to avoid issues that could occur during flooding. Also, the projects must be designed by a registered professional engineer. The coastal high hazard area also has specific standards, which include anchoring, siting at locations above high tide, limit of non-habitable space below the floor level, and prohibiting the use of fill to support structures.

Floodplain Management and Water Course Setback Ordinances

As a condition of participation in the NFIP, the County adopted County Code Chapter 15A — Floodplain Management, and Chapter 15B — Development Along Watercourses, which meet the requirements of the NFIP and FEMA for development in flood-prone areas. The purpose of County Code Chapter 15A — Floodplain Management (Floodplain Management Ordinance) is to promote public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. The Floodplain Management Ordinance requires the finished floor elevation of all new or substantially improved habitable structures to be a minimum of two feet above the 100-year flood elevation.

County Code Chapter 15B — Development Along Watercourses, outlines the controls that the County imposes on development adjacent to watercourses in unincorporated areas. These controls are necessary to prevent undue damage or destruction of development by flood waters.

Water Quality

Project Clean Water

The County's Project Clean Water program assists the County in implementing its Storm Water Management Program (SWMP). The current Municipal General Permit that was adopted in February 2013 no longer requires Water Board approval of the SWMP, but incorporates the SWMP into a Guidance Document that complies with the permit requirements. The goals of Project Clean Water are to (1) protect public health and the environment, (2) comply with the NPDES Municipal General Permit requirements and applicable regulations, and (3) increase public involvement and water quality awareness. The SWMP and Guidance Document describe BMPs that will reduce, control, or eliminate identified pollutants of concern from discharges to

the storm drain system. Project Clean Water works to promote and protect water quality throughout the County while providing educational services to the public and local businesses. Project Clean Water would assist the Plan Area with water quality assessment, improvement projects, and monitoring.

Grading Code

The County Grading Code (Chapter 14 of the County Code) generally requires a grading permit and an Erosion and Sediment Control Plan for all new grading, excavation, and fill where the transported amount of materials exceeds 50 cubic yards or the cut or fill exceeds 3 feet in vertical distance to the natural contour of the land. For projects that must prepare a SWPPP under the Construction General Permit, the Grading Code allows applicants to submit a SWPPP in lieu of an erosion and sediment control plan, as long as the SWPPP contains the required elements of the County's Erosion and Sediment Control Plan. A SWPPP should contain a site map(s), which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography before and after the construction, and drainage patterns across the project. The SWPPP must list the BMPs the discharger will use to protect stormwater runoff and the placement of the BMPs. In addition, the SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Depending on the extent of disturbance, either a SWPPP or Erosion and Sediment Control Plan is required prior to issuance of a grading permit, both of which describe construction-related BMPs to minimize erosion, control sediments, and prevent pollutant discharge.

Storm Water Management and Discharge Control

The County Storm Water Management and Discharge Control Ordinance (Chapter 29, Article IV of the County Code) regulates non-storm water discharges into the storm drainage system to the maximum extent practicable as required by federal and state law. The Discharge Control Ordinance prohibits the discharge of pollutants into the storm drain system. Chapter 29 also references the County's Stormwater Technical Guide for new and redevelopment projects. The Stormwater Technical Guide provides design guidance for development that requires land use permits. The Stormwater Technical Guide shows how to treat stormwater runoff, and guides applicants through the process of permit approval from the initial pre-application meeting, to construction, and ultimately to the long-term maintenance obligation.

The California Water Code authorizes the SWRCB to regulate all discharges that could affect the quality of the waters of the state. The SWRCB adopted the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (State Policy) in June 2012, effective in May 2013. This established a statewide, risk-based tiered approach for the regulation and management of Onsite Wastewater Treatment Systems (OWTS). Tier 1 of the State Policy established minimum standards for low risk or new replacement OWTS. Tier 2 allowed local agencies to develop customized management

programs that address the conditions specific to that jurisdiction, and Tier 3 applies to special standards for new and existing OWTS located near a listed impaired waterbody pursuant to Section 303(d) of the CWA.

The SWRCB and the regional boards recognized the advantages and efficiencies of regulating individual OWTS. As a result, the general guidelines for the siting, design, and construction of new OWTS were part of each regional board's basin plan. Regulatory authority for individual OWTS has been delegated to individual counties through Memorandums of Understanding while regional boards retain primacy over large and some specialized systems.

The County Department of Environmental Health Services (EHS) recognized some standards in Tier 1 would be adequate for the County; however, certain elements of Tier 1 would be problematic for compliance due to existing County development codes and regulations that would preclude an individual from developing their property. As a result, the County Public Health Department and EHS created a new Local Area Management Plan (LAMP) for private on-site wastewater treatment systems in compliance with Tier 2 of the State Policy and the Central Coast Water Board LAMP Guidelines. The County Board of Supervisors adopted the LAMP on January 6, 2015, implementing a new local ordinance specified in Article I, Chapter 18C of the Santa Barbara County Code, and the RWQCB adopted the LAMP in July 2015.

The LAMP applies to the unincorporated areas of the County, and applies to the Plan Area. The LAMP will be reevaluated every five years to determine if water quality is being impacted by OWTS and whether modifications will be made to address any further discharge concerns. All existing development in the Plan Area relies on septic systems for wastewater discharge. New and existing OWTS will be subject to the LAMP in order to ensure that they are constructed, modified, repaired, abandoned, operated, maintained, inspected and serviced in a manner that prevents environmental degradation and protects the health, safety, and general welfare of the people of the County.

4.7.3 Impact Analysis

4.7.3.1 Thresholds of Significance and Methodology

The following impact analysis is based upon secondary source information, including mapping of flood hazard areas within the Plan Area, the County's Comprehensive Plan, and Project Clean Water website. The analysis is programmatic in nature and identifies general impacts associated with, and mitigation for, future development in accordance with buildout of the Plan.

CEQA Guidelines

According to the CEQA Guidelines, implementation of the Plan would have significant environmental impacts on drainage, flooding, or water quality if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substance additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flows; and/or
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

County Environmental Thresholds

The County Environmental Thresholds and Guidelines Manual does not provide significance criteria to assess drainage and flooding impacts but does address groundwater supply and surface and storm water quality, which states that a significant water quality impact is presumed to occur if the project would:

- Be located within an urbanized area of the County and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land;
- Increase the amount of impervious surfaces on a site by 25 percent or more;
- Result in channelization or relocation of a natural drainage channel;
- Result in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks, or wetlands;
- Include an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity);
- Discharge pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the RWQCB Basin Plan, or otherwise impairs the beneficial uses of a receiving waterbody;
- Result in a discharge of pollutants into an “impaired” waterbody that has been designated as such by the SWRCB or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the CWA);
- Result in a discharge of pollutants of concern to a receiving water body, as identified by the RWQCB; and/or
- Results in new pumpage in consolidated rock ("bedrock") aquifers which would place the aquifer in a state of overdraft.

4.7.3.2 Impacts Determination and Mitigation Measures

Impacts

Impact WR-1: Flooding

Plan buildout is estimated to result in development of 167 additional single-family residences and 9 agricultural employee housing units within the Plan Area over the 20-year Plan horizon. Potential Highway Commercial (CH) development is limited to an approximately 2-acre site located east of Highway 101 at Las Cruces. Zoning ordinance amendments are also proposed that could encourage expansion of agricultural land uses and uses accessory and supportive of agriculture such as agricultural processing, farmstands, and small scale agricultural tourist

activities such as fishing, camping and guest ranch/farmstays. PRT Maps Amendments would support additional recreational trails within the Plan Area and are discussed in Section 4.13.

As described under the existing setting above, flood hazards are limited to the coastal areas and mouths of rivers and creeks near the coast. The presence of bluffs limits the extent of inland flooding from storm surge. Mapped flood hazard areas occur within limited coastal portions of Gaviota State Park, Refugio State Beach, and El Capitan State Beach. Flooding hazards are also present at the existing Arroyo Quemada rural residential community (Figure 4.7-2). The Plan would retain existing land use designations for recreation and rural residential land use in these locations and would not increase development potential at Arroyo Quemada.

Sea level rise which has the potential impact to increase the severity and frequency of storms may affect the State Parks and County beaches. Over the 20-year Plan horizon, the implications of sea level rise may begin to potentially affect the coastal areas both in the form of direct flooding by high tides and storm surges and indirectly through increased coastal erosion. Therefore, the County is participating in the Coastal Resiliency Project, the results of which can inform policy and adaptation strategies. Given the overall limited development of the Plan Area, implementation of the Plan policies, including the development standards as amended per recommended Mitigation Measure MM WR-1~~FLD-1~~ below, would serve to protect coastal areas and would not interfere with additional measures and protection of coastal areas.

100-year flood hazard areas are limited within the Plan Area. However, even where development is sited outside of the 100-year floodplain, certain locations along the area's streams and creeks are susceptible to erosion hazards from high flow. Historic flooding events have occurred along the coast, notably in the 1990s, residents of Hollister Ranch were trapped due to flood related road closures. As a result, certain areas of the Plan that are prone to flood damage may require additional protection from flooding. Such protection typically involves the installation of bank protection improvements (for example, pipe and wire revetment, gabions) and in-stream flood control maintenance activities such as vegetation trimming/clearing, sediment removal, etc. While these measures would provide increased protection from flooding, they could also create potentially significant impacts on biological resources (see Section 4.6). Potential changes to drainage flows and velocities are discussed under Impact WR-2, below.

In the western portion of the Plan Area, flooding hazards extend slightly inland at the mouths of creeks and rivers. In these areas, the Plan land uses are not changing and would continue to be designated as Agriculture-II-320. Several legal parcels near the coast are subject to flooding hazards at the coastline and could be developed with a single-family residence. However, due to the large parcel sizes, residences could be accommodated outside of the Special Flood Hazard Areas (SFHA). Future residential buildout and agricultural uses allowed under the Gaviota Agricultural Tiered Permit Structure could increase land disturbance and impervious surfaces within the Plan Area, which could increase flood hazards. However, development is largely planned outside of mapped flood hazard areas and would not involve large-scale creation of impervious surfaces such that downstream flooding impacts could result. Furthermore, existing regulation requires compliance with Floodplain Management and Water

Course Setback ordinances, County Grading Code, engineering standards and codes, and Comprehensive Plan polices and development standards. Recommendations of a site-specific drainage study would also be required, where applicable. As a result of the limited development potential, combined with existing regulations, impacts would be less than significant. An analysis of potential impacts related to flooding resulting from PRT Maps Amendments are discussed in Section 4.13.

Policies and actions are included in the Plan promote increased watershed planning that would facilitate management of flooding issues. Policy AG-2.A: Prevention of Flooding and Sedimentation, specifically requires measures designed for the prevention of flooding and sedimentation resulting from urbanization, especially as such damage relates to new non-agricultural development. Land Use Implementing Action LU-7 calls for the County to research and respond to the impacts of climate change related to hazards on Gaviota's coastal zone shoreline. This involves identifying the most vulnerable areas, structures, facilities, and resources, with priority given to public access and recreation resources such as the California Coastal Trail, Highway 101, and Union Pacific Railroad. As Plan policies would support measures to protect the Plan Area from flooding risks and support watershed based planning, Plan policies/action are further beneficial.

Mitigation

MM WR-1 Addresses Impacts Associated with Sea Level Rise Flooding (Recommended)

The following development standard is recommended to be added to the Plan to ~~mitigate potentially significant~~further reduce impacts associated with sea level rise, including the potential for coastal erosion and flooding~~:~~

~~Mitigation Measure MM-FLD-1: A new Development Standard FLD-1 shall be added to the Plan as follows~~ (addition in underline):

- **Dev Std LU-2 ~~FLD-1~~: Sea Level Rise and Coastal Hazards.** Sea level rise and coastal hazard analyses shall be required for near-shore development. Using best available science, the coastal hazard analysis shall consider the impacts of sea level rise on the proposed development including vulnerability assessment, and identification of adaptive measures to reduce expected risk and increase resiliency to sea level rise. Near-shore development includes sites on and along the beaches, bluffs, tidally influenced water bodies and areas potentially subject to inundation given topography and proximity to the ocean.

Residual Impacts

~~With the adoption of Mitigation Measure MM-FLD-1,~~Incorporation of Dev Std LU-2 into the Plan ~~FLD-1,~~ would further reduce impacts to flooding associated with sea level rise. ~~be incorporated into the Plan and r~~Residual impacts would be less than significant (Class III impact).

Impact WR-2: Runoff and Drainage

Plan buildout is estimated to result in development of 167 additional single-family residences and 9 agricultural employee housing units within the Plan Area over the 20-year Plan horizon. Potential Highway Commercial (CH) development is limited to an approximately 2-acre site located east of Highway 101 at Las Cruces. Zoning ordinance amendments are also proposed that could encourage expansion of agricultural land uses and uses accessory and supportive of agriculture. Overall, development within the Plan Area would be limited to very low-density residential and agricultural accessory uses. Development of trails and recreational uses would also occur under the Plan and are discussed in further detail in PRT Section 4.13.

Runoff

Future development that would occur with buildout of the proposed Plan would result in an increase in impervious surfaces, such as concrete and asphalt, within the Plan Area. Impervious surfaces could be associated with new access roads, new single-family residential structures, commercial uses, greenhouses, and agricultural accessory structures. An increase in the amount of impervious surface area would potentially increase the amount and rate of runoff and could result in an alteration to drainage patterns within the Plan Area. Plan buildout development, including new structures and impervious surfaces, could result in localized drainage problems such as ponding of water, restriction of access, damage to vegetation, and other impacts associated with standing water.

Future projects would be required to comply with the County's Storm Water Regulations, which require treatment of runoff from new development, and Flood Control regulations that address peak runoff from larger storms. Impacts from the construction of impervious surfaces and increased runoff associated with future development would be controlled on a case-by-case basis by applying County policies and conditions of approval. Runoff of future development projects would be required to prepare adequate drainage plans and, as appropriate, mitigation measures so that drainage capacity would be adequate to serve the development. Policy NS-1 and Action NS-1 in the Plan provide for Watershed Management Planning that will aid landowners and the County in identifying runoff and drainage pattern issues in future development projects and could help protect natural watershed functions. These Plan policies would support watershed based planning and watershed level land management that would facilitate the management of flooding issues associated with an increase in runoff.

Future projects also would be required to conform to Comprehensive Plan and Plan policies. The quantity of runoff reduction would depend on the actual design of future projects, including

open space and pervious areas and the manner of implementation of Low Impact Development (LID) practices. Adherence to County regulations and conformance to the County's post-construction requirements and Flood Control Standard Conditions, the Comprehensive Plan and Plan policies would ensure that implementation of the Plan would result in less than significant impacts from increased runoff from developed areas.

Alteration to Drainage Patterns

Future development within the Plan Area would result in development that could increase the amount of impervious surface area, as described above, resulting in a greater quantity and velocity of runoff. Increased quantity and velocity of runoff, and development located in the floodplain or adjacent to creeks, can affect drainage patterns and could affect downstream flooding and can have secondary impacts on environmental resources such as biological communities and archaeological resources. Also, improperly stabilized development along slopes can result in increased erosion and subsequent effects on creeks and channels. However, all future projects within the Plan Area would be required to comply with the Floodplain Management Ordinance, the Water Course Setback ordinance, the County Grading Code, the Plan Steep Slope Guidelines (Appendix E), Flood Control standard conditions of approval, application of the Storm Water Technical Guide for Low Impact Development, and show conformance with Comprehensive Plan and Plan policies, which would ensure that impacts of Plan buildout related to alterations in drainage patterns would be less than significant.

The Plan policies and actions discussed above under WR-1 would also serve to protect existing drainage patterns by supporting watershed based planning and supporting measures that would prevent flooding and sedimentation and address runoff and drainage patterns. These applicable policies include Plan Policy NS-1, Action NS-1, and Policy AG-2.A. Existing regulation and Comprehensive Plan policies adequately address potential impacts related to runoff and drainage. The Plan policies discussed under Impact WR-1 would support efforts to protect watersheds from adverse runoff and drainage impacts.

Mitigation

Impacts would be less than significant and no mitigation is required.

Residual Impacts

Implementation of Plan buildout and applicable land use policies and development standards would result in a less than significant related to runoff and drainage (Class III impact).

Impact WR-3: Water Quality

Plan Buildout is estimated to result in development of 167 additional single-family residences and 9 agricultural employee housing units within the Plan Area over the 20-year Plan horizon. Potential Highway Commercial (CH) development is limited to an approximately 2-acre site

located east of Highway 101 at Las Cruces. Zoning ordinance amendments are also proposed that could encourage expansion of agricultural land uses and uses accessory and supportive of agriculture.

Consistent with the proposed Plan, future use of undeveloped land would consist primarily of agricultural, recreational, and residential uses. Existing and future residential use would largely be supported by septic systems, which can pollute surface and groundwater if systems fail or are not adequately sized or maintained. In addition, buildout of the Plan Area would include the construction of roads and other public infrastructure. Expansion of agriculture and grazing lands could introduce pesticides and nutrients into water bodies. Also, as discussed above, future buildout would result in increased impervious surfaces which change the rate, duration, and volume of runoff and can impact riparian and aquatic habitats through changes in hydrogeomorphology.

Construction Site Runoff

Polluted storm water runoff from construction sites can flow into drainage channels and become discharged into local rivers and streams. Sediment is usually the main pollutant of concern. During a short period of time, bare and unprotected construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to nearby waters. The siltation process can (1) deposit high concentrations of pollutants into water supplies; (2) decrease the depth of a water body, which can reduce the volume of a reservoir or result in limited use of a water body by boaters, swimmers, and other recreational enthusiasts; and (3) directly impair the habitat of fish and other aquatic species, which can limit their ability to reproduce. Excess sediment can cause a number of other problems for water bodies. Sediment is associated with increased turbidity and reduced light penetration in the water column, as well as longer-term effects associated with habitat destruction and increased difficulty in filtering drinking water. Pollutants that commonly are commonly discharged from construction sites include: sediment, solid and sanitary wastes, nitrogen (fertilizer), phosphorus (fertilizer), pesticides, concrete truck wash out, construction chemicals, and construction debris.

Post-construction Site Runoff

As runoff flows over areas altered by development, it picks up sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans.

Roads and parking areas have the potential to introduce contaminants, such as motor oil, gasoline, and heavy metals. In addition, agricultural land use and landscape maintenance can involve the use of pesticides and fertilizers. Grazing lands can contribute pollutants from

manure. Household chemicals and animal waste could also be introduced to site runoff from future developments. Potential pollutants by type of land use are discussed below.

Residential

For residential development, the potential pollutants of concern are sediments, nutrients (from individual septic systems), trash and debris, oxygen-demanding substances, oil and grease, pesticides, and pathogens. New and existing septic systems in the Plan Area will be subject to regulations and monitoring standards as described in the County Environmental Health Services OWTS LAMP (Article I, Chapter 18C of the Santa Barbara Ordinance Code) to ensure proper construction, modification, repair, and maintenance of the OWTS.

Commercial

For commercial developments, the anticipated pollutants of concern are trash and debris, and oil and grease, sediments, nutrients, organic compounds, metals, oxygen-demanding substances, pesticides, and pathogens.

Roads and Other Public Infrastructure

Roads and other public infrastructure within the Plan Area would contribute any of the pollutants identified within the residential and commercial land uses. An analysis of potential impacts related to water quality resulting from PRT Maps Amendments are discussed in Section 4.13.

Agriculture

Agricultural uses would result in the introduction of sediments, nutrients, and pesticides into local water resources. Agricultural uses on steep slopes have the potential to increase erosion and cause impacts to water quality. Therefore, the County has prepared Steep Slope Guidelines (Appendix E) as amendments to the County Land Use and Development Code (LUDC) and Coastal Zoning Ordinance (Article II) to provide further protection and guide development in these areas.

The Comprehensive Plan identifies specific policies to limit pollutant discharge and runoff to receiving surface waters. The proposed Plan supplements these requirements with policies and development standards that support water quality objectives of the Comprehensive Plan. As an example, Action AG-3 requires enhanced standards for agricultural development on slopes of 30 to 40 percent or greater (e.g., preparation of an erosion control plan) and multiple development standards related to new and existing septic systems.

With adherence to existing regulations, including the County Grading Code and the Storm Water Management and Discharge Control Ordinance along with conformance to post-construction development standards, Comprehensive Plan policies, in addition to the Plan polices above, water quality impacts associated with the proposed Plan would be less than significant. Plan policies would have a beneficial impact on water quality.

Plan buildout and rezones would result in potentially significant water quality impacts associated with future development. The proposed Plan contains policies and development standards intended to help minimize the amount of polluted storm water runoff within the Plan Area. Future development of residential and commercial facilities would be required to implement appropriate BMPs. Implementation of storm water BMPs would reduce potential impacts associated with the introduction of pollutants that are listed for streams within the Plan Area. LID practices would minimize pollution by reducing runoff volume, and can provide treatment by filtration and microbial action.

Under current regulations in the County, all projects requiring a grading permit must prepare an erosion and sediment control plan or SWPPP to reduce construction-related impacts on water quality. In addition, project operational impacts on water quality are reduced through site design, source control, and treatment control BMPs, many of which overlap with LID practices. Before building permits are issued for future projects, documentation of specific storm water BMPs during construction and operations is required. The storm water BMPs would reduce the amount of pollutants transported from a future proposed development project to receiving waters.

The recently adopted LAMP regulations applicable to OWTS discussed above, ensure that OWTS are constructed, modified, repaired, abandoned, maintained, inspected and serviced in a manner that prevents environmental degradation and protects the health, safety, and general welfare. With the existing and proposed regulations and policies, applicable in the Plan Area, potential impacts of pollution from new development in the Plan Area would be less than significant.

Mitigation

Mitigation is not required as impacts would be less than significant.

Residual Impacts

Residual impacts would be less than significant (Class III impact).

Impact WR-4: Groundwater Supply

Groundwater extraction in the Plan Area largely occurs through wells that tap bedrock aquifers although some wells are located in alluvial sediments along canyon floors. Consolidated rock aquifers are generally less extensive and have much smaller annual safe yield values than the alluvial basins. As detailed in the Groundwater Thresholds Manual for Environmental Review of Water Resources in Santa Barbara County, environmental concerns associated with bedrock aquifers include degradation of water quality, long-term loss of well yield, well interference and effects on biological resources. The basis for the assessment of impacts on groundwater resources due to pumpage of consolidated rock aquifers is the avoidance of overdraft.

The proposed Plan maintains the previously existing low-density agricultural land use designations in the majority of the Plan Area and would not increase overall development potential, which is a reflection of the fact that groundwater supply is a limiting factor for development in the Plan Area. While the proposed Plan would not directly result in any new groundwater wells; ultimate buildout of the Plan would require additional groundwater use, most likely derived from bedrock aquifer wells. Plan buildout would result in additional groundwater extraction to supply single-family residences within the Plan Area and excessive well pumpage could result in long-term loss of well yield, in addition to other environmental concerns discussed above.

The proposed Plan does not contain policies specific to groundwater supply. Potential adverse impacts associated with groundwater use required for Plan Area buildout would be addressed at the project level as discretionary applications for development within the Plan Area are submitted to the County. Each discretionary project that would use groundwater resources would be subject to review using the County's Groundwater Thresholds Manual, which describes the adopted County methodology for estimating the safe yield of bedrock aquifers. As future development with the Plan Area would be evaluated at the project level to ensure proposed groundwater use would not exceed County thresholds, a less than significant impact related to groundwater supply would occur as a result of Plan buildout

Mitigation

Mitigation is not required as impacts would be less than significant.

Residual Impacts

Residual impacts would be less than significant (Class III impact).

4.7.4 Cumulative Impacts Analysis

Impacts

Flooding

As shown on Figure 4.7-2, flood hazards in the Plan Area are limited to coastal areas primarily at the mouths of creeks and rivers. Large parcel sizes and existing regulations ensure significant impacts do not occur due to development within flood hazard areas. Future residential buildout and agricultural uses allowed under the Gaviota Agricultural Tiered Permit Structure would be subject to compliance with Floodplain Management and Water Course Setback ordinances, County Grading Code, engineering standards and codes, and Comprehensive Plan polices and development standards. These existing regulations would ensure that development does not contribute to downstream flooding impacts. Development upstream of the Plan Area is largely conserved land within the Los Padres National Forest or low density agricultural land; as a result, significant development and creation of impervious

surfaces would not contribute to a significant cumulative impact related to flooding. Cumulative impacts would be less than significant.

Runoff and Storm Water Quality

Buildout of the Plan Area along with future development of cumulative projects would contribute to increased impermeable surfaces and associated increased peak storm water discharge, volumes of runoff, and changes in drainage characteristics. This could impact watercourses on and adjacent to the development sites by increasing erosion/sedimentation and the quantity of storm water. However, development within the upstream portions of the watersheds in the Plan Area is limited due to the presence of the Los Padres National Forest and low density agricultural land in the higher reaches of the watershed. The limited development potential within the Plan Area and in affected watersheds outside of the Plan Area would minimize the potential for cumulative runoff and water quality impacts. Furthermore, future development within the Plan Area would be subject to the County's storm water regulations, Grading Code, and Comprehensive Plan policies. Future development outside of the Plan Area and within neighboring cities would be subject to similar storm water regulations. Compliance with existing regulations and County policies in addition to compliance with the Plan policies included as mitigation would mitigate the project's contribution to cumulative impacts related to runoff and storm water quality to less than significant.

Mitigation

Impacts would be less than significant and no mitigation would be required.

Residual Impacts

There would not be any residual cumulative impacts regarding flooding and water resources (Class III impact).

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