

## 4.14 WATER AND WASTEWATER

*The following section is based on a hydrogeological study/water resources analysis prepared by Hopkins Groundwater Consultants (refer to Appendix K) and a drainage and wastewater analysis prepared by Boyle Engineering Corporation (refer to Appendix H).*

*Agricultural Residential Cluster Subdivision. The applicant proposes to use groundwater to provide water for domestic use. The proposed Agricultural Residential Cluster Subdivision would use about 96 acre-feet per year (afy) of water. This demand may contribute to overdraft of the aquifer system. Although mitigation, including the establishment of a groundwater monitoring program and water conservation measures, would reduce overall system demand, uncertainty of additional water supply would result in Class I, significant and unavoidable, impacts. The Agricultural Residential Cluster Subdivision involves the use of septic systems. Percolation testing has not been conducted for all proposed lots. Mitigation measures requiring a septic tank maintenance plan and septic tank and leachfield site plans would result in Class II, significant but mitigable, impacts related to wastewater disposal. Impacts related to groundwater quality would also be Class II, significant but mitigable. Mitigation measures include regulating the use of water softeners and pollutant input minimization. Septage load management impacts would be Class III, less than significant, pursuant to compliance with standards and regulations.*

*Future Development Program. Because no active application currently exists for the Future Development Program subsequent to the Agricultural Residential Cluster Subdivision, the assessment of water and wastewater impacts is based on a reasonable worst case scenario with regard to the location of future land uses and water use. Buildout of the Future Development Program would result in impacts similar to those resulting from the Agricultural Residential Cluster Subdivision individually. However, the Future Development Program would use about 926 acre-feet per year (afy) of water. Groundwater impacts are Class I, significant and unavoidable. In addition, no percolation tests have been completed for Future Development Program land uses subsequent to the Agricultural Residential Cluster Subdivision. Impacts are Class II, significant but mitigable. Water quality and septage load impacts would be similar to those resulting from the Agricultural Residential Cluster Subdivision individually. The Future Development Program envisions nine wineries located throughout the Ranch property. Water quality impacts resulting from winery wastewater are Class II, significant but mitigable. Development and implementation of a wastewater master plan would reduce impacts to a less than significant level.*

### 4.14.1 Setting

**a. Water Supply and Current Demand.** The Santa Margarita Ranch overlies portions of the Paso Robles Groundwater Basin (Paso Robles Basin), the Santa Margarita and Vaqueros bedrock aquifers, and shallow alluvial aquifers. The Paso Robles Basin is one of 53 basins in the Central Coast Hydrologic Region and comprises approximately 860 square miles of area drained by the Salinas River. Although the Paso Robles Basin is the primary source of groundwater in the region, the existing wells on the Ranch property do not extract from the Paso Robles Basin. Rather, the primary aquifer units that supply existing wells on the Ranch consist of Paso Robles Formation sand and gravel deposits, an undefined or stratigraphic equivalent to the Paso Robles Formation, and the Santa Margarita Formation. The Paso Robles and Santa Margarita Formations are discussed below.



The Paso Robles Formation is a widely distributed, weak conglomerate comprising gravel, sand, silt and clay. This unit outcrops in the hills east of Garden Farms, at Chalk Hill and the hills to the south of Highway 58. The Paso Robles Formation ranges in thickness from 300 to 400 feet in the vicinity of Santa Margarita Ranch. The Paso Robles Formation is found at depths of 400 to 500 feet below ground surface (bgs) along the eastern portion of the Ranch property. The Paso Robles Formation, where present, likely forms the primary aquifer zone from which the higher yielding wells on the Ranch produce.

The Santa Margarita Formation is primarily thick, poorly stratified marine sandstone with finer interbeds of mudstone, siltstone, conglomerate and diatomite. This formation outcrops extensively in the Santa Margarita area between the Rinconada and Nacimiento fault zones and conformably overlies the Monterey Formation and likely defines the effective base of fresh water under much of the Ranch property. The Santa Margarita Formation is believed to be up to 1,000 feet thick in some areas. The Santa Margarita sandstone forms a poor to moderate aquifer for groundwater production and likely contributes to the yield in a number of the existing Ranch wells.

The safe yield of the aquifer system has not been determined in the vicinity of the Santa Margarita Ranch. Approximately 34 wells are located in the Santa Margarita Ranch area. Three are located in the northern portion of the Ranch and serve the community of Garden Farms; four are located near the center of the Ranch and serve the community of Santa Margarita. Of the 27 remaining wells, the Ranch operates approximately 20 wells from which historical groundwater data have been collected since 1999. Data includes groundwater levels, well production, well performance and water quality test results. A summary report that includes this data through April 2006 (RHA, 2006) forms the basis for reviewing impacts of historical groundwater use and the availability of groundwater to supply the Agricultural Residential Cluster Subdivision and Future Development Program.

The Ranch ownership participated in the planning phases of the Nacimiento Water Project. On May 18, 2004, the Board of Supervisors approved a policy to consider a cooperative arrangement between the Ranch and County Service Area No. 23 (CSA 23) (which provides water service to the community of Santa Margarita) if CSA 23 participates in the State Water Project. **However, an agreement has not yet been reached.**

Water Demand. Existing water uses in the area include domestic and agricultural Ranch uses. Table 4.14-1 indicates the estimated amount of annual water demand that is attributed to the existing **and planned** land uses on the Ranch property. The itemized water demands presented in Table 4.14-1 were calculated using the standard San Luis Obispo County water demand estimation factors for domestic and municipal land uses. In addition to the County data, an irrigation demand of 2.0 acre feet per year per acre (afy/ac) was used for landscaping and turf watering. This demand factor accounts for average annual rainfall and evaporation rates measured in the area.



**Table 4.14-1 Existing Ranch Water Demands**

Land Use	Land Use Characteristics	Water Use Factor (acre-feet/unit)	Annual Water Demand (acre-feet)
Margarita Farms	36 residential units on 1.0 to 2.5 acre lots (128 acres total)	1.44 / lot	51.84
1 residential lot	1.0 acre in size	1.44 / lot	1.44
Farm support housing units	7 units on 1.0 acre or less	0.9 / lot	6.30
Private cabins	4 units on 1.0 acre or less	0.9 / lot	3.60
Margarita Vineyard	973.9 acres	1.6 / acre	1,558.24*
<b>Existing Ranch Water Use Total</b>			<b>1,621.42</b>
<b>Planned Orchards</b>	<b>500 acres</b>	<b>2.0 / acre</b>	<b>1,000**</b>
<b>Planned Vineyards</b>	<b>1,026.1 acres</b>	<b>1.6 / acre</b>	<b>1,641.76*</b>
<b>Planned Ranch Water Use Total</b>			<b>2,641.76</b>
<b>Existing and Planned Ranch Water Use Total</b>			<b>4,263.18</b>

Source: Hopkins, 2006 and RHA, 2006.

\* This estimate is based on a factor of 1.6 afy per acre and does not account for the immaturity of on-site vineyards.

Actual consumptive demand is estimated at approximately 400 afy.

\*\* This estimate is based on a factor of 2.0 afy per acre as a reasonable worst case scenario.

As shown in Table 4.14-1, ~~estimated existing~~ Ranch water demands are approximately 1,621 acre feet per year (afy). **Planned vineyards and orchards would add approximately 2,642 afy of demand to this figure for a total of 4,263 afy.** Approximately 4 percent (63 afy) of ~~this existing~~ demand is derived from rural residential uses and approximately 96 percent (1,558 afy) is derived from agricultural uses (i.e., vineyards). **With planned vineyards in place, this ratio would change to 1.5 percent and 98.5 percent, respectively.** It should be noted that although 63 afy is derived from rural residential uses, Margarita Farms (with a demand of 52 afy) is the only non-agricultural development on the Ranch property that draws from the same aquifer units as the proposed Agricultural Residential Cluster Subdivision and Future Development Program.

Consumptive Use. Approximately 40 percent of rural residential water use and 32 percent of agricultural water use results in groundwater recharge, thereby returning to the local aquifer system. Consumptive water use refers to the amount of groundwater that does not result in groundwater recharge, and is permanently removed from the local aquifer system. Although approximately 52 afy is **currently** used for rural residential use (i.e. Margarita Farms), approximately 21 afy would return to the system as groundwater recharge. Therefore, net consumptive use for existing residential uses on the Ranch is approximately 31 afy. Similarly, although an estimated 1,558 afy is **currently** used for agricultural purposes (vineyard irrigation), approximately 499 afy would return to the system as groundwater recharge. Therefore, based on a factor of 1.6 afy per acre (afy/acre), net consumptive use for existing agricultural uses on the Ranch is estimated at approximately 1,059 afy (1.6 afy/acre is the water duty factor applied by Hopkins Groundwater Consultants vineyard irrigation in San Luis Obispo County; refer to Appendix K). The actual reported annual consumption for existing Ranch agricultural uses is 285 afy. This discrepancy may be attributed to a number of factors, including the immaturity of vineyard plantings (as younger crops require less irrigation) and reported discharge meter inaccuracies. Based on available data for immature vineyard water use and reported consumptive demand (past average annual uses), existing agricultural water use on the Ranch is estimated at approximately 400 afy. Therefore, in addition to an estimated 31 afy residential consumption, the total existing consumptive demand on the Ranch property is estimated to be 431 afy.



**b. Existing Santa Margarita Ranch Water Service.** Existing Santa Margarita Ranch water uses are supplied entirely by groundwater. The Ranch property is currently served by approximately 27 wells, located primarily along the east side of the Ranch, west of West Pozo Road. Individual well yields typically range between 200 and 400 gallons per minute (gpm) with some wells capable of rates of up to 1,000 gpm (RHA, 2006). Water supply for the community of Santa Margarita is provided by CSA 23 and is produced solely from water wells in the vicinity of the town.

**c. Wastewater.** The Santa Margarita Ranch is not currently served by wastewater infrastructure. Existing development on the Ranch property, including 36 units in the Santa Margarita Farms Subdivision, one single family residence, four private cabins, and seven farm support housing units, are served by individual on-site septic systems. The communities of Santa Margarita and Garden Farms are also served entirely by septic systems.

#### **4.14.2 Impact Analysis**

##### **a. Methodology and Significance Thresholds.**

1. Methodology. Impacts to water conveyance facilities were assessed by determining where and how close each of these facilities was located to Agricultural Residential Cluster Subdivision and Future Development Program facilities, as well as the sufficiency of the existing water lines to accommodate additional demand associated with the Agricultural Residential Cluster Subdivision and Future Development Program. Well and percolation data provided by the applicant was evaluated to determine the suitability of on-site conditions to support the water and wastewater demand generated by the Agricultural Residential Cluster Subdivision and Future Development Program.

2. Significance Thresholds. In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

- *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or 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);*
- *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;*
- *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;*
- *Fail to have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed; or*
- *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.*



**b. Agricultural Residential Cluster Subdivision Impacts and Mitigation Measures.**

**Agricultural Residential Cluster Subdivision Impact W-1**      **The Agricultural Residential Cluster Subdivision would increase the use of water from area aquifer units, including the Paso Robles and Santa Margarita Formations, by 96 acre-feet per year (afy). This net consumptive use may contribute to overdraft of the aquifer system. Groundwater use associated with the Agricultural Residential Cluster Subdivision is a Class I, significant and unavoidable, impact.**

The Agricultural Residential Cluster Subdivision would use water from existing wells, which extract groundwater from aquifer units located beneath the Ranch property, including Paso Robles Formation sand and gravel deposits, an undefined or stratigraphic equivalent to the Paso Robles Formation, and the Santa Margarita Formation. The majority of these wells are located along the east side of the Ranch property, west of West Pozo Road.

The proposed single-family homes are estimated to use approximately 1.44 acre-feet per year (afy) of water. Therefore, the proposed 112-unit Agricultural Residential Cluster Subdivision would be anticipated to demand 161.28 afy. However, approximately 40 percent of rural residential water use results in groundwater recharge, thereby returning to the local aquifer system [refer to Section 4.14.1(a) *Consumptive Use*]. Although the Agricultural Residential Cluster Subdivision would demand an estimated 161 afy, approximately 64 afy would return to groundwater as recharge. Therefore, net consumptive use for Agricultural Residential Cluster Subdivision development would be approximately 96 afy. The magnitude of this additional demand is a 22 percent increase in groundwater production over the existing Ranch consumptive demand (431 afy). It should be noted that the applicant proposes storm drains along area roadways to direct drainage from the proposed development to detention features within the agricultural conservation easements (ACEs). This would further promote percolation and groundwater recharge.

The applicant proposes to use the Santa Margarita Ranch Mutual Water Company (SMRMWC), to provide the water needed to support the proposed Agricultural Residential Cluster Subdivision. SMRMWC would utilize existing on-site wells to meet domestic needs. Individual well yields typically range between 200 and 400 gallons per minute (gpm), with some wells capable of rates of up to 1,000 gpm. The water would be drawn from Paso Robles Formation sand and gravel deposits, an undefined or stratigraphic equivalent to the Paso Robles Formation, and the Santa Margarita Formation aquifer units. Water would be stored in two 188,000 gallon water tanks located at the top of a hill near the center of the Agricultural Residential Cluster Subdivision.

As described above, net consumptive water demand for the Agricultural Residential Cluster Subdivision is estimated to be approximately 96 afy. To evaluate whether this would result in aquifer overdraft, the groundwater levels in the aquifer system must be evaluated over at least one complete hydrologic cycle to establish a trend (generally several decades). Available groundwater level and production data have been collected intermittently and have not been collected over a complete hydrologic cycle. Therefore, available groundwater data from the Ranch are not sufficient to determine the long-term impacts of existing and proposed



groundwater pumping. Because the safe yield of the aquifer system cannot be verified, the overdraft condition of the aquifer system is not known, and impacts to water resources could be significant.

Mitigation Measures. The following mitigation measures are required to ensure that impacts would be reduced to the extent possible:

**Agricultural Residential  
Cluster Subdivision  
W-1(a)**

**Groundwater and Surface Water Monitoring Programs.** A comprehensive groundwater monitoring program shall be established by the applicant in consultation with the County Public Works Department, **Planning and Building Department, and the Regional Water Quality Control Board (RWQCB)** to collect annual well production data, semiannual groundwater level data from all available wells, and ~~biannual~~ **semi-annual (dry and wet weather)** water quality testing of key constituents of potential concern (i.e., nitrate). The applicant shall provide additional facilities as necessary to monitor the anticipated impacts on groundwater resources for each phase of Agricultural Residential Cluster development. Up gradient and down gradient monitoring locations shall be established.

A comprehensive stream flow monitoring program shall also be established and funded by the applicant in consultation with the County Public Works Department, **Planning and Building Department, and RWQCB.** The monitoring program shall include new monitoring stations on Trout Creek and Rinconada Creek.

Monitoring data shall be provided by the applicant annually to County Public Works, **Planning and Building, and RWQCB.** Remedial action shall be developed based on the significance of the adverse conditions documented by the groundwater and surface water monitoring programs and subsequently implemented. Remedial action may include water rationing, including the prohibition of later phases of development until adequate water supply is demonstrated, and/or the importation of additional water supply [refer to Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply)].

**Plan Requirements and Timing.** Prior to occupancy clearance, the applicant, in consultation with the Public Works Department, **Planning and Building Department, and RWQCB,** shall establish the groundwater and surface water monitoring program on the Ranch property. **Monitoring.** Public Works, **Planning and Building, and RWQCB** shall review groundwater and surface water stream flow monitoring data annually and require remedial action as necessary. The type of remedial action that may be required shall be based on the significance of the



adverse conditions documented by the monitoring program.

**Agricultural Residential  
Cluster Subdivision  
W-1(b)**

**Water Conservation Measures.** The applicant shall implement water conservation measures, including, but not limited to:

- Using available and proven technologies and equipment that provide adequate performance with a substantial water savings. This may include the installation of high efficiency washing machines and ultra-low flush toilets ~~during construction~~ and/or the use of micro sprinklers or drip tape for domestic and agricultural irrigation, installation of hot water pipe circulating systems or “point-of-use” water heaters. **Installation of these water conservation measures shall be included in CC&Rs for residential lots and monitored by a homeowners association or similar entity;**
- Implementing tiered commodity rates for water sales that increase with higher water usage to financially encourage each resident to conserve water;
- Establishing low water use landscaping on all common landscaped areas greater than 0.1 acres, including low water use irrigation methods such as drip irrigation; ~~and~~
- **Limiting total residential irrigated landscape areas to 1,500 square feet and limiting turf (lawn) areas to no more than 25 20% of residential irrigated landscape areas (or 300 square feet at maximum); and**
- **Providing and updating an educational brochure regarding water conservation.**

**Plan Requirements and Timing.** The applicant shall include water conservation measures on site plans, subject to approval by Public Works. **Monitoring.** Public Works shall site inspect to ensure development is in accordance with approved plans prior to occupancy clearance.

**Agricultural Residential  
Cluster Subdivision  
W-1(c)**

**Imported Water Supply.** The applicant shall acquire imported water supply to serve the Agricultural Residential Cluster Subdivision. Potential sources include State Water and/or the Nacimiento Water Project.

**Plan Requirements and Timing.** The applicant shall provide proof of adequate water supply to serve the proposed Agricultural Residential Cluster Subdivision prior to issuance of grading permits. **Monitoring.** Planning and Building and the Department of Public Works shall confirm adequate water supply prior to issuance of a development permit.

Residual Impacts. Implementation of Agricultural Residential Cluster Subdivision measures W-1(a) (Groundwater and Surface Water Monitoring Program) and W-1(b) (Water Conservation Measures) would reduce the overall water system demand for the Agricultural



Residential Cluster Subdivision from an estimated 161.28 afy to approximately 139.94 afy (about 13 percent). This represents a reduction in net consumptive use from an estimated 96 afy to approximately 84 afy [refer to Section 4.14.1(a) *Consumptive Use*]. However, additional water supply would still be required. Additional water may be available for the Agricultural Residential Cluster Subdivision through the State Water Project and/or the Nacimiento Water Project, as outlined in Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) above. **It should be noted that Santa Margarita Ranch, LLC does not currently have an allocation for the State Water Project (SWP), although SWP pipelines are located in the vicinity of the Ranch. The Santa Margarita Ranch Mutual Water Company (SMRMWC), which is proposed by Santa Margarita Ranch, LLC as part of the Agricultural Residential Cluster Subdivision, is identified as an eligible agency ~~does have an allocation~~ for the Nacimiento Water Project (NWP). Pursuant to execution of a Water Delivery Entitlement Contract (WDEC), the SMRMWC could receive an allocation for the NWP, which has not yet been constructed.** However, due to resulting uncertainties regarding timing and availability of these sources, additional water supply cannot be assured at this time. Impacts would remain significant and unavoidable.

Despite the uncertainties discussed above, it may one day be feasible for the applicants to obtain imported water (i.e. through obtainment of SWP allocations or construction of the NWP pipeline). Resultant implementation of Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) would require extension of water lines, which could result in residual environmental impacts. Physical impacts associated with infrastructure necessary to import water to the property have been addressed in several adopted Environmental Impact Reports (EIRs) and one Mitigated Negative Declaration (MND). These EIRs and MND are herein incorporated by reference into this Revised Draft EIR: State Water Project (SWP) Coastal Branch Phase II and Mission Hills Extension Final EIR (State of California Division of Planning, May 1991), State Water Project Coastal Branch (Phase II) Local Distribution Lines and Facilities Final EIR (ERCE, March 1992), Nacimiento Water Project (NWP) Final EIR (Marine Research Specialists, December 2003), Addendum No. 1 to the NWP Final EIR (ESA Associates, June 2007), and Santa Margarita Water System Project MND (County of San Luis Obispo Public Works, June 2007). A Supplement to the SWP Coastal Branch Phase II and Mission Hills Extension Final EIR (State of California Division of Planning, October 1994) addressed technical design changes and realignment of Reach 5 of the project, which does not cover the Santa Margarita area. Addenda to the SWP Coastal Branch (Phase II) Local Distribution Lines and Facilities Final EIR are similarly not applicable to the area.

The previous environmental documents incorporated by reference are summarized below:

- **Final Environmental Impact Report for the State Water Project Coastal Branch, Phase II and Mission Hills Extension, SCH# 1990010613.** This document addressed the proposed construction of new State Water Project (SWP) facilities that would transport SWP water to San Luis Obispo and Santa Barbara Counties. The facilities analyzed in the program-level analysis included the Coastal Branch, Phase II and the Mission Hills Extension. The Coastal Branch, Phase II runs along the southern edge of the community of Santa Margarita.
- **Final Environmental Impact Report for the State Water Project Coastal Branch (Phase II) Local Distribution Lines and Facilities, SCH# 1992100959.** This document evaluates



the site-specific impacts of the construction and operation of local distribution water pipelines, a water treatment plant, and supporting facilities that are associated with the State Water Project Coastal Branch, Phase II. This document tiers from the Final Environmental Impact Report for the State Water Project Coastal Branch, Phase II and Mission Hills Extension (discussed above). Nine local water distribution pipelines are analyzed in this document, including the North County Pipeline, which extends for approximately 17 miles from the Coastal Branch pipeline at SR 58 just east of the town of Santa Margarita to Paso Robles.

- Final Environmental Impact Report for the Nacimiento Water Project, December 2003, Marine Research Specialists, SCH# 2001061022. This document addressed a proposal to develop the Nacimiento Water Project. The report analyzed impacts of two co-equal water delivery options: a Treated Water Option and a Raw Water Option. Both options included construction of an intake at Lake Nacimiento, water storage tanks, pump stations, and a 64-mile water transmission pipeline. This transmission pipeline would run along El Camino Real through the community of Santa Margarita. However, the Raw Water Option included construction of three water discharge facilities while the Treated Water Option included construction and operation of a central Water Treatment Plant near Lake Nacimiento on Camp Roberts' property.
- Addendum to the Final Environmental Impact Report for the Nacimiento Water Project, June 2007, ESA Associates, SCH# 2001061022. This document addressed minor alterations to the proposed Nacimiento Water Project, including pipeline alignment refinements, turnout location refinements, and pump station and storage tank modifications. All analyzed modifications are applied to the Raw Water Option scenario, which was approved by the Board of Supervisors of the SLOCFWCWD in January 2004. Within the Santa Margarita Ranch vicinity, the pipeline would run along the northern boundary of the community of Santa Margarita rather than along El Camino Real. This would avoid one railroad crossing, two crossings of Highway 58, and avoid traffic impacts through the community of Santa Margarita.
- Mitigated Negative Declaration for the Santa Margarita Water System Project (591R360301) ED06-351, June 2007, County of San Luis Obispo Public Works, SCH# 2007071005. This document addresses impacts related water system improvements in the Santa Margarita vicinity. This includes: removal of one existing water tank and construction of a new 500,000-gallon water storage tank; construction of a paved access road extending from Wilhelmina Avenue/I Street to the tank site; installation of pipeline to the water tank site; replacement of existing pipelines within Encina Avenue and K Street; replacement of existing pipeline within F Street, east of Pinal Avenue; installation of a water system loop on F Street and Maria Avenue; replacement of 23 wharf heads with new standard fire hydrants; and installation of parallel distribution pipelines within Wilhelmina Avenue and el Camino Real.

The above documents are available for review at the County of San Luis Obispo Department of Planning and Building Environmental Coordinators Office, 976 Osos Street, San Luis Obispo, CA 93408. Both NWP documents are also available on-line at [http://www.slocounty.ca.gov/PW/NacWP/General\\_Project\\_Information/reports.htm](http://www.slocounty.ca.gov/PW/NacWP/General_Project_Information/reports.htm).



The above documents addressed impacts associated with State and Nacimiento Water Projects, including cumulative and growth inducing impacts. However, implementation of Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply) would require connection to SWP or NWP water lines as well as installation of additional connector pipelines and associated infrastructure. Possible locations for such connections and pipelines are described below, including a discussion of potential impacts that would result.

- **SWP Connection via Encina Avenue.** This delivery option would connect to the existing State water pipeline located along the southern boundary of the community of Santa Margarita (as analyzed in the Final Environmental Impact Report for the State Water Project Coastal Branch, Phase II and Mission Hills Extension) in the vicinity of Encina Avenue. The pipeline would extend east for approximately 950 feet and south along existing ranch roadways for approximately 4,250 feet and then east along existing ranch roadways for another 900 feet. Pipelines would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. Disturbance would be contained within existing County and ranch roadway right-of-ways and would therefore be negligible. Installation of water lines would not occur through undisturbed Ranch property.

Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair as needed. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the SWP facilities serving the Ranch.

- **SWP Connection West of Santa Margarita.** The existing State water pipeline traverses the southern boundary of the community of Santa Margarita and extends southwest from the community toward U.S. Highway 101 (as analyzed in the Final Environmental Impact Report for the State Water Project Coastal Branch, Phase II and Mission Hills Extension). This delivery option would connect to the existing waterline approximately 875 feet west of the community of Santa Margarita. It would then extend an additional 1,300 feet west before extending 4,750 linear feet south-southwest. Pipelines would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. This delivery option would include the installation of water mains across undeveloped Ranch property and the construction of a new water tank on the west side of the Ranch.

Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair as needed. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the SWP facilities serving the Ranch.

Installation of water lines through undeveloped Ranch property could result in impacts related to grading and associated erosion, tree removal, and impacts to California annual grassland and emergent wetlands. Compliance with county grading and storm water ordinances would minimize impacts related to drainage and erosion. In addition, as noted under Agricultural Residential Cluster Subdivision Impact B-1,



no mitigation is required to address the loss of common habitat types, including California annual grassland.

Agricultural Residential Cluster Subdivision measures B-3(a) (Tree Identification), B-3(b) (Heritage Oak Tree Avoidance), B-3(c) (Oak Tree Protection and Mitigation and Monitoring Plan) and B-4(a) (Wetland and Riparian Protection) would apply to disturbance associated with this SWP delivery option. Since the precise location of water pipelines has not been determined, precise environmental impacts associated with such improvements would be too speculative to address at this time. Environmental impacts associated with implementation of this connection would be evaluated in a separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA).

- NWP Connection via Encina Avenue. This delivery option would connect to the Nacimiento waterline at the northern extent of Encina Avenue (as analyzed in the 2007 Addendum to the Final Environmental Impact Report for the Nacimiento Water Project) within the community of Santa Margarita. A pipeline would be constructed within the existing Encina Avenue right-of-way to the southern extent of the roadway at the Ranch boundary (as analyzed in the 2007 MND for the Santa Margarita Water System Project). Delivery of Nacimiento water would be achieved using one of two approaches: (1) the untreated Nacimiento water delivered to the Ranch would be used for agriculture, and the offset of groundwater otherwise extracted for agriculture would be used for the Agricultural Residential Cluster Subdivision development; or (2) the untreated Nacimiento water delivered to the Ranch would be treated on-site and used for the Agricultural Residential Cluster Subdivision.

It should be noted that both of the above options could result in policy inconsistencies. For example, Policy 11 in the County's Agriculture and Open Space Element (AGP11, Agricultural Water Supplies) states that groundwater should be maintained for agricultural use. Importing water for agricultural purposes and using the offset groundwater for residential purposes (as in approach 1) would be potentially inconsistent with this policy. In contrast, the County's Framework for Planning (Inland) includes the goal of maintaining "a distinction between urban and rural development by providing for rural uses outside of urban and village areas..." The objective of this goal is to restrict urban services from being provided outside urban or village reserve areas. Importing water and constructing a treatment facility outside of an urban reserve line (as in approach 2) would be potentially inconsistent with this policy, because the proposed Agricultural Residential Cluster Subdivision site is located approximately five miles from the City of Atascadero's Urban Reserve Line.

The pipeline connecting to the Nacimiento waterline would be contained within the Encina Avenue right-of-way through the community of Santa Margarita Ranch, while the pipeline between the community and the existing Ranch irrigation system would be located within existing Ranch roadways for a maximum of 1,600 feet. Pipelines on the Ranch property would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. Disturbance would be contained within existing right-of-ways and would therefore be minimal. Installation of water lines would not occur through undisturbed Ranch property.



Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair, if needed, between mid-December and mid-January each year. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the NWP facilities serving the Ranch.

- **NWP Connection via Yerba Buena Avenue.** This delivery option would connect to the Nacimiento waterline at the intersection of Yerba Buena Avenue and El Camino Real (as analyzed in the 2007 Addendum to the Final Environmental Impact Report for the Nacimiento Water Project) within the community of Santa Margarita. A pipeline would be constructed within existing right-of-ways to the southern extent of the community at the Ranch boundary. Delivery of Nacimiento water would be achieved using one of two approaches: (1) the untreated Nacimiento water delivered to the Ranch would be used for agriculture, and the offset of groundwater otherwise extracted for agriculture would be used for the Agricultural Residential Cluster Subdivision development; or (2) the untreated Nacimiento water delivered to the Ranch would be treated on-site and used for the Agricultural Residential Cluster Subdivision. Refer to *NWP Connection via Encina Avenue* above for a discussion of potential policy inconsistencies related to these approaches.

Within the community of Santa Margarita, disturbance would be contained within existing right-of-ways. Pipeline between the community and the existing Ranch irrigation system would be located within existing Ranch roadways. Pipelines on the Ranch property would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. Disturbance would be contained within existing right-of-ways and would therefore be minimal.

Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair, if needed, between mid-December and mid-January each year. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the NWP facilities serving the Ranch.

Installation of water lines through portions of the remainder parcel and potential development of a water treatment facility could result in impacts related to grading and associated erosion, tree removal, and impacts to California annual grassland and emergent wetlands. Compliance with county grading and storm water ordinances would minimize impacts related to drainage and erosion. In addition, as noted under Agricultural Residential Cluster Subdivision Impact B-1, no mitigation is required to address the loss of common habitat types, including California annual grassland.

Agricultural Residential Cluster Subdivision measures B-3(a) (Tree Identification), B-3(b) (Heritage Oak Tree Avoidance), B-3(c) (Oak Tree Protection and Mitigation and Monitoring Plan) and B-4(a) (Wetland and Riparian Protection) would apply to this NWP delivery option. Since the precise location of water pipelines has not been determined, precise environmental impacts associated with such improvements would be too speculative to address at this time. Environmental impacts associated with



implementation of this connection would be evaluated in a separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA).

- **NWP Connection via El Camino Real.** This delivery option would connect to the Nacimiento waterline along El Camino Real (as analyzed in the 2007 Addendum to the Final Environmental Impact Report for the Nacimiento Water Project) just west of the community of Santa Margarita. A pipeline would be constructed to extend south through ranch property for approximately 500 feet. It would then extend south-southwest for approximately 4,750 linear feet. Pipelines on the Ranch property would be approximately 4 inches in diameter and would require an approximate 8 foot wide trench during construction. This delivery option would include the installation of water mains across undeveloped Ranch property and the construction of a new water tank on the west side of the Ranch (as analyzed in the 2007 MND for the Santa Margarita Water System Project). Delivery of Nacimiento water would be achieved using one of two approaches: (1) the untreated Nacimiento water delivered to the Ranch would be used for agriculture, and the offset of groundwater otherwise extracted for agriculture would be used for the Agricultural Residential Cluster Subdivision development; or (2) the untreated Nacimiento water delivered to the Ranch would be treated on-site and used for the Agricultural Residential Cluster Subdivision. Refer to *NWP Connection via Encina Avenue* above for a discussion of potential policy inconsistencies related to these approaches.

Maintenance would consist of turnout flow meter calibration, occurring approximately once every one to two years, and electromechanical work at pump stations and/or leak repair, if needed, between mid-December and mid-January each year. Ranch owners would be responsible for the construction, operation and maintenance of any service connection to the NWP facilities serving the Ranch.

Installation of water lines through undeveloped Ranch property and potential development of a water treatment facility could result in impacts related to grading and associated erosion, tree removal, and impacts to California annual grassland and emergent wetlands. Compliance with county grading and storm water ordinances would minimize impacts related to drainage and erosion. In addition, as noted under Agricultural Residential Cluster Subdivision Impact B-1, no mitigation is required to address the loss of common habitat types, including California annual grassland.

Agricultural Residential Cluster Subdivision measures B-3(a) (Tree Identification), B-3(b) (Heritage Oak Tree Avoidance), B-3(c) (Oak Tree Protection and Mitigation and Monitoring Plan) and B-4(a) (Wetland and Riparian Protection) would apply to this NWP delivery option. Since the precise location of water pipelines has not been determined, precise environmental impacts associated with such improvements would be too speculative to address at this time. Environmental impacts associated with implementation of this connection would be evaluated in a separate environmental documentation prepared pursuant to the California Environmental Quality Act (CEQA).



**Agricultural Residential Cluster Subdivision Impact W-2**      **Agricultural Residential Cluster Subdivision soils provide sufficient percolation to support effluent disposal fields. However, percolation tests have not been completed for all proposed lots. Improper disposal field design could result in health hazards or potential ground and surface water contamination. Therefore, the Agricultural Residential Cluster Subdivision would result in Class II, significant but mitigable impacts related to wastewater disposal.**

The Agricultural Residential Cluster Subdivision involves the use of septic systems, as the site is remotely located a sufficient distance from sanitary sewer service facilities to preclude connections to such facilities. Percolation testing was conducted by Buena Geotechnical Services (October 23, 2003) to evaluate the general native soil materials for the suitability of installing individual wastewater disposal fields. Percolation testing was performed in conformance with the methods provided in the Uniform Plumbing Code (UPC) and per the requirements of the State of California, Regional Water Quality Control Board (RWQCB) Central Coast Region (Basin Plan) standards. The average time for the water level to drop one inch ranged from 15 to 60 minutes, with an average of 33 minutes. A total of 26 borings were performed around the property to determine whether septic tank and leachfield disposal systems would be appropriate for the Agricultural Residential Cluster Subdivision. The Buena Geotechnical Services study was a general characterization of site suitability of leachfields, and borings were not collected in sufficient quantities to indicate whether each lot has an appropriate area for a septic tank and leachfield. The study indicated that on-site soils generally provide sufficient percolation for leachfields. However, San Luis Obispo County typically requires a minimum of 3 percolation tests per leachfield, an exploratory boring to 10 feet below the drain field bottom, and a site plan prior to approving a leachfield for construction. A minimum of 336 borings (for 112 residences) would be required to confirm whether each lot has an acceptable leachfield site.

As proposed, the Agricultural Residential Cluster Subdivision does not violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems. However, the generalized percolation test, borings, and leachfield siting study performed by thus far are not sufficient for assessing the capacity of each individual leachfield. In addition, plans have not been submitted which show an acceptable location (appropriate setbacks, slope, and siting) for each leachfield. Improper placement and design of wastewater systems could result in contamination of ground or surface waters, and/or other health hazards. This would be a potentially significant impact unless mitigation is incorporated.

Mitigation Measures. The following mitigation measures are required to reduce impacts related to wastewater disposal:

**Agricultural Residential Cluster Subdivision W-2(a)**      **Septic Tank Maintenance Plan and Monitoring.** The applicant shall prepare a Septic Tank Maintenance Plan. The Plan shall require a minimum tank cleaning frequency of once every ~~two~~ **five** years, delineate proposed groundwater monitoring locations (up gradient and down gradient of the proposed Agricultural Residential Cluster Subdivision), and recommended frequency of collection and analysis. The applicant shall install groundwater



monitoring wells, which shall be sited and designed by a qualified hydrogeologist. At a minimum, three groundwater monitoring wells shall be located up gradient of the Agricultural Residential Cluster Subdivision and three shall be located downgradient.

**Plan Requirements and Timing.** The Septic Tank Maintenance Plan shall be submitted to Planning and Public Works Departments **and to the RWQCB** for review and approval. Groundwater monitoring results shall be submitted to Public Works Department **and to the RWQCB** for review. At a minimum, groundwater samples shall be taken on an annual basis and shall include an analysis of TDS, chlorides, nitrate, nitrite, total nitrogen, ammonia, sodium, and sulfate by a certified laboratory. Sampling and analysis costs shall be paid by the applicant. ~~Installation of monitoring wells shall be ensured through a bond or performance security provided by the applicant.~~ If a statistically significant increase is observed in any of the above parameters, the applicant shall be responsible for developing a Wastewater Collection, Treatment, and Disposal Master Plan. The constituents of concern and threshold limits shall be determined by the county. Monitoring wells shall be installed prior to clearance for occupancy. ~~An entity comprised of individual Agricultural Residential Cluster Subdivision homeowners~~ **County Public Works and RWQCB staff** shall specify long-term septic tank maintenance and groundwater monitoring requirements, **including components of work and schedule for completion. Requirements shall be included in the Home Owner's Association Codes, Covenants, and Restrictions (CC&Rs).** **Monitoring.** Public Works shall site inspect for installation of monitoring wells. Public Works review is required for monitoring well installation, and Planning Department review is required for release of the performance security. Public Works staff shall review regular groundwater monitoring reports (as specified in the Plan) and determine, **in consultation with the RWQCB and County Planning staff,** whether a Wastewater Collection, Treatment and Disposal Master Plan is required.

**Agricultural Residential Cluster Subdivision W-2(b)**

**Septic Tank and Leachfield Site Plans.** The applicant shall develop and submit septic tank and leachfield site plans for each proposed lot, as well as percolation tests and borings in accordance with County leachfield design/construction requirements. The applicant shall demonstrate sufficient leachfield percolation for each proposed residential unit and lot, in accordance with County standards.

**Plan Requirements and Timing.** The applicant shall submit



septic tank and leachfield site plans to Planning and Building with Development Permit Application. **Monitoring.** County Environmental Health and Building Department staff shall review plans prior to issuance of a development permit.

Residual Impacts. With implementation of the above measures, impacts related to wastewater disposal would be less than significant.

**Agricultural Residential Cluster Subdivision Impact W-3**      **Wastewater discharge systems can degrade groundwater quality if wastes are put into the discharge systems that are harmful to groundwater quality. Impacts are Class II, significant but mitigable.**

Groundwater in California often has a high mineral content, a condition commonly referred to as “hard water.” Residents typically offset the hardness through the use of a water softener. Water softeners utilize sodium or potassium salt brines, which are eventually discharged into the wastewater disposal system. The addition of these brines into a septic field can be harmful to groundwater quality (refer to Appendix H). In addition, residents could put chemicals, paints, solvents, pesticides, herbicides, or other household hazardous wastes into the drains, which would degrade the water quality in their septic systems. Because of adverse effects associated with on-site softening of hard water, impacts resulting from the on-site recharge of water softeners, and potential wastes being put down the drains, impacts are potentially significant. Refer to Section 4.5, *Drainage, Erosion and Sedimentation*, for a discussion of additional water quality impacts.

Mitigation Measures. The following mitigation measures are recommended to prevent the potential adverse impact to groundwater through the on-site use of water softeners:

**Agricultural Residential Cluster Subdivision W-3(a)**      **Water Softeners.** Agricultural Residential Cluster Subdivision residents shall be prohibited from installing water softeners which require on-site regeneration or are self-regenerating. Off-site regenerated water softeners shall be allowed if they are regenerated outside the Agricultural Residential Cluster Subdivision site.

**Plan Requirements and Timing.** Water softeners shall be shown on plans submitted to Planning and Building for review and approval prior to issuance of building permits, as applicable. **The prohibition of on-site or self-regenerating water softeners shall be included in Covenants, Conditions and Restrictions (CC&Rs), and monitored by a Homeowners Association (or similar entity) with oversight by County Planning and Building. Monitoring.** Planning and Building shall review site plans for compliance prior to issuance of building permits. County inspector shall inspect site for installation of self-regenerating water softeners prior to occupancy of the structures.



**Agricultural Residential  
Cluster Subdivision  
W-3(b)**

**Pollutant Input Minimization.** ~~Upon the transfer of real property and execution of leases, the transferor will be required to deliver to the prospective transferee~~ **the Santa Margarita Ranch Mutual Water Company shall annually include** a written statement **with resident water bills** that describes methods to prevent degradation of water quality in septic systems. The flyer shall state that chemicals, paints, solvents, pesticides, herbicides, or other household hazardous wastes shall not enter drains.

**Plan Requirements and Timing.** The applicant shall coordinate with the Environmental Health Division on any new regulations or education information on avoiding adverse impacts to the quality of effluent entering septic systems. The written statements shall be provided to all future residents and occupants ~~by the transferor upon the transfer of real property and execution of leases~~ **annually by the Santa Margarita Ranch Mutual Water Company via inclusion with water bill statements.** **Monitoring.** Planning and Building shall review the statements annually to ensure preventative methods are described.

Residual Impacts. With implementation of the above measures, impacts related to water quality from septic systems would be less than significant.

**Agricultural Residential  
Cluster Subdivision  
Impact W-4**

**Implementation of the Agricultural Residential Cluster Subdivision would result in septage load that cannot be managed by existing local facilities. This will result in Class III, less than significant impacts.**

Septage is material that has been removed, typically pumped, from a treatment tank or waste holding tank and hauled to another location for final disposition or additional treatment. Each 1,200-gallon septic tank would be required to be pumped approximately once every five years. As a result, approximately 27,000 gallons of septage per year would be hauled from the proposed Agricultural Residential Cluster Subdivision.

The closest septage receiving station to the Agricultural Residential Cluster Subdivision is the Santa Maria Wastewater Treatment Facility, located in Santa Maria, approximately 40 miles south of the community of Santa Margarita. This facility is currently at capacity [*Survey of Septage, Treatment, Handling, and Disposal Practices in California* (California Wastewater Training and Research Center at CSU-Chico, 2002)]. Although an expansion of the treatment facility is planned, septage loads would need to be hauled to other, more distant facilities in the interim. The hauling and disposal of septage is required to comply with County health and water quality standards, as well as State and federal regulations. Compliance with these standards and regulations would ensure less than significant impacts.

Mitigation Measures. No mitigation measures are required.

Residual Impacts. Impacts would be less than significant.



**c. Future Development Program Impacts and Mitigation Measures.** The Future Development Program represents potential future buildout of the Santa Margarita Ranch, including the proposed Agricultural Residential Cluster Subdivision. Refer to Section 4.14.2(b) for a discussion of water and wastewater impacts resulting from the Agricultural Residential Cluster Subdivision independently.

**Future Development Program Impact W-1**      **The Future Development Program would increase the use of water from area aquifer units, including the Paso Robles and Santa Margarita Formations, by 926 acre-feet per year (afy). This net consumptive use may contribute to overdraft of the aquifer system. Groundwater use associated with the Future Development Program is a Class I, significant and unavoidable, impact.**

The Future Development Program includes the Agricultural Residential Cluster Subdivision, the balance of the 550 single-family residential units allowable pursuant to the Salinas River Area Plan (402 residences) and the additional following uses: private golf course, club house and pro shop; guest ranch, lodge, and restaurant; 12-room bed and breakfast; cafe; amphitheater; crafts studios, galleries and shops; interpretive center and gift shops; nine wineries with tasting rooms and permitted special events; neighborhood park and swimming pool; five ranch/farm headquarters; one livestock sales yard and café; three places of worship; and a retreat center. Table 4.14-2 outlines the anticipated water demand from each of these facilities.

**Table 4.14-2. Future Development Program Water Demands**

Land Use	Land Use Characteristics	Water Use Factor (acre-feet/unit)	Annual Water Demand (acre-feet)
Agricultural Residential Cluster Subdivision	112 residential lots	1.44/lot	161.28
Remainder of the 550 residential units allowable under the Salinas River Area Plan (excluding Margarita Farms and Agricultural Residential Cluster Subdivision)	402 residential lots	1.44/lot	578.8
Guest ranch, lodge, and restaurant	150 to 250 units, 40 tables/200 patrons, 100 acres	0.15/room	37.5
Restaurant	40 tables/ 200 patrons	0.022/seat	4.4
Bed and breakfast	12 rooms	0.15/room	1.8
Private golf course, club house, shop	27 to 36 holes / 220 to 280 acres	2 afy/acre	560
Café	20 tables/ 100 patrons	0.022/seat	2.2
Amphitheater	200 to 600 seats	0.022/seat	13.2
Craft studios, galleries, and shops	6,000 square feet	0.11/1000 sf	0.66
Interpretive center and gift shops	3,000 square feet	0.11/1000 sf	0.33
Nine wineries, tasting rooms, and special events	8 @ 20,000 to 40,000 square feet each, 1 @ 80,000 square feet / 42 events per year per facility	0.17/1,000 sf	68



**Table 4.14-2. Future Development Program Water Demands**

Land Use	Land Use Characteristics	Water Use Factor (acre-feet/unit)	Annual Water Demand (acre-feet)
Five ranch/farm headquarters	2.5 acres each	1.44/lot	7.2
Livestock sales yard and café	20 acres / one Saturday per month / 75 patrons	0.022/seat	1.65
Horse ranch	30 (+) horses	0.1/horse	3
Three places of worship	2,000 to 5,000 square feet each	0.17/1,000 sf	2.55
Oakenshaw Retreat Center	16 to 24 units on 30 acres with lodge and residence	0.15/room	3.6
Neighborhood parkland and swimming pool	5 acres east of Santa Margarita Community	2 afy/acre	10
Dedication of land for expansion of cemetery	5 acres	2 afy/acre	10
<b>Future Development Program Water Use Total</b>			<b>1,466.17</b>

Approximately 40 percent of rural residential water use and 32 percent of agricultural water use results in groundwater recharge, thereby returning to the local aquifer system [refer to Section 4.14.1(a) *Consumptive Use*]. Although the Future Development Program would demand an estimated 1,305 afy (subsequent to the Agricultural Residential Cluster Subdivision), approximately 475 afy would return to groundwater as recharge. Therefore, net consumptive use for Future Development Program residential and commercial development would be approximately 830 afy. When added to the estimated Agricultural Residential Cluster Subdivision consumptive demand (96 afy), this amounts to 926 afy. The magnitude of this additional demand is a 215 percent increase in groundwater production over the existing Ranch consumptive demand (431 afy).

As described under Agricultural Residential Cluster Subdivision Impact W-1, data are not available to conclude whether this increase in demand would result in aquifer system overdraft. Available data indicate that the long-term capability of the aquifer system may be insufficient to provide adequate quantities of water for the Future Development Program.

In addition, if groundwater is produced within or adjacent to the northern portion of the Ranch, impacts would be significant. The increased groundwater demand in this area would decrease the amount of groundwater available to existing wells that draw from this shallow alluvial aquifer and supply CSA 23 and Garden Farms, as the Atascadero sub-basin which supplies water to the Atascadero Mutual Water Company (AMWC). This would be considered a potential long-term water supply availability impact.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures W-1(a) (Groundwater and Surface Water Monitoring Programs), W-1(b) (Water Conservation Measures), and W-1(c) (Imported Water Supply) would apply to all Future Development Program land uses. Water supply would need to be acquired prior to issuance of grading permits for individual Future Development Program land use components, and would be coordinated through the required Specific Plan. The Specific Plan will also be required to include a comprehensive water supply analysis pursuant to California Senate Bill (SB) 610 [Water Code §10910(g)(3), Water Supply Assessments] and California Senate Bill (SB) 221



[Government Code §66473.7(b)(2), Written Verifications of Water Supply]. The following additional mitigation measure is required.

**Future Development Program W-1(a)**

**Reclaimed Water.** Reclaimed water from the envisioned Future Development Program municipally operated sanitary sewer and treatment plant shall, to the extent feasible, be collected and applied for irrigation or turf/landscape areas, including the envisioned golf course [refer to Future Development Program measure W-2(b) (Wastewater Master Plan) for specifics concerning implementation of the wastewater treatment facility]. A qualified professional shall prepare a reclaimed water use plan that outlines the preferred locations of landscaping for such irrigation, with an evaluation of the expense and maintenance hours required for operating and monitoring the irrigation facilities, subject to County approval. The plan shall also evaluate the feasibility of recharging groundwater with treated effluent, including the identification of recharge sites, and analysis of the assimilative capacity of the groundwater for constituents of concern. **Water Reclamation Requirements will be required for all recycled water uses.**

**Plan Requirements and Timing.** A reclaimed water use plan shall be prepared in accordance with County Health Department standards and included in the Specific Plan (or within individual plans, as applicable) for review prior to approval. **Monitoring.** Health Department shall review the reclaimed water use plan and Public Works shall site inspect to ensure development is in accordance with approved plans prior to occupancy clearance.

Residual Impacts. Implementation of the required measures would reduce the overall water system demand. However, additional water supply would still be required. Additional water may be available for the Future Development Program land uses through the State Water Project and/or the Nacimiento Water Project, as outlined in Agricultural Residential Cluster Subdivision measure W-1(c) (Imported Water Supply). However, due to uncertainty regarding timing and availability of these sources, additional water supply cannot be assured at this time. Impacts would remain significant and unavoidable. **Refer to the *Residual Impacts* discussion under Agricultural Residential Cluster Subdivision W-1, which also applies to the Future Development Program.**

**Future Development Program Impact W-2**

**Since the capacity, features, location and timing of the potential future sewage treatment facility envisioned for dedication have not yet been determined, individual future developments could require the use of septic systems prior to treatment plant implementation. Percolation tests have not been completed for any Future Development Program land uses. Therefore, it is not known if area soils would provide sufficient percolation to support effluent disposal fields. Improper disposal field design could result in health hazards**



**or potential ground and surface water contamination. Therefore, the Future Development Program would result in Class II, significant but mitigable impacts related to wastewater disposal.**

The Future Development Program includes the dedication of land for a potential future sewage treatment facility of up to ten (10) acres. The capacity, features, location and timing of this potential future sewage treatment facility have not yet been determined. Therefore, individual development Future Development Program land uses may proceed in advance of implementation of the treatment facility, and would therefore require septic systems. Although percolation testing was conducted for the Agricultural Residential Cluster Subdivision (refer to Agricultural Residential Cluster Subdivision Impact W-2), no testing has been performed for subsequent Future Development Program components. Improper placement and design of wastewater systems could result in contamination of ground or surface waters and/or other health hazards. This would be a potentially significant impact unless mitigation is incorporated.

Mitigation Measures. Agricultural Residential Cluster Subdivision measure W-2(a) (Septic Tank Maintenance Plan) and W-2(b) (Septic Tank and Leachfield Site Plans) would apply to all Future Development Program land uses constructed prior to implementation of a Wastewater Treatment Plant. The following additional mitigation measures are required to reduce impacts related to wastewater disposal:

**Future Development Program W-2(a)**

**Groundwater Characterization Study.** As part of the Specific Plan for future development on the property (or within individual development plans as applicable), a characterization of existing groundwater and estimate of assimilative capacity of groundwater underneath each Future Development Program development area (or individual septic field locations, as applicable) shall be performed. Characterization would be required prior to any future development projects on the Ranch property subsequent the Agricultural Residential Cluster Subdivision. The Characterization Study shall analyze long-term hydraulic disposal capacity, subsurface soil profiles, groundwater lateral hydraulic gradient and mounding potential, and assimilative capacity of the site(s) for water quality constituents of concern.

**Plan Requirements and Timing.** The groundwater characterization study shall be included in the Specific Plan (or within individual plans, as applicable) for review by Planning and Building prior to approval. **Monitoring.** County Environmental Health and Planning and Building staff shall review the Plan prior to adoption of the Specific Plan (or issuance of a development permit, as applicable).

**Future Development Program W-2(b)**

**Wastewater Master Plan.** Implementation of the wastewater treatment facility should proceed in advance of the first Future



Development Program subdivision proposed subsequent to the Agricultural Residential Cluster Subdivision. A Community Wastewater Collection, Treatment, and Disposal Facility Master Plan shall be created as part of the required Specific Plan for future development subsequent to the Agricultural Residential Cluster Subdivision. The Plan shall be completed after the groundwater characterization study and shall address alternative sites for treatment facilities, process alternatives, and disposal/reuse options for buildout of the property as well as provisions to serve the existing community of Santa Margarita. The Plan shall present a phased implementation strategy to address project-by-project impacts as the Future Development Program is implemented. Objectives shall be developed by the County and Regional Water Quality Control Board prior to acceptance or approval of the Plan. A regional or decentralized wastewater treatment system designed to County and Regional Water Quality Control Board requirements shall be implemented. The Wastewater Master Plan shall specify and require maintenance and best management practices for operation. The Master Plan shall also investigate the feasibility of irrigating Future Development Program landscaping and recharging groundwater with treated effluent from the wastewater treatment facility.

**Plan Requirements and Timing.** The Community Wastewater Collection, Treatment, and Disposal Facility Master Plan shall be submitted for review and approval by Planning and Building prior to adoption of the Specific Plan subsequent to the Agricultural Residential Cluster Subdivision. All components of the Plan shall be implemented prior to issuance of any occupancy permits subsequent to the Agricultural Residential Cluster Subdivision. **Monitoring.** Planning and Building shall review the Plan prior to issuance of grading permits for Future Development Program land uses subsequent to the Agricultural Residential Cluster Subdivision. Planning and Building shall ensure compliance with requirements set forth in the Plan.

Residual Impacts. With implementation of the above measures, impacts related to wastewater disposal would be less than significant.

**Future Development  
Program Impact W-3**

**Wastewater discharge systems can degrade groundwater quality if wastes are put into the discharge systems that are harmful to groundwater quality. Impacts are Class II, significant but mitigable.**

Groundwater in California often has a high mineral content, a condition commonly referred to as “hard water.” Residents typically offset the hardness through the use of a water softener. Water softeners utilize sodium or potassium salt brines, which are eventually discharged into



the wastewater disposal system. The addition of these brines into a septic field can be harmful to groundwater quality (refer to Appendix H). In addition, residents could put chemicals, paints, solvents, pesticides, herbicides, or other household hazardous wastes into the drains, which would degrade the water quality in their septic systems. Because of adverse effects associated with on-site softening of hard water, impacts resulting from the on-site recharge of water softeners, and potential wastes being put down the drains, impacts are potentially significant.

Mitigation Measures. Agricultural Residential Cluster Subdivision measures W-3(a) (Water Softeners) and W-3(b) (Pollutant Input Minimization) would apply to all Future Development Program land uses. No additional mitigation is necessary.

Residual Impacts. With implementation of the required measures, impacts related to water quality would be less than significant.

**Future Development Program Impact W-4**      **Buildout of the Future Development Program would result in septage load that cannot be managed by local facilities. This would result in Class III, *less than significant* impacts.**

Because the Future Development Program would involve the use of septic systems, septage would have to be hauled from Future Development Program land uses to the nearest septage receiving station (Santa Maria Wastewater Treatment Facility). This facility is currently at capacity. Therefore, septage loads would need to be hauled to other, more distant facilities. Refer to the discussion under Agricultural Residential Cluster Subdivision Impact W-4. Compliance with County health and water quality standards and regulations would ensure less than significant impacts.

Mitigation Measures. No mitigation measures are required.

Residual Impacts. Impacts would be less than significant.

**Future Development Program Impact W-5**      **The Future Development Program envisions nine wineries located throughout the Ranch property. Winery wastewater contains fermentation waste products, cleaning chemicals, and raw source water constituents. Improperly designed irrigation systems and leach fields could potentially backflow and contaminate groundwater. This is a Class II, *significant but mitigable* impact.**

Each of the nine wineries envisioned in the Future Development Program includes a 5-acre processing facility with on-site tasting room, gift shops, and a bed and breakfast. The existing Margarita (Cuesta Ridge) Vineyard currently produces approximately 350,000 cases of wine annually. At buildout of the Future Development Program (the addition of nine wineries), total production is estimated at approximately 1 million cases annually.

Winery wastewater would be generated by a number of activities such as barrel tank washing, crush operations, bottling and general cleaning. Winery wastewater consists of fermentation waste products (including tannins, lignins, volatile acids, and yeasts), cleaning chemicals



(caustic sodas and disinfectants), and raw source water constituents. Each winery is estimated to generate approximately 18 gallons of wastewater per case produced. During peak crush periods, this would result in approximately 49,315 gallons per day (gpd) of wastewater flow. This effluent would likely be discharged to on-site leachfields. **Although all discharges from the nine wineries would require Waste Discharge Requirements**, improperly designed irrigation systems and leach fields could potentially backflow and contaminate groundwater. This would be a potentially significant impact.

Mitigation Measures. Future Development Program measure W-2(b) (Wastewater Master Plan) would reduce winery wastewater-related impacts to a less than significant level. No further mitigation is required.

Residual Impacts. With implementation of the required measure, impacts related to winery wastewater would be less than significant.

**d. Cumulative Impacts.** The evaluation of the Future Development Program, which includes the Agricultural Residential Cluster Subdivision, in this EIR accounts for all of the expected growth in the Santa Margarita area, as it represents buildout of the major landholding that surrounds the existing community, consistent with the Salinas River Area Plan. Therefore, cumulative water and wastewater impacts from buildout of the Agricultural Residential Cluster Subdivision in combination with buildout of the Future Development Program were addressed in the Future Development Program impact analysis above. As future applications for individual Future Development Program projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through the required Specific Plan and associated environmental review, or through individual project-level environmental review, as applicable.

