ATTACHMENT C
AROMAS WATER DISTRICT

RESOLUTION 2012-02
ADOPTING A MITIGATED NEGATIVE DECLARATION
For Oak Ridge & Via Del Sol Annexation and
Sphere of Influence Amendment

WHEREAS, in accordance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines, an Initial Study was prepared for the Oak Ridge & Via Del Sol Annexation and Aromas Water District (AWD) Sphere of Influence Amendment, which did not identify significant impacts with implementation of mitigation measures, thus allowing for preparation of a Mitigated Negative Declaration; and

WHEREAS, a Mitigated Negative Declaration and Initial Study (MND/IS) (dated November 2011) were prepared for the Oak Ridge & Via Del Sol Annexation and Aromas Water District (AWD) Sphere of Influence Amendment; and

WHEREAS, the MND/IS was circulated for agency and public review and comment on November 15, 2011 for a 30-day period to December 14, 2011; and

WHEREAS, four comment letters and emails were received on the MND/IS; and

WHEREAS, a summary of comments and responses and revisions to the Initial Study was prepared, and are included as part of the MND/IS; and

WHEREAS, the MND/IS has been completed in compliance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq, the Guidelines for Implementation of the California Environmental Quality Act (14 Cal. Code Regs. Section 15000 et seq.) (the "State CEQA Guidelines") and local procedures adopted pursuant thereto; and

WHEREAS, the Board of Directors of the Aromas Water District considered the MND/IS, public comments, and responses at a meeting on January 24, 2012;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Aromas Water District that:

1. The Board of Directors has considered the Mitigated Negative Declaration together with the Initial Study, public comments, the Summary of Comments, and finds that the Mitigated Negative Declaration (dated November 8, 2011) and supporting documents reflects the lead agency's independent judgment and analysis.

2. The Board of Directors finds on the basis of the whole record before it (including the Initial Study as revised, comments received and responses) that there is no substantial evidence that the project will have a significant effect on the environment with implementation of mitigation measures.
RESOLUTION NO. 2012-02

3. The Board of Directors hereby adopts the Mitigated Negative Declaration for the Oak Ridge & Via Del Sol Annexation and Aromas Water District (AWD) Sphere of Influence Amendment, consistent with CEQA and State CEQA Guidelines.

4. The Board of Directors hereby adopts the Mitigation Monitoring and Reporting Program in accordance with CEQA and State CEQA Guidelines.

5. All environmental documents and other materials that constitute the record of proceedings upon which this decision is based, are located at the Aromas Water District, located at 387 Blohm Avenue, Aromas, CA 95004.

PASSED AND ADOPTED this 24th day of January 2012, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

[Signatures]
President of the Board
Secretary
MITIGATED NEGATIVE DECLARATION INITIAL STUDY

Aromas Water District

Sphere of Influence Amendment & Annexation of Oak Ridge & Via Del Sol Subdivisions

November 2011
AROMAS WATER DISTRICT
MITIGATED NEGATIVE DECLARATION
Sphere of Influence Amendment &
Annexation of Oak Ridge & Via Del Sol Subdivisions

The Aromas Water District has prepared this Mitigated Negative Declaration for the following described project:

**Project:** Aromas Water District Sphere of Influence Amendment & Annexation of Oak Ridge & Via Del Sol Subdivisions

**Project Location:** South of the unincorporated community of Aromas in northeastern Monterey County as shown on Figures 1, 2 and 3 on the attached Initial Study.

**Project Applicant:** Aromas Water District is the proponent and lead agency; the Local Agency Formation Commission (LAFCO) of Monterey County and Monterey County are responsible agencies.

**Project Description:** The purpose of the proposed project is to: a) annex the two existing developed subdivisions (Oak Ridge and Via Del Sol) to the Aromas Water District (AWD) in order to provide potable water supplies to existing residences that are experiencing water supply problems in northern Monterey County; and b) amend the AWD’s Sphere of Influence (SOI) boundary to include approximately 1,720 acres that are located between the AWD’s existing southern boundary and the proposed annexation areas, including the proposed annexation parcels. The proposed project consists of the following elements:

1) Sphere of Influence (SOI) amendment to add approximately 1,720 acres within the AWD’s SOI boundary within Monterey County.

2) Annexation of two existing subdivisions to the Aromas Water District and provision of domestic water service to approximately 72 existing homes; the annexation areas are within the proposed SOI amendment area.

3) Creation of an assessment district to finance improvements for the proposed annexation areas.

4) Construction of water system improvements to serve the proposed annexation areas, which includes extension of water lines and construction of accessory water system improvements. These components include approximately 12,000 linear feet of new water pipeline, a pump station, a 100,000 water storage tank, and service connections.

If the SOI amendment is approved, properties located within the amended SOI area (other than the proposed annexation areas) could apply to the LAFCO of Monterey County in the future for annexation to the AWD as a separate action. New development may or may not be proposed in conjunction with potential future annexation requests. Future annexation requests would be subject to environmental review pursuant to the California Environmental Quality Act (CEAQ). No annexation or development within the SOI amendment area is proposed at this time as part of the SOI amendment request by AWD.

**FINDINGS:** The Aromas Water District has reviewed the proposed project and has determined, based on the attached Initial Study, that the project will have a less-than-significant impact on the environment with implementation of mitigation measures. The Initial Study finds that potentially significant impacts related to biological resources and erosion/water quality as a result of
construction of the water system improvements can be reduced to less-than-significant levels with implementation of mitigation measures as described in the attached Initial Study.

MITIGATION MEASURES: The following mitigation measures will be incorporated into the project design or as conditions of approval, to ensure that any potential environmental impacts will not be significant.

MITIGATION MEASURE BIO-1. For the work area adjacent to the tributary creek at Oak Ridge Road and Dumbarton Road, the Aromas Water District shall hire a qualified biologist to conduct pre-construction surveys for coast range newt, California red-legged frog and western pond turtle. The survey should be conducted no more than 48 hours prior to onset of willow trimming and trenching. A biologist shall be on-site during construction to ensure no newts, frogs, or turtles are in the work area.

MITIGATION MEASURE BIO-2. The Aromas Water District shall implement riparian corridor protection measures to minimize impacts to downstream waters and resources located adjacent to the work area, including:

- Install plastic mesh fencing and silt fencing at the perimeter of the work area that abuts downstream waters and riparian corridor to prevent impacts to the adjacent riparian corridor and injury to nearby native trees (if present). The silt fences will also prevent movement of animals from the creek/riparian area into the work area, such that take of the species are avoided. Protective fencing shall be in place prior to ground disturbances and removed once all construction is complete. During construction, no grading, construction or other work shall occur outside the designated limits of work.
- No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored outside the designated limits of work.
- Work above and below existing creek culverts shall be implemented in a manner where no construction material enters the creeks and the existing culverts are not damaged. The water district shall confer with CDFG, RWQCB, and USACE on the need to obtain permits prior to work under or above the existing culverts.
- Prior to commencement of construction, implement standard erosion control measures to prevent construction materials from entering the downstream drainages. Utilize a native erosion control seed mix on disturbed areas following construction.

MITIGATION MEASURE BIO-3. During the grading for the water tank and trenching for the water line portions of the project that cross the grassland areas, the Aromas Water District shall hire a qualified biologist to monitor for presence of California tiger salamander. The biologist shall be on the site during construction in these areas to ensure no salamanders are in the work area. The silt fences (installed as stated in Mitigation Measure BIO-4) will also prevent movement of animals from adjacent areas into the work area, such that take of the species is avoided. No take of California tiger salamanders is allowed.

MITIGATION MEASURE BIO-4. Prior to grading and construction, the Aromas Water District shall designate the limits of construction work and equipment access and install protective fencing. Grassland adjacent to the work area shall be protected by placing plastic protection fencing (i.e., plastic construction mesh fencing with metal t-bars) at the limit of work. Protective fencing should be in place prior to any site grading or other disturbances. All grassland areas outside the limits of work shall be preserved. When all site construction is complete, the temporary fencing can be removed.

MITIGATION MEASURE BIO-5. Areas disturbed by construction shall be seeded with a native erosion control seed mix suitable to the project area. Plant species suitable for use include purple needlegrass (Nasseella pulchra) and California brome (Bromus carinatus).

MITIGATION MEASURE BIO-6. To avoid potential impacts to nesting migratory birds and raptors, schedule construction to avoid the nesting season to the extent feasible, which is typically from March 1 to August 1. If construction cannot be scheduled outside this area, a qualified biologist shall conduct surveys for nesting birds.
August 1. If construction cannot be scheduled outside this area, a qualified biologist shall conduct surveys for nesting birds no more than two weeks prior to onset of tree pruning and construction with heavy equipment. If nesting birds are observed within the project corridor, postpone construction along that portion of the project until the biologist confirms that all young have fledged from the nest. For most birds a 50 foot buffer zone is adequate to protect the nest; a raptor nest will require a 250 foot buffer.

MITIGATION MEASURE BIO-7. Prior to grading and construction, the Aromas Water District shall protect all oak trees that are within 20 feet of grading, trenching, and/or construction staging or access by placing plastic protection fencing (i.e., plastic construction mesh fencing with metal t-bars) at the limit of work. At the direction of a qualified arborist, fencing should be in place prior to any site grading or other disturbances. The final location and integrity of the fencing shall be inspected by a qualified arborist prior to any site construction. All areas outside the limits of work shall be preserved. When all site construction is complete, the temporary fencing can be removed.

MITIGATION MEASURE BIO-8. During ground excavation all roots greater that 2 inches in diameter should be hand-cut (instead of being cut by a mechanical trencher, grader, or excavator). Hand cutting of roots will minimize impacts to trees adjacent to construction. Limbing of tree limbs for access shall follow standards for pruning as per the International Society of Arboriculture (ISA), with any additional measures as identified by a qualified on-site arborist. A qualified arborist shall be on site to oversee all root cutting and limbing. Any additional protective tree measures as identified by the on-site arborist shall be implemented.

MITIGATION MEASURE WQ-1. In addition to erosion control measures identified in Mitigation Measures BIO-2 and BIO-5, include erosion control measures in the construction specifications for all water system improvements and implement during construction to include, but not be limited to, prohibiting construction activities, placement of spoils, and storage of materials and machinery adjacent to water bodies; prohibiting grading between November 1 and April 1; protecting disturbed areas during these times with appropriate erosion control measures; and immediately revegetating disturbed areas with appropriate native plant species that are compatible with surrounding vegetation.

By: Vicki Morris, General Manager
Aromas Water District

Date: 11/8/2011
I. BACKGROUND

1. **Project Title:** Oak Ridge & Via Del Sol Annexation and Sphere of Influence Amendment

2. **Lead Agency Name and Address:**
   Aromas Water District
   P.O. Box 388
   Aromas, CA 95004

3. **Contact Person and Phone Number:** Vicki Morris, General Manager, (831)-726-5071

4. **Project Location:** South of the community of Aromas in the unincorporated area of northeastern Monterey County (see Figure 1).
   - Water storage tank site: APN 141-081-011
   - Water Pipeline & Annexation Area: See Attachment A for APNs
   - Sphere of Influence Amendment: See Attachment A for APNs

5. **Project Applicant's/Sponsor's Name and Address:** Aromas Water District

6. **General Plan and Coastal Land Use Plan Designation:**
   - Annexation Area: Residential (Rural Density); Resource Conservation;
   - Sphere of Influence Amendment: Residential (Rural Density & Low Density); Resource Conservation; Agricultural Conservation; Permanent Grazing; Commercial

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1 All figures are located at the end of the Initial Study in Section VII.
7. **Zoning:**
   - Annexation Area: RDR [Rural Residential], RC [Resource Conservation]
   - Sphere of Influence Amendment Area: RDR [Rural Residential], LDR [Low Density Residential], RC [Resource Conservation, RG [Rural Grazing], F [Farmlands], AC [Ag Conservation]

II. **PROJECT DESCRIPTION and ENVIRONMENTAL SETTING**

A. **Project Description**

**Goals and Objectives.** The purpose of the proposed project is to:

- Annex the Oak Ridge and Via Del Sol subdivisions to the Aromas Water District (AWD) in order to provide potable water supplies to existing residences that are experiencing water supply problems in northern Monterey County; and
- Amend the AWD’s Sphere of Influence (SOI) boundary to include approximately 1,720 acres that are located between the AWD’s existing southern boundary and the proposed annexation areas, including the proposed annexation parcels.

Figure 2 shows the existing AWD service area and existing SOI as well as the proposed annexation and SOI amendment areas; Figure 3 provides a close-up of the project areas. Further details of the project purpose are presented below.

**PROPOSED ANNEXATION.** The proposed annexation area is partially served by the Oak Ridge Mutual Water Company (ORMWC), small shared water systems and individual residential wells. The ORMWC, a small rural mutual water company that serves residences in the Dunbarton Drive area of Aromas and portions of the Oak Ridge subdivision, has experienced insufficient water supplies over the years, requiring some residents to have water delivered by tanker truck. The Via Del Sol Drive area has also suffered from water supply sufficiency problems. This area has seven small shared water systems typically serving two or three homes with the remaining homes having individual water systems. Due to inadequate supply and/or poor water quality, many of the residents in this area have had water delivered via tanker truck. The proposed annexation would result in the provision of domestic water service to these areas by the Aromas Water District via an extension of existing water lines and construction of a new water storage tank. Formation of an assessment district is proposed to finance the improvements; state and/or federal grant funding may also be available.

**PROPOSED SPHERE OF INFLUENCE AMENDMENT.** The proposed annexation area is located approximately one mile south of the existing AWD boundaries and less than one mile south of an existing AWD water transmission main. The proposed annexation would create a service area “island” that is not contiguous to existing AWD boundaries. The Water District is proposing that its Sphere of Influence be amended to include the proposed annexation areas and intervening area, as well as another area east of the project area that is within the AWD...
boundaries, but also is not contiguous with the AWD service area. The amendment would join existing areas within the AWD and its existing Sphere of Influence that are not contiguous.

Project Location. The proposed project area is located in northeastern Monterey County (see Figure 1). The project area is located approximately 7.5 miles southeast of the city of Watsonville (in Santa Cruz County), approximately 2.5 miles south of the unincorporated community of Aromas, 2.6 miles north of the unincorporated community of Prunedale and approximately 4.5 miles east of the unincorporated area of Las Lomas.

The proposed annexation areas are generally located west of Dunbarton Road and Highway 101 and north of Echo Valley Road as shown on Figure 3. The existing Oak Ridge Subdivision (35 lots) is located along Oak Ridge Drive off of Dunbarton Road. The existing Via Del Sol subdivision (28 lots) is located along Via Del Sol Road off of Echo Valley Road. Figure 2 shows the location of the Oak Ridge and Via Del Sol areas proposed for annexation in relation to the AWD boundaries.

The proposed Sphere of Influence amendment area extends south from the existing AWD boundaries from approximately Carpenteria Road. The area is generally bounded by the existing AWD boundaries on the north, the Monterey-San Benito County line on the east, and unincorporated rural lands on the south and west. Figure 3 shows the proposed SOI amendment area, which includes the proposed annexation areas.

Proposed Project Elements. The proposed project consists of the following elements:

1) Sphere of Influence (SOI) amendment to add approximately 1,720 acres within the AWD’s SOI boundary within Monterey County.

2) Annexation of two existing subdivisions to the Aromas Water District and provision of domestic water service to these areas; the annexation areas are within the proposed SOI amendment area.

3) Creation of an assessment district to finance improvements for the proposed annexation areas.

4) Construction of water system improvements to serve the proposed annexation areas.

Each project component is further described below.

Sphere of Influence Amendment. The proposed project includes amendment of the AWD’s adopted Sphere of Influence within Monterey County to include 243 parcels that cover approximately 1,720 acres, including the proposed annexation areas, as shown on Figure 3. Of the total parcels, 207 parcels have at least one existing homes, 26 are not developed, and 10 lots are small well or utility lots. The proposed annexation accounts for 80 lots, and 163 lots are located outside of the proposed annexation areas.

A Sphere of Influence is the probable physical boundaries and service area of a local government that is developed by LAFCOs (Local Agency Formation Commission) in each county pursuant to State law. As indicated above, the AWD is proposing that its Sphere of Influence be amended to include the proposed annexation areas and intervening area, and the amended sphere would connect to an existing discontiguous area within AWD’s existing SOI.
and service area. Pursuant to state law, the Local Agency Formation Commission (LAFCO) of Monterey County is responsible for reviewing and approving proposed jurisdictional boundary changes, including annexations and sphere of influence lines and amendments. LAFCO actions are outlined below under subsection II.C.

The proposed SOI amendment will result in inclusion of additional lands within the Aromas Water District’s Sphere of Influence, which could result in future annexation and potential new development proposals. However, no annexation or development is proposed at this time as part of the proposed SOI amendment. If the SOI amendment is approved, the properties located within the area could apply for annexation to the AWD and potential development proposals. Most of the area is developed or designated for low density residential uses with some limited areas designated resource conservation and agriculture. Existing residentially-designated properties would be limited to one single-family residence on a lot of record (Policy NC-1.5). The resource conservation and agricultural designations generally require larger parcel sizes that would limit future densities and intensity of land uses. Furthermore, any development that may be proposed in the future would be subject to review and permit approvals from Monterey County at which time the appropriate level of environmental review would be conducted.

No development is proposed in the SOI area as part of the proposed project. If the SOI amendment is approved, the properties located within the area could apply for annexation to the AWD, which would require review and approval by the LAFCO of Monterey County. Most of the area is developed or designated for low density residential uses with some limited areas designated Resource Conservation and other agricultural and grazing designations. Development is limited to one single-family residence per lot of record pursuant to the Monterey County General Plan. Any development that may be proposed in the future would be subject to land use permit approvals from Monterey County as further discussed below.

Annexation and Provision of Water Service. The primary project element consists of annexation of up to 80 existing lots (approximately 370 acres) to the Aromas Water District that are located within the existing Oak Ridge and Via Del Sol subdivisions. There are 41 existing developed lots within the Oak Ridge subdivision, and there are four small lots that appear to be well or utility lots. The 41 lots include seven developed lots adjacent to the Oak Ridge Subdivision to the north that are considered for potential annexation due to proximity to the planned water system improvements. There are 31 existing developed lots in the Via Del Sol Subdivision and four small lots that appear to be well or utility lots. Thus, the annexation area includes a total of 80 lots. Attachment A includes a list of the Assessor’s Parcel Numbers (APNs) for the lots proposed for annexation.

The Oak Ridge Mutual Water Company (ORMWC) currently has insufficient water supplies to support the subdivision due to declining well production from when the subdivisions were approved in 1976 (see subsection 17d below for further discussion). By 1979, the Monterey Department of Environmental Health prohibited the Water Company from making additional connections (SOURCE VI.B). The ORMWC’s water system consists of four wells with one storage tank for each of its two pressure zones. The lower zone tank receives the water from all four wells. When the lower tank is nearly full, a transfer pump is activated, lifting water to the upper tank. When there is insufficient water from the wells, the lower tank cannot be filled sufficiently to activate the transfer pump, and the upper tank cannot be refilled, resulting in no water for the

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2 All referenced sources are included in Section VI of this Initial Study.
homes served from this upper tank have no water (Ibid.). As a result, water has had to be trucked in during late summer and fall to supplement the deficient water supply. Additionally, the ORMWC’s water distribution system of 4-inch pipes does not meet current water system standard requirements, and only marginal fire protection is provided (Ibid.).

As previously indicated, the Via Del Sol Drive homes have seven small shared water systems typically serving two or three homes with the remaining homes having individual water systems (SOURCE VI.8). Water quality has also been an issue in the area due to high nitrate levels. Some wells have exceeded the state standards for nitrates and have significantly declined in capacity; these wells and water systems can no longer provide potable water of the required quantity and quality to support these homes (SOURCE VI.2). Water has also been trucked in to the Via Del Sol area.

The Monterey County Department of Health, in a letter to the Aromas Water District in October 2010, stated its support of consolidation of the water systems and single connection wells along Oak Ridge Drive and Via del Sol with the Aromas Water District (SOURCE VI.2). The Monterey County Health Department is the delegated local authority pursuant to state law that oversees public water systems under 200 connections. The Health Department noted that the County’s 1982 and recently adopted 2010 General Plans include policies that strongly promote the consolidation of water systems whenever feasible, which also is included in the Monterey County Code. It also indicated that both the State Department of Health Services and Monterey County policies prohibit use of hauled water as permanent potable water source (Ibid.). The Department indicated that the expansion of the AWD along Oak Ridge Drive and Via Del Sol would bring a much needed, permanent, reliable, continuous and adequate potable water supply to these homes, and bring these properties in compliance with State Health and Safety and Plumbing Codes and Monterey County Code and General Plan.

It is not known whether the existing ORMWC wells or other wells within the annexation area will be abandoned. They may be retained for landscaping or other non-potable uses.

**Assessment District Formation.** Formation of an assessment district is proposed for financing the proposed water systems improvements, and following approval of the proposed annexation, the Aromas Water District intends to proceed with proceedings for formation of an assessment district. With this method, construction of improvements is financed by sale of bonds by the public agency and secured through liens on the properties benefited. A list of parcel owners who were contacted regarding inclusion in the assessment district is shown in Attachment A.

The process for formation of an assessment district is prescribed by state law. Generally, the public agency (AWD in this case) adopts a Resolution of Intent to order the proposed improvements, and directs preparation of an Engineer’s Report detailing the plans and specifications of the proposed improvements and boundaries of the assessment district. Public hearings are conducted, and the extent of the district boundaries are determined.

The engineer’s report indicates that a cash contribution would be approximately $50,105 per connection, which would need to be made prior to construction under this method. With formation of an assessment district, the total estimated project cost would be $3,386,474 or about $52,914 per connection (SOURCE VI.8). Depending on financial need, loans and grants may be available through a revolving fund from the California Department of Health Services (DOHS) for small water providers to improve water treatment of their water systems. Additionally, long-
term lending also may be available through the U.S. Department of Agriculture’s Rural Development programs.

Water System Improvements. The project includes extension of water lines and construction of accessory water system improvements in order to serve the proposed annexation area. These components include a new water pipeline, pump station, water storage tank, and service connections, which are summarized below as set forth in the engineer’s report (SOURCE VI.8) and schematically shown on Figure 4.

- **Water Pipeline:** The project includes installation of approximately 5,500 linear feet of new 8-inch water pipeline and 3,500 linear feet of 6-inch pipeline to serve the Oak Ridge subdivision and an additional 3,000 linear feet 6-inch pipeline to serve the Via Del Sol area for a total of approximately 12,000 linear feet or two miles of new water pipeline. The closest existing AWD water pipeline is a 6-inch pipeline located at the intersection of San Juan Road and Dunbarton Road. A new 8-inch pipeline is proposed to be constructed within Dunbarton Road to Oak Ridge Drive. The line would then extend up Oak Ridge Road to a new pump station and water storage tank as described below; a new water line would extend from the storage tank to the Via Del Sol area. All new water lines would be installed within existing roadways or shoulders within their rights-of-way except for an approximate 800+ foot segment that extends through undeveloped land from the upper Oak Ridge Road area to the Via Del Sol area. An intermittent tributary to Carneros Creek runs parallel to Dunbarton Road and flows via culvert under Oak Ridge Road. The new pipeline would be located on or under the culvert, but there will be no construction work within the creek. Figure 5 illustrates the alignment route on a parcel map, and Figures 6a through 6d show the proposed pipeline alignment superimposed on an aerial photo.

- **Pump Station:** A new duplex pump station with a 50 gpm (gallon per minute) pump will be installed in Oak Ridge Road at about elevation 375 feet as shown on Figure 4. The facility would be enclosed in a small building that is expected to cover approximately 100 square feet.

Below the new pump station, the system would receive water from the AWD’s existing Ballantree Water Tanks system that serves the area within AWD boundaries that is located east of the project area. (Figure 7 shows the proposed annexation areas in relation to existing AWD water system improvements.) Water is pumped from the San Juan Well system to the Ballantree System pipeline. The existing San Juan Well booster pumps would need to be enlarged to accommodate the new services in this zone (SOURCE VI.8). The Ballantree system has two 15,000 gallon tanks located at an elevation of 482 feet. All new Oak Ridge service connections below elevation 375 would be served off this tank pressure zone and would have a minimum of about 50 psi pressure at the new service meter. The pump station would pump water through the new 6-inch line up Oak Ridge Road to a new water storage tank at about elevation 705. Lots between the new pump station and water storage tank, as well as the Via Del Sol Drive area, would be served via gravity-flow from the new storage tank.

- **Water Storage Tank:** A new 100,000 gallon tank is proposed to be constructed at the high point of Oak Ridge area. The tank would be a bolted steel facility, approximately 32 feet in diameter and approximately 20 feet in height (water level at 16 feet) with an antenna on the top. The new tank (at approximately elevation 705 feet) would be high enough to
transmit water via a 6-inch gravity pipeline down to Via Del Sol Drive and to homes along this road. Another storage tank would not be required to serve Via Del Sol area. The tank location is shown on Figure 4, and details are shown on Figure 8. The proposed storage tank and a short segment of pipeline are located within the coastal zone as shown on Figure 9B.

- **Service Connections:** New 5/8-inch services and water meters would be installed from the new pipeline to serve the new connections. The service connections would include water meters with backflow preventers. Each parcel will be served with one meter; parcels with more than one residence will have another meter to serve the other residences (SOURCE v1.8).

- **Construction Methods, Timing and Equipment:** Construction is estimated to take approximately 4-6 months. Project construction will occur on weekdays generally between 7 AM and 6 PM. Equipment is expected to include bulldozer, track loader or excavator for excavation activities and other standard construction equipment. It is expected that approximately 400 to 500 linear feet of trench will be exposed per day, but will be covered during non-working hours. A trench for the installation of the water lines will be excavated to a depth of approximately four feet with an approximate 18-inch width. Traffic control plans will be implemented in accordance with County Public Works requirements, and project roadways will be resurfaced upon completion of the pipeline installation.

**B. Environmental Setting and Surrounding Land Uses**

The project sites are located within a rural area within the northeastern portion of Monterey County. The project area (both the proposed annexation and SOI areas) is situated between a ridgetop on the west and Highway 101 on the east. The area is generally characterized as rural and contains rural residential lots with some agricultural uses amidst rolling grasslands and oak woodlands. The northeastern Monterey County area includes several unincorporated residential areas, including Aromas, Prunedale to the south of the project area, and Las Lomas to the west. Elk Horn Sough and the unincorporated larger community of Castroville are situated further south of the project area.

The project areas are within the North County planning area of the Monterey County General Plan. The proposed water storage tank and a short segment of pipeline are located within the coastal zone, which are subject to the North County Coastal Land Use Plan. Figure 9 illustrates the coastal zone boundary in the project area.

Most of the proposed SOI amendment area, including the Oak Ridge subdivision, is located within the Carneros Creek drainage to Elk Horn Slough. Carneros Creek flows adjacent to Dunbarton Road along a segment of the proposed new water line. The proposed annexation area includes two existing subdivisions located within grassland and oak woodland areas. Scattered oaks and oak woodlands are found interspersed within the larger project area. As previously indicated, the proposed annexation area includes primarily developed residential lots. The SOI area has similar terrain as the annexation area. The area contains existing residences, as well with some areas of existing farming along San Juan Road. There is an existing high pressure gas line is on the east side of Dunbarton Road and on the north side of San Juan Road; the proposed pipelines are located on the opposite sides of the roads from existing gas lines.
C. Project Actions

The proposed project includes the following approvals and permits; the Initial Study covers all project actions.

- AROMAS WATER DISTRICT (AWD): Approval of Service to the Oak Ridge and Via Del Sol subdivisions if annexation is approved by LAFCO of Monterey County.

- LOCAL AGENCY FORMATION COMMISSION OF SAN BENITO COUNTY: Delegation of the authority to LAFCO of Monterey County for processing a Sphere of Influence amendment and annexation to the AWD. This delegation by the LAFCO of the AWD's Principal County was granted on May 27, 2010.

- LOCAL AGENCY FORMATION COMMISSION (LAFCO) OF MONTEREY COUNTY: Approval of an amendment of the AWD Sphere of Influence amendment and approval of annexation of the Oak Ridge and Via Del Sol subdivisions to the Aromas Water District.

- MONTEREY COUNTY RESOURCE MANAGEMENT AGENCY - PLANNING AND BUILDING INSPECTION DEPARTMENT: Approval of Coastal Development Permit for construction of a water storage tank in the coastal zone.

- MONTEREY COUNTY RESOURCE MANAGEMENT AGENCY - PUBLIC WORKS DEPARTMENT: Approval of encroachment permits for installation of water pipelines within existing County roadways.

- MONTEREY COUNTY WATER RESOURCES AGENCY: Approval of removal of Via Del Sol parcels from the County's "Zone 2C" if annexed to AWD.

- PAJARO VALLEY WATER MANAGEMENT AGENCY: Authorization to allow AWD to extend water service to the Oak Ridge and Via Del Sol Subdivision areas. This authorization was granted on November 3, 2010, and is further described in Section V.9 of this Initial Study.

The Aromas Water District, Monterey County and LAFCO staffs reviewed the project, and concluded that the Water District is the lead agency for environmental review.
### III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

**Environmental Factors Potentially Affected by the Project:** The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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<td>Land Use / Planning</td>
<td>Mineral Resources</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>Population / Housing</td>
<td>Public Services</td>
<td></td>
<td>Recreation</td>
</tr>
<tr>
<td>X</td>
<td>Transportation / Traffic</td>
<td>X</td>
<td>Utilities / Service Systems</td>
<td>X</td>
</tr>
</tbody>
</table>
IV. DETERMINATION

On the basis of this initial evaluation:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find that the proposed project COULD NOT have a significant effect on</td>
<td></td>
</tr>
<tr>
<td>the environment, and a NEGATIVE DECLARATION will be prepared.</td>
<td></td>
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<tr>
<td>I find that although the proposed project could have a significant</td>
<td></td>
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<tr>
<td>effect on the environment, there will not be a significant effect in</td>
<td></td>
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<tr>
<td>this case because revisions in the project have been made by or agreed</td>
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<tr>
<td>to by the project proponent. A MITIGATED NEGATIVE DECLARATION will</td>
<td></td>
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<tr>
<td>be prepared.</td>
<td>✓</td>
</tr>
<tr>
<td>I find that the proposed project MAY have a significant effect on the</td>
<td></td>
</tr>
<tr>
<td>environment and an ENVIRONMENTAL IMPACT REPORT is required.**</td>
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</tr>
<tr>
<td>I find that the proposed project MAY have a &quot;potentially significant</td>
<td></td>
</tr>
<tr>
<td>impact&quot; or &quot;potentially significant unless mitigated&quot; impact on the</td>
<td></td>
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<tr>
<td>environment, but at least one effect (1) has been adequately analyzed in</td>
<td></td>
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<tr>
<td>an earlier document pursuant to applicable legal standards, and (2) has</td>
<td></td>
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<tr>
<td>been addressed by mitigation measures based on the earlier analysis as</td>
<td></td>
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<tr>
<td>described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required,</td>
<td></td>
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<tr>
<td>but it must analyze only the effects that remain to be addressed.</td>
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<tr>
<td>I find that although the proposed project could have a significant</td>
<td></td>
</tr>
<tr>
<td>effect on the environment, because all potentially significant effects</td>
<td></td>
</tr>
<tr>
<td>(a) have been analyzed adequately in an earlier EIR or NEGATIVE</td>
<td></td>
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<tr>
<td>DECLARATION pursuant to applicable standards, and (b) have been avoided</td>
<td></td>
</tr>
<tr>
<td>or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION,</td>
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<tr>
<td>including revisions or mitigation measures that are imposed upon the</td>
<td></td>
</tr>
<tr>
<td>proposed project, nothing further is required.</td>
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</tbody>
</table>

Vicki Morris, General Manager  
AROMAS WATER DISTRICT  
11/8/2011 Date
V. ENVIRONMENTAL CHECKLIST and EVALUATION OF ENVIRONMENTAL IMPACTS

A. Instructions to Environmental Checklist

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in parentheses following each question (see section VI for list of cited sources and references). A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained when it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).

2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies when incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level; mitigation measures from "Earliest Analyses" (see below) may be cross-referenced.

5) Earlier analyses may be used when, pursuant to the tiering, program EIR or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to previously prepared or outside documents should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significant.

B. Use of Earlier Analyses

The Monterey County General Plan was updated in 2010. The County Board of Supervisors adopted the 2010 Monterey County General Plan and certified the accompanying EIR on October 26, 2010. The EIR provides a comprehensive analysis of impacts of water demand from development supported by the General Plan on regional water supplies in the North County and Pajaro Valley Water Management Agency areas of Monterey County, in which the project sites and AWD wells are located. This Initial Study utilizes the 2010 Monterey County General Plan EIR analysis for the regional groundwater impact analysis as summarized and discussed in subsection 9(b)—Groundwater of this Initial Study. As such, this Initial Study “tiers” off the County General Plan EIR for addressing regional groundwater issues in accordance with State CEQA Guidelines section 15152, which encourages lead agencies to use an EIR prepared for a general plan or other program or ordinance, when the later project is pursuant to or consistent with the program or plan. The County’s General Plan EIR addresses future development and water demand within the North County area, including the area served by the Aromas Water District. While it does not specifically address the annexation and sphere of influence amendment currently proposed by the AWD, it does address future water demand and regional water supply impacts. The EIR analysis and conclusions are summarized in subsection 9(b) of this Initial Study.

This Initial Study tiers from Monterey County’s General Plan EIR analysis and provides additional analysis related to the impacts of annexation and the sphere amendment. Regional water supply issues are reviewed in the Draft EIR volume (Chapter 4.3 – Water Resources) and the Final EIR volume (Chapter 4 – Changes to Draft EIR), which are “incorporated by reference” in accordance with State CEQA Guidelines section 15150. The referenced documents are on file at the Aromas Water District office during business hours (Monday, Wednesday and Friday, 9 AM to 5 PM, located at 387 Blohm Avenue, Aromas, CA.). The documents are also available on the County’s website at: http://www.co.monterey.ca.us/planning/gpu/GPU_2007/gpu_2007.htm.
C. **Introduction – Project Review**

Unless otherwise indicated, the following subsections review potential environmental impacts associated with the proposed annexation, construction of water system improvements and provision of potable water by the Aromas Water District to the annexed areas. If the SOI amendment is approved, properties located within the amended SOI area could apply to the LAFCO of Monterey County in the future for annexation to the AWD as a separate action. New development may or may not be proposed in conjunction with potential future annexation requests. Future annexation requests would be subject to environmental review pursuant to the California Environmental Quality Act (CEQA). No annexation or development within the SOI amendment area is proposed at this time as part of the SOI amendment request by AWD.

Most of the SOI amendment area is developed or designated for rural and low density residential uses with some limited areas designated resource conservation and agriculture. New development would be subject to the Monterey County General Plan land use designations and zone district regulations. Existing residentially-designated properties would be limited to one single-family residence on a lot of record pursuant to recently adopted General Plan policies for the North County area (Policy NC-1.5). The rural residential, resource conservation and agricultural designations generally require larger parcel sizes that would limit further subdivision or land use intensity even if it were permitted. Furthermore, any development that may be proposed in the future would be subject to review and permit approvals from Monterey County at which time the appropriate level of environmental review would be conducted.

Thus, unless otherwise discussed below, the proposed SOI amendment would not result in direct site-specific, physical environmental impacts as no development or extension and provision of water service is proposed with the SOI amendment. Indirect impacts related to the proposed SOI amendment are addressed in the following sections:

- Agricultural and Forest Resources
- Hydrology – Regional Groundwater Impacts
- Population and Housing - Growth
- Public Utilities – Water Supply
1. AESTHETICS

Would the project:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have a substantial adverse effect on a scenic highway or scenic vista?</td>
<td>✅</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
<td></td>
<td>✅</td>
<td></td>
</tr>
<tr>
<td>c) Substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td></td>
<td></td>
<td>✅</td>
</tr>
<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
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</tbody>
</table>

Analysis and Conclusions:

a) Scenic Views — Less than Significant. The proposed annexation and Sphere of Influence (SOI) project areas are located west of State Highway 101. Highway 101 in the project vicinity is identified as a proposed scenic highway in the newly adopted Monterey County General Plan between Echo Valley Road and the San Benito County line (Figure 15 — “Scenic Highway Corridors & Visual Sensitivity, North County”) (SOURCE VI.1a). Highway 101 also is designated “Eligible State Scenic Highway – Not Officially Designated” by Caltrans from State Route 156 near Prunedale.

Two areas in the proposed annexation area are within mapped “sensitive” visual areas in the County’s newly adopted General Plan (Figure 15 — “Scenic Highway Corridors & Visual Sensitivity, North County”) (SOURCE VI.1a). One area is north of Oak Ridge Road, and the other area is south of Oak Ridge Road and east of Dunbarton Road. Both areas are located outside the coastal zone. A small portion of the proposed SOI amendment area east of Highway 101 also is located within the an area of “visual sensitivity” as mapped in the Monterey County General Plan (Figure 15 — “Scenic Highway Corridors & Visual Sensitivity, North County”) (SOURCE VI.1a).

The proposed water storage tank is located within the coastal zone at an upper elevation that is the top of the Oak Ridge subdivision. The proposed tank site is sited adjacent to an existing large Monterey pine and some oak trees at the western edge of the property. The area is characterized by open grassland surrounded by oaks. According to the project site plans, the tank site is situated adjacent to a scenic easement.

Impact Analysis: Construction of the proposed water system improvements would not result in adverse effects to scenic views due to low or no visibility from scenic highways and sensitive visual areas. This is considered a less-than-significant impact.
The proposed water pipelines would be underground and not visible. The small pump station would be a low profile structure (approximately 100 square feet in size and approximately 8 feet high) that would be visible only in its immediate area along Oak Ridge Road. There are trees in the vicinity, and the structure would not be visually prominent from distant areas and likely would be screened by existing trees and vegetation.

The proposed water storage tank is located outside of the "visual sensitivity" area that is mapped in the County’s General Plan. The site is not visible from the coastline, roadways near Elkhorn Slough or from scenic corridors, which are identified as visually sensitive in the North County Local Coastal Program (LCP). The tank will be sited at the edge of a parcel at an upper elevation. The upper level of the tank could be visible adjacent to the existing tree cover, but the tank would not be highly visible from Highway 101, a proposed scenic highway, due to the distance (almost one mile) and intervening tree cover. The tank will be completed in a muted color and non-glare finish. Therefore, the proposed project construction elements would not result in significant impacts to scenic views.

b) Scenic Resources - No Impact. The project area contains numerous trees, especially oaks within an oak woodland area north of Echo Valley Road. Construction of the proposed water system improvements (pipeline, water storage tank, pump station) would not result in removal of trees. There are no scenic resources (i.e., significant trees, historic buildings, significant rock outcroppings, etc.) on or adjacent to the project sites that would be impacted by the proposed project. Furthermore, the trees in the project vicinity are part of foreground and background views, and based on field observations, there are no significant trees that would be considered a scenic resource as none are visually prominent from a wide area. Nonetheless, no trees are proposed for removal. Therefore, no impact is expected related to scenic resources.

c) Effects on Surrounding Visual Character - Less than Significant. The project sites are located in the North County area of Monterey County in a rural area. The region's topography is characterized by level to gently-rolling topography with oak woodlands and other trees scattered throughout the area.

Impact Analysis. The project consists of installation of water system improvements that will be underground or not highly visible and would not substantially degrade the visual character of the area. This is a less-than-significant impact.

The new underground water pipeline will have no effect on views or the visual quality of the surrounding area as it is located underground. The above ground features, including fire hydrants and individual water meters to serve each lot, are unobtrusive and typical features found in a residential area.

The proposed water storage tank will be sited at an upper elevation adjacent to an existing large Monterey pine tree and a dense oak woodland. The tank site is not visible from other homes in the vicinity, and would not be highly visible from surrounding areas. The tank dimensions are approximately 20 feet in height and 38 feet in diameter. The tank will be sited on a ridgetop partially screened by existing trees, but will not be visible from public roads within the coastal zone or from most areas along Dunbarton Road. The upper portion of the tank may be partially visible from a short segment of Dunbarton
Road for a brief period of time as shown in the photo to the right. A large Monterey pine is located adjacent to the site and provides a partial screening from most locations, and the site would have limited, if any visibility from Highway 101 as discussed above in subsection 1(a). The tank color will be muted and selected to be compatible with the surrounding background colors of the trees which will further reduce visibility of the structure, especially from a distance. The limited visibility would not be highly noticeable given the distance between public roads, intervening vegetation and wooded slopes adjacent to the tank, as well as visibility of residences.

According to section 20.06.950 of the Monterey County Code, ridgeline development means development on the crest of a hill which has the potential to create a silhouette or other substantially adverse impact when viewed from a common public viewing area. The tank is situated adjacent to existing tree cover and would not appear as a prominent feature or create a silhouette or other substantially adverse impact. The tank would not be highly visible from public viewpoints, i.e. Highway 101 given the distance (almost one mile). The limited area of visibility along Dunbarton Road is outside the coastal zone. Thus, the tank would not create a substantially adverse visual impact when viewed from a common public viewing area, consistent with County ordinances and General Plan Policies OS-1.3 and NC-3.2, as public views would not be adversely affected.

Therefore, the project would not substantially degrade the existing visual character of the site and surrounding area, and impacts are expected to be less-than-significant.

d) Light and Glare — No Impact. The project elements will not result in introduction of a major new source of light and glare. The water storage tank will be designed with a muted color and non-glare finish. Therefore, the project would not result in a substantial source of glare or glare of the area and no impacts are anticipated. No development is proposed within the SOI amendment area as part of the proposed project. Any future proposed development or annexation to the AWD would be subject to land use permit approvals from Monterey County at which time effects on the visual quality of surrounding areas would be evaluated.
2. AGRICULTURAL and FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement Methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d) Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Analysis and Conclusions:

a) Agricultural Land Conversion – No Impact.

ANNEXATION PROJECT AREA: The proposed annexation area does not contain lands that are designated “Prime Farmland” by the California Farmland Mapping System. The area is designated “Other Land”, and some areas along Via Del Sol Road are also designated “Urban and Built-Up Land” (source vi.6). Similarly the proposed water system improvements (new pipeline, pump station and water storage tank) are also located in areas that are designated
"Other Land". Furthermore, none of the parcels located within the proposed annexation area are designated for agricultural uses. Thus, the proposed annexation and construction of water system improvements would not result in disruption to or conversion of agricultural lands.

**SPHERE OF INFLUENCE PROJECT (SOI) AREA:** Most of the area within the proposed SOI amendment area is not designated "Prime Farmland" by the California Farmland Mapping System, but is designated "Other Land". However, there is a small band of land south of San Juan Road that is designated "Prime Farmland" and "Farmland of Statewide Importance," although the area is designated for rural residential uses in the County's General Plan and North County Land Use Plan. There are two areas within the SOI amendment area that are designated for agricultural and grazing uses in the County's General Plan and Zoning Ordinance, but these areas are not mapped as prime, unique or important farmland in the State Farmland Mapping Program.

The agriculturally designated properties within the SOI consist of nine parcels that total approximately 150 acres, of which over half (80 acres) is designated for grazing uses. One 69-acre parcel is located north of the Oak Ridge annexation area is designated as “Agricultural Conservation” and “Permanent Grazing”. Approximately 80 acres (eight parcels) east of Dunbarton Road are designated "Rural Grazing" in the Monterey County General Plan. Based on a parcel review conducted by AWD staff, all of the agriculturally-designated properties have existing residences except for one 11-acre parcel designated for Rural Grazing and the 69-acre parcel noted above.³

No development is proposed in the SOI area as part of the proposed project. The proposed Sphere of Influence (SOI) amendment would expand the SOI boundaries for the Aromas Water District to join non-contiguous areas of the District. Inclusion with the SOI could suggest that lands within this boundary may be suitable for receiving municipal water supply in the future. Most of the SOI area is developed with an existing residence, and only two agriculturally-designated properties do not have a residence, both of which have a 40-acre minimum. Potential future development is limited to one single-family residence on a legal lot of record pursuant to Monterey County General Plan (Policy NC-1.5) (SOURCE VI.1c). Thus, under existing County plans and regulations, these properties would be limited to one residence for a total of two potential new residences. This potential future development would not preclude continued agricultural use of the properties, and future conversion of agricultural lands would not be anticipated. Thus, the SOI amendment would not directly result in new development or direct conversion of agricultural lands.

**b) Effects on Williamson Act Contracts – No Impact.** There are no known Williamson Act contracts in the proposed annexation area. There is one potential property within the northern portion of the proposed SOI area that may be subject to a Williamson Act contract (SOURCE VI.1c – DEIR Exhibit 4.2.2), but this property is designated for residential uses in the County General Plan. However, as indicated above, lands designated for agricultural uses in the County's General Plan have limited future development potential to two homes due to County policies and large minimum lot sizes that would be required. This would prevent agricultural land conversion. Thus, the SOI amendment would not lead to indirect conflicts with this contract.

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³ The AWD staff compiled a list of all APNS within the annexation and SOI amendment areas along with acreage and Assessor's use code, which identify whether there is an existing residence on the parcel or whether the property is vacant or in agricultural or other use.
c-e) Forest Conversion – No Impact. The project areas are not zoned Timberland Land
Preserve or do they contain commercial forest resources. None of the surrounding areas is
zoned Timberland Preserve or designated for Forest Resources in the Monterey County
General Plan. The proposed annexation and SOI amendment would not conflict with existing
zoning to protect forest resources or result in forest land conversion. While a portion of the new
water pipeline would be located within a oak woodland area, no trees are planned to be
removed. Thus, neither the proposed annexation nor SOI amendment would conflict with zoning
to protect forest resources, result in direct conversion of forest land or involve other changes
that could indirectly lead to such conversion.

e) Effects on Surrounding Agricultural Lands Conversion – No Impact.

ANNEXATION PROJECT AREA: No agriculturally-designated lands or lands in agricultural cultivation
are located within the proposed annexation area. The proposed water system improvements
(new pipeline, pump station and water storage tank) are located in designated residential areas
and will serve existing subdivisions. Thus, this project element would have no effect on
agricultural lands or indirectly lead to conversion of agricultural lands as the proposed water
system improvements are not located within or adjacent to agricultural areas.

SPHERE OF INFLUENCE PROJECT (SOI) AREA: The proposed SOI amendment includes some
agricultural lands and some small areas of designated “Prime Farmland” and “Farmland of
Statewide Importance” along San Juan Road as described above in subsection 2(a). However,
the Monterey County General Plan designates most of the SOI area for residential uses, except
for two areas as noted above in subsection 2(a).

The Cortese-Knox-Hertzberg Act of 2000, LAFCO’s enabling statute, requires that LAFCOs
consider the effect of maintaining the physical and economic integrity of designated agricultural
preserves when determining an agency’s Sphere of Influence or reviewing proposals. Government Code Section 56377 establishes two policies to be used by LAFCOs in reviewing,
approving, or disapproving proposals with respect to agricultural and open space land:

- First, that development or land uses other than open-space uses shall be guided away
from existing prime agricultural lands toward areas containing non-prime agricultural
lands, unless such an action would not promote the planned, orderly, efficient
development of an area; and

- Second, that development of existing vacant or nonprime agricultural lands for urban
uses within the existing agency jurisdiction or sphere of influence should be encouraged
before any proposal is approved which would allow for or lead to the development of
existing open space lands for non-open-space uses which are outside of the existing
jurisdiction boundaries or sphere.

Further, Section 56426.5 requires that LAFCOs consider the effect of maintaining the physical
and economic integrity of Williamson Act-designated agricultural preserves when determining
an agency’s Sphere of Influence or when reviewing an annexation proposal.

The proposed SOI amendment includes two limited areas that are designated for agricultural
uses. If included in the Water District’s amended SOI, these properties may apply to LAFCO for
annexation to the AWD for provision of municipal water service in future. However, as indicated
above in the "Introduction" to the Checklist and subsection 2(a), future development is governed by the Monterey County General Plan, Zoning Ordinance and other regulations that generally seek to protect agricultural lands. The existing agricultural designations require large parcel sizes, which would prevent potential subdivision and conversion of agricultural uses to non-agricultural uses. Furthermore, development in the North County area is limited to one single-family residence per existing legal parcel. Thus, agriculturally-designated properties within the proposed SOI amendment area would not be able to subdivide or develop, and thus, the proposed SOI amendment would not indirectly lead to conversion of agricultural land to non-agricultural uses.

### 3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
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<tr>
<td>d) Result in significant construction-related air quality impacts?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>e) Expose sensitive receptors to substantial pollutant concentrations?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>f) Create objectionable odors affecting a substantial number of people?</td>
<td></td>
<td></td>
<td>✓</td>
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</tbody>
</table>
Analysis and Conclusions:

a) Conformance with Air Quality Plan – No Impact. The Monterey Bay Unified Air Pollution Control District’s Air Quality Management Plan For the Monterey Bay Region (AQMP) addresses state air quality standards. The Monterey Bay Unified Air Pollution Control District (MBUAPCD) incorporates the County’s General Plan and population forecasts in its preparation of regional air quality plans. Population-generating projects that are within the AQMP population forecasts are considered consistent with the plan. The proposed project is an improvement to an existing water supply system to provide water service to existing development and amendment of the Sphere of Influence boundaries of the Aromas Water District. There is no proposed or planned development as a result of these proposals. The project would not result in new development or population increases, and thus, the project does not conflict with or obstruct implementation of the AQMP.

b) Project Emissions – Less-than-Significant Impact. To protect public health, both the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards (AAQS) that are the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety to protect public health and welfare. The national standards address six criteria pollutants, including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, fine particulate matter (both PM10 and PM2.5, which refer to particles less than 10 microns and 2.5 microns, respectively), and lead. The state standards, which are generally more stringent than the federal standards, apply to the same pollutants as the federal standards do, but also include sulfate, hydrogen sulfide, and vinyl chloride.

The project sites are located within the North Central Coast Air Basin as established by CARB, which is under the jurisdiction of the Monterey Bay Unified Air Pollution Control District (MBUAPCD) and includes Santa Cruz, Monterey and San Benito Counties. The NCCAB is currently in attainment for the federal PM10 (particulates less than 10 microns in diameter) standards and state and federal nitrogen dioxide, sulfur dioxide and carbon monoxide standards. The basin is considered attainment or unclassified for other national standards and non-attainment for the 1-hour state ozone standard and for the state PM10 standard.

The new proposed water system improvements (underground water pipelines, water storage tank and pump station) will not result in permanent stationary emissions, and indirect vehicular emissions would be limited to infrequent maintenance trips by AWD staff. The provision of water service to existing development as a result of the proposed annexation also would not result in new stationary emissions. As discussed in subsection 13(a) below, the no new homes would be expected within the proposed annexation area under current County regulations. Approximately 26 additional homes could potentially be constructed outside the annexation area but within the proposed SOI area under current County regulations. However, this is below MBUAPCD's screening level for potential significant ozone impacts due to residential development. Thus, the project would not result in a less-than-significant impact related to potential violation of air quality standards or substantial contribution to an existing violation. Potential emissions related to construction activities are discussed below in subsection 3(d).

c) Cumulative Emissions – No Impact. According to the MBUAPCD CEQA Guidelines, projects that are consistent with the Air Quality Management Plan (AQMP) would not result in cumulative impacts, as regional emissions have been factored into the Plan. The MBUAPCD prepares air
quality plans which address attainment of the state and federal emission standards. These plans accommodate growth by projecting growth in emissions based on different indicators. For example, population forecasts adopted by Association of Monterey Bay Area Governments (AMBAG) are used to forecast population-related emissions. These forecasts then are accommodated within the AQMP. As indicated above, water system improvements and provision of water service to existing development will not result in new population growth, and thus, the proposed project would not contribute to cumulative emissions or conflict with the adopted Air Quality Management Plan for the region. Similarly, the proposed SOI amendment changes the potential future boundaries of the Aromas Water District, but no development is proposed as part of the project.

**d) Construction Impacts – Less Than Significant Impact.**

*Impact Analysis.* The proposed project's construction activities include excavation for the new pipeline, pipeline installation and grading for and installation of a new water storage tank. Project excavation and grading could result in a short-term, localized decrease in air quality due to generation of particulate emissions (PM$_{10}$) caused by clearing, excavation, and grading operations.

According to MBUAPCD’s “CEQA Air Quality Guidelines” (as updated in February 2008), 8.1 acres could be graded per day with minimal earthmoving, or 2.2 acres per day with major grading and excavation without exceeding the MBUAPCD’s PM$_{10}$ threshold of 82 lbs/day. Limited excavation and grading will occur for installation of the new water line and construction of the water storage tank. The proposed transmission pipeline covers a distance of about 12,000 linear feet, and it is anticipated that a maximum 4-foot wide and 18-inch deep trench would be excavated. The project anticipates completing approximately 400 linear feet per day, resulting in an approximately 2,500 square feet of excavation per day, which is well below MBUAPCD thresholds for potentially significant PM$_{10}$ emissions. The water storage tank improvements are located on an area of approximately 0.5 acre or less (about 20,000 square feet). The project sites would not be graded simultaneously and would be well below MBUAPCD thresholds even with the combined area of the project sites (including daily pipeline trenching and installation), which would be less than one acre. Therefore, the project would result in a less-than-significant impact related to construction emissions.

**e) Sensitive Receptors – No Impact.** The project sites are located within a rural area. Sensitive receptors in the vicinity of the project site include existing residences. The proposed water system improvements would not result in stationary emissions. Thus, the proposed residential project will not expose sensitive receptors to substantial pollutant concentrations, and no impacts are expected to sensitive receptors.

**f) Odors – No Impact.** The project site is located within a rural area. The proposed water system improvements and provision of water service to existing residences would not create objectionable odors due to the nature of the planned components (i.e., underground pipeline and water storage tank, none of which are known for generating odors). No development is proposed in the SOI area as part of the proposed SOI amendment. Therefore, no impacts related to generation of odors are expected to occur.
### 4. BIOLOGICAL RESOURCES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>✓</td>
<td></td>
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</tr>
<tr>
<td>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

### Analysis and Conclusions:

Four natural community types were documented within the annexation project area: coast live oak woodland, coyote brush scrub, needlegrass grassland, riparian woodland, and landscaped areas/ tree groves (SOURCE VI.10). The riparian woodland grows along the main stem and tributaries to Carneros Creek, an intermittent drainage that empties into Elkhorn Slough. The distribution of the vegetation types within the project area is depicted on Figure 10 and further described in Attachment B. Neither the proposed annexation area nor the SOI amendment area are within a critical habitat area identified by Monterey County (SOURCE V.1c – DEIR Exhibit 4.9-5).
a) Special Status Species – Less Than Significant With Mitigation Incorporated.

SPECIAL STATUS PLANT SPECIES. No special status plant species were observed within the project area during the December 2010 or April 2011 field surveys. The April survey was conducted during the blooming season for the special status species with the potential to occur within the habitats occurring project area, but none were observed (SOURCE VI.10). The project area lacks specialized habitats/substrates (i.e., serpentine, vernal pools, seasonal wetlands, or maritime chaparral) that have a propensity to support special status plant species in the greater Prunedale region; however, the site does support grassland and pockets of oak woodland that are suitable habitat for some special status plant species. The fragrant fritillary (*Fritillaria liliacea*) has been recorded northwest of the project area (near San Juan Road and Carpenteria Road). This species occurs in moist grasslands and blooms between February and April. This species was not detected during focused surveys in April. Monterey pines (CNPS List 1B species) were observed on site; however, these are planted specimens that are located outside their native region. There are no records in the CNDDB for special status species located within the project area (Ibid.).

SPECIAL STATUS WILDLIFE SPECIES. A biotic assessment prepared for the project indicate that several special status wildlife species have been found in the area to include California red-legged frog (federally listed as threatened), California tiger salamander (federally and state listed as threatened), Western pond turtle (California Species of Special Concern), and coastal few (**California Species of Special Concern**). No suitable breeding habitat was identified on any of the water system sites for any of these species (SOURCE VI.10). However, occurrences of these species are known within 0.6 – 1.25 miles of the site, generally north of San Juan Road and east of Highway 101. California red-legged frogs and/or Western pond turtles may occur along the Carneros Creek tributary along Dunbarton Road. The coastal few may occur in the riparian willows along this tributary, and the grassland area near the proposed tank site may provide upland habitat for the California tiger salamander (Ibid.).

*Impact Analysis.* Construction of the proposed water system improvements may result in inadvertent harm to special status wildlife species that may be present along the Carneros Creek intermittent drainage and/or the upper grassland areas. This is considered a potentially significant impact.

Three special status amphibians and the pond turtle occur within the general project vicinity, within 1.25 miles of portions of the project area. The amphibians are coast range newt, California tiger salamander, and California red-legged frog. The majority of the project’s water pipeline will be placed within the existing roadways or road shoulders, which do not provide suitable habitat for these species. The roadways are paved and the road shoulders are compacted base rock. Areas where potential construction-related impacts may occur are discussed below.

**Carneros Creek – Drainages.** There will be no work directly within Carneros Creek or its tributary that is parallel to Dunbarton Road. However, work will occur within the roadway of Dunbarton Road, which is adjacent to Carneros Creek and has the potential to impact coast range newt, California red-legged frog, or pond turtle if any are present during the trimming of willows or trenching at that location. Areas of potential impact include Carneros Creek (a culvert under Dunbarton Road just south of San Juan Road) and a tributary to Carneros Creek (along Dunbarton Road north of Oak Ridge Road). At Carneros Creek, the new pipeline will be placed above the existing creek culverts. At the
intersection of Dunbarton Road and Oak Ridge Road, the new pipeline may be placed under the existing creek culvert. Although construction will occur within the shoulder of the roadway and/or above/under existing culverts, activities may result in excavated materials entering the creek during rainfall events, inadvertent deposition of construction materials in the creek.

Grassland Areas. The new water line will cross two grasslands areas that are potential upland habitat for the California tiger salamander in the upper elevations. The new water tank at the 705 ft knob above the western end of Oak Ridge Road also contains grassland that could be used as upland habitat for this species. The other area is the water pipeline that will cross a grassland area between residences at the end of Oak Ridge Road and connect to Via Del Sol Drive. These grasslands have only marginal upland habitat for tiger salamander with scattered gopher burrows, but they are located approximately 0.3 to 0.4 mile from an agricultural pond. It is unknown if tiger salamanders breed in this agricultural pond. The closest known occurrence of tiger salamanders is approximately 2 km (1.24 miles) northeast of the northern end of the water pipeline.

Implementation of the Mitigation Measures BIO-1 through BIO-3 below would reduce the project's impacts on the special status wildlife species to a less-than-significant level and will mitigate potential construction impacts to individual California tiger salamanders, California red-legged frogs, coast range newt and Western pond turtle if present in the work area.

**Mitigation Measure BIO-1.** For the work area adjacent to the tributary creek at Oak Ridge Road and Dunbarton Road, the Aromas Water District shall hire a qualified biologist to conduct pre-construction surveys for coast range newt, California red-legged frog and western pond turtle. The survey should be conducted no more than 48 hours prior to onset of willow trimming and trenching. A biologist shall be on-site during construction to ensure no newts, frogs, or turtles are in the work area.

**Mitigation Measure BIO-2.** The Aromas Water District shall implement riparian corridor protection measures to minimize impacts to downstream waters and resources located adjacent to the work area, including:

- Install plastic mesh fencing and silt fencing at the perimeter of the work area that abuts downstream waters and riparian corridor to prevent impacts to the adjacent riparian corridor and injury to nearby native trees (if present). The silt fences will also prevent movement of animals from the creek/riparian area into the work area, such that take of the species are avoided. Protective fencing shall be in place prior to ground disturbances and removed once all construction is complete. During construction, no grading, construction or other work shall occur outside the designated limits of work.
- No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored outside the designated limits of work.
- Work above and below existing creek culverts shall be implemented in a manner where no construction material enters the creeks and the existing
culverts are not damaged. The water district shall confer with CDFG, RWQCB, and USACE on the need to obtain permits prior to work under or above the existing culverts.

- Prior to commencement of construction, implement standard erosion control measures to prevent construction materials from entering the downstream drainages. Utilize a native erosion control seed mix on disturbed areas following construction.

**Mitigation Measure BIO-3.** During the grading for the water tank and trenching for the water line portions of the project that cross the grassland areas, the Aromas Water District shall hire a qualified biologist to monitor for presence of California tiger salamander. The biologist shall be on the site during construction in these areas to ensure no salamanders are in the work area. The silt fences (installed as stated in Mitigation Measure BIO-4) will also prevent movement of animals from adjacent areas into the work area, such that take of the species is avoided. No take of California tiger salamanders is allowed.

b) **Sensitive Habitat – Less Than Significant with Mitigation Incorporated.** As previously indicated, there are four natural community types within the project area: coast live oak woodland, coyote bush scrub, needlegrass grassland, and riparian woodland, as well as, landscaped areas/ tree groves. The riparian woodland grows along the main stem and tributaries to Carneros Creek, an intermittent drainage that empties into Elkhorn Slough. The distribution of the vegetation types within the project area is depicted on Figure 10.

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. CDFG classifies and ranks the State’s natural communities to assist in the determining the level of rarity and imperilment. Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled. If a vegetation alliance is ranked as S4 or S5, these alliances are generally considered common enough to not be of concern; however, it does not mean that certain associations contained within them are not rare. The project area was observed to support one vegetation type with an imperiled status (SOURCE VI.10).

Needlegrass grassland is ranked S3 and is considered a sensitive habitat (SOURCE VI.10). The project area supports grassland along the ridgetop and on slopes between the knoll and Via del Sol. The grassland supports stands of purple needlegrass (a native species) that intermix with non-native species (Ibid.).

The riparian woodland occurs along the main stem of Carneros Creek just south of San Juan Road and along an intermittent tributary that parallels a portion of Dunbarton Road. The woodland is dominated by a dense growth (thicket) of arroyo willow (*Salix lasiolepis*). This type of riparian woodland has a State ranking of S4, indicating it is common within the State and not considered sensitive in the CNDDB (SOURCE VI.10). However, riparian habitat is one of the highest value habitats for wildlife species diversity and abundance in California. Factors which contribute to the high wildlife value include the presence of surface water, the variety of niches provided by the high structural complexity of the habitat, and the abundance of plant growth.
Riparian habitat along the project site may be used by a diversity of wildlife species for food, water, escape cover, nesting, migration and dispersal corridors, and thermal cover (Ibid.).

**Impact Analysis.** Some of the project construction activities would result in construction in areas supporting the sensitive needlegrass plant community, which is considered a potentially significant impact. Water main trenching and construction of the access road in near the proposed tank site will require trenching through areas supporting needlegrass grassland. While this community type is State ranked S3 (sensitive resource) and native bunchgrass stands and natural meadows are identified as areas of biological significance in the County General Plan, the community on the project site is not of high quality, as evidenced by the predominance of non-native species, presence of invasive thistles, human activities within the area, and the lack of special status plant species. In addition, the project will affect a small acreage of this community type (approximately 2,000 square feet) and it is unlikely that this impact will be a serious threat to the existence of high quality habitat of this type (SOURCE VI.10). Nevertheless, implementation of the following mitigation measure will ensure that the impact is reduced to a less-than-significant level.

The project will require pruning of the willow thicket located at the intersection of Dunbarton Road and Oak Ridge Road. The willows overhang the existing roadway where construction will occur. The extent of limbing is approximately 50 square feet (10 feet long by 5 feet wide). Removal of riparian woodland is a potentially significant impact; however, limbing is a temporary impact. As the limbed willow trees are expected to quickly re-grow after completion of the project, this action is not considered to be a significant impact to riparian resources. No mitigation is required.

Implementation of the Mitigation Measures BIO-4 and BIO-4 below would reduce the project’s impacts on the sensitive needlegrass habitat to a less-than-significant level.

**Mitigation Measure BIO-4.** Prior to grading and construction, the Aromas Water District shall designate the limits of construction work and equipment access and install protective fencing. Grassland adjacent to the work area shall be protected by placing plastic protection fencing (i.e., plastic construction mesh fencing with metal t-bars) at the limit of work. Protective fencing should be in place prior to any site grading or other disturbances. All grassland areas outside the limits of work shall be preserved. When all site construction is complete, the temporary fencing can be removed.

**Mitigation Measure BIO-5.** Areas disturbed by construction shall be seeded with a native erosion control seed mix suitable to the project area. Plant species suitable for use include purple needlegrass (Nassella pulchra) and California brome (Bromus carinatus).

c) **Wetlands – No Impact.** The biological resources investigation found no evidence of wetlands at any of the project sites.

d) **Wildlife Corridors and Nesting Species – Less Than Significant With Mitigation Incorporated.** The proposed water system improvements (underground pipeline and water storage tank) would not interfere with wildlife movement.
The federal Migratory Bird Treaty Act (MBTA; 16 U.S.C., §703, Supp. I, 1989) prohibits killing, possessing or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Migratory birds also are protected in and by the state of California (State Fish and Game Code §3503 and other sections and subsections). Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, a violation of the MBTA. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFG. The mitigation measure described below should be implemented to comply with laws and regulations protecting raptors or other birds nesting on or immediately adjacent to the sites.

*Impact Analysis.* The project has the potential to disturb nesting migratory birds or raptors if any are present within the work area during tree pruning and use of heavy equipment. Nests may potentially be destroyed by pruning, resulting in death of chicks or eggs, if any are present. Loud noise from heavy equipment may potentially cause adult nesting birds to abandon their nests, resulting in death of chicks or eggs, if any are present. No long-term impacts to bird nesting habitat are expected to occur from the minor amount of tree pruning needed for this project. This is considered a potentially significant impact. Implementation of the following mitigation measure would reduce the impact to a less-than-significant level.

*Mitigation Measure BIO-6.* To avoid potential impacts to nesting migratory birds and raptors, schedule construction to avoid the nesting season to the extent feasible, which is typically from March 1 to August 1. If construction cannot be scheduled outside this area, a qualified biologist shall conduct surveys for nesting birds no more than two weeks prior to onset of tree pruning and construction with heavy equipment. If nesting birds are observed within the project corridor, postpone construction along that portion of the project until the biologist confirms that all young have fledged from the nest. For most birds a 50 foot buffer zone is adequate to protect the nest; a raptor nest will require a 250 foot buffer.

e) Local Tree Ordinances — Less Than Significant with Mitigation Incorporated. Removal of healthy, native oak trees in northern Monterey County is discouraged in the County’s 2010 General Plan (Policy NC3-4). The General Plan also outlines measures for the preservation of oak woodland and protection of oak and madrone trees. Within the unincorporated portions of the County, outside the coastal zone, permits are required for removal of oak and madrone trees larger than six inches diameter as measured two feet above grade pursuant to provisions in Chapter 16.60 of the County Code (“Preservation of Oak and Other Protected Trees”). Landmark oaks are those greater 24 inches diameter as measured two feet above grade.

The project area supports numerous oak trees that are greater than six inches diameter within the oak woodland along Oak Ridge Road, the knolltop, and in the Via del Sol area. The oak woodland east of Via del Sol Drive also supports several oak trees that would meet the definition of landmark oaks. As depicted on Figure 11, oak woodland abuts much larger woodland areas that are located outside the project area. Oak woodland is also found adjacent to Via del Sol Drive.

The woodland east of Via Sol Drive is comprised of large, multi-branched coast live oak trees. The trees form a dense canopy; many trees have extensive low-hanging branches. Many trees
in this area meet the size requirement of landmark oaks, as defined in the County's General Plan (SOURCE V1.10). Approximately 31 oak trees occur adjacent to the proposed water main construction area. The approximate diameter of the trees ranges from six inches to over 60 inches (Ibid.). (See Table 2 in Attachment B for specific sizes.)

Impact Analysis. As depicted on the site plan, no oak trees will be removed to accommodate the water line, and the majority of the construction work will occur within the shoulder of existing roadways. Thus, the project would not be conflict with local policies and regulations regarding protection of oak trees. However, in two locations (along the Oak Ridge knoll and within oak woodland east of Via del Sol Drive) trenched will occur within undisturbed oak woodland. Several oak trees, including trees meeting the County's requirement of landmark oaks, will be located within 20 feet of trenching and associated construction activities. Construction trenching and other activities will occur within the dripline of numerous oak trees that are to be retained. Indirect impacts to these trees may occur through root disturbances, soil compaction, removal of limbs, and inadvertent injury to tree trunks. Thus, this is considered a potentially significant impact. Implementation of the following mitigation measure would reduce the impact to a less-than-significant level.

Mitigation Measure BIO-7. Prior to grading and construction, the Aromas Water District shall protect all oak trees that are within 20 feet of grading, trenching, and/or construction staging or access by placing plastic protection fencing (i.e., plastic construction mesh fencing with metal t-bars) at the limit of work. At the direction of a qualified arborist, fencing should be in place prior to any site grading or other disturbances. The final location and integrity of the fencing shall be inspected by a qualified arborist prior to any site construction. All areas outside the limits of work shall be preserved. When all site construction is complete, the temporary fencing can be removed.

Mitigation Measure BIO-8. During ground excavation all roots greater that 2 inches in diameter should be hand-cut (instead of being cut by a mechanical trencher, grader, or excavator). Hand cutting of roots will minimize impacts to trees adjacent to construction. Limbing of tree limbs for access shall follow standards for pruning as per the International Society of Arboriculture (ISA), with any additional measures as identified by a qualified on-site arborist. A qualified arborist shall be on site to oversee all root cutting and limbing. Any additional protective tree measures as identified by the on-site arborist shall be implemented.

f) Habitat Plans – No Impact. Monterey County does not have an adopted Habitat Conservation Plan or Natural Community Conservation Plan in the project area. Therefore, the project would not conflict with Monterey County's adopted biological resources policies or conservation plans, and thus, the project would result in no impact.
5. CULTURAL RESOURCES

Would the project:

<table>
<thead>
<tr>
<th>Would the project</th>
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</tr>
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<tbody>
<tr>
<td>a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?</td>
<td>✓</td>
</tr>
<tr>
<td>b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?</td>
<td>✓</td>
</tr>
<tr>
<td>c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>✓</td>
</tr>
<tr>
<td>d. Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>✓</td>
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</tbody>
</table>

Analysis and Conclusions:

a) **Historical Resources — No Impact.** None of the project sites contain structures or other features that would be considered historical. Therefore, the project would result in no impact to historical resources.

b) **Archaeological Resources — Less than Significant.** The project sites are generally are not located within an archaeological sensitivity area as shown on Monterey County General Plan maps (SOURCE VI.1c – DEIR Exhibit 4.10-2). However, a small area near the upper reach of the water pipeline appears to be within a identified high archaeological sensitivity zone.

An archaeological analysis of the subject sites was conducted by Archaeological Consulting, which included a records search, field survey and Native American consultation. The background records search at the Northwest Regional Information Center found several recorded cultural resources located in and adjacent to the project area, primarily along portions of the water pipeline alignment. Several others are located within one kilometer of the project area. Historic resources were recorded on some properties, but none are listed in the California Inventory of Historical Resources, California Historical Landmarks or in the National Register of Historic Places. The Sacred Lands file search through the Native American Heritage Commission found no recorded resources in the project area (SOURCE VI.9).

During the field reconnaissance, none of the materials frequently associated with prehistoric cultural resources in this area (dark midden soil, marine shell fragments, flaked or ground stone, old bone fragments, fire-affect rock, etc.) were observed on the project sites. Additionally, there was no evidence of significant historic resources in or immediately adjacent to the project area (SOURCE VI.9).

**Impact Analysis.** The archaeological investigation concluded that the project area contains no surface evidence of significant historic resources, and as currently designed,
will have no effect on significant cultural resources identified within the project area. However, according to concerned Native American consultants, the segment of the proposed pipeline near Carneros Creek has a potential for discovery of buried resources during installation of the new water pipeline. An approximate 4-foot deep and 2-foot wide trench would be excavated for installation of the pipeline. Native American consultants from the Amah Mutsun Bank recommend Native American monitoring of excavations within 400 feet of a waterway. Because no significant cultural resources were identified, but unknown resources may be uncovered during construction, this is considered a less-than-significant impact. Although mitigation measures are not required, the following is recommended due to the possibility of unidentified (e.g., buried) cultural resources being found during construction.

**RECOMMENDED CONSTRUCTION SPECIFICATION 1.** Require project construction specifications to include Native American and archaeological monitoring of project excavations within 400 feet of a waterway.

**RECOMMENDED CONSTRUCTION SPECIFICATION 2.** If archaeological resources or human remains are unexpectedly discovered during any construction, work shall be halted within 50 meters (+160 feet) of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated, with the concurrence of the Lead Agency, and implemented. If human remains are discovered during the construction of the project, an appropriate representative of Native American groups and the County Coroner shall be informed and consulted, as required by law.

c) **Paleontological Resources – No Impact.** No unique geologic or paleontological features have been identified in county plans and none were observed on the project sites during site visits. Therefore, the project would result in no impact to these resources.

d) **Human Remains – No Impact.** No known burials are known to have occurred on the project site based on the archaeological records search and consultation with the California Native American Heritage Commission (SOURCE VI.9). However, the project site may contain previously unknown buried human remains. In the event that human remains are discovered during project activities, compliance with Section 7050.5 of the State Health and Safety Code and section 5097.98 of the State Public Resources Code would reduce any potential impacts to less than significant. This is included in the recommendation above.
### 6. GEOLOGY AND SOILS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td></td>
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<td>✓</td>
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<tr>
<td>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</td>
<td>✓</td>
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<td>ii) Strong seismic ground shaking?</td>
<td>✓</td>
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<tr>
<td>iii) Seismic-related ground failure, including liquefaction?</td>
<td>✓</td>
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<tr>
<td>iv) Landslides?</td>
<td>✓</td>
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<tr>
<td>b) Result in substantial soil erosion or the loss of topsoil?</td>
<td>✓</td>
<td></td>
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<tr>
<td>c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</td>
<td>✓</td>
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<tr>
<td>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
<td>✓</td>
<td></td>
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<tr>
<td>e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?</td>
<td>✓</td>
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</table>

**AROMAS WATER DISTRICT**  
Annexation & Sphere of Influence Amendment  
INITIAL STUDY  
November 2011
Analysis and Conclusions:

α-i) Fault Rupture – No Impact. The project site is located in the North County planning area within Monterey County. Two faults are of concern in the project area: the San Andreas and Zayante-Vergeles faults. The active San Andreas Fault represents a major seismic hazard in California. The main trace of the San Andreas Fault is east of the project site and located within San Benito County (SOURCE V.1c).

The Vergeles Fault is mapped from Dunbarton (Monterey County) southeast to San Juan Bautista (San Benito County), and has been associated with the Zayante Fault in Santa Cruz County. No major earthquakes have occurred on this fault during the past 100 years (SOURCE VI.1c). It is not delineated on the Alquist-Priolo Earthquake Fault map (Ibid.). Based on fault investigations and evidence of past rupture, the only state-designated fault zones in Monterey County are along the San Andreas Fault (Ibid.).

The mapped location of the Vergeles Fault appears to be slightly to the north of the project area (SOURCE VI.1c – DEIR Exhibit 4.4-1). Thus, the proposed water system improvements would not be subject to fault rupture. Furthermore, the pipeline will be designed with flexible connections to withstand rupture in the event of an earthquake.

α-ii-iv, c) Exposure to Seismic Hazards – Less than Significant. Documented seismic sources within Monterey County include the Rinconada, San Gregorio (Palo Colorado), Monterey Bay-Tularcitos, Hosgri, and San Andreas Faults (SOURCE V.1c). The active San Andreas Fault, located east of the project sites in San Benito County, represents a major seismic hazard in California. The present analysis of seismic data indicates that the highest-magnitude earthquakes that would generate the strongest seismic shaking are expected to occur on the San Andreas Fault since this has the highest slip rates and rupture lengths (Ibid.). Other faults with high slip and rupture lengths are the southern segment of the San Gregorio and Hosgri Faults. Both the Rinconada and Monterey Bay-Tularcitos Faults have much lower slip rates and are therefore not expected to produce as large an earthquake as the other faults. Evidence indicates that the San Andreas Fault is the dominant seismic source in the region. The Vergeles fault is mapped as an active fault, but no earthquakes have occurred on this fault during the past 100 years (Ibid.).

The project site is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project. The project sites are located within an area identified as having a low liquefaction potential and a low to moderate landslide potential (SOURCE V.3 and SOURCE V.1c-Exhibit 4.4.3). The project area is identified in the Monterey County General Plan as having a low to moderate susceptibility to earthquake-induced landsliding (SOURCE V.1c-Exhibit 4.4.4).

Impact Analysis. The proposed water system improvements will be subject to seismic shaking from earthquakes on nearby faults. Seismic shaking is expected as a result of a major earthquake on regional faults. The proposed project elements do not include habitable structures. With designs in accordance with geotechnical recommendations, exposure to seismic and geologic hazards would be a less-than-significant impact.

As indicated above, the underground pipeline will have flexible connections to minimize rupture during a seismic event. The pipeline is generally located on flat or gently sloping
terrain, and the tank site is located on level terrain. A short segment of the new water line will be constructed on laterally across 30+/-% slopes for a distance of approximately 400 feet between the end of Oak Ridge Road and the Via Del Sol lots. The pipeline has been routed to avoid crossing steep slopes or creation of unstable slopes. The water storage tank will be designed in accordance with recommendations of a geotechnical report that will be prepared for the facility and in accordance with California Building Code requirements. Therefore, less-than-significant impacts are expected to occur related to seismic shaking and other seismic hazards.

b) Erosion – Less than Significant with Mitigation Incorporated. Several soil types are found on the project sites. Arnold loamy sand and the Arnold-Santa Ynez complex are found throughout the area, as well as, Vista coarse sandy loam. These soils are classified by the Monterey County Soil Survey as having a moderate to high erosion hazard potential. The project area is identified in the Monterey County General Plan as having a high erosion potential (SOURCE V.1b-Exhibit 4.4.5).

Impact Analysis. Construction activities associated with the project would include site preparation, grading and installation of utilities. Several segments of the pipeline alignment are sited on gently sloping terrain, and the some of the soils are classified as having moderate to high erosion hazards. The greatest potential impacts could occur during construction along segments adjacent to Carneros Creek and its tributary. Implementation of Mitigation Measures BIO-2 and BIO-5 above, as well as Mitigation Measure WQ-1 below, would require implementation of erosion control measures and revegetation, and would mitigate impacts to a less-than-significant level.

Indirect impacts to water quality could result from inadvertent transport of sediments into nearby water bodies during construction, which is discussed below in subsection 9(f).

d) Expansive Soils – Less than Significant. As indicated above, several soil types are found on the project sites, all of which are classified by the Monterey County Soil Survey as having a low shrink swell potential. The water storage tank will be designed and constructed in accordance with recommendations of geotechnical reports prepared for this project element; the pipeline installation will include engineered fill and soil compaction recommendations as necessary. Thus, the project would not create substantial risks to life or property should expansive soils be present, and this is considered a less-than-significant impact.

e) Soil Suitability – No Impact. The project does not involve the use of septic tanks or alternative wastewater disposal systems; therefore, there is no impact.

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7. GREENHOUSE GAS EMISSIONS

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment??

B) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Analysis and Conclusions:

a) Generation of Greenhouse Emissions – Less-than-Significant Impact. Climate change refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Greenhouse gases trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities (SOURCE V.11a). Climate change models predict changes in temperature, precipitation patterns, water availability, and rising sea levels, and these altered coastal conditions can have impacts on natural and human systems in California (SOURCE V.11c). Changes in temperature, precipitation, and sea levels can affect California’s public health, habitats, ocean and coastal resources, water supplies, agriculture, forestry, and energy use (Ibid.), as well as result in increased droughts and flooding.

The most common GHG that results from human activity is carbon dioxide, followed by methane and nitrous oxide (SOURCE V.11e). The primary contributors to GHG emissions in California (as of 2008) are transportation (about 37%), electric power production (24%), industry (20%), agriculture and forestry (6%), and other sources, including commercial and residential uses (13%). Approximately 81% of California’s emissions are carbon dioxide produced from fossil fuel combustion (SOURCE V.11a).

The State of California passed the Global Warming Solutions Act of 2006 (AB32), which seeks to reduce GHG emissions generated by California. The Governor’s Executive Order S-3-05 and AB 32 (Health & Safety Code, § 38501 et seq.) both seek to achieve 1990 emissions levels by the year 2020. Executive Order S-3-05 further requires that California’s GHG emissions be 80 percent below 1990 levels by the year 2050. AB 32 defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrocarbons, perfluorocarbons and sulfur hexafluoride.

The California Air Resources Board (CARB) is the lead agency for implementing AB32. CARB identified 36 “early actions to mitigate climate change in California” in April 2007 as required by AB 32. These actions relate to low carbon and other fuel standards, improved methane capture
at landfills, agricultural measures, reduction of hydrocarbons and perfluorocarbons from specified industries, energy efficiency, and a variety of transportation-related actions.

In accordance with provisions of AB 32, CARB has completed a statewide Greenhouse Gas (GHG) inventory that provides estimates of the amount of GHGs emitted to, and removed from, the atmosphere by human activities within California. Based on review of this inventory, in December 2007 CARB approved a 2020 emissions limit of 427 CO\textsubscript{2} equivalent million metric tons (MMT CO\textsubscript{2}e)\textsuperscript{5}, which is equivalent to the 1990 emissions level. In accordance with requirements of AB32, a Scoping Plan was released in October 2008 and adopted by CARB in December 2008. The Scoping Plan identifies 18 emissions reduction measures that address cap-and-trade programs, vehicle gas standards, energy efficiency, low carbon fuel standards, renewable energy, regional transportation-related greenhouse gas targets, vehicle efficiency measures, goods movement, solar roofs program, industrial emissions, high speed rail, green building strategy, recycling, sustainable forests, water and air (SOURCE V.11b).

Impact Analysis. The proposed project will result in the construction of water system improvements, provision of water service to existing residencies and amendment of a SOI boundary for the Aromas Water District. The proposed project would not result in direct or indirect emissions of GHGs associated with new development. The proposed water system improvements would not result in stationary emissions or vehicular emissions that would generate greenhouse emissions. The project would use limited electricity to pump water to the new water storage tank, but this would be a very minor and intermittent level of energy consumption and related indirect GHG emission. Therefore, this is considered a less-than-significant impact.

(b) Conflict with Applicable Plans – No Impact. The project would not conflict with state plans adopted for the purpose of reducing greenhouse gas emissions. Monterey County is in the process of preparing a Climate Action Plan to address countywide greenhouse emissions, but a plan has not yet been adopted. Thus, the project would not conflict with plans adopted for the purpose of reducing greenhouse gas emissions.

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<tr>
<th>8. HAZARDS AND HAZARDOUS MATERIALS</th>
<th>Less Than Significant Impact</th>
<th>Potentially Significant Impact</th>
<th>With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
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Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ✔

\textsuperscript{5} The CO\textsubscript{2} equivalent emissions are commonly expressed as "million metric tons of carbon dioxide equivalent (MMTCO\textsubscript{2}E)". The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated Global Warming Potential (GWP).
8. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ✓

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ✓

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ✓

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? ✓

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? ✓

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ✓

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? ✓

Analysis and Conclusions:

a) Hazardous Materials, Waste or Emissions — No Impact. The proposed annexation consists of the extension of water service to an existing developed residential area and construction of necessary infrastructure improvements (i.e., water lines, meters, hydrants). The project does not involve the transport, use, or disposal of hazardous materials or wastes and would not result in creation of a public health hazard. Therefore, the project would not result in impacts related to hazardous material use or hazardous emissions or wastes.


d) **Hazardous Sites – No Impact.** Review of applicable state and Environmental Protection Agency (EPA) database resources indicate that the project site is not included on a list of hazardous materials sites (compiled pursuant to Government Code Section 65962.5) which includes but is not limited to the National Priorities List (NPL) or “Superfund List” and the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). Therefore, the project would not pose a significant hazard to the public or the environment and there would be no impact.

e-f) **Airport Safety – No Impact.** The project site is not located near a public airport or private airstrip. (SOURCE VI.1.c). The proposed provision of water service and construction of water system improvements would not result in new employees or residents.

g) **Emergency Response Plans – No Impact.** The project is located within a semi-rural portion of the county and the temporary construction activities would have no effect on or interfere with adopted emergency response or evacuation plans for the area. The Monterey County Emergency Plan contains policies and actions needed to respond to widespread emergencies. As a public facility improvement, the project would not interfere with implementation of the plan or its objectives; therefore, no impacts would result.

h) **Wildland Fire Hazards – No Impact.** The project sites are located within a rural, wooded area subject to wildland fire hazards. The proposed project consists of water system improvements and would not result in habitable structures or an increase in population that would result in wildland fire risks or expose residents to such a risk. Therefore, no impacts are expected. The proposed water system components would result in improve fire flows, water storage and provide new fire hydrants in the area.

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<tr>
<th>9. HYDROLOGY AND WATER QUALITY</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</thead>
<tbody>
<tr>
<td>Potentially Significant Impact</td>
<td>With Mitigation Incorporated</td>
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**Would the project:**

a) Violate any water quality standards or waste discharge requirements? ✓

b) 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)? ✓
9. HYDROLOGY AND WATER QUALITY

Would the project:

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<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>c)</td>
<td>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?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
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<tr>
<td>d)</td>
<td>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 which would result in flooding on- or off-site?</td>
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<td>✓</td>
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<tr>
<td>e)</td>
<td>Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
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<td>f)</td>
<td>Otherwise substantially degrade water quality?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
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<tr>
<td>g)</td>
<td>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?</td>
<td></td>
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<td>✓</td>
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<td>h)</td>
<td>Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
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<td>i)</td>
<td>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?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
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<td>j)</td>
<td>Inundation by seiche, tsunami, or mudflow?</td>
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<td></td>
<td></td>
<td>✓</td>
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Analysis and Conclusions:

a) Waste Discharge – No Impact. The proposed water system improvements would not result in discharges that would be regulated or potentially violate water quality standards or waste discharge requirements. Therefore, no impacts are expected.
b) **Groundwater – Less than Significant.** The project areas are located within northern Monterey County. The Monterey County Water Resources Agency (MCWRA) is responsible for the management and planning of water resources within Monterey County, except for the northernmost portion of the County that is managed by the Pajaro Valley Water Management Agency (PVWMA) as further discussed below. The water agency jurisdiction and project watershed boundaries are shown on Figure 11.

As indicated in section V.B above, this Initial Study tiers from Monterey County’s General Plan EIR analysis regarding regional water supply. The Draft and Final EIR sections that address this issue are “incorporated by reference.” The information and analysis is summarized in this subsection and supplemented with information and data regarding the Aromas Water District.

**NORTH MONTEREY COUNTY GROUNDWATER CONDITIONS.** The project area is identified as being located with the Bolsa Nueva watershed in northern Monterey County, which is adjacent to and south of the Pajaro River watershed (SOURCE VI.1c Exhibit 4.3.1). The North County watersheds lie between the Salinas River and Pajaro River watersheds, straddling the Pajaro Valley groundwater basin and the northeastern end of the Salinas Valley groundwater basin (East Side Subarea) - a watershed divide that is not topographically well defined, and includes the Elkhorn Slough watershed (Ibid.). The Elkhorn Slough drainage and its major tributary, Carneros Creek, extend beyond the county’s eastern boundary into San Benito County. Most of the proposed SOI amendment area, including the Oak Ridge subdivision, is located within the Carneros Creek drainage.

There are four large (more than 200 connections) water systems in the North County planning area: Cal-Water’s Oak Hills and Las Lomas water systems, Normco, and the Aromas Water District. These four systems have approximately 2,246 connections, serving approximately 23% of the parcels in North County. There are approximately 600 small (from 2 to 200 connections) water systems in North County, serving approximately 3,707 parcels. This represents 38% of the total number of parcels in the area (SOURCE VI.1c). Approximately 40% of parcels in North County are served by private wells or are undeveloped (Ibid.).

According to the Monterey County General Plan EIR, groundwater supply in North County is limited by a combination of natural conditions, including relatively small aquifers, limited recharge potential, and impermeable layers between subareas (SOURCE VI.1c). Due to demand exceeding supply, the area has been in a state of chronic overdraft since the 1950s. Groundwater extractions are estimated to be twice the average annual recharge. Resultant water supply and water quality problems include falling water levels, seawater intrusion, and extensive areas with nitrate contamination. North County problems not only affect residents and agriculture in the area, they also affect water supply and water quality conditions in the adjacent and hydraulically connected Salinas and Pajaro Valleys. Agriculture makes up the largest part of the water demand (SOURCE VI.1c).

Groundwater in the North County has been divided into five planning areas with varying hydrogeologic and water use characteristics: the Pajaro, Springfield Terrace, and Highlands North planning areas are managed as part of the Pajaro Valley groundwater basin; the Highlands South and Granite Ridge planning areas are managed as part of the Salinas River groundwater basin (SOURCE VI.1c). The Highlands North and South areas reflect the jurisdictional boundary between the PVWMA and the MCWRA, which is based on hydrogeology because

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6 Overdraft - the amount of water withdrawn exceeds the amount of water replenishing the basin.
relatively impermeable mud fills a deep valley underlying Elkhorn Slough and acts as a barrier to groundwater movement between the Salinas and Pajaro Valleys (ibid.). Local recharge in the area may flow into either the Pajaro Valley groundwater basin or the Salinas Valley groundwater basin (ibid.).

The project sites are located primarily within the Granite Ridge subarea, except for the northern portion of the proposed SOI amendment area, which is located in the Highlands North subarea. The Granite Ridge community has experienced problems with water quality and supply. Groundwater supply in North County is limited by a combination of natural conditions, including relatively small aquifers, limited recharge potential, and impermeable layers between subareas. Groundwater extractions are estimated to be twice the average annual recharge, with a reported demand of approximately 1,300 acre-feet per year (AFY) that has resulted in an overdraft of approximately 700 AFY (SOURCE VI.1c). Resultant water supply and water quality problems include falling water levels, seawater intrusion, and extensive areas with nitrate contamination (ibid.).

Groundwater overdraft is also experienced within the Highlands North planning subarea. Water extractions are estimated to be almost twice the average annual recharge, with a reported demand of approximately 5,621 acre-feet per year (AFY) that has resulted in an overdraft of approximately 2,701 AFY (SOURCE VI.1c).

In 2002, MCWRA drafted a Comprehensive Water Resources Management Plan to present strategies to resolve overdraft conditions and associated water quality problems in North County. For the area within MCWRA's jurisdiction (the Salinas Valley basin), the plan proposes a possible long-term expansion of the Salinas Valley Water Project (SVWP) to deliver supplemental water to agricultural users in North County. This would be dependent upon the participation and funding support of landowners in the area (SOURCE VI.1c). A portion of the proposed annexation area in the Via Del Sol subdivision are also part of the County's "Zone 2C" that was established to fund implementation of the Salinas Valley Water Project (SVWP). The MCWRA is currently evaluating a new well and water system for the Granite Ridge Area to increase water supply and improve supply reliability, and an EIR is currently being prepared for the project.

A small portion of the 76,800-acre Pajaro Valley groundwater basin, is located within northern Monterey County. The primary sources of recharge to the Pajaro Valley groundwater basin are infiltration of rainfall, seepage of streamflow from the Pajaro River and its tributaries, and percolation of irrigation water. As documented in numerous groundwater studies conducted over the past 55 years, the Pajaro Valley groundwater basin is in an overdraft condition (SOURCE VI.1c), which is further described below.

Water quality issues in North County relate primarily to high levels of nitrates. Intensive agriculture and non-sewered residences have resulted in excessive nitrogen loading that has rendered groundwater non-potable in many areas (SOURCE VI.1c). There are approximately 680 small water systems in North County, including all wells serving from 2 to 200 connections. Of these, 77 (about 11% of the total) currently exceed the 45-mg/l nitrate standard. Approximately 165 systems (about 23% of the total) have nitrate levels greater than half but not in excess of the standard (23–45 mg/l) The remainder of the systems (about 66% of the total) have nitrate levels of from 0 to 22 mg/L (ibid.).
AWD WATER SUPPLIES & PVWMA BACKGROUND. The Aromas Water District (AWD) utilizes groundwater to provide potable drinking water to its service area. (Further description of AWD’s service area and water supplies is provided in subsection 17(d) below.) Most of the AWD service area that is located within Monterey County, as well as the District’s three water supply wells, is located within the Highlands North groundwater planning subarea. Annual water use within the AWD has ranged between about 370 and 415 acre-feet per year over the past ten years (SOURCE VI.4b).

Two of AWD’s active wells (Carpenteria and Pleasant Acres) are located within the jurisdiction of the Pajaro Valley Water Management Agency (PVWMA). Additionally, most of the Monterey County portion of the AWD is located within the Pajaro groundwater basin that is managed by the PVWMA. The District’s San Juan well is located outside, but adjacent to, the PVWMA boundary, and is within the southern portion of the Highlands North groundwater planning subarea. However, pursuant to an agreement between AWD and PVWMA in 2002, the San Juan well is subject to PVWMA ordinances and resolutions as if the well were located within PVWMA’s jurisdiction.

The PVWMA is charged with the management of existing and supplemental water supplies in the Pajaro Valley Water Basin, which is in an overdrafted condition. The PVWMA is responsible for developing and using supplemental water and available underground storage to manage the groundwater supplies. The Agency is authorized to construct, maintain, operate, and repair necessary works for the protection of groundwater and for any reclamation and replenishment of such water within its statutory boundaries. This authority includes importation of water, but only for agricultural purposes (with the one exception that imported water may be provided for other uses to the Aromas Water District) (SOURCE VI.5a).

The PVWMA’s infrastructure components include the operational Coastal Distribution System recycling project in partnership with the City of Watsonville, and the Harkins Slough Project. The Coastal Distribution System delivers blended supplemental recycled water supplies to agricultural parcels along the coast where groundwater pumping must be eliminated in order to prevent seawater intrusion into the aquifer. The Harkins Slough Project diverts excess flow from Harkins Slough in the winter months and pumps it to a 12-acre recharge basin where it percolates into the upper aquifer for temporary storage (SOURCE VI.5a).

Numerous studies conducted over the past 50 years have documented that the Pajaro Valley groundwater basin is in an overdraft condition, which has led to seawater intrusion in some coastal areas. Current groundwater pumping provides approximately 69,000 acre-feet per year (AFY) of the total PVWMA area water demand of 71,500 AFY. Nearly 85% of the water use in the basin is for agricultural purposes (SOURCE VI.7). Water demand in the basin is estimated to increase by approximately 9,000 acre-feet per year (AFY) from an existing use of about 69,000 AFY to a total of 78,000 AFY in the year 2040 (Ibid.).

Modeling has shown that seawater intrusion is not uniform and that some areas along the coast are more impacted than others. The results indicate that, under current pumping practices, a 65% reduction in basin-wide groundwater pumping (45,000 AFY) is necessary to eliminate seawater intrusion throughout the coastal area, which would also cause groundwater levels to rise throughout the basin. With basin-wide pumping reductions, the sustainable yield of the

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Footnote: Basin sustainable yield is defined as the long-term amount of groundwater, which can be extracted from the aquifer system without causing an adverse impact on the quantity and/or quality of the groundwater basin.
Pajaro groundwater basin is estimated at approximately 24,000 AFY (69,000 – 45,000 AFY). This yield is only one third of the current average annual demand on groundwater supplies (SOURCE VI.7). With modified pumping (i.e., elimination of coastal pumping) and dependable supplemental water supplies, the basin sustainable yield could increase to 48,000 AFY (Ibid.). With the current groundwater demand of 69,000 AFY and a basin sustainable yield of 48,000 AFY, 21,000 AFY would still be needed to balance the basin. With a projected future groundwater demand of 78,000 AFY, 30,000 AFY would still be needed to balance the basin (Ibid.).

The PVWMA adopted a revised Basin Management Plan (BMP) on February 6, 2002, which currently is being updated. The Revised Basin Management Plan (BMP) evaluates basin management strategies to:

- Balance water demand within the PVWMA service area with sustainable water supplies:
- Prevent seawater intrusion in the service area; and Initiate long-range programs to protect water supply and quality within the basin (PVWMA, February 2002); and
- Initiate long-range programs to protect water supply and quality within the basin.

The Revised BMP includes a range of projects dealing with development of local surface water supplies, recycling of treated wastewater, groundwater storage, and importation of water from the Central Valley Project. The final strategy adopted by the Board, the “Modified BMP 2000 Alternative,” includes five major projects and programs, as well as, watershed management programs that would include water resources monitoring, water metering, nitrate management, wells management, and recharge area protection (SOURCE VI.7).

The PVWMA is authorized to connect to the Central Valley’s San Felipe water project by constructing a new pipeline that would transport this non-local water to supplement local water supplies within the Pajaro Valley. According to legislation that formed the Agency, the use of San Felipe water is to be limited to agricultural irrigation within the Pajaro basin and to supplement existing water supplies of the Aromas Water District. However, recent court decisions regarding environmental quality in the Delta Project may result in reducing the amount of water supplies that are available from the San Felipe project (SOURCE VI.5a). Due to Delta water and environmental issues, as well as cost of a pipeline project, the CVP project no longer appears to be a feasible long-term supplemental supply. The PVWMA Board of Directors deleted this project from the 2002 BMP in February 2010 (Bannister, PVWMA, personal communication, November 2011).

In 1998, the PVWMA adopted two ordinances which restrict any water district or water purveyor within the Pajaro basin from exporting water beyond the basin, except for public health and safety. The AWD’s wells are within the jurisdiction of PVWMA, except its most recent well, San Juan, is located just outside the PVWMA’s jurisdictional boundary. However, AWD and PVWMA, pursuant to an agreement executed in 2002, AWD agreed to comply with all current and future PVWMA ordinances and resolutions that may apply to the new well as if the new well were located within the PVWMA boundaries, including the export provisions of Ordinance 98-1. Thus, any approval of water service by the AWD to areas outside the PVWMA jurisdiction would be subject to PVWMA approval under the Agency’s export provisions. Authorization to allow AWD to extend water service to the Oak Ridge and Via Del Sol Subdivision areas was considered and granted by the PVWMA on November 3, 2010.
Impact Analysis: The proposed Oak Ridge and Via Del Sol annexation and potential future annexation of properties located within the proposed Sphere of Influence amendment area, if approved by LAFCO, will expand AWD’s provision of water service and would increase groundwater pumping in an area subject to overdraft conditions. Most of the water demand within the annexation and SOI amendment areas currently exists as the areas are primarily developed. The minor increase in water demand would not be considered significant. Most of the existing and potential future demand is within the same subwatershed (Carneros Creek), as are the AWD wells. Therefore, the project impact on regional groundwater supplies is considered less than significant as discussed below.

The proposed Oak Ridge-Via Del Sol annexation area includes 80 lots of which eight are small well or utility lots, and the remaining 72 lots are developed and are currently using some level of groundwater that is supplied by the Oak Ridge Mutual Water Company and other mutual and private wells. Due to diminishing supplies, water has been trucked into the area at times. Therefore, water demand within the area would increase slightly with connection to the AWD. Based on annual water use within AWD’s service area, existing accounts average annual water use is approximately 0.5 AFY per connection. Thus, the total existing water demand from the 72 residences to be annexed is estimated as 36 AFY, which is partially provided by existing groundwater supplies. (The AWD indicated in its letter to PVWMA in October 2010 that estimated demand would be 30 AFY based on a slightly lower lot count, which has since been updated.)

With connection to AWD, groundwater extraction would shift from the Granite Ridge planning subarea to the Highlands North subarea where the AWD wells are located, but half the lots (Oak Ridge) and the AWD wells are all located within the same Carneros Creek watershed. The proposed new water service is proposed in response to existing health and safety concerns, and the PVWMA has authorized AWD to extend service to the proposed areas. The County’s General Plan policies promote coordination between and consolidation with public water service providers drawing from a common water table to ensure that the water table is not overdrawn (Policy PS-2.1). Since the annexation area is currently developed and using groundwater, and both the County and PVWMA have supported the annexation, the potential minor net increase in water demand and pumping as a result of the proposed annexation, would not be considered significant.

The proposed SOI amendment area includes 243 existing lots, of which 80 are within the proposed annexation area as discussed above. Of the remaining 163 lots, 135 are currently developed, 26 lots are vacant and two lots are well lots. If the SOI amendment is approved, all lots that are not in the current annexation proposal could apply to LAFCO at some future date requesting annexation to the AWD. Since nearly all the lots in the SOI amendment area are currently using water, there would not be a significant net increase in water demand. As with the proposed annexation area, water extraction would shift from mostly the Granite Ridge to the Highlands North planning subarea, although some of the SOI amendment area is located within the Highlands North subarea. The SOI area outside of the proposed annexation area, as well as the AWD wells, are located in the same Carneros Creek watershed.

The SOI amendment area outside the proposed annexation area is estimated to currently use approximately 68 AFY of water based on the estimated 0.5 AFY for each of
the 135 developed lots. There are 26 undeveloped lots in the SOI area. Under current County policies, only one residential unit would be permitted on existing lots of record until supplemental water sources are developed. Thus, 26 new homes may be developed in the future with an estimated water demand of 13 AFY based on the 0.5 AFY water demand rate. The 2010 Monterey County General Plan EIR projected that 435 new residential units could potentially be developed in the North County area with 262 constructed by 2030 (SOURCE VI.1b). This level of development would result in a new water demand of 154 AFY in the North County area (SOURCE VI.1b). There are an estimated 577 vacant residential lots in the North County Plan area according to the General Plan EIR. Thus, potential new development in the SOI area has been included in the County General Plan EIR analysis.

The 2010 Monterey County General Plan EIR concluded that land uses and development consistent with the General Plan would result in a water demand that exceeds the capacity of water supplies and could continue to impact declining groundwater supplies, resulting in a significant unavoidable impact. Future potential development resulting from the SOI amendment would be within the development levels analyzed within the General Plan EIR. The EIR concluded that General Plan policies will constrain development until long-term water supplies are assured, but until then, non-discretionary development on legal lots of record (i.e., one single-family home) will exacerbate existing water supply problems in the North County, including the Pajaro Valley, and within the Pajaro River basin the impact would remain significant and unavoidable. The EIR did acknowledge that while current planning is underway in both the North County and Pajaro watershed areas to address current problems and provide water for new development, none of the major supply projects is sufficiently developed to conclude that they will provide adequate water to address current problems and future needs (SOURCE VI.1b). Mitigation Measure WR-1 puts the County on record as supporting a regional solution (but not necessarily those currently proposed). For the Granite Ridge/Highlands South areas, the EIR concluded that impacts to water supply would be less than significant because Salinas Valley Water Project brings balance to basin overall (Ibid.).

The Monterey County General Plan Public Services Element Policy PS-3.1 prohibits approval of new development that does not have proof of sustainable water supply, both in quality and quantity, to serve the development. The first single-family dwelling and accessory uses on an existing lot of record are exempted from this policy. The policies include comprehensive requirements to ensure that new discretionary development has adequate potable water supplies before it can be built. Policy PS-3.9 requires that a program to eliminate overdraft of water basins be established as part of the Capital Improvement and Financing Plans of the General Plan. The program would use water banking, groundwater and aquifer recharge and recovery, desalination, pipelines to new supplies, and a variety of conjunctive use techniques. Furthermore, The North County Area Plan Policy NC-5.1 requires new development to maximize groundwater recharge capabilities. North County Area Plan Policy NC-5.2 (surface and groundwater water supply) states that water development projects that can offer a viable water supply to water-deficient areas in North County shall be a high priority.

Water supplied to the proposed annexation and SOI amendment areas would be from existing AWD wells that have already been permitted and developed. Approximately 117 AFY of new water demand within the AWD could result from the project as outlined
above: 36 AFY for the proposed annexation; 68 AFY for existing residences in the remainder of the SOI amendment area; and 13 AFY for undeveloped lots in the SOI amendment area. While the level of AWD pumping would increase, water withdrawals would primarily occur from the same subwatershed as existing uses. However, the project water demand would shift some groundwater extraction from the Granite Ridge subarea to the Highlands North subarea. Approximately 50 lots in the SOI amendment area outside of the proposed annexation area are located in the Granite Ridge subarea; the remainder of the lots are already located within the Highlands North subarea. Thus, approximately 61 AFY of groundwater pumping would shift from the Granite Ridge to Highlands North subarea (36 AFY for the proposed annexation area and approximately 25 AFY for a portion of the SOI amendment area). This represents approximately 1% of the estimated withdrawals from the Highlands North subarea.

The Highlands North subarea in which the AWD production wells are located is managed by the PVWMA and all AWD wells are within or treated as they are within the PVWMA jurisdiction. Thus, the proposed project would also result in a minor increased demand within the basin in which current demand of approximately 69,000 AFY is projected to increase to 78,000 AFY in the future. As indicated above, the proposed project could result in additional annual water demand of 117 AFY to be served by AWD with the currently proposed annexation and other potential future annexations within the SOI amendment area. This represents approximately 0.2% of the existing demand within the Pajaro basin, which is a very minor increase.

The PVWMA’s Basin Management Plan includes the following water supply efforts; water conservation program (5,000 acre-feet), Harkins Slough project (1,100 acre-feet), Murphy Crossing project (1,600 acre-feet), and the Watsonville Area Water Recycling Project (4,000 acre feet) and related distribution system. These projects will relieve pumping pressure by providing recycled water supplies to replace groundwater used for farmland irrigation. However, these efforts will not be sufficient to prevent continued overdraft as result of urban and agricultural demands without importation of water from the Central Valley. There are no current plans to import additional water supplies from outside the county in order to meet future demand.

The currently proposed annexation will expand AWD’s service area and provision of water service to approximately 72 existing homes. If the proposed Sphere of Influence amendment is approved, additional annexations and requests for water service may be forthcoming in the future for an additional 161 existing parcels, which are currently developed with homes, except for 26 lots. Annexation would increase groundwater pumping in a basin that has experienced historical groundwater overdraft and supply problems. However, the majority of the area is currently developed and utilizing water from the same groundwater basin – the Carneros Creek subwatershed. The AWD wells are also within this subwatershed. Since most of the water demand associated with the proposed annexation and within the SOI area currently exists and is in the same subwatershed, the project would not substantially impact groundwater resources. The amount of new development that may occur in the future in the SOI amendment area would be minor and would fall under the analysis of regional groundwater impacts included in the County’s General Plan EIR. Furthermore, future annexation would be subject to environmental review and approval by LAFCO of Monterey County. Provision of water by AWD to the SOI amendment area would also be subject to approval of the PVWMA under provisions of its export ordinance. New development would be subject to
County land use regulations. Monterey County General Plan policies prohibit approval of new development that does not have proof of a sustainable water supply (PS-3.1).

c) Alteration of Drainage and Erosion Potential – No Impact. The proposed annexation and Sphere of Influence project elements would not result in new development or impervious surfacing, except for a potential minor increase with construction of a new water storage tank. The proposed water system improvements would have no effect on streams or watercourses in the vicinity. Therefore, the project would result in no impact regarding alteration of drainage patterns and watercourses and potential subsequent erosion.

d-e) Drainage – Less than Significant. Existing drainage in the vicinity is via surface flow into intermittent drainages that primarily flow into creeks and tributaries within the Elkhorn Slough drainage. The proposed pipeline is underground and would not affect drainage. The water storage tank and small pump station would result in a minor increase in impervious surface of a magnitude of less than 7,500 square feet. The resulting increase in runoff would be minimal and would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding and would not substantially alter the existing drainage pattern of the site. The minor increase in runoff at the water storage tank site is not expected to substantially affect intermittent drainages. Therefore, the project is expected to have a less-than-significant impact on drainage and would not contribute runoff that would exceed capacity of storm water drainage systems.

f) Water Quality – Less than Significant with Mitigation. An intermittent tributary to Carneros Creek is located on the west side of Dunbarton Road south of San Juan Road. Carneros Creek is located to the north and is culverted under Dunbarton Road at its intersection at San Juan Road. None of the creeks/drainages in the project areas are identified as being “impaired” in the Monterey County General Plan. The project area is identified in the Monterey County General Plan as having a low to moderate susceptibility to earthquake-induced landsliding (SOURCE V.1b-Exhibit 4.3.14).

Impact Analysis. Excavation and installation of the water pipeline could result in inadvertent erosion into Carneros Creek and its tributary, if not properly managed. Without incorporation of proper erosion control measures and best management practices, soil disturbance could result in inadvertent erosion into these water bodies that could adversely affect water quality. This is considered a potentially significant impact.

Pipeline construction will occur within the roadway of Dunbarton Road, which is adjacent to Carneros Creek (at a culvert under Dunbarton Road just south of San Juan Road) and a tributary to Carneros Creek (along Dunbarton Road north of Oak Ridge Road). At Carneros Creek the new pipeline will be placed above the existing creek culverts. At the intersection of Dunbarton Road and Oak Ridge Road, the new pipeline may be placed under the existing creek culvert. Although construction will occur within the shoulder of the roadway and/or above/under existing culverts, activities may result in excavated materials entering the creek during rainfall events, inadvertent deposition of construction materials in the creek, or inadvertent damage to existing creek culverts. The proposed water storage tank is located at upper elevations away from watercourses, although standard erosion control measures would be required during construction.
Implementation of Mitigation Measures BIO-2 and BIO-5 above, as well as Mitigation Measure WQ-1 below, would require implementation of erosion control measures and revegetation, and would mitigate impacts to a less-than-significant level.

**Mitigation Measure WQ-1.** In addition to erosion control measures identified in Mitigation Measures BIO-2 and BIO-5, include erosion control measures in the construction specifications for all water system improvements and implement during construction to include, but not be limited to, prohibiting construction activities, placement of spoils, and storage of materials and machinery adjacent to water bodies; prohibiting grading between November 1 and April 1; protecting disturbed areas during these times with appropriate erosion control measures; and immediately revegetating disturbed areas with appropriate native plant species that are compatible with surrounding vegetation.

g-h) Housing and/or Structures in Flood Hazard Areas – No Impact. Most of the proposed water system improvements are located outside of a mapped 100-year floodplain (SOURCE VI.3 and SOURCE V.1c-Exhibit 4.3.13). However, a segment of the water line along Dunbarton appears to be within the 100-year floodplain of the Cameros Creek tributary. However, the pipeline would be underground. None of the project elements would result in construction of housing or other structures within a floodplain or expose people to flood hazards. Therefore, the project would have no impact related to placement of housing or structures within a flood hazard area.

i-j) Dam Failure, Tsunami, Seiche, Mudflow Hazards – No Impact. The project site is not located within an area subject to flooding as a result of failure of a dam or levee according to County maps. The project site is not located in the coastal zone or near any waterbody, and thus, is not subject inundation by seiche, tsunami, or mudflow. Therefore, there is no impact.

### 10. LAND USE AND PLANNING

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Physically divide an established community?</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
<td></td>
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<td>✔</td>
</tr>
</tbody>
</table>
Analysis and Conclusions:

a) Physically Divide a Community – No Impact. The proposed annexation component of the project consists of construction of a new water pipeline and storage tank to serve existing subdivision. As such, it would not divide an established community. The proposed SOI amendment will result in inclusion of additional lands within the Aromas Water District’s Sphere of Influence to provide a contiguous service area, which also would not physically divide an established community. Thus, no impact would result with implementation of the proposed project.

b) Conflicts with Policies & Regulations – No Impact. The proposed annexation and SOI amendment area are located within the North County Planning Area; the water storage tank and a short segment of the proposed water pipeline are located in the coastal zone and subject to provisions in the North County Land Use Plan. The parcels within the proposed annexation sites area are designated Residential (Rural Density) in the Monterey County General Plan, except for the area along Via Del Sol, which is designated Resource Conservation. Land use designations within the proposed SOI amendment area include: Residential (Rural Density & Low Density); Resource Conservation; Agricultural Conservation; Permanent Grazing; and Commercial.

It does not appear that the project conflicts with relevant County policies or regulations adopted for the purpose of avoiding or mitigating an environmental impact. The proposed actions are consistent with Monterey County General Plan Policy PS-2.1, which promotes coordination between and consolidation with those public water service providers drawing from a common water table to ensure that the water table is not overdrawn. The proposed construction of water system improvements is consistent with “North County Area Plan” policies. There will be no new development within a sensitive visual area, consistent with Policy NC-3.1 as discussed in subsection 1(a) above. There will be no removal of native oak trees, consistent with Policy NC-3.4 as discussed in subsection 4(e).

c) Habitat Plans – No Impact. Monterey County does not have an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional or state habitat conservation plan. Therefore, there is no impact.

<table>
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<tr>
<th>11. MINERAL RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potentially Significant Impact</td>
</tr>
<tr>
<td>Would the project:</td>
</tr>
<tr>
<td>a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</td>
</tr>
<tr>
<td>b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</td>
</tr>
</tbody>
</table>
Analysis and Conclusions:

a-b) Mineral Resources – No impact. The project site does not contain any locally or regionally valuable mineral resources according to the Monterey County General Plan. A couple of areas outside the proposed annexation area are identified as locations of “non-metallic” mineral mines (SOURCE V.1b-Exhibit 4.5.1), but there is no proposed construction in these areas. Therefore, the proposed project would not adversely affect mineral resources and no impact is expected.

12. NOISE

<table>
<thead>
<tr>
<th>Would the project result in:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td></td>
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<td></td>
<td>✓</td>
</tr>
<tr>
<td>c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) For a project within the vicinity of an airstrip, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>✓</td>
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<td></td>
</tr>
</tbody>
</table>

Analysis and Conclusions:

a-b) Noise Exposure – No Impact. The project consists of construction of water system improvements to provide water service to existing residences, including installation of an underground water pipeline and a water storage tank (above ground). The project sites are located in a rural area. Ambient noise in rural areas is generally very low and well within noise
compatibility standards. None of the project components (annexation, water system improvements or SOI amendment) will result in structural development that might subject people to excessive noise levels. Thus, the project would result in no impact related to noise exposure.

c) **Permanent Noise Increases – Less-than-Significant Impact.** The project consists of construction of water system improvements to provide water service to existing residences, including installation of an underground water pipeline and a water storage tank (above ground). Once completed, there will be no permanent increases in ambient noise levels associated with the water pipeline and water storage tank. The small proposed pump station would generate minor intermittent sounds due to pumping, but the facility will be enclosed and would not result in a substantial increase in ambient noise levels. Thus, the construction of the proposed water system improvements would not result in a substantial increase in ambient noise level or expose people to noise in excess of standards identified in the County’s General Plan. Thus, this is considered a less-than-significant impact.

d) **Temporary Noise Increases – Less than Significant.** The proposed water pipeline and water storage tank are located within an existing rural – low density residential area.

*Impact Analysis.* Construction of the proposed water system improvements will temporarily increase noise levels. Noise levels will vary during the construction period, depending on the activity and type of equipment used, but would not be considered substantial due to the short-term duration. Project construction activities will result in short-term and temporary noise increases (approximately 4-6 months) associated with construction activities. This will result in intermittent increased ambient noise levels that would vary throughout the day. However, given the temporary and short-term nature of this construction activity, impacts related to construction noise are not considered significant. Therefore, the project would result in a less-than-significant impact related to permanent ambient noise levels.

e-f) **Airport Noise – No Impact.** There are no air carrier or general aviation airports in the immediate vicinity of the project site (SOURCE Y.1c). The Watsonville Municipal Airport is located approximately 10 miles to the northwest. There are no private airstrips in the area that would be affected by the proposed project. Therefore, no impacts are expected.

### 13. POPULATION AND HOUSING

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</td>
<td>![Checkmark]</td>
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</table>

**AROMAS WATER DISTRICT**
Annexation & Sphere of Influence Amendment

**INITIAL STUDY**
November 2011
13. POPULATION AND HOUSING

Would the project:

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? ✓

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ✓

Analysis and Conclusions:

a) Population Growth Inducement – No Impact (Annexation) and Less-than-Significant Impact (SOI Amendment).

The Aromas Water District currently serves approximately 900 connections. Estimates provided by AWD to AMBAG indicate that the AWD estimated that it can serve an additional 491 housing units (AMBAG, June 2008, “Monterey Bay Area 2008 Regional Forecast Population, Housing Unit and Employment Projections for Monterey, San Benito and Santa Cruz Counties to the Year 2035”). Infrastructure improvements to serve a population increase of 10 to 20 percent is not expected.

ANNEXATION PROJECT AREA: The proposed project consists of water system improvements and annexation to serve 72 existing developed residential lots and residences in the Oak Ridge Road and Via Del Sol Drive areas. These lots are developed with a single-family home, and there would be no potential for additional development or growth. The project will result in replacement of existing private water systems with public water service provided by the Aromas Water District. The proposed project will provide a new water transmission pipeline, a new water storage tank and supporting water distribution system infrastructure. The project is proposed due to existing water supply availability and quality problems that do not meet state standards.

SPHERE OF INFLUENCE AMENDMENT PROJECT AREA: In addition to the proposed 72 homes in the annexation area, there are 161 lots within the proposed Sphere of Influence amendment area for a total of 233 potential new connections in the entire SOI amendment area, which is within the amount of additional housing the AWD estimates it can serve. If the SOI amendment is approved, the properties located within the area could apply for annexation to the AWD in the future as a separate action. New development may or may not be proposed in conjunction with potential future annexation requests. No annexation or development within the SOI amendment area is proposed at this time as part of the SOI amendment request by AWD.

Most of the SOI amendment area (207 lots including the proposed annexation) is developed with single-family residences and is designated for rural and low density residential uses with some limited areas designated for resource conservation and agriculture. New development would be subject to the Monterey County land use designations and regulations. Existing residentially-designated properties would be limited to one single-family residence on a lot of
record pursuant to recently adopted General Plan policies for the North County area (Policy NC-1.5). The resource conservation and agricultural designations that exist in limited areas generally require larger parcel sizes that would limit future densities and intensity of land uses. Based on parcel research conducted by the AWD\textsuperscript{8}, there are 26 undeveloped parcels that may be able to develop a single-family home in the future assuming compliance with County policies and regulations and no site constraints that would preclude development. The inclusion of these properties within the proposed AWD SOI and the potential to be served by a municipal water source could be an incentive to some properties to seek annexation. However, 26 homes represents approximately 3% of the AWD's total existing connections. Thus, while the proposed SOI amendment, if approved by LAFCO, could indirectly induce population growth in the area, this is not considered substantial due to the small amount of growth in relation to the District's service area and population. Furthermore, any development that may be proposed in the future would be subject to review and permit approvals from Monterey County at which time the appropriate level of environmental review would be conducted.

b-c) Housing & Population Displacement — No Impact. The project includes properties are primarily developed with existing residences. The water system improvement project sites do not contain habitable structures. Most of the facilities are located within road rights-of-way, and the water storage tank is located on a property with an existing residence that will not be affected by the siting of the tank. The project, therefore, would not displace numbers of people or homes or otherwise adversely affect housing or population; therefore there is no impact.

14. PUBLIC SERVICES

<table>
<thead>
<tr>
<th>Would the project result in:</th>
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</table>

Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?  

b) Police protection?  

c) Schools?  

d) Parks?  

\textsuperscript{8} The AWD staff compiled a list of all APNS within the annexation and SOI amendment areas along with acreage and Assessor's use code, which identify whether there is an existing residence on the parcel or whether the property is vacant or in agricultural or other use.
14. PUBLIC SERVICES

Would the project result in:

e) Other public facilities? ✓

Analysis and Conclusions:

a-e) Public Service Demand – No Impact. The proposed project consists of the extension of water service to an existing developed residential area and construction of necessary infrastructure improvements (i.e., water lines, meters, hydrants). The project does not involve new development or habitable structures that would result in new population growth or demands for public services. The project does not involve new habitable structures and will bring no new students to the area, require no new school facilities, or impact parks/recreation facilities or other governmental services. The temporary construction activities and associated work crews will not have an impact on fire or police protection services.

The proposed water system improvements include expanded storage capacity and new water lines, which will improve water pressure and meet local fire flow and storage requirements. The Aromas Tri-County Fire Protection supports the consolidation of water systems and single connection wells along Oak Ridge Drive and Via Del Sol with the Aromas Water District. The consolidation would provide a fire protection water supply system meeting current California Fire Code regulations and National Fire Protection Standards, greatly enhancing the firefighting capability in that area.9

15. RECREATION

Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? ✓

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? ✓

Analysis and Conclusions:

9 Letter from Reno DiTullio Jr, Battalion Chief, Aromas Tri-County Fire Protection District to Vicki Morris, General Manager, Aromas Water District regarding “Consolidation of Oak Ridge and Via Del Sol Water systems with Aromas Water District; dated November 11, 2010.
a-b) Parks and Recreational Facilities – No Impact. The proposed project consists of the extension of water service to an existing developed residential area and construction of necessary infrastructure improvements (i.e., water lines, meters, hydrants). The water system improvements will not result in new development, population or public service demands related to parks and recreational facilities.

### 16. TRANSPORTATION/TRAFFIC

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
<td></td>
<td></td>
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<td>✓</td>
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<tr>
<td>b) Conflict with an applicable congestion management program, including, but not limited to level of service standard and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</td>
<td></td>
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<td>✓</td>
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<tr>
<td>c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</td>
<td></td>
<td></td>
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<td>✓</td>
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<tr>
<td>d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
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<td>✓</td>
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<tr>
<td>e) Result in inadequate emergency access?</td>
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<td>✓</td>
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<tr>
<td>f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Analysis and Conclusions:

a-b) Traffic – No Impact. Access to all project sites is provided by Dunbarton Road and Echo Valley Road. Highway 101 provides major freeway access in the area. Traffic is limited on roadways in the vicinity of the project site. Given the rural and agricultural nature and small population of the project vicinity, roadways are expected to be operating at acceptable levels of service. There are no adopted congestion management plans in the project vicinity.

Impact Analysis. The proposed project is a water system improvement and will not result in new habitable development, population increases or trip generation that would affect vicinity roadways. Therefore, the project would not result in a permanent increase of substantial traffic. Occasional maintenance activities would briefly affect only local segments; this would be a less-than-significant impact.

There would be a short-term temporary increase in traffic in the project area related to construction equipment and workers during the construction period. This is not considered significant due to the low peak hour trip volume generated by the project in relation to the existing roadway traffic. Project-generated traffic would be dispersed throughout the construction work hours, thus minimizing the effect on traffic flow on project area roadways. Given the low number of estimated construction workers and estimated daily truck trips, temporary construction traffic would not cause a substantial increase in traffic relative to existing conditions or contribute substantial volumes of traffic during peak hours.

During construction of the new water pipeline, temporary road and lane closures would be necessary. The roadways mostly affected would be local roads serving the area, including Dunbarton Road, Oak Ridge Road, Via Del Sol Drive. There may be brief periods when temporary lane closures and traffic control may be required. During times of temporary lane closures, traffic control measures will be implemented in accordance with the encroachment permit issued by the County of Monterey for construction within public roadways.

Construction of the proposed water line would affect access to adjacent residences for both general and emergency traffic, and result in temporary traffic disruption and short-term traffic delays. Access to driveways and to cross streets along the construction route may be temporarily blocked due to trenching and paving. However, provisions will be made to allow access to private property at all times. Vehicle access would be restored at the end of each work day through the use of steel trench plates over trenched segments. Emergency vehicle access would be maintained at all times throughout project construction. Construction and installation of the proposed water lines within the existing roadway will require approval of an encroachment permit by the Monterey County Public Works Department which will require the preparation and implementation of a traffic control plan to include traffic controls and provision of emergency and private property access.

**RECOMMENDED CONSTRUCTION SPECIFICATION:** To the extent possible, restrict any temporary lane closures on Dunbarton Road to times outside peak traffic periods, which are generally 7-9 AM and 4-6 PM, and require implementation of traffic
controls during times of lane closures consistent with provisions of a traffic control plan.

c-e) Air Traffic and Access – No Impact. The proposed project will have no effect on air traffic patterns. The project does not propose new structural development and will not result in inadequate emergency access. There would be no impact.

f) Alternative Transportation – No Impact. The proposed project is located in a rural area. The proposed water system improvements would not result in increased vehicle trips or traffic and would not conflict with adopted policies, plans or programs supporting alternative transportation. Therefore, there would be no impact.

17. UTILITIES AND SERVICE SYSTEMS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b) 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?</td>
<td>✓</td>
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</tr>
<tr>
<td>c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>✓</td>
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<td></td>
</tr>
<tr>
<td>d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>e) 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?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?</td>
<td></td>
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<tr>
<td>g) Comply with federal, state and local statutes and regulations related to solid waste?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Analysis and Conclusions:

The proposed project consists of the annexation and provision of public water service to an existing developed residential area and construction of necessary infrastructure improvements (i.e., water lines, meters, hydrants). The project does not involve new development or habitable structures that would result in construction of storm drainage facilities (c) or that would result in new population growth or demands for public utilities related to wastewater treatment (e) or solid waste disposal (f-g).

a) Exceed Wastewater Treatment Requirements – No Impact. The proposed project consists of a proposed Sphere of Influence amendment for the Aromas Water District, annexation of two existing subdivisions with provision of water service, and construction of water system improvements. No change is proposed in wastewater treatment in connection with the proposed water system improvements. Therefore, the project would have no effect on wastewater treatment requirements and would result in no impact.

b) Construction of New Water or Wastewater Facilities – Less than Significant with Mitigation Incorporated. As indicated above, the proposed project would result in construction of new water system facilities, including a new water storage tank and pipeline, which are the subject of review in this Initial Study. Potentially significant impacts have been identified in this Initial Study related to biological resources and water quality. With implementation of recommended mitigation measures, construction of new water service facilities would result in a less-than-significant impact. The project would not result in construction of new water treatment facilities.

d) Water Supply – Less than Significant. The project area is served by the Aromas Water District (AWD), which was formed in 1959, and serves portions of Monterey and San Benito Counties. The district now includes four contiguous, annexed areas (Ballantree Estates, Monterey RV Park, Orchard Acres, Rancho Larios); two of which extend into neighboring San Benito County. The District provides potable drinking water and distributes it to customers throughout the District with 900 connections, of which 47 are inactive (SOURCE VI.4). Annual water use within the AWD has ranged between about 370 and 415 acre-feet per year (AFY) over the past ten years (SOURCE VI.4b). The current maximum daily demand is estimated at 612 gpm10 (Ibid).

The AWD currently has four wells (three active and one inactive) with a combined capacity of 1,500 gallons per minute (gpm) and a design capacity of 2,005 gpm as summarized on Table 1 (SOURCE VI.4). (Design capacity refers to the permitted capacity, while current capacity refers to the actual existing production capability of the well.) The Marshall well is inactive and production in the Pleasant Acres well has decreased. The District replaced its Carpenteria well in 2011, which increased total AWD supply capacity. The District’s pipeline distribution system allows water from the various wells to be mixed before entering the main water storage tank, the Pine Tree Tank. The District has a total of about 153,000 lineal feet of pipelines to distribute water from the wells to the storage tanks and to District customers (SOURCE VI.5a).

---

10 Annual average water use is expressed in acre-feet per year, which is commonly used to discuss groundwater issues. Maximum daily demand is expressed in gallons per minute in the analysis of well production capacity.
TABLE 1: Aromas Water District Well Production

<table>
<thead>
<tr>
<th>Sources</th>
<th>Design Capacity (gpm)</th>
<th>Current Capacity (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Juan</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Pleasant Acres</td>
<td>700</td>
<td>400</td>
</tr>
<tr>
<td>Carpenteria</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Marshall Well</td>
<td>205</td>
<td>0</td>
</tr>
<tr>
<td>Total Capacity</td>
<td>2,005 gpm</td>
<td>1,500 gpm</td>
</tr>
</tbody>
</table>

SOURCE: Aromas Water District

The project includes annexation and provision of water service to the Oak Ridge and Via Del Sol subdivisions. The Oakridge Mutual Water Company serves potentially 35 lots, and 33 lots are currently developed (SOURCE VI.8). The Via Del Sol Drive area has 28 homes that also suffer from water supply sufficiency problems and also wish to be adsorbed into Aromas Water District.

In 1976 the Monterey Division of Environmental Health issued a water supply permit to serve 44 potential connections to the Oak Ridge Mutual Water Company (ORMWC); a number of very large lots, that could be subdivided in the future, received more then one connection (shares). At the time of permitting, a sustained pumping test of the wells produced a total of about 60gpm. By September of 1979, the production had declined to about 12 gpm, which does not meet State and County water system requirements Division of Environmental Health prohibited the Water Company from making additional connections (SOURCE VI.8).

The ORMWC’s water system consists of four water supply wells with one 10,000 gallon steel tank for each of the two pressure zones. The lower zone tank receives the water from all four wells. When the lower tank is nearly full, a transfer pump is activated, lifting water to the upper tank. When insufficient water is available from the wells, the lower tank cannot be filled sufficiently to activate the transfer pump, and the upper tank cannot be refilled and homes served from this upper tank have no water (SOURCE VI.8). As a result, in recent years water had to be trucked in during late summer and fall to supplement the deficient water supply. Additionally, the ORMWC’s water distribution system of 4-inch pipes does not meet current water system standard requirements, and only marginal fire protection is provided (Ibid.).

**Impact Analysis.** The proposed project will result in annexation of two existing subdivisions with provision of water service to approximately 72 existing homes and potentially up to 161 additional homes in the SOI area. The AWD well capacity is adequate to serve the additional demand. This is a less-than-significant impact.

As indicated in subsection 9(b) above, the proposed annexation and potential future annexations within the SOI amendment area could result in an increased water demand of 117 AFY on the AWD water supply system. Average annual water demand within the District from existing and project water demand would total approximately 500-535 AFY. This level of production is within the estimated safe yield for the Aromas area of approximately 1,000 AFY based on past reviews conducted for the AWD (SOURCE VI.4c). Additionally, due to water problems experienced by these areas, the Monterey County
Division of Health supports consolidation of the Oak Ridge and Via Del Sol systems and provision of water service by the AWD (SOURCE VI.2).

Table 2 identifies maximum daily water demand with a comparison to well production capacity with existing, planned and project uses. As of September 2011, maximum daily demand within the AWD was estimated at 612 gpm (approximately 0.68 gpm per connection) (SOURCE VI.4a). Another 141 gpm of demand is projected for parcels that have already been annexed, but not yet connected, resulting in a total demand of 753 gpm. The proposed annexation and SOI amendment areas could result in an additional maximum daily demand of approximately 167 gpm based on a peak factor of 0.68 gpm per meter (Ibid.). Existing and future peak demand with addition of the proposed project would total approximately 912 gpm, which is below the current well capacity of 1,500 gpm. Thus, there is adequate well capacity within the existing AWD water supply system to serve both the proposed annexation and potential future annexations with amendment and expansion of the AWD’s sphere of influence in Monterey County.

In February 2011, the LAFCO of the County of San Benito approved a Sphere of Influence amendment for the Aromas Water District that expanded the San Benito County portion of the AWD’s SOI by approximately 4,763 acres. Figure 2 shows the San Benito County SOI area. The majority of this area is located outside of the PVWMA jurisdiction. Based on the environmental review for the San Benito County SOI (and supporting analyses), these properties would be subject to PVWMA Ordinance 98-1 which prohibits AWD from exporting water outside PVWMA boundaries without PVWMA approval and for health or safety reasons (SOURCE VI.4d). Thus, any future development proposed in the approved San Benito County SOI would require a water source that does not derive its origin from the Pajaro Valley basin (Ibid.).

**TABLE 2: Estimated AWD Water Demand**

<table>
<thead>
<tr>
<th>Sources</th>
<th>Number of Connections</th>
<th>Maximum Daily Demand [1]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Demand</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Active Meters</td>
<td>853</td>
<td>580 gpm</td>
</tr>
<tr>
<td>Inactive Meters</td>
<td>47</td>
<td>32 gpm</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>900</td>
<td>612 gpm</td>
</tr>
<tr>
<td><strong>Potential Connections</strong></td>
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<td></td>
</tr>
<tr>
<td>Annexed, but not yet connected</td>
<td>208</td>
<td>141 gpm</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>208</td>
<td>141 gpm</td>
</tr>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oak Ridge &amp; Via Del Sol</td>
<td>72</td>
<td>49 gpm</td>
</tr>
<tr>
<td>Remainder of Proposed SOI</td>
<td>161</td>
<td>110 gpm</td>
</tr>
<tr>
<td>Amendment Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>233</td>
<td>159 gpm</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1,341</td>
<td>912</td>
</tr>
</tbody>
</table>

[1] Maximum daily demand is factored at 0.68 gpm based on production meter records. MDD is determined by using production data from the historically greatest month’s use.

**SOURCE:** Aromas Water District for Current Demand and Potential Connections
The AWD anticipates development of a new water source at some future time within San Benito County. Even if the San Benito County SOI properties were to be served by existing AWD facilities, adequate well capacity would be available. The AWD has estimated a maximum daily water demand of 262 gpm for the San Benito County SOI (SOURCE VI.4a). When added to existing, planned and project demand as summarized in Table 2, the total maximum daily demand would be 1,174 gpm which is within the District's production capacity of 1,500 gpm. Thus, existing AWD water supplies are adequate to serve the project and future development. (See also subsection 18(b) below regarding water demand in AWD's San Benito County portion of its sphere of influence.)
18. MANDATORY FINDINGS OF SIGNIFICANCE

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species or eliminate important examples of the major periods of California history or prehistory?</td>
<td>![checkmark]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Have impacts that are individually limited, but cumulatively considerable? (&quot;Cumulatively considerable&quot; means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?)</td>
<td>![checkmark]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td>![checkmark]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Analysis and Conclusions:

a) Degradation of Environment - Less than Significant with Mitigation Incorporated. Based upon the findings of this environmental initial study, the proposed project, as mitigated, would not significantly degrade or diminish the quality of the environment, substantially reduce or burden the habitat of fish or wildlife species, cause fish or wildlife populations to decrease below self-sustaining levels, threaten to eliminate special or unique plant or animal communities, or reduce the number or restrict the habitat or range of rare or endangered plants or animal life. No cultural resources were identified in the area, and the project would not eliminate important examples of the major periods of California history or prehistory.

b) Cumulative Impacts – Less than Significant. The Monterey County Planning Department conducted a review of pending and recently approved applications within the general project vicinity. Approximately eight additional residential units and two residential lots have pending applications before the Department. This would result in ten additional residential units for a total of 36 potential new residential units with the proposed project (future development within the proposed SOI area). As discussed in subsection 9(b) above, the 2010 Monterey County General Plan EIR projected that 435 new residential units could potentially be developed in the North County area with 262 constructed by 2030 (SOURCE VI.1.c). This level of development would result in a new water demand of 154 AFY in the North County area (SOURCE VI.1.b). Cumulative residential development in the North County area would result in increased water...
demand within groundwater basins that are in overdraft conditions. The County’s General Plan EIR has analyzed the impacts of this future development, and the analysis is incorporated by reference in this document as discussed in Section V.B above. See also the groundwater analysis in subsection 9(b). There are no other known potential projects or significant cumulative impacts within the Monterey County portion of the Aromas Water District to which the project would contribute.

As previously indicated, approximately 4,763 acres within San Benito County were added to AWD’s SOI in February 2011 as approved by the LAFCO of the County of San Benito. The majority of this area is located outside of the PVWMA jurisdiction. Based on the environmental review for the San Benito County SOI (and supporting analyses), these properties would be subject to PVWMA Ordinance 98-1 which prohibits AWD from exporting water outside PVWMA boundaries without PVWMA approval and for health or safety reasons (SOURCE VI.4d). Thus, any future development proposed in the approved San Benito County SOI would require a water source that does not derive its origin from the Pajaro Valley basin (Ibid.), and future development and provision of water service by AWD to San Benito County properties would not contribute to the significant regional cumulative groundwater impacts in the Pajaro basin. The AWD anticipates development of a new water source at some future time within San Benito County. Even if the San Benito County SOI properties were to be served by existing AWD facilities, adequate well capacity would be available as discussed in subsection 17(d) above.

c) Adverse Effects on Human Beings – No Impact. The project would not directly or indirectly cause substantial adverse effects on human beings. The project would improve an existing small water system to meet state drinking water standards.

VI. REFERENCES and SOURCES

Agency Documents:

1. Monterey County.


4. **Aromas Water District.**
   a) Revised 9/30/11. “Aromas Water District Capacity to Provide Service in Monterey and San Benito Counties – 2011”.
   c) August 19, 2010. “Engineering Analysis of Sphere of Influence Amendment, Aromas Water District, Aromas, California.” Prepared by Fall Creek Engineering, Inc. for the Aromas Water District.
   d) August 24, 2010. Environmental Checklist From for the Aromas Water District Sphere of Influence Amendment.

5. **Local Agency Formation Commission (LAFCO) of Monterey County.**
   a) February 2006. Final Municipal Services Review for the North County Area of Monterey County.
   b) February 25, 2008. Staff Report regarding Annexation to the Aromas Water District of Approximately 738 Acres.
   c) Undated. “Standards for the Evaluation of Proposals.”


**Project Documents:**


**Other Documents:**

11. Global Climate Change References:


Persons and Agencies Contacted:
• Aromas Water District: Vicki Morris
• LAFCO of Monterey County: Kate McKenna, Thom McCue
• Monterey County Planning Department, Laura Lawrence
• Monterey County Water Resources Agency: Rob Johnson, Kathy Thomasberg
• Pajaro Valley Water Management Agency: Mary Bannister
• Freitas + Freitas: Mike Freitas, Project Engineer

Initial Study Preparation: Stephanie Strelow, STRELOW CONSULTING
VI. LIST OF FIGURES

1. Regional Location
2. Aromas Water District and Project Areas
3. Proposed Annexation and Sphere of Influence Amendment Areas
4. Proposed Project Improvements – Schematic
5. Water Pipeline Layout
6A-E Water System Site Plans
7. Aromas Water District Facilities
8. Water Storage Tank Site Plan
9A. Monterey County General Plan Designations
9B. Monterey County Coastal Zone Boundary and Land Use Designations
10. Plant Communities
11. Water Management Agency and District Service Areas
FIGURE 1: Regional Location

SOURCE: Base Map from Parsons Transportation Group for TAMC

SOURCE: Freitas + Freitas

AROMAS WATER DISTRICT
Annexation & Sphere of Influence Amendment

INITIAL STUDY
November 2011
FIGURE 3: Proposed Annexation and Sphere of Influence Amendment Areas
FIGURE 4: Proposed Project Improvements - Schematic

Connect to Existing 6" Pipeline

Construct 5,500 feet of 8" Pipeline to New Pump Station at Elevation 375 Feet

Pump Station 50 gpm capacity

Construct Duplex Pump Station at Elevation 375 Feet

Construct 3,500 feet of 6" Pipeline from Pump Station to New 100,000 Gallon Water Storage Tank in Roadway

Construct 100,000 Gallon Water Storage Tank at High Point Elevation 705 Feet

Construct 3,000 feet of 6" Pipeline in Via Del Sol Drive

Via Del Sol Drive

Echo Valley Road

Existing 6" Pipeline in San Juan Road from Rea Tank

North

SOURCE: Freitas + Freitas
FIGURE 5: Water Pipeline Layout

SOURCE: Freitas + Freitas

AROMAS WATER DISTRICT
Annexation & Sphere of Influence Amendment

INITIAL STUDY
November 2011
FIGURE 6A: Water Pipeline Layout
FIGURE 6B: Water Pipeline Layout
FIGURE 6C: Water Pipeline Layout
FIGURE 6D: Water Pipeline Layout
FIGURE 6E: Water Pipeline Layout
FIGURE 7: Aromas Water District Facilities

SOURCE: Freitas + Freitas
FIGURE 9A: Monterey County

General Plan Designations

North Monterey County 2010 General Plan

AROMAS WATER DISTRICT
Annexation & Sphere of Influence Amendment

INITIAL STUDY
November 2011
FIGURE 10: Plant Communities

LEGEND
- Proposed Water Line Alignment
- Proposed Water Tank
- Carmans Creek and Tributaries

PLANT COMMUNITY TYPES
- Willow Thickets Riparian Woodland
- Oak Woodland
- Nesting Grassland
- Landscape Trees and Landscaping
- Coyote Brush Scrub

SOURCE: Biotic Resources Group
FIGURE 11: Water Management Agency Boundaries
## ATTACHMENT A
### Parcels Proposed for Annexation & Within Proposed Sphere of Influence Amendment Area

### Parcels Proposed for Annexation & Assessment District Formation and Included in SOI Amendment Area

<table>
<thead>
<tr>
<th></th>
<th>Oak Ridge</th>
<th>Adjacent to OR</th>
<th>Via Del Sol</th>
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**AROMAS WATER DISTRICT**
Annexation & Sphere of Influence Amendment

**INITIAL STUDY**
November 2011
### Other Parcels Proposed for Inclusion

**Within Proposed Sphere of Influence Amendment**

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ATTACHMENT B

Biological Report
Biotic Resources Group
Biological Report

Prepared for:

Strelow Consulting
Attn: Stephanie Strelow
P.O. Box 2896
Santa Cruz, CA 95063-2896

Prepared by:

Biotic Resources Group
Kathleen Lyons, Plant Ecologist

With

Dana Bland, Wildlife Biologist
Dana Bland & Associates

April 28, 2011
1.0 INTRODUCTION

The Biotic Resources Group, with Dana Bland & Associates, conducted a biological assessment for a proposed water line to service residences along Oak Ridge Road and Via Del Sol in northern Monterey County.

Specific tasks conducted for this study include:

- Identify sensitive biotic resources, including species of concern, within the water line construction area, and
- Evaluate the potential effects of the proposed work, and associated infrastructure, on sensitive biological resources and recommend measures to avoid or reduce such impacts.

1.1 PROPOSED PROJECT

The project area is located in the Aromas area of northern Monterey County and consists of two developed residential subdivisions. The proposed water main project extends along Dunbarton Road from San Juan Road to Oak Ridge Road. The project continues along Oak Ridge Road then connects to Via Del Sol Drive and to Echo Valley Road. Existing water service is supplied by Oak Ridge Mutual Water Company and private wells in the Via Del Sol drive area.

The project involves annexing the existing Oak Ridge Road and Via Del Sol Drive subdivisions into the Aromas Water District. The District will provide full water service, including meter reading and maintenance of the system, including a new pipeline, water storage tank, and pumps. The new system will connect to an existing pipeline at the intersection of San Juan Road and Dunbarton Road. A new 8” pipeline will be constructed within the shoulder of Dunbarton Road (western side of the road) to Oak Ridge Drive. At Oak Ridge Drive, the pipeline will be jack and bored beneath existing culverts that carry flow within a tributary to Carneros Creek. West of the culverts, the pipeline will be located within the shoulder of the paved road (northern edge of the road) up to a new pump station located at about elevation 375 feet on Oak Ridge Road. The pipeline would continue within the shoulder of Oak Ridge Road to the knoll. A line will split northward to a new water storage tank. The pipeline will traverse grassland and oak woodland to reach the tank site. The new 100,000 gallon tank will be located at the high point of the knoll at about elevation 705 feet as shown on the USGS map. Water will travel via gravity in 6” pipeline down to Via Del Sol Drive and to homes along this road. On the knoll, the pipeline will be constructed within the shoulder of an existing road before going down slope through undisturbed grassland and oak woodland. Upon reaching Via del Sol, the pipeline will be placed in the shoulder of the roadway (west side of the road). The project includes new 5/8” service lines and water meters with backflow preventers installed from the new pipeline to serve the new connections. Aromas Water District policy is to serve each parcel with one water meter. Parcels with more than one residence will have to have another meter or meters to serve additional residences. The proposed water line project is depicted on the Pipeline Plan (Freitas + Freitas, 10/10). The project location is depicted on Figure 1.

1.2 INTENDED USE OF THIS REPORT

The findings presented in this biological report are intended for the sole use of Strelow Consulting and Aromas Water District in evaluating the proposed project. The findings presented by the Biotic Resources Group in this report are for information purposes only; they are not intended to represent the interpretation of any State, Federal or County laws or ordinances pertaining to permitting actions within sensitive habitat or endangered species. The interpretation of such laws and/or ordinances is the responsibility of the applicable governing body.
2.0 EXISTING BIOTIC RESOURCES

2.1 METHODOLOGY

Kathleen Lyons, plant ecologist, and Dana Bland, wildlife biologist, conducted an assessment of biological resources within the project area in December 2010. A rare plant survey was conducted in April 2011.

Study methodology included field reconnaissance surveys, literature review, and accessing electronic databases. Literature and data base searches included the California Natural Diversity Data Base (CNDDB) “Rare Find” (2010) and California Native Plant Society (CNPS) Rare Plant Electronic Inventory (2010) for the Prunedale quadrangle and surrounding eight quadrangles.

Prior to conducting the field survey, a potential list of special status or sensitive plant species was prepared for the project area, utilizing species recognized by California Department of Fish and Game, U.S. Fish and Wildlife Service, and CNPS. The field survey was conducted to document the biological resources within the expected project work area. The Jepson Manual (Hickman, 1993) and An Illustrated Field Key to the Flowering Plants of Monterey County (Matthews, 1997) were the principal taxonomic references. A survey to determine the presence/absence of special status plant species was conducted in April 2011, which corresponded to the blooming period for special status plant species with potential to occur within the project area. Classification of vegetation types is according to the California Natural Community Codes as developed by CDFG (CDFG, 2010).

2.2 ENVIRONMENTAL SETTING

2.2.2 Geographic Setting

Four natural community types were documented within the project area: coast live oak woodland, coyote brush scrub, needlegrass grassland, riparian woodland, and landscaped areas/tree groves. The riparian woodland grows along the main stem and tributaries to Cameros Creek, an intermittent drainage that empties into Elkhorn Slough. The distribution of the vegetation types within the project area is depicted on Figure 2. Each vegetation type, its California code, and state ranking (rarity) are listed in Table 1.

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<th>Vegetation Type</th>
<th>Plant Association</th>
<th>State Ranking</th>
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<td>Coast Live Oak / Blackberry / Annual Grasses</td>
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<td>Coyote Brush/ Sticky Monkey Flower/California Coffee Berry</td>
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<td>41.150.00</td>
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<td>Purple Needlegrass/Dogtail Grass/ Rattlesnake Grass</td>
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<td>Arroyo Willow/California Blackberry</td>
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<td>-</td>
<td>Landscaped Areas/Tree Groves</td>
<td>Eucalyptus/Monterey Cypress/Acacia</td>
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1- State Rankings: S1-S3 vegetation types and associations considered to be highly imperiled and considered of special concern by CDFG. S4 vegetation types are common and are not considered of special concern by CDFG (CDFG, 2010).
Figure 1. Project Location on Prunedale USGS Topographic Map
Figure 2. Plant Community Types in Project Area
2.2.2 Vegetation and Wildlife Habitats

Coast Live Oak Woodland

The coast live oak woodland occurs along the both sides of Oak Ridge Road, along the ridge leading to the proposed water tank, and along a section of the water line route near Via del Sol. As depicted on Figure 2, this vegetation type abuts much larger woodland areas that are located outside the project area. This oak woodland type has a State ranking of S4, indicating it is common within the State and not considered sensitive in the CNDDB.

Along Oak Ridge Road and the knoll top, the tree species within the woodland are dominated by coast live oak (*Quercus agrifolia*). The trees are of mixed age, as evidence by a range in tree trunk diameters. The trees are rooted along both sides of Oak Ridge Road, with the tree canopy extending over the roadway in many locations. The woodland also supports scattered occurrences of non-native trees, such as pines (*Pinus sp.*) and acacia (*Acacia sp.*); most of these trees are associated with the nearby residences. The woodland understory supports native species, such as California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), coyote brush (*Baccharis pilularis*), California sagebrush (*Artemisia californica*), and toyon (*Heteromeles arbutifolia*). Non-native herbaceous species, such as iceplant (*Carpobrotus sp.*), poison hemlock (*Conium maculatum*), Italian thistle (*Carduus pycnocephalus*), and dogtail grass (*Cynosurus echinatus*) dominate the open areas. The character of the woodland along Oak Ridge Road is depicted in Figure 3.

![Figure 3. Oak woodland along Oak Ridge Road](image)

Oak woodland is also found adjacent to Via del Sol Drive. The woodland east of Via Sol Drive is comprised of large, multi-branched coast live oak trees. The trees form a dense canopy; many trees have extensive low-hanging branches. Many trees in this area meet the size requirement of landmark oaks, as defined in the County’s General Plan. The understory is comprised of grasses and forbs, such as Italian ryegrass (*Lolium multiflorum*), ripgut brome (*Bromus diandrus*), and dogtail grass, with California blackberry, poison oak, miner lettuce (*Montia perfoliata*), and thistle (*Carduus sp.*). Since water main trenching will occur in undisturbed land in this area, the number of trees adjacent to construction was determined. Approximately 31 oak trees occur adjacent to the proposed water main construction area. The approximate diameter of the trees
ranges from six inches to over 60 inches. Table 2 lists the trees located within approximately 25 feet of the proposed water main trench. The character of this woodland is depicted in Figure 4.

Table 2. Approximate Number of Oak Trees within Oak Woodland near Via Del Sol Drive

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<td>60”</td>
<td>Low branches and canopy within work area</td>
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| Total Number of Trees | 31                      |

¹ measured two feet from grade

Figure 4. Oak woodland east of Via del Sol Drive

The oak woodlands within the project alignment provide high value habitat type for wildlife. The wildlife value of oak woodland varies with the degree of canopy cover and the density and diversity.
of understory plants. Acorns from oaks provide an important food resource for many wildlife species, and natural cavities in the oaks provide nesting opportunities for several birds and mammals. Snags are an important component of oak woodlands to some wildlife such as woodpeckers, which excavate nests in snags and holes for storing acorns. Downed decaying logs and limbs add to the structural complexity of the habitat, and are important cover, nesting, roosting, and foraging substrate for species such as newts which are attracted to the moist microclimate and invertebrate food supply. The denser oak woodlands also provide escape cover during the day for species such as deer.

Common wildlife species expected to occur in oak woodlands within the project alignment include California slender salamander (*Batrachoseps attenuatus*), western fence lizard (*Sceloporus occidentalis*), scrub jay (*Aphelocoma californica*), California quail (*Callipepla californica*), red-tailed hawk (*Buteo jamaicensis*), western gray squirrel (*Sciurus griseus*), and deer (*Odocoileus hemionus*).

**Coyote Brush Scrub**

The project area supports a small area of scrub that is dominated by coyote brush (*Baccharis pilularis*). Other species include California blackberry (*Rubus ursinus*), sticky monkey flower (*Mimulus aurantiacus*), coffee berry (*Rhamnus californica*), and California cudweed (*Gnaphalium californicum*). The scrub is located along the knoll near the proposed water tank site. This scrub type has a State ranking of S5, indicating it is common within the State and not considered sensitive in the CNDDDB. The character of this scrub is depicted in Figure 5.

![Figure 5. Coyote brush scrub on knoll near proposed water tank site](image)

The berries of shrubs and the seeds of herbaceous plants in the coastal scrub habitat provide important forage for wildlife. Wildlife may perch on the outer perimeter of mixed scrub to take advantage of hunting opportunities in adjacent openings, and take cover in the denser shrub patches as needed. Common wildlife species found in coastal scrub include western fence lizard, California towhee (*Pipilo crissalis*), white-crowned sparrow (*Zonotrichia leucophrys*), and coyote (*Canis latrans*).
Willow Thicket Riparian Woodland

The riparian woodland occurs along the main stem of Carneros Creek just south of San Juan Road and along an intermittent tributary that parallels a portion of Dunbarton Road (Figure 2). The woodland is dominated by a dense growth (thicket) of arroyo willow (Salix lasiolepis). Other plant species observed are California blackberry, poison hemlock, brisly ox-tongue (Picris echiioides), snowberry (Symphoricarpus sp.), California rose (Rosa californica), and toyon. This type of riparian woodland has a State ranking of S4, indicating it is common within the State and not considered sensitive in the CNDDB. The willow thicket along Dunbarton Road is depicted in Figure 6.

![Figure 6. Willow thicket riparian woodland along Dunbarton Road]

The riparian habitat is one of the highest value habitats for wildlife species diversity and abundance in California. Factors which contribute to the high wildlife value include the presence of surface water, the variety of niches provided by the high structural complexity of the habitat, and the abundance of plant growth. Riparian habitat along the project site may be used by a diversity of wildlife species for food, water, escape cover, nesting, migration and dispersal corridors, and thermal cover. The value of riparian areas to wildlife is underscored by the limited amount of remaining habitat which has not been disturbed or substantially altered by flood control projects, agriculture, and urbanization.

Common wildlife species that are expected to inhabit the riparian habitat include Pacific chorus frog (Pseudacris regilla), bullfrog (Rana catesbeiana), western aquatic garter snake (Thamnophis couchii), Wilson’s warbler (Wilsonia pusilla), Bewick’s wren (Thryomanes bewickii), several swallow species, red-shouldered hawk (Buteo lineatus), raccoon (Procyon lotor), opossum (Didelphis virginiana), and California myotis (Myotis californicus).

Needlegrass Grassland

The project area supports grassland along the ridge top and on slopes between the knoll and Via del Sol. The grassland supports stands of purple needlegrass (a native species) that intermix with non-native species, such as dogtail grass, wild oat (Avena sp.), ripgut brome, rattlesnake grass (Briza maxima), and Italian ryegrass. This community type has a State-ranked of S3, which
indicates it is a community of special concern in the CNDDDB and by CDFG. The character of the grassland on the knoll is depicted in Figure 7.

Forbs observed during the winter and spring-season surveys include non-native species, such as Italian thistle, broadleaf filaree (*Erodium botrys*), Bermuda buttercup (*Oxalis pes-caprae*), iceplant (*Carpobrotus* sp.), fiddle dock (*Rumex acetosella*), English plantain (*Plantago lanceolata*), sidewalk conyzal (*Conyza bonariensis*), cat's ear (*Hypochaeris* sp.), red-stemmed filaree (*Erodium cicutarium*), flax (*Linum* sp.), narrow-leaved clover (*Trifolium angustifolium*), vetch (*Vicia sativa*), filago (*Filago gallica*), and wild mustard (*Brassica* sp.). Native species observed include lupine (*Lupinus namus*), common yarrow (*Achillea millefolium*), Ithuriel's spear (*Triteleia laxa*), sun cups (*Camissonia ovata*), telegraph weed (*Heterotheca grandiflora*), and soap plant (*Chlorogalum pomeridianum*). Additional spring season species include checkerbloom (*Sidalcea malviflora*), footsteps of spring (*Sanicula arctopoides*), blue dicks (*Dichelostemma capitatum*), blue eyed grass (*Sisyrinchium bellum*), wood rush (*Luella* sp.), California buttercup (*Ranunculus californica*), and Johnny jump-up (*Viola pedunculata*).

![Image of grassland](Figure 7. Needlegrass grassland on knoll, April 2011)

Grasslands provide an important foraging resource for a wide variety of wildlife species. The grasses and forbs produce an abundance of seeds and attract numerous insects, providing food for granivorous and insectivorous wildlife. Sparrows, rabbits and rodents are commonly found in this habitat. Consequently, grasslands are valuable foraging sites for raptors such as hawks and owls, and other predators including coyote, fox, skunk and snakes. Aerial foraging species that occur over grasslands include bats and swallows.

**Residential Landscaping and Tree Groves**

Non-native landscaping and tree groves occur along Oak Ridge Road and Via del Sol Drive. Commonly observed species include Monterey cypress (*Cupressus macrocarpa*) and Monterey pine (*Pinus radiata*), two native trees, yet planted as landscape tress outside their natural range. Other species include acacia, other pines (*Pinus* sp.), eucalyptus (*Eucalyptus* sp.), oleander (*Nerium oleander*), and other landscape shrubs. Non-native tree stands and landscaping have no State rank in the CNDDDB.
Wildlife use of the landscaping plants is expected to be low because many are non-native plants not frequented by native wildlife species, and most are only single shrubs or trees interspersed among an otherwise developed area providing little vegetative cover for wildlife. Urban adapted species such as scrub jay (*Aphelocoma coerulescens*) and European starling (*Sturnus vulgaris*) may use the landscaped areas as perches, and these as well as other birds may occasionally forage on berries or nectar of some plants.

2.3 SENSITIVE BIOLOGICAL RESOURCES

2.3.1 Regulated Habitats

CDFG is a trustee agency that has jurisdiction under Section 1600 et seq. of the CDFG Code. Under Sections 1600-1603 of the California Fish and Game Code, the California Department of Fish and Game (CDFG) regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife. Along watercourses, CDFG jurisdictional limits typically extend to the top of bank or to the edge of riparian habitat if such habitat extends beyond top of bank (outer drip line), whichever is greater. A small portion of the proposed project is located within the regulatory jurisdiction of CDFG, as the new water main will be placed above existing culverts carrying flow within Carneros Creek (south of San Juan Road) and below existing culverts carrying flow within a tributary to Carneros Creek (intersection of Dunbarton Road and Oak Ridge Road). No construction will occur within the bed or bank of any creek; however, some work may occur within the dripline of the willow thicket associated with the tributary to Carneros Creek (at the intersection of Dunbarton Road and Oak Ridge Road).

Water quality in California is governed by the Porter-Cologne Water Quality Control Act and certification authority under Section 401 of the Clean Water Act, as administered by the Regional Water Quality Control Board (RWQCB). The Section 401 water quality certification program allows the State to ensure that activities requiring a Federal permit or license comply with State water quality standards. Water quality certification must be based on a finding that the proposed discharge will comply with water quality standards which are in the regional board’s basin plans. The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the waters of the state to file a report of waste discharge. The RWQCB issues a permit or waiver that includes implementing water quality control plans that take into account the beneficial uses to be protected. Waters of the State subject to RWQ CB regulation extend to the top of bank, as well as isolated water/wetland features and saline waters. The proposed project will not affect any drainage within the jurisdictional area of the RWQCB. No work or fill will be placed within any drainage way in the project area; however, construction work will occur above and below existing creek culverts.

The US Army Corps of Engineers (USACE) regulates activities within waters of the United States pursuant to congressional acts: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (1977, as amended). Section 10 of the Rivers and Harbors Act requires a permit for any work in, over, or under navigable waters of the United States. Navigable waters are defined as those waters subject to the ebb and flow of the tide to the Mean High Water mark (tidal areas) or below the Ordinary High Water mark (freshwater areas). The proposed project will not affect any areas within the jurisdictional of the USACE. No work or fill will be placed within any drainage way in the project area; however, construction work will occur above and below existing creek culverts.
2.3.2 Sensitive Habitats

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. CDFG classifies and ranks the State’s natural communities to assist in the determining the level of rarity and imperilment. Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled. If a vegetation alliance is ranked as S4 or S5, these alliances are generally considered common enough to not be of concern; however, it does not mean that certain associations contained within them are not rare (CDFG, 2007 and 2010). The project area was observed to support one vegetation type with an imperiled status. Needlegrass grassland is ranked S3.

The Monterey County General Plan also identifies sensitive or significant vegetation. Removal of healthy, native oak trees in northern Monterey County is discouraged (North County Area Plan County’s 2010 General Plan (NC3-4). The General Plan also outlines measures for the preservation of oak woodland and protection of oak and madrone trees. Within the unincorporated portions of the County, outside the Coastal Zone, permits are required for removal of oaks and madrone ≥ six inches diameter two feet above grade. Landmark oaks are those ≥ 24 inches diameter two feet above grade. The project area supports numerous oaks trees ≥ six inches diameter within the oak woodland along Oak Ridge Road, the knoll, and in the Via del Sol area; the oak woodland east of Via del Sol Drive also supports several oak trees that would meet the definition of landmark oaks (see Figure 2).

2.3.3 Special Status Plant Species

The assessment focused on special status plant species that are officially listed by the State, /or Federal government, and/or on CNPS List 1B (CDFG, 2010). Several special status plant species were evaluated for the potential to occur in the project vicinity (see Table 3). No special status species were observed within the project area during the December 2010 or April 2011 field surveys. The April survey was conducted during the blooming season for the special status species with potential to occur within the habitats occurring project area. No special status plant species were detected during the plant surveys. A discussion of plant species searched for and their occurrence in the project area is provided in Table 3.

The project area lacks specialized habitats/substrates (i.e., serpentine, vernal pools, seasonal wetlands, or maritime chaparral) that have a propensity to support special status plant species in the greater Prunedale region; however, the site does support grassland and pockets of oak woodland that are suitable habitat for some special status species. One special status species, fragrant fritillary (Fritillaria liliacea), has been recorded northwest of the project area (near San Juan Road and Carpenteria Road). This species occurs in moist grasslands and blooms between February and April. This species was not detected during focused surveys in April. Monterey pines (CNPS List 1B species) were observed on site; however, these are planted specimens that are located outside their native region. There are no records in the CNDDB for special status species located within the project area.
### Table 3. List of Special Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Oak Ridge/Via del Sol Project Area, Monterey County

<table>
<thead>
<tr>
<th>Species</th>
<th>Status</th>
<th>Habitat Type</th>
<th>Closest Known Occurrence(s) Observed on Site?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prunedale Quadrangle</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hooker’s manzanita ( (Arctostaphylos hookeri ssp. hookeri) )</td>
<td>List IB.2 State: None Fed: None</td>
<td>Sandy soils, maritime chaparral/oak woodland mosaic Evergreen shrub</td>
<td>Long Canyon, Strawberry Canyon. 7 km to SW. Not observed within project area.</td>
</tr>
<tr>
<td>Pajaro manzanita ( (Arctostaphylos pajaroen sis) )</td>
<td>List IB.1 State: None Fed: None</td>
<td>Sandy soils, maritime chaparral/oak woodland mosaic Evergreen shrub</td>
<td>E of Royal Oaks Park (1966), 1 km to W; N rim of Langley Canyon 3 km to SW; Berta Ridge and Eden Path Road, Prunedale, 4 km to S. Not observed within project area.</td>
</tr>
<tr>
<td>Congdon’s tarplant ( (Centromadia parryi ssp. congodonii) )</td>
<td>List IB.2 State: None Fed: None</td>
<td>Moist grasslands, alkaline depressions Annual; blooms July - October</td>
<td>Along Road through Long Canyon 5 km to SW. Not observed within project area.</td>
</tr>
<tr>
<td>Monterey spineflower ( (Chorizanthe pungens var. pungens) )</td>
<td>List IB.2 State: None Fed: T</td>
<td>Sandy soils, maritime chaparral Annual; blooms May – August</td>
<td>W side of San Miguel Canyon Road, Strawberry Canyon 3 km to W Not observed within project area.</td>
</tr>
<tr>
<td>Robust spineflower ( (Chorizanthe robusta var. robusta) )</td>
<td>List IB.1 State: None Fed: E</td>
<td>Sandy soils, maritime chaparral Annual; blooms May – August</td>
<td>W of Spreckels 10 km to S. Not observed within project area.</td>
</tr>
<tr>
<td>Eastwoods goldenbush ( (Ericameria fasciculata) )</td>
<td>List IB.1 State: None Fed: None</td>
<td>Sandy openings in maritime chaparral, pine forests, coastal scrub Perennial shrub; blooms Jul – Oct.</td>
<td>Berta Ridge and Eden Path Road, Prunedale, 4 km to S. Not observed within project area.</td>
</tr>
<tr>
<td>Fragrant fritillary ( (Fritillaria liliacea) )</td>
<td>List IB.2 State: None Fed: None</td>
<td>Coastal scrub, grasslands near coast Perennial bulb; blooms February - April</td>
<td>Near San Juan Road and Carpenteria Road, 4 km to NW. Not observed within project area.</td>
</tr>
<tr>
<td>Santa Cruz tarplant ( (Holocarpha macradenia) )</td>
<td>List IB.1 State: E Fed: T</td>
<td>Prairie, grasslands near coast Annual herb; blooms June - August</td>
<td>Porter Ranch near Hall Road and Elkhorn Road, 10 km to W. Not observed within project area.</td>
</tr>
<tr>
<td>Yadon’s rein orchid ( (Piperia yadonii) )</td>
<td>List IB.1 State: None Fed: E</td>
<td>Closed cone pine forest, scrub, coastal bluff scrub Annual, blooms May - June</td>
<td>Vierra Canyon, 3 km to S; Long Canyon 4 km to SW; Manzanita Park 4 km to SSW; Between Prunedale and Berta Canyon 3 km to S. Not observed within project area.</td>
</tr>
<tr>
<td>Pine rose ( (Rosa pinetorum) )</td>
<td>List IB.2 State: None Fed: None</td>
<td>Closed cone pine forest Perennial, blooms May - June</td>
<td>Manzanita Park 4 km to SSW Not observed within project area</td>
</tr>
</tbody>
</table>

### Surrounding Eight Quadrangles

<table>
<thead>
<tr>
<th>Species</th>
<th>Status</th>
<th>Habitat Type</th>
<th>Closest Known Occurrence(s) Observed on Site?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hickman’s onion ( (Allium hickmanii) )</td>
<td>List IB.2 State: None Fed: None</td>
<td>Openings in forest, woodlands, or chaparral, grassland Sandy damp ground and vernal swales; blooms April - May</td>
<td>Slopes N of Carmel Valley Road, E side Hwy 1 at Carpenter Road; Veterans Memorial Park Not observed within project area.</td>
</tr>
<tr>
<td>Species</td>
<td>Status</td>
<td>Habitat Type</td>
<td>Closest Known Occurrence(s) Observed on Site?</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------</td>
<td>--------------------------------------</td>
<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td>Toro manzanita (Arctostaphylos montearenensis)</td>
<td>List 1B.2</td>
<td>Sandy soils, maritime chaparral/oak woodland mosaic</td>
<td>Monterey Airport; Ft. Ord, Toro Regional Park</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td>Closed cone forest, Sandy soils, maritime chaparral, dunes</td>
<td>Gibson Canyon, N of Carmel Highlands, Ft. Ord</td>
</tr>
<tr>
<td></td>
<td>Fed: None</td>
<td>Evergreen shrub</td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td>Sandmat manzanita (Arctostaphylos pumila)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>List 1B.2</td>
<td>Coastal bluff scrub, moist sandy depressions on bluffs or dunes; blooms April – May</td>
<td>Along 17-mile Drive near Ocean Road.</td>
</tr>
<tr>
<td></td>
<td>State: E</td>
<td></td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>Fed: E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td>Coastal bluff scrub, moist sandy depressions on bluffs or dunes; blooms April – May</td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>Fed: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Round-leaved filaree (California macrophylla)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>List 1B.1</td>
<td>Coastal bluff scrub, moist sandy depressions on bluffs or dunes; blooms April – May</td>
<td>Pt. Lobos, Veterans Park, Ft. Ord.</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td>Not observed on site</td>
</tr>
<tr>
<td></td>
<td>Fed: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnny nip paintbrush (Castilleja ambigua ssp. insalata)</td>
<td>List 1B.1</td>
<td>Coastal bluff scrub, annual; blooms May – June</td>
<td>Gibson Creek, Hastings Reserve, Gabilan Range</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td>Not observed in project area.</td>
</tr>
<tr>
<td></td>
<td>Fed: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seaside birds-beak (Corystanthus rigidus ssp. litoralis)</td>
<td>List 1B.1</td>
<td>Coastal bluff scrub, annual; blooms May – June</td>
<td>E of Pt. Lobos along N side of San Jose Creek and W of Palo Corona Trail crossing, Soberanes Point area</td>
</tr>
<tr>
<td></td>
<td>State: E</td>
<td></td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>Fed: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinnacle’s buckwheat (Eriogonum nortonii)</td>
<td></td>
<td>Coastal bluff scrub, annual; blooms May – June</td>
<td>Gibson Creek, Hastings Reserve, Gabilan Range</td>
</tr>
<tr>
<td></td>
<td>CNPS: List 1.3</td>
<td></td>
<td>Not observed in project area.</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Federal: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hutchinson’s larkspur (Delphinium hutchinsoniae)</td>
<td>List 1B.2</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>E of Pt. Lobos along N side of San Jose Creek and W of Palo Corona Trail crossing, Soberanes Point area</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>Fed: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sand-loving wallflower (Erysimum monophylum)</td>
<td></td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>E of Pt. Lobos along N side of San Jose Creek and W of Palo Corona Trail crossing, Soberanes Point area</td>
</tr>
<tr>
<td></td>
<td>List 1B.2</td>
<td></td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fed: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yadon’s wallflower (Erysimum menziesii ssp. menziesii)</td>
<td>List 1B.1</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Pt. Ord; Naval Postgraduate School; Pt. Pinos; Seaside; Asilomar; 17-mile Drive</td>
</tr>
<tr>
<td></td>
<td>State: E</td>
<td></td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>Fed: E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sand gilia (Gilia temulata ssp. arenaria)</td>
<td></td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Pt. Ord; Naval Postgraduate School; Pt. Pinos; Seaside; Asilomar; 17-mile Drive</td>
</tr>
<tr>
<td></td>
<td>List 1B.2</td>
<td></td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>State: T</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Pt. Ord; Naval Postgraduate School; Pt. Pinos; Seaside; Asilomar; 17-mile Drive</td>
</tr>
<tr>
<td></td>
<td>Fed: E</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td>San Francisco gumplant (Grindelia hirsutula var. maritima)</td>
<td>List 1B.2</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Pt. Ord; Naval Postgraduate School; Pt. Pinos; Seaside; Asilomar; 17-mile Drive</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>Fed: None</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td>Kellogg’s horkelia (Horkelia cuneata ssp. sericea)</td>
<td></td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Pt. Ord; Naval Postgraduate School; Pt. Pinos; Seaside; Asilomar; 17-mile Drive</td>
</tr>
<tr>
<td></td>
<td>List 1B.1</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>State: None</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Not observed within project area.</td>
</tr>
<tr>
<td></td>
<td>Fed: None</td>
<td>Coastal bluff scrub, coastal dunes; scrub</td>
<td>Not observed within project area.</td>
</tr>
</tbody>
</table>
Table 3. List of Special Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Oak Ridge/Vie del Sol Project Area, Monterey County

<table>
<thead>
<tr>
<th>Species</th>
<th>Status</th>
<th>Habitat Type Plant Characteristics</th>
<th>Closest Known Occurrence(s) Observed on Site?</th>
</tr>
</thead>
</table>
| Contra Costa goldfields (Lasthenia confusens) | List 1B.1  | Moist grassland, vernal pools  
Bloom March - May  
Feds: E                                                              | Pt. Ord  
Not observed within project area.                                                 |
| Tidestom’s lupine (Lupinus tidestomii)        | List 1B.1  | Coastal dunes  
Annual herb; blooms April – May  
Feds: E                                                                        | Pt. Pinos, Asilomar 17-mile Drive;  
Spanish Bay Dunes  
Not observed within project area.                                                   |
| Woodland woolly threads (Monolopia gracilens) | List 1B.2  | Chaparral, grasslands, woodlands,  
serpentine  
Bloom April - June  
Feds: None                                                              | Monterey, 1897 herbarium record  
Not observed within project area.                                                   |
| Monterey pine (Pinus radiata)                | List 1B.1  | Closed cone pine forest  
Evergreen tree  
Feds: None                                                              | Pt. Lobos State Reserve, Pt. Pinos  
Individuals present yet as installed landscape specimens outside of native stands |
| Choris’ popcorn flower (Plagiochola chorisina var. choristiana) | List 1B.2  | Grassland, prairie; mesic areas  
Annual, blooms March - May  
Feds: None                                                              | No records in CNDDB  
Not observed within project area.                                                   |
| Most beautiful jewelflower (Streptanthus albides ssp. peramoecum) | List 1B.2  | Serpentine grassland, scrub, rocky outcrops  
Bloom May - July  
Feds: None                                                              | Salmon Creek Santa Lucia Mountains  
Not observed within project area.                                                   |
| Santa Cruz clover (Trifolium buckwestorium)  | List 1B.1  | Prairie, grasslands, mesic areas  
Annual, blooms March - April  
Feds: None                                                              | Tarpey Flats, Reservation Road  
Not observed within project area.                                                   |
| Saline clover (Trifolium depauperatum var. hydrophilum) | List 1B.2  | Alkali grasslands, mesic areas  
Annual, blooms May - June  
Feds: None                                                              | Moro Cojo Slough area  
Not observed within project area.                                                   |

**CNPS Status:**

**List 1B:** These plants (predominantly endemic) are rare through their range and are currently vulnerable or have a high potential for vulnerability due to limited or threatened habitat, few individuals per population, or a limited number of populations. List 1B plants meet the definitions of Section 1901, Chapter 10 of the CDFG Code.

**Federal and State Status:**

T: Designated as a threatened species by the federal government or the California Fish and Game Commission

E: Designated as an endangered species by the federal government or the California Fish and Game Commission

### 2.3.4 Special Status Wildlife Species

Special status wildlife species include those listed, proposed or candidate species by the Federal or the State resource agencies, as well as those identified as State species of special concern. In addition, all raptor nests are protected by Fish and Game Code, and all migratory bird nests are protected by the Federal Migratory Bird Treaty Act. Special status wildlife species were evaluated for their potential presence in the project area as described in Table 4 below. Known occurrences of special status species within 2km (1.24 miles) of the project corridor are shown on Figure 8.
<table>
<thead>
<tr>
<th>SPECIES</th>
<th>STATUS</th>
<th>HABITAT</th>
<th>POTENTIAL OCCURRENCE ON SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amphibians</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coast range newt <em>Taricha torosa torosa</em></td>
<td>CSC</td>
<td>Coastal drainages and adjacent forests, breeds in ponds and slow-moving parts of streams.</td>
<td>No breeding habitat within project corridor, but may occur in willow riparian.</td>
</tr>
<tr>
<td>California tiger salamander <em>Ambystoma californiense</em></td>
<td>FT, ST</td>
<td>Ponds, vernal pools for breeding, grasslands with burrows for upland habitat</td>
<td>No breeding habitat within project area, but potential upland habitat in grasslands at new tank site and along pipeline segment between Oak Ridge Road and Via Del Sol Drive.</td>
</tr>
<tr>
<td>Santa Cruz long-toed salamander <em>(Ambystoma macrodactylum croceum)</em></td>
<td>FE, SE</td>
<td>Ponds for breeding with water at least into June. Riparian, oak woodland, coastal scrub for upland habitat.</td>
<td>No breeding habitat within project area. Closest known breeding pond (Oxbow) is &gt;4 miles to west. Unlikely to occur within project area.</td>
</tr>
<tr>
<td>California red-legged frog <em>Rana aurora draytonii</em></td>
<td>FT, CSC</td>
<td>Riparian, marshes, estuaries and ponds with still water at least into June.</td>
<td>No suitable breeding habitat on site. Closest known occurrence is approx. 0.5 mile east of project area along upper arm of tributary to Carneros Creek (same one that crosses under intersection of Oak Ridge Road and Dumbarton Road). This frog may occur along this tributary creek and Carneros Creek within the project area.</td>
</tr>
<tr>
<td><strong>Reptiles</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western pond turtle <em>Actinemys marmorata</em></td>
<td>CSC</td>
<td>Creeks and ponds with water of sufficient depth for escape cover, and structure for basking; grasslands or bare areas for nesting.</td>
<td>Closest occurrence is approx. 0.75 mile northeast of north end of project area. May occur along Carneros Creek.</td>
</tr>
<tr>
<td><strong>Birds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White-tailed kite <em>Elanus leucurus</em></td>
<td>FP</td>
<td>Nests in dense riparian and oak woodlands; adjacent open grasslands and marshes for foraging.</td>
<td>Unlikely, riparian area lacks tall canopy trees, and grasslands too small and fragmented to provide sufficient foraging area.</td>
</tr>
<tr>
<td>Golden eagle <em>Aquila chrysaetos</em></td>
<td>FP</td>
<td>Nests in oak woodlands primarily adjacent to open areas for foraging.</td>
<td>Unlikely, oak woodlands within project area are not suitable for nesting due to high human use; adjacent grasslands too small for suitable foraging habitat.</td>
</tr>
<tr>
<td>Western burrowing owl <em>Athene cunicularia hypugae</em></td>
<td>CSC</td>
<td>Grasslands with suitable burrows.</td>
<td>None, no suitable burrows observed in grasslands along project corridor. Grasslands too small and fragmented to provide sufficient foraging area.</td>
</tr>
<tr>
<td>Tricolored blackbird <em>Agelaius tricolor</em></td>
<td>CSC</td>
<td>Dense bulrush and/or cattail vegetation adjacent to freshwater marshes</td>
<td>None, no suitable habitat on site.</td>
</tr>
</tbody>
</table>

**Mammals**
Table 4. Special status wildlife species and their predicted occurrence in the vicinity of the Oak Ridge/Via del Sol Project Area, Monterey County, December 2010.

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>STATUS</th>
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<th>POTENTIAL OCCURRENCE ON SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pallid bat <em>Antrozous pallidus</em></td>
<td>CSC</td>
<td>Roosts in caves, hollow trees that protect from high daytime temps. Very sensitive to human disturbance.</td>
<td>Unlikely, trees along project corridor subject to high human disturbance.</td>
</tr>
<tr>
<td>American badger <em>Taxidea taxus</em></td>
<td>CSC</td>
<td>Grasslands with friable soils for digging dens</td>
<td>None, no suitable habitat on site. Grasslands within project area are too small and fragmented to support a badger population.</td>
</tr>
</tbody>
</table>

1 Key to status:

FE = Federally listed as endangered species
FT = Federally listed as threatened species
SE = State listed as endangered species
ST = State listed as threatened species
CSC = California species of special concern
FP = Fully protected species under CDFG Code
Figure 8. Location of Special Status Wildlife Species within 2 km (1.4 miles) of the Proposed Oak Ridge Road/Via del Sol Project
3.0 IMPACT AND MITIGATION ANALYSIS

3.1 IMPACT CRITERIA

The following section describes the thresholds of significance used to assess potential environmental impacts and the impact assessment.

3.1.1 Thresholds of Significance

According to CEQA Appendix G Criteria, implementation of the Project would be considered to have a significant impact on biological resources if it resulted in any of the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as listed endangered or threatened, proposed for listing, candidate for listing, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;
- Threaten to eliminate a plant or animal community, substantially reduce the habitat of a fish or wildlife species, or cause a fish or wildlife population to drop below self-sustaining levels, including but not limited to:
  - Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources;
  - Substantially interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors; and
  - Impede the use of nursery areas or disrupt nesting and breeding of fish and wildlife species;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP.

Impacts were not considered significant to vegetation communities or habitats that are not protected, are generally common, and do not support listed, candidate or special concern species. For the water main project impacts to the coyote brush scrub, non-native tree groves, or non-native landscape plants were not considered to pose significant impacts to statewide or regional botanical resources.

3.2 ENVIRONMENTAL IMPACTS, MITIGATION MEASURES AND SIGNIFICANCE DETERMINATION FOR THE PROPOSED PROJECT

The proposed water project was evaluated as to potential direct and indirect impacts to sensitive resources. One regulated habitat may be affected by the project: willow riparian woodland. One State-recognized sensitive resource may be affected by the project: needlegrass grassland. Oak trees, as regulated by Monterey County, may also be affected by the project. Adverse effects to these
resources would be considered significant impacts. Measures are described below to reduce any potential project impacts to these habitats to a less than significant level.

Nesting migratory birds may occur along the project corridor, and impacts to nesting birds from the project would be considered a significant impact. Three special status amphibian species and one reptile are known from the general project vicinity, and may occur along certain portions of the project corridor. Measures are described below to reduce any potential project impacts to these special status wildlife species to a less than significant level.

Impact 3.2-1. Impacts to Willow Riparian Woodland

The project will require pruning of the willow thicket located at the intersection of Dunbarton Road and Oak Ridge Road. The willows overhang the existing roadway where construction will occur. The extent of limbing is approximately 50 square feet (10 feet long by 5 feet wide). Removal of riparian woodland is a potentially significant impact; however, limbing is a temporary impact. As the limbed willow trees are expected to quickly re-grow after completion of the project, this action is not considered to be a significant impact to riparian resources. No mitigation is required.

Mitigation Measures: None Required

Impact 3.2-2. Impacts to Carneros Creek and Tributaries

Project construction will occur within the roadway of Dunbarton Road, which is adjacent to Carneros Creek (at a culvert under Dunbarton Road just south of San Juan Road) and a tributary to Carneros Creek (along Dunbarton Road north of Oak Ridge Road). At Carneros Creek the new pipeline will be placed above the existing creek culverts. At the intersection of Dunbarton Road and Oak Ridge Road, the new pipeline will be placed under the existing creek culvert. Although construction will occur within the shoulder of the roadway and/or above/under existing culverts, activities may result in excavated materials entering the creek during rainfall events, inadvertent deposition of construction materials in the creek, or inadvertent damage to existing creek culverts.

Level of Significance before Mitigation: Potentially Significant

Mitigation Measures:

Mitigation Measure BIO-1

The Aromas Water District shall implement riparian corridor protection measures to minimize impacts to downstream waters and resources located adjacent to the work area, including:

- Install plastic mesh fencing and silt fencing at the perimeter of the work area that abuts downstream waters and riparian corridor to prevent impacts to the adjacent riparian corridor and injury to nearby native trees (if present). Protective fencing shall be in place prior to ground disturbances and removed once all construction is complete. During construction, no grading, construction or other work shall occur outside the designated limits of work.
- No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored outside the designated limits of work.
- Work above and below existing creek culverts shall be implemented in a manner where no construction material enters the creeks and the existing culverts are not damaged. The water district shall confer with CDFG,
RWQCB, and USACE on the need to obtain permits prior to work under or above the existing culverts.

- Implement standard erosion control measures to prevent construction materials from entering the downstream drainages. Utilize a native erosion control seed mix on disturbed areas following construction. Plant species suitable for use include purple needlegrass (Nassella pulchra) and California brome (Bromus carinatus).

**Level of Significance after Mitigation:** Less than Significant

**Impact 3.2-3. Impacts to Oak Woodland and Oak Trees**

As depicted on the site plan, no oak trees will be removed to accommodate the water line. The majority of the construction work will occur within the shoulder of existing roadways, yet in two locations (along the Oak Ridge knoll and within oak woodland east of Via del Sol Drive) trenching will occur within undisturbed oak woodland. Several oak trees, including trees meeting the County’s requirement of landmark oaks, will be located within 20 feet of trenching and associated construction activities. Construction trenching and other activities will occur within the dripline of numerous oak trees that are to be retained. Indirect impacts to these trees may occur through root disturbances, soil compaction, removal of limbs, and inadvertent injury to tree trunks.

**Level of Significance before Mitigation:** Potentially Significant

**Mitigation Measures:**

**Mitigation Measure BIO-2**

Prior to grading and construction, the Aromas Water District shall protect all oak trees that are within 20 feet of grading, trenching, and/or construction staging or access by placing plastic protection fencing (i.e., plastic construction mesh fencing with metal t-bars) at the limit of work. At the direction of a qualified arborist, fencing should be in place prior to any site grading or other disturbances. The final location and integrity of the fencing shall be inspected by a qualified arborist prior to any site construction. All areas outside the limits of work shall be preserved. When all site construction is complete, the temporary fencing can be removed.

**Mitigation Measure BIO-3**

During ground excavation all roots greater that 2 inches in diameter should be hand-cut (instead of being cut by a mechanical trencher, grader, or excavator). Hand cutting of roots will minimize impacts to trees adjacent to construction. Limbing of tree limbs for access shall follow standards for pruning as per the International Society of Arboriculture (ISA), with any additional measures as identified by a qualified on-site arborist. A qualified arborist shall be on site to oversee all root cutting and limbing. Any additional protective tree measures as identified by the on-site arborist shall be implemented.

**Level of Significance after Mitigation:** Less than Significant
Impact 3.2-4. Impacts to Needlegrass Grassland

Water main trenching and the access road will require trenching through areas supporting needlegrass grassland. While this community type is State ranked S3 (sensitive resource) and native bunchgrass stands and natural meadows are identified as areas of biological significance in the County General Plan, the community on site is not of high quality, as evidenced by the predominance of non-native species, presence of invasive thistles, human activities within the area, and the lack of special status plant species. In addition, the project will affect a small acreage of this community type (approximately 2,000 square feet) and it is unlikely that this impact will be a serious threat to the existence of high quality habitat of this type. Nevertheless, measures to minimize impacts to this habitat from the proposed project are identified.

**Level of Significance before Mitigation**: Potentially Significant

**Mitigation Measures**:

**Mitigation Measure BIO-4**

_Prior to grading and construction, the Aromas Water District shall designate the limits of construction work and equipment access and install protective fencing. Grassland adjacent to the work area shall be protected by placing plastic protection fencing (i.e., plastic construction mesh fencing with metal t-bars) at the limit of work. Protective fencing should be in place prior to any site grading or other disturbances. All grassland areas outside the limits of work shall be preserved. When all site construction is complete, the temporary fencing can be removed._

**Mitigation Measure BIO-5**

_Areas disturbed by construction shall be seeded with a native erosion control seed mix suitable to the project area. Plant species suitable for use include purple needlegrass (Nassella pulchra) and California brome (Bromus carinatus)._ 

**Level of Significance after Mitigation**: Less than Significant

Impact 3.2-5. Impacts to Nesting Birds

The project has the potential to impact nesting migratory birds or raptors if any are present within the work area during tree pruning and use of heavy equipment. Nests may potentially be destroyed by pruning, resulting in death of chicks or eggs, if any are present. Loud noise from heavy equipment may potentially cause adult nesting birds to abandon their nests, resulting in death of chicks or eggs, if any are present. No long-term impacts to bird nesting habitat are expected to occur from the minor amount of tree pruning needed for this project.

**Level of Significance before Mitigation**: Potentially Significant

**Mitigation Measures**:

**Mitigation Measure BIO-6**

_To avoid potential impacts to nesting migratory birds and raptors, the Aromas Water District shall schedule construction to occur during the non-nesting season, which is_
August 1 to March 1 of any given year. If this is not practical, implement Measure BIO-8 below.

Mitigation Measure BIO-7.

The Aromas Water District shall hire a qualified biologist to conduct surveys for nesting birds no more than two weeks prior to onset of tree pruning and construction with heavy equipment. If nesting birds are observed within the project corridor, postpone construction along that portion of the project until the biologist confirms that all young have fledged from the nest. For most birds a 50 foot buffer zone is adequate to protect the nest; a raptor nest will require a 250 foot buffer.

Level of Significance after Mitigation: Less than Significant

Impact 3.2-6 Impacts to Amphibians and Pond Turtle

Three special status amphibians and the pond turtle occur within the general project vicinity, within 2 km (1.24 miles) of portions of the project area. The amphibians are coast range newt, California tiger salamander, and California red-legged frog. The majority of the project’s water pipeline will be placed within the existing roadways or road shoulders, which do not provide suitable habitat for these species. The roadways are paved and the road shoulders are compacted base rock. There will be no work directly within Carneros Creek or its tributary for this project. However, work will occur adjacent to the edge of the tributary creek on Oak Ridge Road at its intersection with Dumbarton Road, which has the potential to impact coast range newt, California red-legged frog, or pond turtle if any are present during the trimming of willows or trenching at that location.

The new water line will cross two grasslands areas that are potential upland habitat for the California tiger salamander. One area is the water line and new water tank at the 705 ft knoll above the western end of Oak Ridge Road. The other area is the water pipeline that will cross a grassland area between residences at the end of Oak Ridge Road and connect to Via Del Sol Drive. These grasslands have only marginal upland habitat for tiger salamander with scattered gopher burrows, but they are located approximately 0.3 to 0.4 mile from an agricultural pond (see Figures 2 and 8). It is unknown if tiger salamanders breed in this agricultural pond. The closest known occurrence of tiger salamanders is approximately 2 km (1.24 miles) northeast of the northern end of the water pipeline.

Level of Significance before Mitigation: Potentially Significant

Mitigation Measures:

Mitigation Measure BIO-8

For the work area adjacent to the tributary creek at Oak Ridge Road and Dumbarton Road, the Aromas Water District shall hire a qualified biologist to conduct pre-construction surveys for coast range newt, California red-legged frog and western pond turtle. The survey should be conducted no more than 48 hours prior to onset of willow trimming and trenching. A biologist shall be on-site during construction to ensure no newts, frogs, or turtles are in the work area. The silt fences (installed as stated in Mitigation Measure BIO-1) will also prevent movement of animals from the
creek/riparian area into the work area, such that take of the species are avoided. No take of California red-legged frog is allowed.

Mitigation Measure BIO-9.

During the grading for the water tank and trenching for the water line portions of the project that cross the grassland areas, the Aromas Water District shall hire a qualified biologist to monitor for presence of California tiger salamander. The biologist shall be on-site during construction to ensure no salamanders are in the work area. The silt fences (installed as stated in Mitigation Measure BIO-1) will also prevent movement of animals from adjacent areas into the work area, such that take of the species is avoided. No take of California tiger salamanders is allowed.

Level of Significance after Mitigation: Less than Significant
4.0 REFERENCES AND LITERATURE CITED


California, State of, Department of Fish & Game. 2011. Natural Diversity Database. 2011 Rare Find program, Prunedale quadrangle.


