

Q.5.5 - Biological Resources

Special Status Species

Q5.5-A:	The project would 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.
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Project-Specific Impact Analysis

Collection System

Similar to Proposed Project 4 analyzed within the Draft EIR, the collection system for the Preferred Project encompasses areas throughout the community of Los Osos within the Urban Reserve Line, east along the Los Osos Valley Road right-of-way to Turri Road, and north along the Turri Road right-of-way for approximately 2,800 feet to the proposed treatment facility location on the Tonini property. The collection system for the Preferred Project includes septic tank abandonment and installation of a network of sewer collection pipelines and force main lines, nine pump stations (Mid-town, six duplex, two triplex), thirteen pocket pump stations, two standby power stations located onsite at six of the pump station sites, thirteen pocket pump stations, and a wastewater conveyance pipeline to the treatment facility. The treated effluent pipeline from the treatment facility to the Broderson leachfields is also addressed under the collection system for the Preferred Project.

As discussed in Section 3, the wastewater gravity collection system within the Urban Reserve Line evaluated in the Draft EIR was originally designed for the previous iteration of the project that was approved by the California Coastal Commission (CCC) and issued a Coastal Development Permit (CDP). This same wastewater gravity collection system design has been adopted for the Preferred Project, with additional refinements that meet the conditions of the CDP issued for the previous iteration of the project, as well as the new engineering demands in delivering wastewater out to the Tonini site.

The collection system for Preferred Project would be the same as that which is proposed for Proposed Project 4 in the Draft EIR, with the addition of the new refinements. The additional refinements are discussed in detail within Appendix Q.3. Of the additional refinements, the on-site design changes for pump stations would not result in any impacts to biological resources. However, those resulting in developments and siting changes within new sewer collection pipelines, force mains, pocket pump stations, and pump stations could result in impacts to biological resources that were not addressed within the Draft EIR. The refinements that are expected to result in potential impacts on biological resources include the following:

- a change in location of the Mid-town pump station from the southeast corner to the southwest corner of the Mid-town site;
- a sewage gravity collection line, pocket pump, and a force main along Palisades Avenue to collect sewage and convey back to the Mid-town Pump Station along Los Osos Valley Road;

- the addition of the Solano pump station and force main along Solano Street and Skyline Drive, increasing the total number of pump stations to nine;
- a connection to a new standby power station for the Baywood and West Paso pump stations located near the corner of 8th Street and El Moro Street instead of onsite standby power stations at both pump station sites;
- a connection to a new standby power station for the Mountain View pump station located at the nearby LOCSD South Bay well site instead of an onsite standby power station; and
- an approximately 7-acre construction staging area located northwest of the intersection of Pismo Avenue and South Bay Boulevard, adjacent to the East Paso pump station.

A description of each refinement and discussion of the existing conditions at each of the proposed locations are provided below.

Sewer Collection Pipelines and Force Main Lines

Similar to that analyzed for Proposed Project 4 in the Draft EIR, the sewer collection pipelines and force main lines for the Preferred Project will be contained within disturbed and developed portions of surface street rights-of-way throughout the community of Los Osos. The network of sewer collection pipelines and force main lines is displayed on Exhibit Q.3-1. The Preferred Project incorporates refinements to the sewer collection pipelines and force main line layout that include the installation of an additional sewer collection line along Palisades Road north of Los Osos Valley Road, the installation of a force main along Palisades Road north of Los Osos Valley Road, the installation of a force main along Los Osos Valley Road running west from Palisades Road to the Mid-town pump station, and the installation of a force main from the Solano pump station south along Solano Street and east along Skyline Drive. Additionally, lateral lines will run from the sewer collection pipelines to each property lines being served by the collection system. It is expected that the majority of the sewer collection pipeline, force main line, and lateral line installation would occur within disturbed and developed portions of surface street rights-of-way. These areas do not contain suitable habitat for any special status species; therefore, no impacts are anticipated to occur to biological resources, including special status species.

Pocket Pump Stations

The Preferred Project includes a total of thirteen unnamed pocket pump stations required within individual low-elevation locations of the collection system. These pocket pump station locations are displayed on Exhibit Q.3-1 and labeled with the letter "P". All pocket pump stations will occur in disturbed and developed areas contained primarily within surface street rights-of-way. The refinements call out the need for an additional pocket pump station located at the northern terminus of Palisades Avenue. The pocket pump station development will require the additional force main along Palisades Avenue north of Los Osos Valley road that was addressed above under the sewer collection pipelines and force main lines discussion. The new pocket pump station will be contained within

disturbed and developed portions of Palisades Avenue that do not contain any native plant species or natural communities, or federally- or state-regulated wetland resources.

Pump Stations

The Preferred Project includes a total of nine pump stations referred to as the Mid-town, Solano, Lupine, West Paso, Baywood, East Ysabel, East Paso, Mountain View, and Sunny Oaks pump stations. These pump stations are displayed on Exhibit Q.3-1 and are referred to as either pump stations with (PSS) or without (PS) on-site standby power buildings. It should be noted that with the exception of the Mid-town pump station, all pump stations will occur within a variety of disturbed and developed areas, and areas vegetated primarily with non-native ornamental and ruderal (weedy) plant species. With the exception of the Mid-town pump station, none will occur within any natural communities or areas dominated by native vegetation. The 0.03-acre Baywood pump station and 0.03-acre Mountain View pump station will be entirely contained within paved asphalt portions of El Moro Avenue and Mountain View Drive.

Of the nine pump stations, only a single pump station, the Solano pump station, was not addressed in the Draft EIR. This pump station is addressed below. Additionally, the change in location of the Mid-town pump station was not addressed in the Draft EIR. The change in location of the Mid-town pump station is also addressed below.

Solano Pump Station: The Solano pump station will occur within an approximately 0.07-acre area located on the east side of Solano Street, immediately south of the eastern terminus of Butte Drive adjacent to the Sea Pines Golf Resort in western Los Osos. The pump station development will require the additional force mains along Solano Street and Skyline Drive that were addressed above under the sewer collection pipelines and force main lines discussion. The 0.07-acre area is contained within a flat disturbed lot that is currently being used for storage, presumably by the Sea Pines Golf Resort. A number of dirt piles, a concrete pipeline segment, and other debris were observed scattered throughout the area. The area is subject to routine pedestrian and vehicle traffic as a result of recreation and golf course maintenance activities. The area is characterized by bare earth and non-native ruderal (weedy) vegetation, and does not contain any native plant species or natural communities, or federally- or state-regulated wetland resources.

Mid-town Pump Station: The location of the Mid-town pump station has been changed from the location identified in the Draft EIR due to the hydraulic characteristics and requirements of the proposed collection system.

The new proposed location encompasses a 0.25-acre area near the southwest corner of the Mid-town property (Exhibit Q.3-1). As discussed in the Draft EIR, the Mid-town pump station is proposed within land that had been cleared in 2005 for the previously approved iteration of the project. The biological resources-related impacts associated with the new location are essentially the same as those associated with the previous location and analyzed for Proposed Projects 1 through 4. In general, the

pump station occurs within a flat upland area characterized by bare earth and sparse native and non-native vegetation. Since the previous clearing and relocation activities, the overall Mid-town property has partially recovered to support a sparse arrangement of native and non-native plant species. Some areas remain highly disturbed and contain a significant percentage of bare earth and non-native veldt grass (*Ehrharta calycina*), while other areas support an open canopy of disturbance-tolerant and early-seral type native shrub species. Although much of the 0.25-acre area proposed for the Mid-town pump station is characterized by bare earth (approximately 70 percent), it does contain a sparse arrangement of vegetative cover (approximately 30 percent). Dominant non-native plant species observed include veldt grass and fig marigold (*Carpobrotus edulis*). Native plant species that have sparsely recruited back into the area include deerweed (*Lotus scoparius*), black sage (*Salvia mellifera*), silver dune lupine (*Lupinus chamissonis*), and California croton (*Croton californicus*). An east-to-west trending section of the chain-linked perimeter fence for the property transects the southern half of the 0.25-acre area. Sand bags support the base of the chain-linked fence poles.

Standby Power Stations

The Baywood and Mountain View pump stations for the Preferred Project will be served by two standby power stations that occur in isolation from the pump station developments. These standby power station locations are displayed on Exhibit Q.3-1 and labeled with the letter “S”. Both standby power stations will be located within disturbed and developed land. Coaxial connections will be contained within disturbed and developed portions of surface street rights-of-way. Therefore, no impacts to biological resources are anticipated to result from the standby power stations for the Preferred Project.

Raw Wastewater Conveyance Pipeline

The raw wastewater conveyance pipeline for the Preferred Project is similar to that analyzed for Proposed Project 4 in the Draft EIR, with the exception of bridge suspension methodologies as opposed to open-cut trenching for the installation of pipelines that will cross Los Osos Creek and Warden Creek. As discussed in the Draft EIR, the raw wastewater conveyance pipeline will begin at the Mid-town pump station, continue east on Los Osos Valley Road to Turri Road before heading north and terminating at the Tonini wastewater treatment facility site. The pipeline will be installed entirely within disturbed and developed portions of the Los Osos Valley Road and Turri Road rights-of-way using open trench construction, with the exception of the Los Osos Creek and Warden Creek crossings. At the Los Osos Creek crossing, the pipeline will be secured using conventional pipe hangers along the north edge of the existing Los Osos Valley Road bridge. Similarly, at the Warden Creek crossing, the pipeline will be secured using conventional pipe hangers along the west edge of the existing Turri Road bridge. At each of the Los Osos Creek and Warden Creek crossings it will be necessary to support the pipeline during installation. It is anticipated that this will be accomplished from above on top of the bridge with an excavator, crane, or similar equipment, or with hand-built falsework. If required, the pipeline (or pipeline segments) would be lowered into place and retrieved with a crane from above. No access ramp would be required for either crossing as no in-stream heavy

equipment use is anticipated. The crossing of several tributary drainages to Warden Creek and seasonal wetland swales will also be required along Los Osos Valley Road and Turri Road. These crossings will be accomplished by open trench construction during the dry season.

Treated Effluent Pipeline

The treated effluent pipeline for the Preferred Project is similar to that analyzed for Proposed Project 4 in the Draft EIR, with the exception of bridge suspension methodologies as opposed to open-cut trenching for the installation of pipelines that will cross Los Osos Creek and Warden Creek. As discussed in the Draft EIR, the pipeline will convey the treated effluent from the treatment facility at the Tonini site to the sprayfields on the Tonini ranch property and to the leachfields on the Broderon property. A short pipeline and series of distribution lines all contained within the Tonini property will convey treated effluent to the sprayfields. These pipelines will cross tributary streams to Warden Creek at five locations on the Tonini property, and will be installed using open-cut trenching methods during the dry season. The treated effluent conveyance pipeline out to the leachfields on the Broderon property will run within the Los Osos Valley Road right-of-way for most of its length before heading south within the Broderon Avenue right-of-way and terminating at the leachfields. The pipeline will be installed entirely within disturbed and developed portions of the Los Osos Valley Road and Broderon Avenue rights-of-way using open trench construction, with the exception of the Los Osos Creek and Warden Creek crossings. The pipeline crossing at Warden Creek will be secured using conventional pipe hangers along the east edge of the Turri Road bridge. The pipeline crossing at Los Osos Creek however will not require pipe hangers as installation will occur through existing voids within the Los Osos Valley Road bridge abutments. Similar to the raw wastewater conveyance line, the treated effluent pipeline may need to be supported during installation. If required, it is anticipated that this will be accomplished from above on top of the bridge with an excavator, crane, or similar equipment, or with hand-built falsework. If required, the pipeline (or pipeline segments) would be lowered into place and retrieved with a crane from above. No access ramp would be required for either crossing as no in-stream heavy equipment use is anticipated. Similar to the raw wastewater conveyance pipeline, the crossing of several tributary drainages to Warden Creek and seasonal wetland swales will also be required along Los Osos Valley Road. These crossings will be accomplished by open trench construction during the dry season.

Construction Staging Areas

The construction yard to be used during installation of the collection system for the Preferred Project includes a 7-acre area located at the northwest corner of Pismo Avenue and South Bay Boulevard. This parcel will also support the East Paso pump station for the Preferred Project. The 7-acre disturbed area was used by the previous LOCSO wastewater project and is primarily characterized by bare earth. No impacts to biological resources are anticipated to result from the construction staging area for the Preferred Project collection system.

Short Term Construction Impacts

The collection system for the Preferred Project could result in significant direct and indirect short-term construction impacts to special status species. The following provides a project-specific impact analysis of the short-term construction impacts on special status plant and wildlife species for the collection system element of Preferred Project.

- **Special Status Plant Species.** Impacts to special status plant species resulting from the collection system component of Preferred Project would be essentially the same as those addressed for Proposed Project 4 within the Draft EIR. It was determined that portions of the collection system contain suitable habitat for the federally-endangered Morro manzanita. No other special status plant species were determined to have a potential to occur within the collection system area.

Surveys conducted by the County Department of Public Works in December 2008 and January 2009 concluded that no naturally occurring Morro manzanita specimens are present within the collection system impact area. Therefore, no impacts to this species are anticipated to occur as a result of the collection system component of the Preferred Project, and no mitigation measures are required.

- **Special Status Wildlife Species.** Impacts to special status wildlife species resulting from the collection system component of Preferred Project would be essentially the same as those addressed for Proposed Project 4 within the Draft EIR. The Preferred Project could result in significant direct and indirect impacts to special status wildlife species and their habitat during project construction, including including the Morro shoulderband snail (*Helminthoglypta walkeriana*) and federally-designated critical habitat, south-central California coast steelhead (*Oncorhynchus mykiss irideus*; southern steelhead) and federally-designated critical habitat, California red-legged frog (*Rana aurora draytonii*), and Morro blue butterfly (*Icaricia icarioides moroensis*).

Morro Shoulderband Snail. A detailed description of this species recovery status, biological requirements, and critical habitat is provided within Section 5-5 and Appendix G of the Draft EIR. The collection system component of the Preferred Project could result in direct impacts to the Morro shoulderband snail through the permanent removal and temporary disturbance of areas potentially occupied by this species during the construction phase.

Approximately 0.25 acre of temporary impacts to potentially occupied habitat would result from the construction of sewer collection pipelines and force mains within surface street rights-of way west of Los Osos Creek. These areas contain very limited vegetative cover and do not support the primary constituent elements for this species. The potential for snail occurrence within these areas is very low; however,

limited portions may support a very low number of individual snails. Therefore, there is a potential for the project to result in direct impacts to this species during construction activities within the 0.15-acre area proposed for sewer collection pipeline and force main developments.

Approximately 0.75 acre of permanent impacts to potentially occupied habitat would result from pump station developments, of which, approximately 0.25-acre would result from the Mid-town pump station. With the exception of the Mid-town pump station, the remaining 0.50-acre of pump station areas are confined to disturbed and developed land with very limited vegetative cover. The areas do not contain the primary constituent elements for this species. The potential for snail occurrence within these areas is very low; however, limited portions may support a very low number of individual snails. Therefore, there is a potential for the project to result in direct impacts to this species during construction activities within the 0.50-acre area proposed for pump station developments.

Approximately 0.25 acre of permanent impacts to potentially occupied habitat would result from development of the Mid-town pump station. As described above, the 0.25-acre pump station is proposed within portions of the parcel in which plant regeneration has been limited to approximately 10 to 15 percent cover of non-native plant species and marginal coastal dune scrub constituents. Due to the young age of the coastal dune scrub constituents, there is little duff under the plants to provide suitable conditions for the Morro shoulderband snail. The potential for snail occurrence within the 0.25-acre area is low; however, the area may support a low number of individual snails. Therefore, there is a potential for the project to result in direct impacts to this species during construction activities within the 0.25-acre area proposed for the Mid-town pump station.

The current project proposes to impact approximately 9 acres of coastal dune scrub habitat yet still proposes 73 acres of open space at the Broderson parcel. Because the current project results in the same or less impacts in the same locations as the previous project, use of the same mitigation (Broderson) for the loss of habitat is appropriate. Further, with the assumption that the Mid-town site is developing into suitable Morro shoulderband snail habitat, future impacts of other projects on the Mid-town site will likely require mitigation.

In summary, the collection system for the Preferred Project would result in the disturbance and/or removal of approximately 1.0 acre of habitat that could be occupied by low numbers of Morro shoulderband snail individuals. Impacts resulting from “take” of individual snails and loss of occupied and critical habitat would be considered significant. Implementation of Mitigation Measures Q5.5-A1, Q5.5-A3,

Q5.5-A4, Q5.5-A15, and Q5.5-A16 provided within Table Q.2-2 would minimize and reduce the level of impacts to the Morro shoulderband snail to a less than significant level.

Mitigation Measure Q5.5-A1 is proposed as a standard condition for the project to ensure that formal consultation is initiated and carried out by the appropriate agencies. The County of San Luis Obispo Department of Public Works have prepared a Biological Assessment for the project that specifically addresses project impacts to this and other federally-listed species. The Biological Assessment has incorporated the findings and proposed measures contained herein, and will accompany the consultation process with the USFWS. The proposed measure identifies that the project would be subject to all mandatory reasonable and prudent measures that will be developed through the consultation process as part of the forthcoming Biological Opinion provided by the USFWS. The mandatory reasonable and prudent measures would ensure that impacts are minimized to federally-listed species, including the Morro shoulderband snail.

Mitigation Measure Q5.5-A3 proposes that a worker education program be developed, and a biologist approved by the USFWS be retained, to provide construction personnel specific instruction on general detection and avoidance of sensitive resources, including the Morro shoulderband snail, during construction activities. Implementation of Mitigation Measure Q5.5-A3 would ensure that potential “take” of the Morro shoulderband snail is minimized during construction activities in suitable habitat for the species.

Mitigation Measure Q5.5-A4 proposes surveys for the Morro shoulderband snail prior to construction, monitoring and relocation during construction, and reporting to the USFWS. Implementation of Mitigation Measure Q5.5-A4 would ensure that potential “take” of the Morro shoulderband snail is avoided to the maximum extent feasible during construction activities within areas determined to be occupied by the species.

Mitigation Measure Q5.5-A15 proposes habitat-based compensatory mitigation for the loss of 1.0 acre of habitat potentially occupied by Morro shoulderband snail. The 1.0 acre loss areas includes disturbed lands currently characterized by either low quality coastal dune scrub or minimally vegetated areas that have the potential to support coastal dune scrub over time if left unaffected. Implementation of Mitigation Measure Q5.5-A15 would ensure that 72 acres of coastal dune scrub and central maritime chaparral are acquired and preserved in perpetuity on the Broderson site, and that plans are prepared and implemented for restoration and long-term

management of the preserve. This includes approximately 15.4 acres of coastal dune scrub that is contained within USFWS-designated Critical Habitat (Unit 2) and is considered occupied by the species. In addition to being occupied by the species and containing the primary constituent elements for the species' Critical Habitat, the proposed mitigation lands on the Broderson site contain all of the following attributes: they are contiguous with existing preservation lands within the Morro Dunes Ecological Reserve and areas studied for the Greenbelt Program by the Land Conservancy; they currently support appropriate soils to accept native plantings for restoration; they are capable of being cleared of unfavorable debris and structures; they support primarily windblown sand deposits that are in a stabilized condition (i.e. not mobile dune habitat); they are characterized by habitat types with an open canopy; they contain appropriate slopes to accommodate snail mobility to and from adjacent lands; and they are of appropriate aspect and meteorological conditions. Compared with the 1.0 acre of loss resulting from the proposed collection system and the 8.0 acres of loss resulting from the proposed leachfields on the Broderson site, the acquisition and preservation of 15.4 acres of coastal dune scrub on the Broderson site represents an "in-kind" on-site mitigation ratio that exceeds 1.5:1 (1.5 acres of acquisition for every 1.0 acre of loss). Implementation of this measure would fully compensate the loss of occupied habitat and promote the long-term viability and recovery of the species.

Mitigation Measure Q5.5-A16 proposes measures for restoring areas within the Broderson site that will be impacted as a result of construction and long-term maintenance of the leachfields, in addition to areas outside of the proposed leachfields that will be unaffected and preserved in perpetuity. Implementation of Mitigation Measure Q5.5-A16 would restore damaged areas and enhance preserve lands to provide functioning live-in habitat for the Morro shoulderband snail as well as other sensitive species with the potential to occur in the area.

Southern Steelhead. A detailed description of this species recovery status, biological requirements, and critical habitat is provided within Section 5-5 and Appendix G of the Draft EIR. The collection system component of the Preferred Project could result in direct and indirect impacts to the federally threatened southern steelhead through the installation of conveyance pipelines during the construction phase.

The proposed raw wastewater conveyance pipeline and treated effluent conveyance pipeline will cross several drainages, including Los Osos Creek, which supports southern steelhead and is designated as critical habitat for the species. As discussed above, the crossing of Los Osos Creek will occur at the Los Osos Valley Road bridge and will be conducted by securing the pipelines to proposed conventional pipe hangers and existing voids within the bridge structure. The raw wastewater pipeline

will be secured by hangers proposed on the north edge of the bridge and the treated wastewater pipeline will be placed inside existing bridge abutment voids on the south side of the bridge. Construction of hangers and supporting the pipeline during installation could be conducted from above with an excavator or similar equipment, from below with a small backhoe/loader, or with hand-built falsework. If any materials or construction equipment will be required below within the creek bed, it would be lowered into place and retrieved with a crane. Therefore, no access ramp would be required.

Due to the fact that installation of pipelines across Los Osos Creek at the Los Osos Valley Road bridge will be conducted during the dry time of year, impacts to steelhead habitat would be temporary in nature and direct mortality of individuals is not likely. However, the installation of pipelines could result in the temporary degradation of steelhead habitat through alterations of the stream substrate during construction, downstream sedimentation during and after construction, and the temporary loss of riparian vegetation and stream function as fishery habitat during construction. Indirect injury or mortality to steelhead individuals could result from an accidental spill of hazardous materials or careless fueling or oiling of vehicles or equipment near sensitive upland or aquatic habitats. Remnant materials left within the streambed or adjacent areas after construction could runoff and enter the creek during a time when it may be occupied by steelhead, potentially resulting in injury or mortality. Implementation of Mitigation Measures Q5.5-A3 and Q5.5-A6 provided within Table Q.2-2 would minimize and reduce the level of impacts to the southern steelhead and its critical habitat to a less than significant level.

Mitigation Measure Q5.5-A3 proposes that a worker education program be developed, and a biologist approved by the USFWS be retained, to provide construction personnel specific instruction on general detection and avoidance of sensitive resources during construction activities, including the south-central California coast steelhead and its critical habitat within Los Osos Creek. Implementation of Mitigation Measure Q5.5-A3 would ensure that adverse impacts to this species and its critical habitat are minimized during construction activities in the Los Osos Creek vicinity.

Mitigation Measure Q5.5-A6 proposes avoidance, minimization, monitoring, and restoration measures that will be implemented during and immediately after construction. The construction schedule will be restricted to the time of year when Los Osos Creek will be dry thereby eliminating the potential for direct impacts to individuals. Minimization measures that include site-specific Best Management Practices and a Spill Prevention Plan will restrict construction activities and contain

potential pollutants within safe upland areas that are setback from Los Osos Creek. A qualified biological monitor will be required on-site during any construction activities that must occur within Los Osos Creek to direct and contain activities within construction boundaries and minimize disturbance. Lastly, all disturbance areas will be restored to pre-project conditions immediately after construction to ensure that the functions and values of Los Osos Creek are not lost. Implementation of Mitigation Measure Q5.5-A6 would ensure that adverse impacts to this species and its critical habitat are avoided and minimized during and immediately after construction activities in the Los Osos Creek vicinity.

As discussed within Impact Q5.5-C and Mitigation Measures Q5.5-C1, Q5.5-C2, and Q5.5-C3, the project will be required to obtain the appropriate permits from the USACE, RWQCB, and CDFG for impacts to waters and wetlands, and riparian-vegetated streambed associated with Los Osos Creek. These permits, along with the project's forthcoming CDP from the CCC, will contain additional conditions that will further reduce impacts to Los Osos Creek and associated resources. Any impacts to riparian and wetland habitat shall be mitigated for through replacement mitigation at a minimum ratio of 1:1 so that there is no net loss, or at a set ratio as determined through the permitting process. Where the mitigation requirements of separate policy under the CZLUO, or the requirements of the USACE, RWQCB, and CDFG or other agency with jurisdiction over an affected area or resource are different, the more restrictive regulations shall apply.

California Red-Legged Frog. A detailed description of this species recovery status, biological requirements, and critical habitat is provided within Section 5-5 and Appendix G of the Draft EIR. The collection system component of the Preferred Project could result in direct and indirect impacts to the federally-threatened and California State species of special concern California red-legged frog through the installation of conveyance pipelines during the construction phase. Potential impacts to this species are essentially the same as those discussed in the Draft EIR and Appendix G for proposed Project 4, with the exception of the installation methodologies for pipeline crossings at Los Osos Creek and Warden Creek.

The collection system for the Preferred Project would result in the temporary disturbance of stream and wetland habitat that could be used by California red-legged frog during construction. These impacts could result from the construction activities associated with the installation of conveyance pipelines on existing bridge structures across Los Osos Creek and Warden Creek, and construction activities associated with open-cut installation of conveyance pipelines within tributary waters to Warden Creek on the Tonini property. Impacts resulting from "take" of individual frogs and loss of occupied habitat would be considered significant. Construction activities

could result in injury or mortality of individuals as a result of being crushed by earth moving equipment, construction debris, and worker foot traffic. Construction noise and disturbance from instream activities could also resulting displacement of individuals from suitable habitat, including breeding and aestivation sites, as well as degradation of habitat. Improper containment and use of hazardous materials, including fuel or oil, could also result in the injury or mortality of individuals and degradation of habitat. Additionally, the improper handling, containment, or transport of individuals, or release of individuals into unsuitable habitat could result in injury or mortality. Implementation of Mitigation Measures Q5.5-A1, Q5.5-A3, and Q5.5-A8 provided within Table Q.2-2 would minimize and reduce the level of impacts to the California red-legged frog to a less than significant level.

Mitigation Measure Q5.5-A1 is proposed as a standard condition for the project to ensure that formal consultation is initiated and carried out by the appropriate agencies. The County of San Luis Obispo Department of Public Works have prepared a Biological Assessment for the project that specifically addresses project impacts to this and other federally-listed species. The Biological Assessment has incorporated the findings and proposed measures contained herein, and will accompany the consultation process with the USFWS. The proposed measure identifies that the project would be subject to all mandatory reasonable and prudent measures that will be developed through the consultation process as part of the forthcoming Biological Opinion provided by the USFWS. The mandatory reasonable and prudent measures would ensure that impacts are minimized to federally-listed species, including the California red-legged frog.

Mitigation Measure Q5.5-A3 proposes that a worker education program be developed, and a biologist approved by the USFWS be retained, to provide construction personnel specific instruction on general detection and avoidance of sensitive resources during construction activities, including the California red-legged frog. Implementation of Mitigation Measure Q5.5-A3 would ensure that adverse impacts to this species and its habitat are minimized during construction activities.

Mitigation Measure Q5.5-A8 proposes pre-construction survey, avoidance, minimization, monitoring, and restoration measures to reduce the risk of incidental “take” of individuals and minimize disturbance of habitat. The construction schedule will be restricted to the time of year when stream and wetland habitat will be dry, with the exception of Warden Creek (which supports perennial flows year-round), thereby minimizing the potential for incidental direct impacts to individuals. Aligning with Mitigation Measure Q5.5-A3, all biologists retained to conduct initial survey and relocation and monitoring activities for the California red-legged frog

shall be approved by the USFWS. The pre-construction surveys would confirm presence/absence of individuals within the affected areas and immediate vicinity so that appropriate avoidance and relocation measures can be undertaken prior to construction. The measure would ensure that the functions and values of all affected areas and immediate vicinity are restored to pre-project conditions and enhanced to eradicate exotic predators, create additional live-in habitat, and promote the long-term viability of the species.

Minimization measures that include site-specific Best Management Practices and a Spill Prevention Plan would also be implemented and would restrict construction activities and contain potential pollutants within safe upland areas that are setback from habitat for the California red-legged frog. Additionally, as discussed within Impact Q5.5-C and Mitigation Measures Q5.5-C1, Q5.5-C2, and Q5.5-C3, the project will be required to obtain the appropriate permits from the USACE, RWQCB, and CDFG for impacts to waters and wetlands, and riparian-vegetated streambed associated with Los Osos Creek, Warden Creek, and tributaries to Warden Creek. These permits, along with the project's forthcoming CDP from the CCC, will contain additional conditions that will further reduce impacts to California red-legged frog habitat. Any impacts to riparian and wetland habitat shall be mitigated for through replacement mitigation at a minimum ratio of 1:1 so that there is no net loss, or at a set ratio as determined through the permitting process. Where the mitigation requirements of separate policy under the CZLUO, or the requirements of the USACE, RWQCB, and CDFG or other agency with jurisdiction over an affected area are different, the more restrictive regulations shall apply.

Morro Blue Butterfly. A detailed description of this species status and biological requirements is provided within Section 5-5 and Appendix G of the Draft EIR. The collection system component of the Preferred Project could result in direct and indirect impacts to the non-listed locally rare Morro blue butterfly through the construction of the Mid-town pump station.

The refined location of the 0.25-acre Mid-town pump station was determined to contain a few specimens of the larval host plant for the Morro blue butterfly, silver dune lupine (*Lupinus chamissonis*), and therefore, there is a potential for the area to support a low number of individuals of this species. Construction activities would result in the removal of all silver dune lupine shrubs within the 0.25-acre impact area. Depending on the time of year, the removal of larval host plants could result in direct mortality of butterfly eggs, larvae, or pupae that are attached to the plant. Due to the current status of this non-listed species and the fact that project construction may only affect a low number of individuals, impacts would be considered less than significant. To meet the requirements of the project's forthcoming CDP, avoidance

and minimization measures are proposed within Table Q.2-2 that will ensure that all individuals are relocated out of the impact area prior to construction, and that restored areas are enhanced to contain the host plant and promote use by the species.

Mitigation Measure Q5.5-A3 proposes that a worker education program be developed, and a biologist approved by the USFWS be retained, to provide construction personnel specific instruction on general detection and avoidance of sensitive resources during construction activities, including the Morro blue butterfly. Implementation of Mitigation Measure Q5.5-A3 would ensure that adverse impacts to this species and its habitat are minimized during construction activities.

Mitigation Measure Q5.5-A10 proposes that a qualified biologist be retained to inspect host plants within the impact area prior to construction and relocate them into unaffected suitable habitat areas. The measure also proposes that all planting and restoration efforts for the project include the larval host plant within the seed palette to enhance the treatment area's ability to support the butterfly species.

Mitigation Measure Q5.5-A15 proposes habitat-based compensatory mitigation that would ensure that 72 acres of coastal dune scrub and central maritime chaparral are acquired and preserved in perpetuity on the Broderson site, and that plans are prepared and implemented for restoration and long-term management of the preserve. The coastal dune scrub and central maritime chaparral habitats support silver dune lupine and presumably the Morro blue butterfly. Implementation of this measure would fully compensate the loss of occupied habitat and promote the long-term viability of the species.

Mitigation Measure Q5.5-A16 proposes measures for restoring areas within the Broderson site that will be impacted as a result of construction and long-term maintenance of the leachfields, in addition to areas outside of the proposed leachfields that will be unaffected and preserved in perpetuity. Implementation of Mitigation Measure Q5.5-A16 would restore damaged areas and enhance preserve lands to provide functioning live-in habitat for the Morro blue butterfly as well as other sensitive species with the potential to occur in the area.

Long Term Operational Impacts

Potential long-term operational impacts to special status species resulting from the collection system for the Preferred Project would be essentially the same as those analyzed for Proposed Project 4 in the Draft EIR. It is anticipated that once the collection system elements are constructed they will not provide suitable habitat for any special status species. The large majority of the collection system will operate underground, eliminating long-term indirect impacts to wildlife species that may result from noise or lighting, or the placement of aboveground permanent structures that may present a

physical barrier for wildlife. Pump stations have been sited to incorporate setbacks from suitable habitat for plant and wildlife species, and other sensitive resources.

Wastewater facilities are a common feature of urban environments and generally are not considered to pose significant hazards. Because old and leaking septic tanks will be decommissioned and abandoned, the collection system represents a significant positive impact to the biological environment. If not properly constructed, operated, and maintained, there is the potential for breakage and leakage in the pipelines of the collection system, releasing untreated sewage into the environment. This potential impact is addressed in Section 5.7 of the Draft EIR, specifically within Impact 5.7-A.

Treatment Plant Site

Similar to Proposed Project 4 analyzed within the Draft EIR, the treatment plant site for the Preferred Project is proposed within the southeast portions of the Tonini property. Several refinements to the siting and design of the treatment plant site have been adopted for the Preferred Project based on additional geotechnical, biological and cultural resources field studies completed since the Draft EIR was completed. The additional refinements are discussed in detail within Section Q.3, and have been incorporated into a preliminary design for the Preferred Project evaluation and application of the project's forthcoming CDP. Of the additional refinements, the on-site design changes for the wastewater treatment process, appurtenances, and wet weather storage would not result in any impacts to biological resources. However, those resulting in an increase or decrease in the development footprint and treatment plant elements siting could result in impacts to biological resources that were not addressed within the Draft EIR. These refinements include the following:

- an oxidation ditch/Biolac™ treatment process as opposed to facultative ponds, and the construction of three wet weather storage ponds as opposed to one, reducing the total development footprint from approximately 32 acres down to 20 acres;
- an additional approximately 1,000 linear feet of new access road to re-align the existing access road and accommodate vehicle access to the treatment plant site and a clear line-of-sight when entering and exiting at Turri Road;
- an offsite storm drainage outfall located immediately east of the treatment plant site to accommodate excess stormwater runoff not returned to the treatment plant facility, or directed to the sprayfields or leachfields;
- riparian and grassland planting/landscaping to enhance habitat functions and values and overall aesthetics of the site; and
- a 1.5-acre staging area located south of the entrance to the facility from Turri Road.

A description of each refinement and a discussion of the existing conditions at refinement locations are provided below.

Oxidation/Biolac® Treatment Process and Storage Ponds

The treatment process and wet weather storage pond requirements for the Preferred Project are refined from that analyzed for Proposed Project 4 in the Draft EIR. Impacts to biological resources resulting from the treatment process and wet weather storage ponds for the Preferred Project are essentially the same as that which was analyzed for Proposed Project 4, with the exception of the reduction in the overall site plan development footprint. The change from facultative ponds to oxidation/Biolac™ for the treatment process results in a substantial reduction in the amount of area required for development at the treatment plant site. The total acreage of treatment plant site developments is reduced from approximately 32 acres to 20 acres for the Preferred Project. Although the number of wet weather storage ponds would increase from one pond under Proposed Project 4 to three ponds under the Preferred Project, the amount of area required for development would remain essentially the same. The acreage requirements for the Preferred Project's appurtenances would remain essentially the same as well.

The location of the treatment plant site for the Preferred Project is largely contained within the footprint for that which was analyzed for Proposed Project 4 (see Exhibit 3-9 for Proposed Project 4 from the Draft EIR, and Exhibit Q.3-1 and Q.3-2 for the Preferred Project). A detailed description of the existing conditions within those portions of the Tonini property is provided within Section 5.5 and Appendix G of the Draft EIR. Generally, the treatment plant site is proposed within a relatively flat disturbed upland area that is characterized by extensive agriculture (dry farming). The area is largely dominated by non-native herbaceous plants and does not support any natural communities, or waters or wetlands.

Similar that analyzed for Proposed Project 4, with the exception of the offsite storm drainage outfall discussed below, all construction activities and proposed developments will be restricted to upland areas that are setback a minimum of 100 feet from sensitive resources. This includes 100-foot minimum setbacks to all coastal streams, wetlands, and tributary waters to Warden Creek that occur on the Tonini property.

Access Road

Similar to that which had been planned for Proposed Project 4, the existing access road on the Tonini property will be utilized by the Preferred Project for access to the treatment plant site from Turri Road. However, refinements to the access route are required to accommodate vehicle access and allow for a clear line-of-sight when entering and exiting the Tonini property at Turri Road.

Under the Preferred Project, the proposed entrance to the Tonini property from Turri Road has been moved approximately 600 feet north of the existing entrance. This move to the north has resulted in the need for approximately 705 linear feet of new access road diverting from the existing access road in the eastern portions of the property. An addition approximately 332 linear feet of new access road will be required from the existing access road to the treatment plant. The location of the access road is displayed within Exhibit Q.3-2 for the Preferred Project. A detailed description of the existing

conditions within these portions of the Tonini property is provided within Section 5.5 and Appendix G of the Draft EIR. Similar to the treatment plant site, the access road will occur within a relatively flat disturbed upland area that is characterized by extensive agriculture (dry farming). The area is largely dominated by non-native herbaceous plants and does not support any natural communities, or waters or wetlands.

Use of an existing bridge crossing of a coastal stream and tributary water to Warden Creek will be required where the proposed access road converges with the existing access road. It is anticipated that this existing bridge crossing, in addition to another existing bridge crossing located closer to the treatment plant site, will be upgraded to accommodate larger vehicles during project construction and operation.

Offsite Storm Drainage Outfall

Similar to Proposed Project 4, the treatment plant site for the Preferred Project will require a storm drain system that will manage stormwater runoff during operation. The general components of the storm drain system are displayed within Exhibit Q.3-3 for the Preferred Project. This storm drain system is intended to catch stormwater runoff and deliver it back into the treated effluent to be disposed at either the sprayfields or leachfields. The storm drain system also includes an offsite storm drainage outfall to accommodate surface flow from behind the treatment plant. This small outfall is proposed immediately east of the treatment plant site and will discharge runoff into an adjacent drainage feature referred to as drainage T-1 in the Draft EIR. This drainage is a coastal stream and tributary water to Warden Creek that supports wetland conditions and occupied habitat for the California red-legged frog.

Riparian and Grassland Planting/Landscaping

As planned for Proposed Project 4, conceptual landscape plans have been prepared for Preferred Project that include the planting of riparian and grassland vegetation. The conceptual landscape plan is displayed within Exhibit Q.3-6 for the Preferred Project. The plant palette for the conceptual plans includes native grasses, forbs, shrubs, and trees that are prevalent within riparian and annual grassland habitats that occupy the local area. The primary objective of the landscaping is to enhance functions and values of the existing environment as habitat for plant and wildlife species, and improve the overall aesthetics of the site at build-out. Areas targeted for enhancement generally include areas along the eastern boundary of the Tonini property that front Turri Road, embankment areas along existing streams and tributary waters to Warden Creek, and areas along the eastern boundary of the treatment plant site.

Construction Staging Areas

The equipment storage and staging area to be used during construction of the treatment plant site for the Preferred Project includes a 1.5-acre area located in the eastern portions of the Tonini property. This staging area is displayed within Exhibit Q.3-2 for the Preferred Project. Similar to areas proposed for the treatment plant site and access road, the 1.5-acre staging area is proposed within a

relatively flat disturbed upland area characterized by extensive agriculture (dry farming). No impacts to biological resources are anticipated to result from the construction staging area for the Preferred Project treatment plant site.

Short Term Construction Impacts

The treatment plant site for the Preferred Project could result in significant direct and indirect short-term construction impacts to special status species. The following provides a project-specific impact analysis of the short-term construction impacts on special status plant and wildlife species for the treatment plant site for the Preferred Project.

- **Special Status Plant Species.** Impacts to special status plant species resulting from the treatment plant site component of Preferred Project would be essentially the same as those addressed for Proposed Project 4 within the Draft EIR. No special status plant species were determined to have a potential to occur within the area proposed for the treatment plant site; therefore, no impacts will occur and no mitigation measures are required.
- **Special Status Wildlife Species.** Impacts to special status wildlife species resulting from the treatment plant site component of Preferred Project would be essentially the same as those addressed for Proposed Project 4 within the Draft EIR. The Preferred Project could result in significant direct and indirect impacts to the California red-legged frog and indirect impacts to foraging raptors during construction.

California Red-Legged Frog. A detailed description of this species recovery status, biological requirements, and critical habitat is provided within Section 5-5 and Appendix G of the Draft EIR. The treatment plant site of the Preferred Project could result in direct and indirect impacts to the federally-threatened and California State species of special concern California red-legged frog during the construction phase. Potential impacts to this species are essentially the same as those discussed in the Draft EIR and Appendix G for Proposed Project 4.

The treatment plant site for the Preferred Project would require construction activities in the vicinity of stream, wetland, and upland habitat that could be used by California red-legged frog for breeding, dispersal, and aestivation. Any impacts resulting in “take” of individual frogs and loss of occupied habitat would be considered significant. Similar to those potential impacts discussed for the collection system, construction activities could result in injury or mortality of individuals as a result of being crushed by earth moving equipment, construction debris, and worker foot traffic. Construction noise and disturbance from instream activities could also resulting displacement of individuals from suitable habitat, including breeding and aestivation sites, as well as degradation of habitat. Improper containment and use of hazardous materials, including fuel or oil, could also result in the injury or mortality of individuals and degradation of habitat. Additionally, the improper handling,

containment, or transport of individuals, or release of individuals into unsuitable habitat could result in injury or mortality. Implementation of Mitigation Measures Q5.5-A1, Q5.5-A3, and Q5.5-A8 provided within Table Q.2-2 would minimize and reduce the level of impacts to the California red-legged frog to a less than significant level. The rationale for the level of significance after implementation of these measures is discussed above within the collection system impact analysis.

As required for all construction activities proposed in the vicinity of areas that could be occupied by California red-legged frog, minimization measures that include site-specific Best Management Practices and a Spill Prevention Plan would also be implemented and would restrict construction activities and contain potential pollutants within safe upland areas that are setback from California red-legged frog habitat. Additionally, as discussed within Impact Q5.5-C and Mitigation Measures Q5.5-C1, Q5.5-C2, and Q5.5-C3, the project will be required to obtain the appropriate permits from the USACE, RWQCB, and CDFG for impacts to waters and wetlands, and riparian-vegetated streambed associated with Los Osos Creek, Warden Creek, and tributaries to Warden Creek. Any impacts to riparian and wetland habitat shall be mitigated for through replacement mitigation at a minimum ratio of 1:1 so that there is no net loss, or at a set ratio as determined through the permitting process. Where the mitigation requirements of separate policy under the CZLUO, or the requirements of the USACE, RWQCB, and CDFG or other agency with jurisdiction over an affected area are different, the more restrictive regulations shall apply.

Raptor Foraging. A detailed discussion of the location and quality of raptor foraging habitat within the affected area, as well as the status and biological requirements of raptors with the potential to forage in the affected area are provided within Section 5.5 and Appendix G of the Draft EIR. The Preferred Project would result in the permanent loss of substantially less land that could be used by foraging raptors than that which would result from Proposed Project 4. Consistent with the findings for Proposed Project 4 in the Draft EIR, impacts to raptor foraging would be considered less than significant due to the relatively small loss of low quality raptor foraging habitat when compared to the abundance of foraging opportunities in the vicinity of the affected areas. Mitigation Measures Q5.5-A11 and Q5.5-A12 will reduce potential impacts to raptors and other bird species during their respective breeding seasons to less than significant.

Long Term Operation Impacts

The treatment plant site for the Preferred Project could result in significant indirect long term operation impacts to special status species. The following provides a project-specific impact analysis

of the long term operation impacts on special status plant and wildlife species for the treatment plant site for the Preferred Project.

- **Special Status Plant Species.** Long-term operation impacts to special status plant species resulting from the treatment plant site component of Preferred Project would be essentially the same as those addressed for Proposed Project 4 within the Draft EIR. No special status plant species were determined to have a potential to occur within the area proposed for the treatment plant site; therefore, no impacts will occur and no mitigation measures are required.
- **Special Status Wildlife Species.** Long-term operation impacts to special status wildlife species resulting from the treatment plant site component of Preferred Project would be essentially the same as those addressed for Proposed Project 4 within the Draft EIR. The Preferred Project could result in significant indirect impacts to the California red-legged frog during operation.

California Red-Legged Frog. A detailed description of this species recovery status, biological requirements, and critical habitat is provided within Section 5-5 and Appendix G of the Draft EIR. The treatment plant site of the Preferred Project could result in indirect impacts to the California red-legged frog during operation. Potential impacts to this species during operation are essentially the same as those discussed in the Draft EIR and Appendix G for Proposed Project 4.

Similar to that which had been analyzed for Proposed Project 4, operation of the Preferred Project would result in a number of beneficial impacts to the California red-legged frog. Through the siting of the treatment plant and proposed riparian planting/landscaping on the Tonini property, the Preferred Project is avoiding and enhancing good quality vernal marsh habitat and riparian/riverine areas that are currently occupied by California red-legged frog. The avoidance of these habitat areas represents a set aside of extant habitat that would be conserved and enhanced as a direct result of the project. The vernal marsh and riparian/riverine habitats on the Tonini property will be enhanced from their current state as a result of the land use conversion. The operation of the project and removal of grazing and agricultural activities within and around these habitats will result in an increase in water quality and stream function. Under pre-project conditions, these habitats are exposed to direct disturbance and degradation from agricultural activities (in-stream equipment use, stream course diversion, disruption of natural hydrology, etc) and cattle use (excessive trampling, direct water contact, fecal deposition, grazing, etc.). These adverse uses under pre-project conditions would no longer occur under post-project conditions. The benefits of the project would have immediate and long-term value to the California red-legged frog and other sensitive resources that occur on the Tonini property and into downstream areas discharging into Warden Creek.

Similar to that which had been planned for Proposed Project 4, the treatment plant design for the Preferred Project incorporates lighting elements that would increase nighttime lighting levels in the area when compared to pre-project conditions. As discussed, the treatment plant site is proposed in the vicinity of habitat that has been determined to be occupied by the California red-legged frog. Nighttime lighting that is directed toward suitable habitat areas may inhibit use by frogs, or have an adverse effect on behavior such that it precludes the ability to carry out vital components of their life history. In addition, the creation and operation of the wet weather storage ponds could result in the introduction of exotic species and predators of the California red-legged frog into the area. Exotic species could move into areas occupied by California red-legged frog, thereby competing for resources and potentially displacing individuals or causing mortality. The storage ponds could also result in the introduction and increase in predators such as bullfrogs, wading birds, and fishes potentially resulting in mortality. Lastly, the development and operation of the treatment plant could result in a change in the hydrologic characteristics of the local area due to permanent developments and stormwater runoff. Any impacts resulting in “take” of individual frogs and loss of occupied habitat would be considered significant.

As included within the Preferred Project design, nighttime illumination at the treatment plant site will meet the following requirements of the County’s Estero Area Plan: “all lighting fixtures shall be shielded so that neither the lamp nor the related reflector interior surface is visible from adjacent properties. Light hoods shall be dark-colored.” No night lighting shall be used unless necessary for active nighttime maintenance activities at the plant, or under emergency conditions. Lighting will therefore be shielded and directed away from California red-legged frog habitat, and nighttime use will be limited to that which will be absolutely necessary.

Mitigation Measure Q5.5-A8 proposes that wet weather storage ponds be maintained and monitored to prevent attracting exotics and predators. As proposed, the treatment plant site incorporates 100-foot minimum setbacks from occupied habitat areas and includes construction of perimeter fencing. The conceptual landscape plans also incorporate the planting of riparian habitat that will not only enhance the functions and values of the area, but will also provide a natural physical separation to buffer habitat from project elements and minimize indirect impacts. When coupled with the consultation requirements within Mitigation Measure Q5.5-A1, and the proposed design features and landscaping, implementation of this Mitigation Measure Q5.5-A8 would reduce long term operation impacts to the California red-legged frog to a less than significant level.

Disposal Sites

Similar to Proposed Project 4 analyzed within the Draft EIR, the disposal of treated effluent will include the use of sprayfields on the Tonini property and leachfields on the Broderson property. The treated effluent pipelines from the treatment facility to the Tonini sprayfields and Broderson leachfields are addressed above under the collection system for the Preferred Project.

The disposal sites for Preferred Project would be the same as that which is proposed for Proposed Project 4 in the Draft EIR, with additional refinements to the methodology of disposal and the size of targeted areas. The additional refinements are discussed in detail within Section Q.3. Of the refinements, the use of existing monitoring wells and details in the operation schedule and monitoring would not result in any impacts to biological resources, and therefore are not discussed further in this section. However, those refinements resulting in an increase in the size and location of areas proposed for disposal could result in impacts to biological resources that were not addressed within the Draft EIR. These refinements include the following:

- the elimination of percolation as a disposal option and expansion of the area proposed for sprayfields on the Tonini property from 175 acres to 248 acres.

A description of this refinement and discussion of the existing conditions at the proposed location is provided below, along with additional detail regarding the leachfields on the Broderson property.

Sprayfields

Similar to Proposed Project 4, the use of sprayfields and evapotranspiration on the Tonini property will be incorporated as a disposal method for the Preferred Project. As discussed in Section Q.3, the sprayfields would not operate during wet weather or at night. The area required for sprayfields under the Preferred Project encompasses all of the 175 acres analyzed for Proposed Project 4, however will require an additional 73 acres as a result of the elimination of percolation as a disposal option on the Tonini property. This results in a total of 248 acres required for the sprayfields disposal option under the Preferred Project. The additional 73 acres of sprayfields include shallow-sloping higher elevation areas in the western and northern portions of the property, and shallow-sloping lower elevation areas in the southwestern portion of the property. The entire 248-acre area is depicted on Exhibit Q.3-2. A detailed description of the existing conditions within the new 73-acre area required for sprayfields is provided in Appendix Q.8. Existing conditions for the remaining 248 acres of sprayfields analyzed for Proposed Project 4 are discussed in Section 5.5 and Appendix G of the Draft EIR. In general, the 248-acre available sprayfields area for the Preferred Project includes both flat and gently rolling upland areas that are characterized by extensive agriculture (dry farming and row crops) and actively grazed non-native grassland. The area is largely dominated by non-native herbaceous plants and does not support any natural communities, or waters or wetlands.

Similar that analyzed for Proposed Project 4, the sprayfields will be restricted to upland areas that are setback a minimum of 100 feet from sensitive resources. This includes 100-foot minimum setbacks from natural communities and native habitat types, significant sensitive plant species populations, and all coastal streams, wetlands, and tributary waters to Warden Creek that occur on the Tonini property. Additional setbacks and changes within the sprayfields area may be required prior to project operation.

The findings, impacts, and mitigation pertaining to special-status plant and wildlife species and the sprayfields are the same as that for Proposed Project 4, with the exception of those pertaining to the non-listed CNPS List 1B.1 plant species Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), and the fully protected and critically endangered Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*). Additional surveys of the sprayfields have been conducted since the preparation of the Draft EIR (See Appendix Q.8). These recent surveys have resulted in a change in the findings, impacts, and mitigation that had been proposed within the Draft EIR for Proposed Project 4. These changes, in addition to the refinements in sprayfields, have been incorporated into the impact discussions below for the Preferred Project.

Leachfields

The location and operation requirements of the leachfields on the Broderson property are the same for the Preferred Project as that which had been analyzed for the Proposed Project 4 in the Draft EIR. The findings, impacts, and mitigation pertaining to special-status plant and wildlife species are also the same as that for Proposed Project 4, with the exception of those pertaining to the listed Morro manzanita, Monterey spineflower (*Chorizanthe pungens* ssp. *pungens*), and Indian Knob mountainbalm (*Eriodictyon altissimum*). Additional botanical surveys of the leachfields have been conducted since the preparation of the Draft EIR (Appendix Q-8). These recent botanical surveys have resulted in a change in the findings, impacts, and mitigation that had been proposed within the Draft EIR for Proposed Project 4. These changes have been incorporated into the impact discussions below for the Preferred Project.

Short Term Construction Impacts

The disposal sites for the Preferred Project could result in significant direct and indirect short-term construction impacts to special status species. The following provides a project-specific impact analysis of the short-term construction impacts on special status plant and wildlife species for the disposal sites element of Preferred Project.

- **Special Status Plant Species.** Consistent with the findings for Proposed Project 4 in the Draft EIR, no special species plant species were determined likely to occur within the area proposed for construction of the sprayfields for the Preferred Project. Therefore, as determined for Proposed Project 4 in the Draft EIR, no impacts are anticipated to occur to any special status plant species as a result of construction of the sprayfields for the Preferred Project.

Also consistent with the findings for Proposed Project 4 in the Draft EIR, thirteen special status plant species and non-vascular lichens were initially determined to have a potential to occur within the area proposed for the leachfields on the Broderson property. Since the preparation of the Draft EIR, there are new survey findings for the Morro manzanita, Monterey spineflower, and Indian Knob mountainbalm that have resulted in a change in the impacts and modification of the mitigation measures proposed for the Preferred Project. The recent survey results, determinations, impacts and proposed mitigation for Morro manzanita, Monterey spineflower, and Indian Knob mountainbalm are discussed in detail below.

With the exception of those discussed below for Morro manzanita, Monterey spineflower, and Indian Knob mountainbalm, potential short term construction impacts to the remaining ten special status plant species and non-vascular lichens associated with the Preferred Project would be the same as those addressed for Proposed Project 4 in the Draft EIR. Because the remaining ten species are non-listed species that have no legal protection under federal and state endangered species laws, and due to the fact that potential impacts to these species would be limited to the removal of 8-acres of potential habitat for leachfields on the Broderson property, potential impacts are considered less than significant. Mitigation Measures Q5.5-A14, Q5.5-A15, and Q5.5-A16 will further reduce potential short term construction impacts to non-listed plant species and non-vascular lichens.

Morro Manzanita, Monterey Spineflower, and Indian Knob Mountainbalm. A detailed description of each of these species' recovery status and biological requirements is provided within Section 5-5 and Appendix G of the Draft EIR. Since the preparation of the Draft EIR, botanical surveys were conducted by the County Department of Public Works in December 2008 and January 2009 that confirmed the absence of the federally-threatened Morro manzanita and the federally- and California State-endangered Indian Knob mountainbalm within the area proposed for the leachfields on the Broderson property. Both of these species are conspicuous perennial evergreen shrubs whose positive identification can be confirmed throughout all portions of the year. Based on the recent negative survey findings, no impacts will occur to either of these two species as a result of the Preferred Project, therefore no mitigation is required.

As addressed in the Draft EIR, there is anecdotal evidence that suggests the federally-threatened Monterey spineflower occurs on the Morro Dunes Ecological Preserve east of the Broderson property, and on the Broderson property itself. Another spineflower, the common narrowleaf spineflower (*Chorizanthe angustifolia*), shares many diagnostic characteristics with the Monterey spineflower, and it is likely that the previous identification had been incorrect, confusing the common species with the federally threatened variety. Despite the anecdotal evidence, historic and known

distribution data for this species indicate that the community of Los Osos is well outside of the known range for the species. As indicated in the Draft EIR, according to the CNDDDB there are no known occurrences for the Monterey spineflower within the project study area. Botanical surveys and expert identification are scheduled to occur within the Broderson property during the appropriate blooming season (April to June) to confirm the absence of this species within the Broderson property and conclusively determine if the species known range should be extended south.

Mitigation Measure Q5.5-A13 proposes minimization measures in the unlikely event that this species is found within the area proposed for the leachfields. Prior to construction, seeds will be collected from the impact area and later sown within the unaffected portions of Broderson site that will be preserved in perpetuity. This method is considered feasible for this annual herb. Implementation of mitigation Measure Q5.5-A13 would minimize and reduce potential impacts to the Monterey spineflower to less than significant levels.

- **Special Status Wildlife Species.** Impacts, determinations, and proposed mitigation pertaining to special status wildlife species resulting from the disposal sites for the Preferred Project would be essentially the same as those addressed for Proposed Project 4 within the Draft EIR, with the exception of those pertaining to the Morro Bay kangaroo rat.

There have been new findings since the preparation of the Draft EIR regarding the potential for the Morro Bay kangaroo rat to occur within an area on the Tonini property that is proposed for sprayfields. As discussed below, these findings have resulted in a change in the impact determinations and proposed mitigation for the Preferred Project that is different than that which had been analyzed and proposed for Proposed Project 4 in the Draft EIR.

Morro Bay Kangaroo Rat. A detailed description of this species recovery status, biological requirements, and critical habitat is provided within Section 5.5 and Appendix G of the Draft EIR. As referenced within Appendix Q-8, recent survey efforts headed by Dr. Francis Villablanca in conjunction with the USFWS determined that central and southern portions of the proposed sprayfield area on the Tonini property that support Pismo-Tierra complex and Tierra sandy loam soils may provide suitable conditions for the Morro Bay kangaroo rat. Protocol-level surveys and trapping, as approved by the USFWS and CDFG, are scheduled on these portions of the Tonini property.

As currently designed, a pipeline for the sprayfields area for the Preferred Project will occur within an area identified as potential habitat for the Morro Bay kangaroo rat. Therefore, construction activities associated with the installation of this pipeline could

result in significant impacts to the species. No effects to Morro Bay kangaroo rat are anticipated to occur due to the fact that this species has not been detected within any proposed impact areas to date and is not expected to occur. However, as this species is a California State fully protected and critically endangered species, additional surveys have been mandated and the Preferred Project would be required to avoid any areas occupied by this species at build-out.

Portions of the proposed sprayfield area have been subject to the first year of protocol surveys in 2008 by Dr. Villablanca which resulted in negative findings. The second year of surveys within these areas result will proceed in the spring of 2009. If the second year of surveys also result in negative findings, as expected, this species will be presumed absent from those areas. However, new suitable habitat areas were identified outside of the areas included in the first year of protocol surveys mentioned above, and these new areas will have to be surveyed for their first year beginning in the spring of 2009. If the species is not detected during the first year surveys in 2009, the second year of protocol surveys will be conducted in 2010. If the second year of surveys within the new suitable habitat areas also result in negative findings, this species will be presumed absent from all areas surveyed on the Tonini property.

Due to the fact that the Preferred Project will be constructed over multiple years prior to build-out and operation, there will be adequate time to complete the on-going surveys within the sprayfield area on the Tonini property. As proposed within Mitigation Measure Q5.5-A5, the County shall commit to avoiding any “take” and minimizing all potential adverse effects to the species. Where there was a lack of funding and recent understanding of this species current known range, this measure shall ensure that the County provide funding for on-going research efforts to benefit the species as whole. If at the end of the survey period it is determined that there are areas occupied by the Morro Bay kangaroo rat, the County shall avoid those areas in the Preferred Project design by adjusting the sprayfield boundaries to be entirely contained within areas that are not suitable for the species. This is feasible as there are enough acreages available to modify the sprayfield boundaries while achieving effluent disposal goals. Additional avoidance and minimization measures that include setbacks and exclusionary design elements shall also be implemented to prevent encroachment and potential “take” of individuals. Therefore, implementation of Mitigation Measure Q5.5-A5 would ensure that no “take” of Morro Bay kangaroo rat specimens occurs and that all potential impacts to the species are reduced to a less than significant level.

Long Term Operation Impacts

The disposal sites for the Preferred Project could result in significant direct and indirect long-term construction impacts to special status species. The following provides a project-specific impact

analysis of the long-term construction impacts on special status plant and wildlife species for the disposal sites element of Preferred Project.

Special Status Plant Species. Impacts, determinations, and proposed mitigation pertaining to special status wildlife species resulting from the disposal sites for the Preferred Project would be essentially the same as those addressed for Proposed Project 4 within the Draft EIR.

Consistent with the findings for Proposed Project 4 in Draft EIR, no federally- or State-listed plant species were determined likely to occur within the area proposed for construction of the sprayfields for the Preferred Project. Therefore, no impacts will occur to any federally- or State-listed plant species as a result of the sprayfields for the Preferred Project.

Since the preparation of the Draft EIR, there are new survey findings for Blochman's dudleya that have resulted in a change in the impacts and modification of the mitigation measures proposed for the Preferred Project. The recent survey results, determinations, impacts and adjusted project design pertaining to Blochman's dudleya are discussed in detail below.

Blochman's dudleya. Blochman's dudleya is a CNPS List 1B.1 plant. It is not protected under the FESA or CESA, however, it is rare and hence given a sensitivity ranking by the CNPS. Additional information pertaining to this species status, distribution, and biological requirements are provided within Appendix Q-8. General biological surveys conducted by the County Department of Public Works and MBA in January, February, and March of 2009 after the preparation of the Draft EIR concluded that portions of the areas proposed for sprayfields support concentrations of Blochman's dudleya, a non-listed CNPS List 1B.1 plant. The surveys identified all significant concentrations within the area, most of which are restricted to isolated rock outcrops and minor terrace escarpments located in the northern portions of the Tonini property that are supported by Diablo and Cibo clays. Based on the survey findings, the total population on the Tonini property is estimated to include approximately 1,000 individuals, with the largest concentration estimated at approximately 200 individuals. As a result of the presence of this species, the areas proposed for sprayfields have been adjusted to exclude the extreme northern portions of the property adjacent to Turri Road that support the highest concentrations of individuals. With the incorporation of this avoidance within the project design, impacts to this species resulting from the sprayfields for the Preferred Project are anticipated to be less than significant and no mitigation is required.

- **Special Status Wildlife Species.** Long-term operation impacts to special status wildlife species resulting from the disposal sites for the Preferred Project would be essentially the same as those addressed for Proposed Project 4 within the Draft EIR. Consistent with those findings

in the Draft EIR, the disposal sites for the Preferred Project could result in significant direct and indirect impacts to the Morro shoulderband snail and Morro blue butterfly during operation. Long-term maintenance required for the leachfields on the Broderson property could result in direct impacts to these species. Temporary ground disturbance that will include ripping of the area every 5 to 10 years to maintain leachfield function could result in the displacement or mortality of individuals and the temporary loss of occupied habitat. Any “take” of Morro shoulderband snails would be considered significant. Mitigation Measures Q5.5-A1, Q5.5-A3, Q5.5-A4, Q5.5-A15, and Q5.5-A16 would minimize project effects and incidental “take”, and reduce impacts to the Morro shoulderband snail to a less than significant level. Although impacts to the Morro blue butterfly are considered less than significant, Mitigation Measure Q5.5-A10 includes avoidance and minimization measures to reduce impacts to individuals during disturbance activities.

There have been new findings since the preparation of the Draft EIR resulting from the general biological surveys conducted within the additional sprayfields area in January, February, and March 2009 by MBA and the County Department of Public Works (Appendix Q-8). In addition to the Blochman’s dudleya discussed above for special status plant species, the surveys detected the presence of a single den that could be actively utilized by the American badger (*Taxidea taxus*), a California State species of special concern. Additional information regarding this species biological requirements is provided within Appendix G of the Draft EIR. Due to the fact that the sprayfield operation for the Preferred Project is not anticipated to result in the removal of any den structures or significant degradation of foraging habitat, impacts to this California State species of special concern are considered less than significant and no mitigation is required.

As discussed within the short term impact analysis, there have been recent survey findings pertaining to the Morro Bay kangaroo rat that have resulted in a change in the sprayfields impact analysis for the species. Further discussion is provided below.

Morro Bay Kangaroo Rat. A detailed description of this species recovery status, biological requirements, and critical habitat is provided within Section 5.5 and Appendix G of the Draft EIR. As currently designed, portions of the sprayfields for the Preferred Project are proposed within areas that have been determined to provide suitable conditions for the species. Although the potential for the species to occur is very low and no effects are anticipated, operation of the sprayfields could result in significant direct and indirect impacts to this California State fully protected and critically endangered species. As discussed above within the short term impact analysis, there are on-going survey efforts that will continue through 2010 and to

confirm the absence of this species within the sprayfields area prior to build-out and operation.

As proposed within Mitigation Measure Q5.5-A5, the County shall commit to avoiding any “take” and minimizing all potential adverse effects to the species. The measure shall ensure that the County provides funding for on-going research efforts to benefit the species as whole. If at the end of the survey period it is determined that there are areas occupied by the Morro Bay kangaroo rat, the County shall avoid those areas in the Preferred Project design by adjusting the sprayfield boundaries to be entirely contained within areas that are not suitable for the species. Additional avoidance and minimization measures that include setbacks and exclusionary design elements shall also be implemented to prevent encroachment and potential “take” of individuals. Therefore, implementation of Mitigation Measure Q5.5-A5 would ensure that no “take” of Morro Bay kangaroo rat specimens occurs and that all potential impacts to the species are reduced to a less than significant level.

Combined Project Effects

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, the construction and operation of the proposed components for the collection system, treatment plant site, and disposal sites for the Preferred Project could result in measurable combined effects on special status species and their habitat. Based on a review of the additions and modifications for the Preferred Project, there are no new elements proposed that would result in a significant change or contribution to the combined effects analyzed for Proposed Project 4.

In many regards, construction of the Preferred Project would result in a reduction of combined adverse effects to special status species due to the change in methodology for the crossing of Los Osos and Warden Creeks. Whereas open-cut trenching had been proposed for Proposed Project 4, the Preferred Project would minimize any in-stream activity through the incorporation of bridge suspension methodologies for pipeline installation. This would result in substantially less disturbance to special status species and their habitat. For all other pipelines crossing creeks and special status species habitat, combined effects would be reduced due to the fact that open-cut trenching would be restricted to periods when creeks are dry, and all affected areas would be restored to pre-project conditions immediately after construction.

As proposed within Mitigation measure Q5.5-A15, the Preferred Project would contribute a total of 72 acres of undeveloped coastal dune scrub and central maritime chaparral habitat on the Broderon property, all of which is known to be occupied and suitable for special status species. The primary intent of the measure would be to mitigate the loss of habitat and potential incidental “take” of the Morro shoulderband snail as a result of the collection system and disposal site impacts. The acquired 72 acres will be enhanced to increase overall function and value under post-project conditions, and preserved in perpetuity to be monitored and managed in the long-term. The acquisition of this habitat

represents a significant combined effect that is beneficial to both common and special status species in the long-term, most importantly, species such as the Morro Bay kangaroo rat, Morro shoulderband snail, Morro manzanita, and Morro blue butterfly. The preserve lands would establish a habitat connection between the Morro Dunes Ecological Reserve to the immediate east and the Montana De Oro State Park to the south, thereby providing for a large core habitat block in the area that would provide for the long-term sustainability of habitat and viability of special status species.

Aside from siting the treatment plant facility with setbacks and within areas of low biological value, the Preferred Project also includes the use of oxidation/Biolac™ technologies in the treatment process. This process substantially reduces the overall size of the wastewater facility developments and resulting acreage losses. Additionally, the design promotes the consolidation of development in order to maximize the surface area-to-perimeter ratio, such that developments are planned interior to any open space that abuts project boundaries and existing resources. As a result of the consolidation of treatment plant site developments, occupied habitat for the California red-legged frog will be avoided, enhanced with riparian vegetation, and conserved in the long-term as a result of the Preferred Project.

Similar to the findings for Proposed Project 4, the combined effects on special status species resulting from all components of the Preferred Project would be reduced to less than significant levels through the implementation of Mitigation Measures Q5.5-A1, Q5.5-A3 through Q5.5-A6, Q5.5-A8 through Q5.5-A16, and Q5.5-C1 through Q5.5-C3.

Cumulative Impact Analysis

As considered in the cumulative impacts analysis for Proposed Project 4 in the Draft EIR, the Los Osos Valley Road Palisades Storm Drain project represents the only project with a considerable effect on special status species that is relevant to the Preferred Project. The Los Osos Valley Road Palisades Storm Drain project involves the installation of a storm drain beneath Los Osos Valley Road from Bush Street to Palisades Avenue, and was determined to have a potential significant effect on the Morro shoulderband snail through the removal of suitable habitat and potential take of individuals. Similar to the Los Osos Valley Road Palisades Storm Drain project, the collection system and leachfield component of the Preferred Project were also determined to have potential significant effects on the Morro shoulderband snail through the removal of habitat and potential take of individuals. Based on a review of the additions and modifications for the Preferred Project, there are no new elements proposed that would result in a significant change or contribution to the cumulative effects on Morro shoulderband snail that had been analyzed for Proposed Project 4. When considered with the Los Osos Valley Road Palisades Storm Drain project impacts, impacts to this species as a result of the collection system and leachfields components for Preferred Project, including refinements, are cumulatively considerable, and would be significant. Implementation of Mitigation Measures Q5.5-A1, Q5.5-A3, Q5.5-A4, Q5.5-A15, and Q5.5-A16 would reduce cumulative impacts to the Morro shoulderband snail to less than significant.

Mitigation Measures

Project-Specific

Q5.5-A1 The proposed project may affect federally-listed species (including Morro shoulderband snail and California red-legged frog) and as such, the EPA shall initiate formal consultation with USFWS pursuant to Section 7(a)(2) of the federal ESA. All mandatory terms and conditions, and reasonable and prudent measures pertaining to incidental take prescribed within the Biological Opinion and Nationwide Permit for the project shall be fulfilled and implemented.

Q5.5-A2 No longer required.

Q5.5-A3 A worker education program and clearly defined operations procedures shall be prepared prior to project construction. The worker education program and operations procedures shall be implemented by the County throughout the duration of construction. A biologist approved by the USFWS shall be retained to provide construction personnel specific instruction on general detection and avoidance of sensitive resources during construction. The worker education program shall include: descriptions and pictures of listed species; the provisions of the Endangered Species Act; those specific measures being implemented to conserve listed species as they relate to the project; and the project boundaries within which the work will occur.

Q5.5-A4 Prior to construction, a biologist authorized by the USFWS shall conduct intensive surveys to identify and relocate all Morro shoulderband snails within the proposed impact area on the Broderson and Mid-town properties, and all suitable habitat areas within the proposed collection system. Only USFWS authorized biologists shall survey for, monitor, handle, or relocate Morro shoulderband snails.

A biologist authorized by the USFWS shall be retained to monitor all construction activities that will take place within suitable habitat for the Morro shoulderband snail. Monitoring activities shall be required daily until completion of initial disturbance at each construction area. The monitoring biologist shall be granted full authority to stop work at his or her discretion. The monitoring biologist shall be responsible for implementing avoidance and minimization measures during construction. The monitoring biologist shall stop work if project-related activities occur outside the demarcated boundaries of the construction footprint. The monitoring biologist shall stop work if any Morro shoulderband snails are detected within the proposed construction footprint, and shall implement measures to relocate them to suitable habitat out of harms way prior to construction activities resuming. If no suitable habitat opportunities are available in the immediate vicinity of the construction footprint, salvaged and relocated specimens may also be transported to an offsite location approved by the USFWS.

The County shall provide a written report to USFWS within 90 days following the completion of the proposed project. The report must document the number of Morro shoulderband snails removed and relocated from project areas, the locations of all Morro shoulderband snail relocations, and the number of Morro shoulderband snails known to be killed or injured. The report shall contain a brief discussion of any problems encountered in implementing minimization measures, results of biological surveys, observations, and any other pertinent information such as the acreages affected and restored, or undergoing restoration, of each habitat type.

Q5.5-A5 The County shall provide funding for on-going recovery activities for the Morro Bay kangaroo rat conducted by California Polytechnic State University San Luis Obispo and the USFWS (through recovery permit holder Dr. Francis Villablanca) to ensure avoidance of the species during project construction and operation. Recovery activities on the Tonini property shall include only protocol-level surveys and trapping according to methodologies approved by the USFWS and CDFG within all suitable habitat areas considered for sprayfields for the Preferred Project. If the species is determined to be present, the County shall adjust the sprayfield boundaries to avoid the habitat in accordance with a "no take agreement".

Prior to construction, the County shall formalize a "no take agreement" with the CDFG for the Morro Bay kangaroo rat. The "no take agreement" shall detail measures to avoid the species through sprayfield redesign, exclusion fencing, and other measures as necessary dependant upon the results of the protocol-level surveys and trapping conducted on the Tonini property. The "no take agreement" shall also outline a monitoring and contingency plan for the Broderson leachfield, as on-going maintenance of the leachfield may create suitable Morro Bay kangaroo rat habitat.

Q5.5-A6 All construction activities across Los Osos Creek shall be restricted to low-flow periods of June 15 through November 1. If the channel is dry, construction can occur as early as June 1. Restricting construction activities to this work window will minimize impacts to migrating adult and smolt steelhead, if present.

Prior to construction, the County shall retain a qualified biological monitor to be on site during all stream crossing activities associated with Los Osos Creek. The biological monitor will be authorized to halt construction if impacts to steelhead are evident.

Prior to construction, a spill prevention plan for potentially hazardous materials shall be prepared and implemented. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for

cleaning up and reporting of any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching the creek channel.

Prior to construction, silt fencing shall be installed in all areas where construction occurs within 100 feet of known or potential steelhead habitat. All silt fencing, erosion control and landscaping specifications shall only include natural-fiber, biodegradable products for meshes and coir rolls to minimize impacts to species and the environment during use.

During construction, spoil sites shall be restricted to upland locations so they do not drain directly into Los Osos Creek. If a spoil site drains into a water body, catch basins shall be constructed to intercept sediment before it reaches the channels. If required, spoil sites shall be graded to reduce the potential for erosion.

During construction, equipment and materials shall be stored at least 50 feet from Los Osos Creek. No debris such as trash and spoils shall be deposited within 100 feet of waterways. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be restricted to locations outside of the stream channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the stream shall be positioned over drip pans at all times. Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles shall be moved away from the stream prior to refueling and lubrication.

During construction, proper and timely maintenance for all vehicles and equipment used shall be provided to reduce the potential for mechanical breakdowns leading to a spill of materials into or around the creek. Maintenance and fueling shall be restricted to safe areas away from Los Osos Creek that meet the criteria set forth in the spill prevention plan.

Immediately following construction, all construction work areas shall be restored to pre-construction channel conditions, including streambed composition, compaction, and gradient. If required, channel banks shall be returned to original grade slope and appropriate bank stabilization techniques shall be implemented to reduce the potential for erosion and sedimentation. A plan describing pre-project conditions and restoration methods shall be prepared prior to construction.

Immediately following construction, all appropriate construction work areas will be revegetated with an appropriate assemblage of native upland vegetation, and if necessary, riparian vegetation, suitable for the area. A plan describing pre-project

conditions, restoration and monitoring success criteria shall be prepared prior to construction.

Q5.5-A7 No longer required.

Q5.5-A8 Prior to project construction, the County shall retain a qualified biologist to conduct pre-construction surveys for the California red-legged frog according to protocol approved by the USFWS. Surveys shall be conducted within all areas that are determined to contain suitable habitat for this species and that occur within 100 feet of proposed construction, or at a distance determined through USFWS consultation.

To avoid potential timing conflicts with the California red-legged frog breeding period, construction activities in the vicinity of California red-legged frog habitat shall be completed between April 1 and November 1. This measure shall apply to construction activities on the Tonini property, at the Turri Road bridge and Warden Creek crossing, at the Los Osos Valley Road bridge and Los Osos Creek crossing, and all other areas determined during pre-construction surveys to contain suitable habitat for the species, including areas that occur within 100 feet of proposed construction, or at a distance determined through USFWS consultation.

Prior to construction, the County shall retain a USFWS-approved biologist to permanently remove any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes from the project area, to the maximum extent possible. The USFWS-approved biologist will be responsible for ensuring his or her activities are in compliance with the California Fish and Game Code.

Prior to construction, the County shall retain a USFWS-approved biologist to conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the project, and the boundaries within which the project may be accomplished.

Prior to construction, the County shall retain a USFWS-approved biologist responsible for monitoring construction activities. Ground disturbance shall not be authorized to begin until written approval is received from the USFWS that the biologist is qualified to conduct the work. Only USFWS-approved biologists will participate in activities associated with the capture, handling, and monitoring of California red-legged frog. To ensure that diseases are not conveyed between work sites by the USFWS-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force shall be followed at all times. A

USFWS-approved biologist shall be present at the active work sites until such time that the initial survey for California red-legged frogs, instruction of workers, and (upland) habitat disturbance have been completed. After this time, the contractor or permittee shall designate a qualified person to monitor on-site compliance with all minimization measures. The USFWS-approved biologist shall ensure that this individual receives appropriate training as to the identification of frogs, potential hazards to the species, inappropriate and allowable work activities, and appropriate contacts for immediate, professional biological support.

During work activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

All fueling and maintenance of vehicles and other equipment and staging areas shall occur a minimum of 100 feet from all open water, stream, wetland, and riparian habitat. The permittee shall ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the EPA shall ensure that the permittee has prepared a plan to allow a prompt and effective response to any accidental spills.

Wet weather storage ponds shall be maintained as to not attract bullfrogs. This will include allowing the ponds to go dry during the summer to disrupt any breeding activity by bullfrogs. The County shall monitor wet weather storage ponds for bullfrog activity.

Streams and tributaries to Warden Creek on the Tonini property shall be restored to provide improved habitat for the California red-legged frog. Drainages currently devoid of riparian vegetation shall be revegetated with native riparian canopy and emergent species to provide additional shade, cover, and breeding habitat. Current practices of removing vegetation within and adjacent to the existing streams and tributary waters to Warden Creek on the Tonini property shall cease.

Q5.5-A9

The proposed project shall avoid Monarch butterfly winter roost habitats where feasible. If the proposed project will impact potential winter roost habitat, a qualified biologist with expertise in positively identifying the Monarch butterfly and winter roosting behavior shall conduct preconstruction surveys within all suitable habitat that occurs within the proposed impact area during the months of October through February. All potential roost sites that have a potential to be impacted as a result of construction activities shall be fenced and avoided. No construction activities shall be permitted in the vicinity (within 500 feet) of potential roost sites during the winter roosting months.

Q5.5-A10 Prior to construction activities on the Broderson and Mid-town properties, a qualified biologist shall be retained to identify and demarcate all host silver dune lupine (*Lupinus chamissonis*) shrubs that occur within the impact area. The qualified biologist shall inspect each host lupine for the presence of any Morro blue butterfly eggs, larvae, or pupae. In an effort to avoid mortality of butterfly eggs, larvae, or pupae prior to the onset of adult emergence, any host lupine specimens determined to contain eggs, larvae, or pupae shall be considered for relocation outside of the impact area and within suitable coastal dune scrub habitat on either the Broderson or Mid-town properties.

Any planting and restoration efforts proposed as mitigation for the project shall include silver dune lupine within the plant palette to encourage the species to continue to use the area.

Q5.5-A11 If any construction activities are proposed during the general bird breeding season (February 1 through August 31), a pre-construction survey shall be conducted by a qualified biologist within 10 calendar days prior to the onset of construction activities to identify any active non-raptor bird nests within 250 feet of the proposed impact area. If an active nest is identified during the pre-construction survey, a minimum no-disturbance buffer of 250 feet shall be delineated around active nests until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. For sensitive species, including Allen's hummingbird, yellow warbler, and loggerhead shrike, the distance and placement of the construction avoidance shall be a minimum of 250 feet unless otherwise determined through consultation with the CDFG.

Q5.5-A12 If any construction activities are proposed during the general raptor breeding season (February 1 through August 31), a pre-construction survey shall be conducted by a qualified biologist within 10 calendar days prior to the onset of construction activities to identify any active raptor nests within 500 feet of the proposed impact area. If an active raptor nest is identified during the pre-construction survey, a minimum no-disturbance buffer of 500 feet shall be delineated around active nests until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

Pursuant to Section 2050 of the CFG Code, the CDFG will not permit any impacts to the California state fully protected raptor white-tailed kite. If an active nest or breeding territory is detected during preconstruction surveys for nesting birds, no construction activities shall take place within 500 feet of the location of the active nest. The area shall be completely avoided and fenced to allow for an adequate

buffer from construction activities. A qualified biologist shall be retained to monitor the activity of the nest during the breeding season until it is determined that the nest is no longer active (i.e. all young have fledged the nest and no individual kites are dependent on the nest).

- Q5.5-A13** Prior to project construction and within all areas on the Broderson property that contain suitable habitat for the Monterey spineflower, a qualified biologist shall be retained to conduct botanical surveys to Monterey spineflower presence. Surveys shall be conducted during the local blooming period for the species, which typically occurs between April and June, and according to recommendations and guidelines prepared by the USFWS, CDFG, and CNPS. If positively identified, all specimens shall be clearly demarcated with flagging, and avoided to the maximum extent feasible during construction. A qualified monitoring biologist shall be retained to monitor all construction activities in the immediate vicinity (within 25 feet) of any flagged specimens that will not be removed as a result of construction activities. If specimens are positively identified within the leachfield impact area, the seeds of those specimens shall be collected and sown within suitable habitat located outside of the leachfield impact area and within the Broderson property.

The County shall provide a written report to USFWS within 90 days following the completion of the project. The report shall document the number of Monterey spineflower specimens removed from project areas, the locations of areas seeded with Monterey spineflower seeds, and the number of Monterey spineflower specimens found to be dead or damaged as a result of construction activities. The report shall contain a brief discussion of any problems encountered in implementing minimization measures, results of biological surveys, observations, and any other pertinent information such as the acreages affected and restored, or undergoing restoration, of each habitat type.

- Q5.5-A14** The proposed project shall minimize to the maximum extent feasible any potential impacts to non-listed plant and lichen species designated as sensitive by the CNPS, including Blochman leafy daisy, saint's daisy, San Luis Obispo wallflower, curly-leafed monardella, dune almond, spiraled old man's beard, Los Osos black and white lichen, long-fringed parmotrema, and splitting yarn lichen. The County shall retain a qualified biologist to conduct botanical surveys within suitable habitat on the Broderson and Mid-town properties to identify all sensitive plant and lichen species within and in the immediate vicinity of the impact areas. Surveys shall be conducted during the local blooming periods for each species, where applicable, and according to recommendations and guidelines prepared by the USFWS, CDFG, and CNPS. All specimens shall be clearly demarcated with flagging and avoided to the maximum extent feasible during construction.

Q5.5-A15 Prior to project construction, land containing coastal dune scrub and maritime chaparral habitat shall be acquired on the Broderson property that is sufficient to compensate the loss of habitat for the Morro shoulderband snail and other sensitive species on the Broderson and Mid-town properties, and sensitive areas in the collection system. Seventy-three acres of the Broderson property not used for the proposed leachfields would be preserved in perpetuity and granted to an appropriate agency or conservation organization with the responsibility of management and monitoring the preserve as determined during agreements with USFWS, CDFG, and the County. A long-term management and monitoring program shall be prepared. The County shall be responsible for the allocation of appropriate funding for the long-term management and monitoring of the mitigation land.

Q5.5-A16 Immediately following construction of the leachfields within the Broderson property, the disturbance area and all existing and unaffected coastal sage scrub (or coastal dune scrub) within the property shall be restored, enhanced, and maintained to promote the land's function and value as suitable habitat for sensitive plants and wildlife that are local or endemic to the area. Restoration and enhancement efforts, including at minimum, seeding with native plant species and eradication of exotic non-native plant species, shall be repeated immediately following all long-term maintenance activities resulting in temporary disturbance of the leachfields. This shall be applied to the ripping and backfilling activities that will be required every 5 to 10 years to maintain the leachfield function.

Restoration activities shall be conducted according to a Restoration Plan or similar plan specifically prepared for the effort and approved by USFWS, CDFG, and/or the CNPS. The Restoration Plan shall require at minimum, a description of the prescribed restoration and methodology, feasibility and likelihood for success, and a schedule and program for maintenance, monitoring and reporting the progress of the restoration effort. All restoration activities shall be conducted by qualified personnel with expertise in restoration ecology and knowledge of sensitive plant and wildlife species in the area.

The restoration effort shall include the implementation of a seed collection program to gather seeds to be used during restoration from native sources. The seed collection program shall be prepared for approval by the County prior to project construction activities. The seed collection program shall include the use of native plants that will be removed as a result of the project, including but not limited to: mock heather (*Ericameria ericoides*), silver dune lupine (*Lupinus chamissonis*), California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), bush monkey flower (*Mimulus aurantiacus*), and deerweed (*Lotus scoparius*). Collection shall take place

by qualified personnel with expertise in botanical resources during the appropriate time of year for seed production and harvesting.

Unless otherwise determined during consultation with the USFWS, the restoration effort shall be monitored against permanence standards for a minimum of five years, or until the first ripping event for the restored areas within the leachfield area, after which the maintenance and monitoring of the restored areas shall be covered within specific management directives contained within a Resource Management Plan. The performance standards shall include, at minimum, at least 80 percent native plant species coverage and no greater than 1 percent coverage of invasive non-native plant species (e.g. pampass grass, veldt grass). At minimum, the restored areas must demonstrate a continued ability to support the functions and values necessary to sustain the Morro shoulderband snail. Quarterly monitoring shall be conducted for the first two years of the restoration effort, with annual monitoring efforts to follow for the remaining three years. All monitoring and maintenance of restoration areas shall be conducted by qualified personnel with expertise in botanical resources and knowledge of sensitive species that occur in the local area, including the Morro shoulderband snail, Morro Bay kangaroo rat, and Morro blue butterfly.

The County shall provide annual reports to the USFWS documenting the results of all restoration and monitoring activities. Annual reports shall be provided to the USFWS for a minimum of five years or until it is determined by the USFWS that requisite performance criteria have been met. These reports should include any noted changes in the plant community structure or composition or surface hydrology down-slope of the Broderson leachfields, in addition to other requirements as determined through USFWS consultation and stipulated within permit conditions.

All on-going and long-term restoration, enhancement, and maintenance of preserve lands on the Broderson property shall be implemented according to a Resource Management Plan or similar mitigation and monitoring plan that may be developed during consultation with the USFWS. The Resource Management Plan shall include management directives that are specific to the preserve and the resources present. The Resource Management Plan shall include measures for the removal and eradication of invasive exotic plant species known to occur in the local area, including veldt grass and pampas grass. Activities that involve the removal of invasive species should not result in unnecessary trampling or removal of native species, and techniques for invasive removal shall be least damaging to native species.

Cumulative

Mitigation Measures Q5.5-A1, Q5.5-A3, Q5.5-A4, Q5.5-A15, and Q5.5-A16.

Level of Significance After Mitigation

Project-Specific

Less than significant.

Cumulative

Less than significant.

Riparian Habitat

Impact Q5.5-B: **The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.**

Short-term Construction Impacts

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, construction of the collection system for the Preferred Project would result in temporary impacts to riparian habitat associated with Los Osos Creek, Warden Creek, and tributary waters to Warden Creek referred to as drainages W-3, W-4, W-5, W-5b in the Draft EIR. Temporary impacts to riparian habitat would be considered significant. As a standard condition within Mitigation Measures Q5.5-C3, the Preferred Project would be required to obtain a Streambed Alteration Agreement from the CDFG for all impacts to riparian-vegetated streambed pursuant to Section 1600 et seq of the California Fish and Game Code. If required, the agreement will include measures to compensate the temporary loss of riparian habitat. Therefore, implementation of Mitigation Measure Q5.5-C3 would reduce impacts to riparian habitat to less than significant levels.

Similar to that which had been determined for the Proposed Project 4 in the Draft EIR, no impacts to riparian habitat are anticipated to result from the construction of the treatment plant site or the disposal site, with the exception of the beneficial effects resulting from the change in land use and treatment plant site landscape plans for the Preferred Project. The landscape plans will include the creation and enhancement of riparian habitat within unaffected areas on the Tonini property, thereby contributing to compensation efforts to mitigate the temporary loss of riparian habitat. The coastal streams on the Tonini property also contain good quality functioning vernal marsh habitat that will be avoided and enhanced by the change in land use (i.e. removal of agricultural practices and grazing).

Also similar to that which had been determined for the Proposed Project 4 in the Draft EIR, construction of the Preferred Project would not result in impacts to any other sensitive natural communities. The central maritime chaparral that occurs within the Broderson property will be completely avoided in the leachfield design for the Preferred Project. In addition, unlike previous iterations of the project, the Preferred Project has incorporated a design that minimizes impacts to coastal dune scrub habitat, particularly on the Mid-town property. As discussed within Impact Q5.5-A, the coastal dune scrub on the Mid-town property is recovering from the previous grading and clearing that took place during construction of the previous iteration of the project in 2005. The

Preferred Project would only result in the loss of 0.25 acre of the coastal dune scrub habitat on the Mid-town property. The remaining portions of the property would be unaffected by the Preferred Project and conserved in their current state of recovery. As discussed within Impact Q5.5-A, the Preferred Project includes measures to acquire and preserve in perpetuity 72 acres of coastal dune scrub and central maritime chaparral on the Broderson property. The preservation of this habitat represents a beneficial effect to natural communities in the local area.

Long-term Operational Impacts

Similar to that which had been determined for the Proposed Project 4 in the Draft EIR, no significant impacts to riparian habitat or sensitive natural communities are anticipated to result from the long-term operation of the Preferred Project. The Preferred Project design incorporates adequate setbacks from riparian habitat and sensitive natural communities, and design features that minimize potential indirect impacts. No additional mitigation is required.

Combined Project Effects

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, the construction and operation of the collection system and treatment plant site for the Preferred Project could result in a measurable combined effect on riparian habitat. The collection system would result in temporary construction impacts to riparian habitat through the installation of components within and adjacent to Los Osos Creek, Warden Creek, and tributaries to Warden Creek located along Los Osos Valley Road and within the Tonini property. Impacts would be temporary and would not result in a substantial removal, alteration, or degradation of riparian habitat. Based on a review of the additions and modifications for the Preferred Project, there are no new elements proposed that would result in a significant contribution to the combined effects analyzed for Proposed Project 4.

Similar to that discussed under Impact Q5.5-A, the proposed bridge suspension for installation of pipelines across Los Osos and Warden Creeks would result in a substantial reduction of temporary impacts to riparian habitat. Temporary impacts that would require permitting with the regulatory agencies would be fully mitigated through the permit process. As discussed above for the treatment plant site, the change in land use on the Tonini property will result in the removal of agricultural practices and grazing, thereby enhancing the function and quality of riparian habitat on-site and downstream within Warden Creek. In addition, the Preferred Project design incorporates landscape plans for the installation and planting of riparian vegetation within the coastal streams on the Tonini property, thereby creating riparian habitat and enhancing functions and values within the targeted areas and downstream.

As discussed within Impact Q5.5-A, the permanent loss of other upland natural communities, namely coastal dune scrub as a result of the collection system, would be fully mitigated through the implementation of Mitigation Measure Q5.5-A15. This measure proposes the acquisition of 72 acres of native coastal dune scrub and central maritime chaparral that is known to be occupied by special

status species. In addition, Mitigation Measure Q5.5-A16 would provide for the short- and long-term restoration, enhancement, monitoring and management of the areas preserved in perpetuity.

The combined effects on riparian habitats and sensitive natural communities resulting from all components of the Preferred Project would be reduced to less than significant levels through the implementation of Mitigation Measures Q5.5-A6, Q5.5-A8, Q5.5-A15, Q5.5-A16, and Q5.5-C3.

Cumulative Impact Analysis

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, of the projects considered for the cumulative impacts analysis, none were determined to have considerable effect on riparian habitat that is relevant to the Preferred Project. When considered against the cumulative setting, the cumulative impacts to riparian habitat would be limited to that which may result from the Preferred Project. Therefore, no mitigation is required beyond that which is proposed for project-specific impacts.

Mitigation Measures

Project-Specific

See Mitigation Measures Q5.5-C1 through Q5.5-C3 below for Impact Q5.5-C. See also Mitigation Measures Q5.5-A6, Q5.5-A8, Q5.5-A15, and Q5.5-A16.

Cumulative

No mitigation measures are required.

Level of Significance After Mitigation

Project-Specific

Less than significant.

Cumulative

Less than significant.

Federally Protected Wetlands

Impact Q5.5-C:	The project would 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.
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Short-term Construction Impacts

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, construction of the collection system and the effluent pipelines for the sprayfields for the Preferred Project would result in the temporary fill of federally-regulated waters and wetlands. These impacts would be considered significant.

As required for all project elements, runoff during construction will be maintained through the implementation of project specific stormwater runoff Best Management Practices (BMPs), in accordance with objectives outlined in the County of San Luis Obispo Storm Water Management Plan. Adherence to the Storm Water Management Plan would ensure that water quality standards and waste discharge requirements are not violated and the project is in compliance with National Pollutant Discharge Elimination System and Central Coast Regional Water Quality Control Board requirements. A Storm Water Pollution Prevention Plan shall also be prepared in accordance with the guidelines and requirements provided by the State Water Resources Control Board. The project would also adhere to the requirements outlined in the project specific Sedimentation and Erosion Control Plan.

Similar to that which had been determined for the Proposed Project 4 in the Draft EIR, no impacts to federally-regulated waters and wetlands are anticipated to result from the construction of the disposal sites for the Preferred Project. No additional mitigation is required. As proposed in the siting and design for Proposed Project 4, the Preferred Project incorporates maximum avoidance of jurisdictional waters, wetlands, and riparian vegetated streambed, including those that exist along the Los Osos Valley Road right-of-way. Based on a review of the refinements for the Preferred Project, although not eliminated, construction-related temporary impacts would be reduced as a result in the change in methodology for conveyance pipeline installation across Los Osos and Warden Creeks. As opposed to the open-cut trenching methodologies for Proposed Project 4, the Preferred Project proposes to suspend and install pipelines on the existing bridge structures that cross Los Osos and Warden Creek. A detailed discussion of the bridge suspension methodologies is provided within Impact Q5.5-A. As a result in the change in methodologies, the Preferred Project would result in substantially less disturbance to federally-regulated waters and wetlands. The installation of pipelines within the Los Osos Valley Road right-of-way will be restricted to upland areas within the road margin and setback from federally-regulated waters and wetlands. Where impacts are unavoidable, installation would involve open-cut methodologies during the dry time of the year. Construction and operation of the treatment plant site for the Preferred Project would require the improvements to existing drainage crossings to vehicular access. Due to the size and flow capacity of the drainages that will be crossed, it is anticipated that only minor improvements for bridge-widening and reinforcement would be required.

As a standard condition within Mitigation Measure Q5.5-C1, the Preferred Project would be required to obtain a Nationwide or Individual Permit from the USACE for all impacts to federally-regulated waters and wetlands pursuant to Section 404 of the Clean Water Act. If required, the permit will include measures to fully compensate the temporary loss of waters and wetlands. Therefore, implementation of Mitigation Measure Q5.5-C1 would reduce impacts to federally-regulated waters and wetlands to less than significant levels. Mitigation Measure Q5.5-C2 includes standard conditions to obtain a Water Quality Certificate from the Central Coast Regional Water Quality Control Board. Compliance with these and other standard conditions during construction would

prevent indirect runoff-related impacts to all federally-regulated and State-regulated waters and wetlands. State-regulated waters and wetlands protected under the CZLUO are addressed under Impact Q5.5-E.

Long-term Operational Impacts

Similar to that which had been determined for the Proposed Project 4 in the Draft EIR, no significant impacts to federally-regulated waters and wetlands are anticipated to result from the operation of the Preferred Project. The Preferred Project design incorporates adequate setbacks of permanent aboveground structures from all federally-regulated waters and wetlands, and design features that minimize the potential for indirect impacts. The treatment plant site for the Preferred Project includes the development of a storm drain system to manage local stormwater flows during operation. The system will include a collection channel that will collect stormwater flows running off and discharging from areas immediately upslope from the treatment plant site and the existing access road for the property. The collection channel will divert sheet flows around the treatment plant site and discharge them into an offsite storm drainage outfall located immediately east of the site. Flows entering the offsite storm drainage outfall would discharge into an existing natural drainage feature (T-1) which was determined to contain federally- and State-regulated waters and wetlands.

Natural flows discharging into drainage T-1 under pre-project conditions will be largely conserved through the storm drain system under post-project conditions. The Preferred Project would not result in a significant increase or decrease of flows entering drainage T-1. Water entering the storm drain system would be derived from precipitation and sheet flows running off the natural land, and therefore would not contain any pollutants or impairments that would result in adverse effects to water quality. Therefore, indirect impacts resulting from the operation of treatment plant site and storm drain system are anticipated to be less than significant, and no mitigation is required beyond that which is proposed within Mitigation Measure Q5.5-C2.

The Preferred Project would result in significant beneficial impacts to federally- and State-regulated waters and wetlands during operation. Aside from providing obvious benefits to groundwater and surface drainage resources as a result of septic tank decommissioning, among other beneficial effects, the change in land use on the Tonini property represents a significant beneficial impact to federally- and State-regulated waters and wetlands that occur throughout the property as tributaries to Warden Creek. As discussed above within Impact Q5.5-A, under current conditions, the existing agricultural activities and intensive grazing have resulted in adverse physical disturbances and impairments to the tributaries to Warden Creek on the Tonini property. Perhaps most significant include those resulting from in-stream equipment use, and cattle trampling, grazing, and fecal deposition. The Preferred Project would eliminate these adverse land uses and enhance the functions and values of the existing tributaries to Warden Creek on the Tonini property and the resources they support, thereby resulting in a significant beneficial impact.

Combined Project Effects

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, the construction and operation of the collection system and treatment plant site for the Preferred Project could result in a measurable combined effect on federally- and State-regulated waters and wetlands. The collection system would result in temporary construction impacts to waters and wetlands through the installation of components within and adjacent to Los Osos Creek, Warden Creek, and tributaries to Warden Creek located along Los Osos Valley Road and within the Tonini property. Impacts would be temporary and would not result in a substantial removal, alteration, or degradation of riparian habitat. Based on a review of the additions and modifications for the Preferred Project, there are no new elements proposed that would result in a significant contribution to the combined effects analyzed for Proposed Project 4.

Similar to that discussed under Impact Q5.5-A, the proposed bridge suspension for installation of pipelines across Los Osos and Warden Creeks would result in a substantial reduction of temporary impacts to waters and wetlands. Temporary impacts that would require permitting with the regulatory agencies would be fully mitigated through the permit process. The change in land use on the Tonini property will result in the removal of agricultural practices and grazing, thereby improving water quality and stream function within the property and downstream into Warden Creek.

The combined effects on federally- and State-regulated waters and wetlands resulting from all components of the Preferred Project would be reduced to less than significant levels through the implementation of Mitigation Measures Q5.5-C1 through Q5.5-C3, in addition to the construction avoidance and minimization measures proposed within Mitigation Measures Q5.5-A6 and Q5.5-A8.

Cumulative Impact Analysis

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, of the projects considered for the cumulative impacts analysis, none were determined to have considerable effect on federally- and State-regulated waters and wetlands that is relevant to the Preferred Project. When considered against the cumulative setting, the cumulative impacts would be limited to that which may result from the Preferred Project. Therefore, no mitigation is required beyond that which is proposed for project-specific impacts.

Mitigation Measures

Project-Specific

Q5.5-C1 Prior to construction, an application for a Nationwide or Individual Permit shall be submitted by the County to the United States Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA). If required, the County shall obtain a Nationwide or Individual Permit from the USACE for any impacts, temporary and permanent, to any areas within the proposed project which are determined to qualify as jurisdictional waters and wetlands of the U.S. The County

shall implement all required conditions and special considerations stipulated within the Nationwide or Individual Permit during all relevant phases of development.

Q5.5-C2 Prior to construction, an application for a Water Quality Certification shall be submitted by the County to the Central Coast RWQCB pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Act. If required, a Water Quality Certification shall be obtained from the Central Coast RWQCB for any impacts, temporary and permanent, to any areas within the proposed project which are determined to qualify as jurisdictional waters of the State. The County shall implement all required conditions and special considerations stipulated within the Water Quality Certification during all relevant phases of development.

Q5.5-C3 Prior to construction, a Notification of Lake or Streambed Alteration shall be submitted by the County to the CDFG pursuant to CFG Code Section 1602. If required, a Streambed Alteration Agreement shall be obtained from the CDFG for any impacts, temporary and permanent, to any areas within the proposed project which are determined to qualify as jurisdictional streambed or riparian habitat. The County shall implement all required conditions and special considerations stipulated within the Streambed Alteration Agreement during all relevant phases of development.

Cumulative

No mitigation measures are required.

Level of Significance After Mitigation

Project-Specific

Less than significant.

Cumulative

Less than significant.

Wildlife Corridors and Nursery Sites

Impact Q5.5-D: The project would 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 wildlife nursery sites.

Short-term Construction Impacts

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, construction of the collection system and the pipelines for the sprayfields for the Preferred Project would result in temporary impacts to linear habitat and drainage features that may function to facilitate wildlife movement for both common and special status species.

As addressed for Proposed Project 4 in the Draft EIR and discussed within Impact Q5.5-A for the Preferred Project, the portion of Los Osos Creek that is proposed for pipeline crossing represents a significant corridor for southern steelhead potentially migrating to and from spawning sites located upstream. As discussed within Impact Q5.5-A, impacts associated with the installation of pipelines across Los Osos Creek for the Preferred Project will be temporary and would not result in any permanent developments or fish barriers. If conducted during times of the year when steelhead are present, constructed and installed without prudence, or left un-restored after installation, the temporary impacts to steelhead migratory habitat within Los Osos Creek would be significant. Implementation of Mitigation Measures Q5.5-A3 and Q5.5-A6 provided within Table Q.2-2 would minimize and reduce temporary impacts to Los Osos Creek and steelhead to less than significant levels. Implementation of standard BMPs during construction in accordance with objectives outlined in the County of San Luis Obispo Storm Water Management Plan, as well as implementation of Mitigation Measures Q5.5-C1 through Q5.5-C3 would further reduce impacts.

As addressed for Proposed Project 4 in the Draft EIR and discussed within Impact Q5.5-A for the Preferred Project, the installation of pipelines will occur within coastal streams that contain suitable and occupied habitat for California red-legged frog. These areas represent significant corridors that provide dispersal opportunities and access to and from aquatic breeding sites. Impacts associated with the installation of pipelines will be temporary and would not result in any permanent developments within any areas that are suitable or occupied by California red-legged frog. If conducted during times of the year when California red-legged frog are present, constructed and installed without prudence, or left un-restored after installation, the temporary impacts to dispersal habitat and corridors for this species would be significant. Implementation of Mitigation Measures Q5.5-A1, Q5.5-A3, and Q5.5-A8 provided within Table Q.2-2 would minimize and reduce temporary impacts to the California red-legged frog dispersal habitat and corridors to a less than significant level. Implementation of standard BMPs during construction in accordance with objectives outlined in the County of San Luis Obispo Storm Water Management Plan, as well as implementation of Mitigation Measures Q5.5-C1 through Q5.5-C3 would further reduce impacts.

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, no portions of the proposed treatment plant or disposal sites for the Preferred Project occur within any habitat that functions as a potential wildlife corridor or nursery site. Therefore, no impacts to wildlife corridors and nursery sites would result from the construction of the Preferred Project's treatment plant or disposal sites.

Long-term Operational Impacts

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, the long-term operation of the collection system and disposal sites for the Preferred Project would not result in any impacts to wildlife corridors and nursery sites. Collection and conveyance pipelines would be buried underground and areas affected during construction will be restored to pre-project conditions.

Potential long-term indirect impacts to areas used for California red-legged frog dispersal and movement to and from aquatic breeding sites could result from the Preferred Project's treatment plant site on the Tonini property. As discussed within Impact Q5.5-A, the siting of treatment plant site developments for the Preferred Project incorporates minimum 100-foot setbacks from dispersal and corridor areas that are suitable and occupied by the California red-legged frog. These setbacks would reduce potential indirect impacts from the operation of the treatment plant site, including those related to noise, lighting, and anthropogenic-related activities. Additionally, the Preferred Project design incorporates design features to require that all lighting fixtures at the treatment plant site are properly shielded and directed away from sensitive areas in order to reduce and minimize potential adverse affects resulting from nighttime lighting. The Preferred Project also includes the implementation of a landscape plan that would enhance the functions and values of California red-legged frog habitat within the property and provide natural features to block and minimize potential indirect impacts from the treatment plant site. As discussed within Impact Q5.5-C, pre-project flows entering drainage T-1 would be conserved by the storm drain system for the Preferred Project's treatment plant site, thereby ensuring that there are no major disruptions in the local hydrology regime that contributes to California red-legged frog habitat.

Implementation of Mitigation Measure Q5.5-A8 would ensure that areas occupied by California red-legged frog are protected from the introduction of exotic species and predators. When coupled with the consultation requirements within Mitigation Measure Q5.5-A1, and the proposed design features and landscaping, implementation of this measure would reduce long-term operation impacts to California red-legged frog corridors and access to and from aquatic breeding sites to a less than significant level.

Combined Project Effects

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, the construction and operation of the collection system and treatment plant site for the Preferred Project could result in a measurable combined effect on wildlife corridors and nursery sites. The collection system would result in temporary construction impacts to coastal streams and linear habitat used in migration and dispersal to and from nursery sites by the southern steelhead and California red-legged frog. Impacts would result from the installation of components within and adjacent to Los Osos Creek, Warden Creek, and tributaries to Warden Creek located along Los Osos Valley Road and within the Tonini property. Impacts would be temporary and would not result in a substantial removal, alteration, or degradation of habitat. Based on a review of the additions and modifications for the Preferred Project, there are no new elements proposed that would result in a significant contribution to the combined effects analyzed for Proposed Project 4. The combined effects resulting from all components of the Preferred Project would be reduced to a less than significant level through the implementation of Mitigation Measures Q5.5-A1, Q5.5-A6, Q5.5-A8, and Q5.5-C1 through Q5.5-C3.

Cumulative Impact Analysis

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, of the projects considered for the cumulative impacts analysis, none were determined to have considerable effect on wildlife corridors and nursery sites that is relevant to the Preferred Project. When considered against the cumulative setting, the cumulative impacts would be limited to that which may result from the Preferred Project. Therefore, no mitigation is required beyond that which is proposed for project-specific impacts.

Mitigation Measures

Project-Specific

See mitigation measures Q5.5-A1, Q5.5-A3, Q5.5-A6 and Q5.5-A8. See also mitigation measures Q5.5-C1 through Q5.5-C3.

Cumulative

No mitigation measures are required.

Level of Significance After Mitigation

Project-Specific

Less than significant.

Cumulative

Less than significant.

Local Policies or Ordinances Protecting Biological Resources

Q5.5-E: The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Short-term Construction Impacts

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, installation of collection and conveyance pipelines for the Preferred Project would result in temporary and permanent construction impacts to areas identified as Sensitive Resources Areas (SRA), and coastal stream, wetland, and riparian vegetation Environmentally Sensitive Habitat Areas (ESHA) protected under the CZLUO. Essentially all of the SRA and ESHA to be impacted correspond to coastal stream, wetland, and riparian vegetation resources that have been addressed above within Impact Q5.5-A, Impact Q5.5-B and Impact Q5.5-C, and also for Proposed Project 4 within the Draft EIR. Based on a review of the additions and modifications for the Preferred Project, although not eliminated, construction impacts would be largely temporary and reduced as a result of a change in pipeline installation methodologies and incorporation of setbacks from SRA and ESHA. Similar the findings for Proposed Project 4 in the Draft EIR, without mitigation, these temporary impacts would result in conflicts with local policies and ordinances pertaining to biological resources.

As opposed to the open-cut trenching methodologies for Proposed Project 4, the Preferred Project proposes to suspend and install pipelines on the existing bridge structures that cross Los Osos and Warden Creeks. As discussed within Impact Q5.5-A, Impact Q5.5-B and Impact Q5.5-C, these methodologies would result in substantially less disturbance to coastal stream, wetland, and riparian vegetation contained within Los Osos and Warden Creeks. As discussed within Impact Q5.5-C, the installation of pipelines within the Los Osos Valley Road right-of-way will be restricted to upland areas within the road margin and will be setback from coastal streams, and areas supporting wetland conditions and riparian vegetation. Where unavoidable and at existing culverts, installation of these pipelines would involve open-cut methodologies during the dry time of the year, with affected areas restored to pre-project conditions immediately following installation. A short pipeline and series of distribution lines all contained within the Tonini property will convey treated effluent to the sprayfields. These pipelines will cross coastal stream ESHA at five locations on the Tonini property. Installation of these pipelines would also involve open-cut methodologies during the dry time of the year, with affected areas restored to pre-project conditions immediately following installation.

Construction of the Mid-town pump station would result in the loss of 0.25 acres of coastal dune scrub habitat that is potentially occupied by special status species. This 0.25-acre area could be considered terrestrial habitat ESHA protected under the CZLUO. The development of the Mid-town pump station has been sited and designed to minimize disruption of this habitat.

Construction and operation of the treatment plant site for the Preferred Project would require improvements to two existing drainage crossings to provide vehicular and equipment access. The two drainages to be crossed are coastal stream ESHA and tributaries to Warden Creek. Due to the size and flow capacity of the drainages that will be crossed, it is anticipated that only minor improvements for bridge-widening and reinforcement would be required. Aside from these improvements, no additional impacts to SRA or ESHA would occur as a result of the construction of the treatment plant site for the Preferred Project.

Construction and operation of the leachfields would result in the loss of 8 acres of coastal dune scrub habitat that is potentially occupied by special status species. This 8-acre area could be considered terrestrial habitat ESHA protected under the CZLUO. The development of the leachfields have been sited and designed to minimize disruption of this habitat.

Implementation of Mitigation Measures Q5.5-A1, Q5.5-A3, Q5.5-A4, Q5.5-A6, Q5.5-A8, Q5.5-A9, Q5.5-A10, Q5.5-A13, Q5.5-A14, Q5.5-A15, Q5.5-A16, and Q5.5-C1 through Q5.5-C3 would reduce impacts to SRA, and terrestrial habitat, coastal stream, wetland, and riparian vegetation less than significant levels, and ensure consistency of the Preferred Project with the CZLUO.

Long-term Operational Impacts

The treatment plant site for the Preferred Project incorporates a storm drainage system and offsite outfall that would result in the discharge of stormwater into a coastal stream ESHA. As discussed

within Impact Q5.5-C, natural pre-project flows would be conserved by the storm drain system and ensure that there are no major disruptions in the local hydrology regime that contributes to the coastal stream. The Preferred Project would not result in a significant increase or decrease of flows entering the coastal stream. Water entering the storm drain system would be derived from precipitation and sheet flows running off the natural land, and therefore would not contain any pollutants or impairments that would result in adverse effects to water quality. The indirect impacts to coastal stream ESHA resulting from the operation of treatment plant site and storm drain system are anticipated to be less than significant, and no mitigation is required beyond that which is proposed within Mitigation Measure Q5.5-C2.

As discussed within the impacts above, the removal of agricultural practices and grazing on the Tonini property would result in significant beneficial effects to ESHA both on-site and downstream. The change in land use would benefit the coastal stream ESHA and tributaries to Warden Creek on the Tonini property by improving surface drainage water quality, eliminating in-stream trampling and agricultural equipment use, eliminating habitat destruction and degradation, and enhancing the overall function and value of the streams and habitat they support.

As discussed within Impact Q5.5-A, the leachfields will require maintenance every 5 to 10 years that will entail ripping and backfilling the 8-acre area. This 8-acre area could be considered terrestrial habitat ESHA protected under the CZLUO. The loss of this habitat would be fully mitigated through on-site in-kind compensatory mitigation. In addition, the area would be restored with native vegetation consistent with CZLUO policies.

Combined Project Effects

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, the construction and operation of the proposed components for the collection system and leachfields of Proposed Project 4 could result in a measurable combined effect on resources protected under local policies and ordinances. Based on a review of the additions and modifications for the Preferred Project, there are no new elements proposed that would result in a significant contribution to the combined effects analyzed for Proposed Project 4.

The Preferred Project has incorporated the goals and development standards identified in the CZLUO for siting and design that ensure avoidance and minimization of impacts to SRA and ESHA in the short- and long-term. The majority of the combined effects on SRA and ESHA will be temporary in nature as a result of the installation of bride-suspended or belowground pipelines. As required, pump station and treatment plant siting for the Preferred Project incorporates adequate setbacks from sensitive resource areas and design features that minimize potential indirect impacts, and enhance the surrounding environment.

Implementation of Mitigation Measures Q5.5-A1, Q5.5-A3, Q5.5-A4, Q5.5-A6, Q5.5-A8, Q5.5-A9, Q5.5-A10, Q5.5-A13, Q5.5-A14, Q5.5-A15, Q5.5-A16, and Q5.5-C1 through Q5.5-C3 would reduce

combined impacts to SRA, and terrestrial habitat, coastal stream, wetland, and riparian vegetation less than significant levels, and ensure consistency of the Preferred Project with the CZLUO.

Cumulative Impact Analysis

Similar to that which had been analyzed for Proposed Project 4 in the Draft EIR, of the projects considered for the cumulative impacts analysis, none were determined to have considerable effect on local policies or ordinances protecting biological resources that is relevant to the Preferred Project. When considered against the cumulative setting, the cumulative impacts would be limited to that which may result from the Preferred Project. Therefore, no mitigation is required beyond that which is proposed for project-specific impacts.

Mitigation Measures

Project-Specific

Mitigation Measures Q5.5-A1, Q5.5-A3, Q5.5-A4, Q5.5-A6, Q5.5-A8, Q5.5-A9, Q5.5-A10, Q5.5-A13, Q5.5-A14, Q5.5-A15, and Q5.5-A16. See also mitigation measures Q5.5-C1 through Q5.5-C3.

Cumulative

No mitigation measures are required.

Level of Significance After Mitigation

Project-Specific

Less than significant. Project is consistent with applicable local policies and ordinances.

Cumulative

Less than significant.

Conservation Plans

5.5-F:	The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.
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Project-Specific Impact Analysis

No impact.

Similar to that which had been determined for Proposed Project 4 in the Draft EIR, the Preferred Project would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other approved local, regional, or state habitat conservation plan. The Preferred Project occurs within the boundaries of the Draft Los Osos Habitat Conservation Plan. This plan has not been approved or implemented to date.

Implementation of the Preferred Project would result in the acquisition of 72 acres of mitigation lands on the Broderon property. These mitigation lands in addition to those lands on the Tonini property that will be avoided and conserved could contribute to the future assembly of a preserve system for

any forthcoming adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Cumulative Impact Analysis

No impact.

Mitigation Measures

Project-Specific

No mitigation is required.

Cumulative

No mitigation is required.

Level of Significance After Mitigation

Project-Specific

No Impact.

Cumulative

No impact.

