APPENDIX B

SUMMARY OF MITIGATION

This section provides a summary of all proposed mitigation measures as described in Section 3.0 of this document.

Mitigation Number [CEQA number]	Mitigation Measure
Section 3.4: Historic Properties	
3.4-1	Prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, the Section106 process will be completed. This process will include the finalization of the Historic Properties Evaluation and Treatment Plan and the acceptance of the project's Memorandum of Agreement by the appropriate federal signatories.
3.4-2	An Historic Properties Evaluation and Treatment Plan has been prepared for the LOWWP, and details the extensive scope of the proposed project; establishes site types with corresponding levels of effort for mitigation, and details data recovery and monitoring plans for the extent of the proposed project. This Treatment Plan will be executed in full throughout the course of the project.
3.4-3 [5.6-B4]	As detailed in the Treatment Plan, if avoidance of recorded archaeological sites within any portion of the approved project design is not possible through project redesign, a phased program of site testing will be undertaken to establish boundaries and evaluate the resources' potential eligibility to the California Register of Historical Resources or the National Register of Historic Places. If a site is determined ineligible, no further work is required. If a site is determined eligible, data recovery excavations will be required to mitigate adverse effects incurred from project development.
3.4-4 [5.6-B6]	Preconstruction monitoring will occur in areas ranked as high in sensitivity for buried deposits. Mechanical backhoe trenching will be conducted within the sensitive areas where any construction impacts will occur and will be monitored by a qualified geoarchaeologist. Any identified intact deposits will be evaluated, and any deposits determined to be eligible to the California Register and/or National Register will require project redesign to avoid impacts, or data recovery to mitigate unavoidable impacts.
3.4-5 [5.6-B7]	While prior survey, excavation, and monitoring have been conducted for the majority of the collection system in the community of Los Osos, redesign in the placement of pipelines and location of pump stations and other facilities requires additional consideration. Areas of high archaeological sensitivity, including the locations of human burials, have been identified. Continued avoidance or additional testing, monitoring, and/or data recovery will be required to reduce impacts to a less-than-substantial level.
3.4-6 [5.6-B8]	Full analysis, processing, documentation, curation, and reporting of the project collections was not achieved because of the stop-work order on the 2005 wastewater project. These tasks will be completed by qualified archaeologists as an

Mitigation Number [CEQA number]	Mitigation Measure
	important mitigation effort for overall project impacts and to fulfill requirements associated with past Section 106 consultations. Study findings will be made available to the general public and local Native Americans, as well as to the scientific community.
3.4-7 [5.6-D1]	A draft Memorandum of Agreement has been prepared for the treatment and disposition of human remains and associated burial items. Although not required by law, this document lays out the procedures agreed upon by interested local Native Americans and stipulated under State law, including proper and respectful handling of remains, identification of reburial areas, acceptable analyses, and resolution of conflicts. It includes a list of Most Likely Descendents approved by the Native American Heritage Commission; these individuals would be signatories on the Agreement.
3.4-8 [5.6-D2]	For sites with known human remains or which have a potential for human remains, pre-construction excavations will take place within the direct impact areas to insure that no human remains are present.
3.4-9 [5.6-D3]	If human remains are encountered within the project area, the County will be responsible for complying with provisions of Public Resources Code Sections 5097.98 and 5097.99, and 7050.5 of the California Health and Safety Code, as amended by AB 2641. Restrictions or procedures for excavation, treatment, or handling of human remains will be established in consultation with the individuals designated by the Native American Heritage Commission as the Most Likely Descendents.
Section 3.5: Biological Resources Information	
3.5-1*	All staging areas, as well as those areas where fueling and maintenance of vehicles and other equipment would occur, will be located at least 20 meters from riparian habitat or water bodies. The contractor or County will ensure that contamination of habitat does not occur during such operations.
3.5-2*	Prior to the onset of work near any riparian habitat, the USDA will ensure that the contractor or County has prepared a plan to allow a prompt and effective response to any accidental spills.
3.5-3*	To avoid potential timing conflicts between construction and the breeding season for the California red-legged frog, work activities adjacent to Los Osos Creek will only commence after March 31 and be completed by October 31, annually.
3.5-4*	Night-time illumination at the treatment plant site will meet the following requirements of the County's Estero Area Plan in order to be shielded from riparian areas and creeks: "all lighting fixtures will be shielded so that neither the lamp nor the related reflector interior surface is visible from adjacent properties. Light hoods will be dark-colored." No night

Mitigation Number [CEQA number]	Mitigation Measure
	lighting will be used unless necessary for active maintenance activities at the plant, or under emergency conditions.
3.5-5*	Tributaries to Warden Creek on the Giacomazzi property will be restored to provide improved habitat for the California red-legged frog. Drainages currently devoid of riparian vegetation will be revegetated with native riparian canopy and emergent species to provide additional shade, cover, and breeding habitat. The current practice of removing all vegetation within and adjacent to Los Osos Creek and tributaries to Warden Creek will cease.
3.5-6 [5.5-A3]	A worker education program and clearly defined operations procedures will be prepared prior to project construction. The worker education program and operations procedures will be implemented by the County throughout the duration of construction. A biologist approved by the USFWS will be retained to provide construction personnel specific instruction on general detection and avoidance of sensitive resources during construction. The worker education program will include: descriptions and pictures of listed species; the provisions of the Endangered Species Act; those specific measures being implemented to avoid and minimize take or impacts to listed or otherwise sensitive species (e.g. conserve listed and sensitive species as they relate to the project); and the project boundaries within which the work will occur.
3.5-7 [5.5-A8]	Prior to project construction, the County will retain a qualified biologist to conduct pre-construction surveys for the California red-legged frog according to protocol approved by the USFWS. Surveys will be conducted within all areas that at 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 will be completed between April 1 and November 1. This measure will apply to construction activities at the LOVR 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 will 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 will retain a USFWS-approved biologist to conduct a training session for all construction personnel. At a minimum, the training will 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

Mitigation Number [CEQA number]	Mitigation Measure
	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 will retain a USFWS-approved biologist responsible for monitoring construction activities. Ground disturbance will 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 will be followed at all times. A USFWS-approved biologist will 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 will designate a qualified person to monitor on-site compliance with all minimization measures. The USFWS-approved biologist will 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 will be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas. All fueling and maintenance of vehicles and other equipment and staging areas will occur a minimum of 100 feet from all open water, stream, wetland, and riparian habitat. The permittee will ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the EPA will ensure that the permittee has prepared a plan to allow a prompt and effective response to any accidental spills. Recycled water storage ponds will 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 will monitor recycled water storage ponds for bullfrog activity.
3.5-8**	All construction activities across Los Osos Creek will occur when the channel is dry.
3.5-9**	Silt fencing will be installed in all areas where construction occurs within 100 feet of known or potential steelhead habitat.
3.5-10**	Spoil sites will be located so they do not drain directly into Los Osos Creek. If a spoil site drains into a water body, catch basins will be constructed to intercept sediment before it reaches the channel. Spoil sites will be graded to reduce the potential for erosion.

Mitigation Number [CEQA number]	Mitigation Measure
3.5-11**	A spill prevention plan for potentially hazardous materials will be prepared and implemented. The plan will 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 will be constructed to prevent spilled materials from reaching the creek channel.
3.5-12**	Equipment and materials will be stored at least 50 feet from Los Osos Creek. No debris such as trash and spoils will be deposited within 100 feet of waterways. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, will be located outside of the stream channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the stream will be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream will be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles will be moved away from the stream prior to refueling and lubrication.
3.5-13**	Proper and timely maintenance for vehicles and equipment used during construction will be provided to reduce the potential for mechanical breakdowns leading to a spill of materials into or around the creek. Maintenance and fueling will be conducted in an area that meets the criteria set forth in the spill prevention plan (i.e., away from the creek).
3.5-14**	A qualified biological monitor will be on site during all stream crossing activities. The biological monitor will be authorized to halt construction if impacts to steelhead habitat are evident.
3.5-15**	Project sites will be restored to pre-construction channel conditions, including streambed composition, compaction, and gradient.
3.5-16**	Project sites, if disturbed, 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 will be prepared prior to construction.
3.5-17 [5.5-A6]	All construction activities across Los Osos Creek will 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 will retain a qualified biological monitor to be on site during all stream crossing activities associate with Los Osos Creek. The biological monitor will be authorized to halt construction if impacts to steelhead are evident.

Mitigation Number [CEQA number]	Mitigation Measure
	Prior to construction, a spill prevention plan for potentially hazardous materials will be prepared and implemented. The plan will 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 will be constructed to prevent spilled materials from reaching the creek channel. Prior to construction, silt fencing will 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 will 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 will 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 will be constructed to intercept sediment before it reaches the channels. If required, spoil sites will be graded to reduce the potential for erosion. During construction, equipment and materials will be stored at least 50 feet from Los Osos Creek. No debris such as trash and spoils will be deposited within 100 feet of waterways. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, will 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 will be positioned over drip pans at all times. Any equipment or vehicles driven and/or operated within or adjacent to the stream will be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles will be moved away from the stream prior to refueling and lubrication. During construction, proper and timely maintenance for all vehicles and equipment used will be provided to reduce the potential for mechanical breakdowns leading to a spill of materials into or around the creek. Maintenance and fueling will 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 will be restored to pre-construction channel conditions, including streambed composition, compaction, and gradient. If required, channel banks will be returned to original grade slope and appropriate bank stabilization techniques will be implemented to reduce the potential for erosion and sedimentation. A plan describing pre-project conditions and restoration methods will 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 will be prepared prior to construction.
3.5-18	Maintenance activities associated with pipe suspension that may result in activity within the streambed of Los Osos

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[5.5-A7 Revised]	Creek should be restricted to periods when the streambed is dry and does not support any flowing water or pooling water in the proposed maintenance area.
3.5-19*	A Service-authorized biologist will conduct training sessions for all project-related personnel immediately prior to the start of vegetation removal, grading, and ground-disturbing construction-related activities.
3.5-20*	Construction areas will be clearly marked with high visibility flagging or barrier fencing. Construction equipment and personnel will be restricted to the marked areas.
3.5-21*	A Service-authorized biologist will be retained to monitor all vegetation removal, grading, and ground-disturbing construction-related activities that will take place within habitat suitable for the Morro shoulderband snail. Monitoring activities will be required daily until completion of initial disturbance at each location and for ensuring appropriate minimization measures are implemented during construction. The monitor will be granted full authority to stop work at his or her discretion and will stop work if project-related activities occur outside the demarcated boundaries of the construction footprint. The monitoring biologist will stop work if any Morro shoulderband snails are detected within the proposed construction footprint and will implement measures to relocate them to suitable habitat out of harm's 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 off-site location approved by the Service.
3.5-22*	Prior to the initiation of project-related activities that would result in vegetation removal, soil disruption, or construction, the approximately 73 acres of the Broderson property that will not be used for the proposed leach fields will be secured and granted, in perpetuity, to an appropriate agency or conservation organization who will assume the responsibility for its management. A long-term management and monitoring program will be prepared and approved by the Service and the Department. The County will be responsible for the allocation of appropriate funding necessary to implement the management and monitoring of the conserved lands.
3.5-23*	The existing degraded coastal dune scrub at the Broderson property will be restored and maintained to promote its function as habitat for Morro shoulderband snail and sensitive plants and wildlife species that are local or endemic to the area. Restoration activities will be conducted by qualified personnel with expertise in restoration ecology and knowledge of sensitive plant and wildlife species in the area. Restoration activities will be conducted in accordance with a Restoration Plan specifically prepared for the effort and approved by the Service, and the Department. Similarly, habitat restoration and maintenance will be implemented according to a Habitat Mitigation and Monitoring Plan that will evaluate the progress of the restoration effort.

Mitigation Number [CEQA number]	Mitigation Measure
3.5-24*	Habitat restoration activities will include measures for the removal and eradication of competitive, invasive, non-native plant species known to occur in the local area, including veldt grass (Ehrharta calycina) and pampas grass {Cortaderia spp.). Activities that involve the removal of invasive species will not result in unnecessary trampling or removal of native species, and techniques employed for the removal of non-native plant species will be those that will result in the least damage to native species. Any disturbed portions of the acquired 73 acres of the Broderson parcel should be evaluated for their potential to be restored as coastal dune scrub habitat that would have the potential to support the functions and values necessary for the Morro shoulderband snail, the Morro Bay kangaroo rat, and other coastal dune scrub species.
3.5-25*	The restoration effort will include the implementation of a seed collection program to gather seeds to be used during restoration from native sources. The seed collection program will be prepared for approval by the County, Service, and Department prior to the commencement of vegetation removal, soil disruption, grading or other construction- related activities and focus on those native plant species that will be affected by project implementation. Collection will be conducted by personnel with demonstrated expertise in seed collection and storage and occur during the appropriate time of year for seed production and harvesting.
3.5-26*	The County will provide annual reports to the USDA and Service documenting the results of all restoration and monitoring activities. Annual reports will be provided for a minimum of five years or until it is determined that the requisite performance criteria have been met. The County will provide a written report to the USDA and Service 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 will 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.
3.5-27*	A final report would be submitted by the County to the USDA and VFWO within 60 days of the end of project activities. This report would summarize the Annual Reports and include a discussion regarding Project activities, compensation activities, and minimization and avoidance measures implemented.
3.5-28*	Worker education programs and clearly-defined operational procedures must be implemented by the USDA and County.
3.5-29*	Only Service-authorized biologists may survey for, monitor, handle, and/or relocate Morro shoulderband snails.
3.5-30*	Service-authorized biologists must have the authority to stop work if project-related activities occur outside the demarcated boundaries of the construction footprint.

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3.5-31*	The USDA must ensure that the level of incidental take that occurs is commensurate with the analysis contained within this biological opinion.
3.5-32*	The worker education program must include descriptions and pictures of the Morro shoulderband snail, relevant provisions of the Endangered Species Act, specific measures being implemented to conserve the Morro shoulderband snail as they relate to the project and the project boundaries within which the work will occur.
3.5-33*	The USDA and the County must minimize the removal of, or damage to, native vegetation during project activities to the maximum extent possible.
3.5-34*	Only Service-authorized biologists may survey for, monitor, capture, handle, or relocate Morro shoulderband snails. Eric Wier, Kate Ballantyne, and John Farhar are hereby authorized to independently conduct these activities as described in this biological opinion. Katie Drexhage, Kelly Sypolt, and Trevis Warner are authorized to conduct such activities only under the direct supervision of Eric Wier, Kate Ballantyne, and/or John Farhar. The USDA, in conjunction with the County, must request the Service's authorization of any other biologists it wishes to employ to conduct these activities relative to the proposed project. This request must be in writing and received by the Service at least 30 days prior to the intended start date.
3.5-35*	A Service-authorized biologist must monitor the proposed project area(s) daily during work activities, for up to two weeks or until completion of initial site disturbance at each project site, and have the authority to stop project activities that occur outside the demarcated boundaries of the construction footprint and access road and to relocate Morro shoulderband snails to suitable habitat out of harm's way.
3.5-36*	If more than 28 Morro shoulderband snails are found dead or injured during implementation of the project, the USDA or County must contact the VFWO immediately so we can review the project activities to determine if additional protective measures are needed.
3.5-37 [5.5-A1]	The project may adversely affect federally listed species and their habitat. Prior to project approval, the lead Federal agency will enter into formal consultation with the USFWS and/or NMFS. A BO will be prepared by the USFWS and/or NMFS for any action which may result in take of a listed species and its habitat. Pending the determinations made by the USFWS and/or NMFS in a forthcoming BO, the project will be required to fulfill all mitigation obligations and conservation measures conditioned in the BO regarding federally listed species and their habitat.
3.5-38	Prior to the onset of construction activities, a biologist authorized by the USFWS will conduct intensive surveys to

Mitigation Number [CEQA number]	Mitigation Measure
[5.5-A4]	identify and relocate all snail specimens within the impact area on the Broderson and Mid-Town properties, and all suitable habitat areas within the collection system. Only USFWS authorized biologists will survey for, monitor, handle, or relocate Morro shoulderband snails. A biologist authorized by the USFWS will be retained to monitor all construction activities that will take place within suitable habitat for the Morro shoulderband snail. Monitoring activities will be required daily until completion of initial disturbance at each construction area. The monitoring biologist will be granted full authority to stop work at his or her discretion. The monitoring biologist will be responsible for implementing avoidance and minimization measures during construction. The monitoring biologist will stop work if project-related activities occur outside the demarcated boundaries of the construction footprint. The monitoring biologist will stop work if any Morro shoulderband snails are detected within the construction footprint, and will relocate them to suitable habitat out of harm's way prior to construction activities resuming. If no suitable habitat exists in the immediate vicinity of the construction footprint, salvaged specimens may also be transported to an offsite location approved by the USFWS. The County will provide a written report to the USFWS within 90 days following the completion of the project. The report must document the number of Morro shoulderband snails removed and relocated from project areas, the locations of all Morro shoulderband snails' relocations, and the number of Morro shoulderband snails known to be killed or injured. The report will 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.
3.5-39 [5.5-A15]	Prior to project construction, land containing coastal sage scrub habitat and/or other habitat will be acquired on the Broderson property that is sufficient to compensate the loss of habitat for the Morro shoulderband snail, the Morro Bay kangaroo rat, and other sensitive species on the Broderson and Mid-Town properties, and areas in the community of Los Osos that will be served by the collection system. Mitigation lands for the project will be acquired within the remaining acres of land on the Broderson property that will not be impacted by the leachfields. Mitigation lands within the Broderson property will include land that is designated as Critical Habitat for the Morro shoulderband snail; contiguous with existing preservation lands within the Morro Dunes Ecological Reserve and areas studied for the Greenbelt Program by the Land Conservancy; currently supports appropriate soils to accept native plantings for restoration; is capable of being cleared of unfavorable debris and structures; supports primarily windblown sand deposits that are in a stabilized condition (i.e. not mobile dune habitat); is characterized by habitat types with an open canopy; contains appropriate slopes to accommodate snail mobility to and from adjacent lands; and is of appropriate aspect and meteorological conditions.

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	Within two years of project operation all mitigation land will 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 between the USFWS, CDFG, and the County. A long-term management and monitoring program will be prepared. The County will be responsible for the allocation of appropriate funding for the long-term management and monitoring of the mitigation land, as determined through agreements between the USFWS, CDFG, and the County.
3.5-40 [5.5-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 will 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, will be repeated immediately following all long-term maintenance activities resulting in temporary disturbance of the leachfields. This will be applied to the ripping and backfilling activities that may be required every 5 to 10 years to maintain the leach field function. Restoration activities will be conducted according to a Restoration Plan or similar plan specifically prepared for the effort and approved by the USFWS, CDFG, and/or the CNPS. The Restoration Plan will 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 will be conducted by qualified personnel with expertise in restoration ecology and knowledge of sensitive plant and wildlife species in the area. The restoration effort will include the implementation of a seed collection program to gather seeds to be used during restoration from native sources. The seed collection program will be prepared for approval by the County prior to project construction activities. The seed collection program will 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 will 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 will be monitored against permanence standards for a minimum of five years, or until the first ripping event for the restored areas within the leach field area, after which the maintenance and monitoring of the restored areas will be covered within specific management directives contained within a Resource Management Plan. The performance standards will include, at minimum, at

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	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 will 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 will 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 will provide annual reports to the USFWS documenting the results of all restoration and monitoring activities. Annual reports will 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 will 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 will include management directives that are specific to the preserve and the resources present. The Resource Management Plan will 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 will be least damaging to native species. Mitigation lands within the Broderson property will include land that is designated as Critical Habitat for the Morro shoulderband snail; contiguous with existing preservation lands within the Morro Dunes Ecological Reserve and areas studied for the Greenbelt Program by the Land Conservancy; currently supports appropriate soils to accept native plantings for restoration; is capable of being cleared of unfavorable debris and structures; supports primarily windblown sand deposits that are in a stabilized condition (i.e. not mobile dune habitat); is characterized by habitat types with an open canopy; contains appropriate slopes to accommodate snail mobility to and from adjacent lands; and is of appropriate aspect and meteorological conditions. Within two years of project operation all mitigation land will 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 between the USFWS, CDFG, and the County. A long-term management and monitoring program will be prepared. The County will be responsible for the allocation of appropriate funding for the long-term management

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	and monitoring of the mitigation land, as determined through agreements between the USFWS, CDFG, and the County.
3.5-41*	Prior to the initiation of any vegetation clearing, revegetation/habitat restoration, soil disruption, grading, and/or ground-disturbing construction-related activities within the leach field area on the Broderson parcel or any other location within the action area that has potential for occurrence of the species (as determined in coordination with the Service and Department), the County will work with the Service and Department to develop and implement a "no take" strategy for the Morro Bay kangaroo rat. This strategy will include specific take avoidance measures and provide a survey, monitoring, and contingency plan should required periodic maintenance of the leach field area create suitable habitat for the species. Prior to its implementation, the strategy will be reviewed and approved by the Service and the Department and made part of a formal agreement to be signed by all parties.
3.5-42*	Construction in and around riparian habitat associated with Los Osos Creek will occur only between September 15 and October 31. If surveys are conducted by a Service-authorized biologist from March 15 through June 15 and least Bell's vireo breeding activity is not detected, this construction window may be expanded to include the months of July and August.
3.5-43*	Annual Biological Monitoring Reports would be submitted by the County to USDA and the VFWO Office by January 31 of each year. Reports would be submitted for the duration of project construction. These reports would discuss the status and progress of compensation measures implemented. Photographs of mitigation/compensation sites would be included to document progress. If monitoring results indicate that additional measures are necessary to meet the goals set in the biological opinion, additional recommendations would be made and next steps would be agreed upon with appropriate agencies.
Section 3.9: Air Quality	
3.9-1 [5.9-C1]	Prior to initiation of construction, the County will submit a Construction Activities Management Plan for the review and approval of the SLOAPCD. This plan will include but not be limited to the following Best Available Control Technologies for construction equipment: a. Minimize the number of large pieces of construction equipment operating during any given period. b. Schedule construction related truck/equipment trips during non-peak hours to reduce peak-hour emissions. c. Properly maintain and tune all construction equipment according to manufacturer's specifications. d. Fuel all off-road and portable diesel powered equipment including but not limited to: bulldozers, graders, cranes, loaders, scrapers, backhoes, generators, compressors, auxiliary power units, with CARB motor vehicle diesel fuel. e. Use 1996 or newer heavy duty off road vehicles to the extent feasible.

Mitigation Number [CEQA number]	Mitigation Measure
	f. Use Caterpillar pre-chamber diesel engines (or equivalent) together with proper maintenance and operation to reduce emissions of NOX. g. Electrify equipment where possible. h. Use CNG, LNG, biodiesel, or propane for on-site mobile equipment instead of diesel- powered equipment.
3.9-2 [5.9-C2]	Prior to initiating grading activities, the project will: a. Include the following specifications on all project plans: One CDPF will be used on the piece of equipment estimated to generate the greatest emissions. If a CDPF is unsuitable for the potential equipment to be controlled, five diesel oxidation catalysts will be used. b. Identify equipment to be operated during construction as early as possible in order to place the order for the appropriate filter and avoid any project delays. This is necessary so that contractors bidding on the project can include the purchase, proper installation, and maintenance costs in their bids. c. Contact the SLOAPCD Compliance Division to initiate implementation of this mitigation measure at least two months prior to start of construction.
3.9.3 [5.9-C3]	Prior to initiating grading activities, if it is determined that portable engines and portable equipment will be utilized, the contractor will contact the SLOAPCD and obtain a permit to operate portable engines or portable equipment, and will be registered in the statewide portable equipment registration program. The SLOAPCD Compliance Division will be contacted in order to determine the requirements of this mitigation measure.
3.9-4 [5.9-C4]	Project contract documents will include the following dust control measures: a. Reduce the amount of the disturbed area where possible, b. Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency will be required whenever wind speeds exceed 15 mph. Recycled (non-potable) water should be used whenever possible. c. All dirt stockpile areas will be sprayed daily as needed, d. Permanent dust control measures identified in the revegetation and landscape plans will be implemented as soon as possible following completion of any soil disturbing activities. e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading will be sown with a fast germinating native grass seed and watered until vegetation is established. f. All disturbed soil areas not subject to revegetation will be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD. g. All roadways, driveways, sidewalks, etc. to be paved will be completed as soon as possible. In addition, building

Mitigation Number [CEQA number]	Mitigation Measure
	pads will be laid as soon as possible after grading unless seeding or soil binders are used. h. Vehicle speed for all construction vehicles will not exceed 15 mph on any unpaved surface at the construction site. i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or will maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114. j. Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site. k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with recycled water should be used where feasible. l. If visible emissions of fugitive dust persist beyond a distance of 200 feet from the boundary of the construction site, all feasible measures will be implemented to eliminate potential nuisance conditions at off-site receptors (e.g., increase frequency of watering or dust suppression, install temporary wind breaks where appropriate, suspend excavation and grading activity when winds exceed 25 mph) m. The contractor will designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties will include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons will be provided to the SLOAPCD prior to the start of construction.
3.9-5 [5.9-C5]	If the above mitigation measures do not bring the construction emissions below the thresholds, off-site mitigation funds can be used to secure emission reductions from projects located in close proximity to this construction site. In this instance, emissions in excess of construction phase thresholds are multiplied by the cost effectiveness value defined in the State's current Carl Moyer Incentive Program Guidelines to determine the off-site mitigation amount associated with the construction period. Examples of off-site emission reduction measures are contained in Section 5.9 of the 2003 CEQA Air Quality Handbook. The actual mix of mitigation measures that will be required to meet the reduction in NO_X to less than a total of 185 lbs per day or 6.0 tons per quarter over the term of construction and will be finalized and mutually agreed to by the Applicant and appropriate staff of the SLOAPCD at the earliest feasible time, with the goal of reaching agreement prior to commencement of construction of the project.
* : Mitigation measures from the Biological Opinion – USFWS for the LOWWP. **: Mitigation measures from the Biological Assessment for the LOWWP.	