FINAL Environmental Impact Report

For The

Los Osos Community Services District

WASTEWATER FACILITIES PROJECT

SCH# 9911103

Certified March 1, 2001

Prepared by:

Crawford Multari & Clark ASSOCIATES

Final Environmental Impact Report

for the

Los Osos Community Services District
Wastewater Facilities Project

SCH#9911103

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Part I: Comments on the Draft EIR, Responses to Comments and Persons and Agencies Commenting on the Draft

Part II: Findings of Fact and A Statement of Overriding Consideration and Mitigation Monitoring Program Prepared In Accordance With the California Environmental Quality Act (CEQA)

Prepared by:

Crawford
Multari &
Clark
ASSOCIATES

I. Introduction

In accordance with State CEQA Guidelines, the Los Osos Community Services District, as Lead Agency, prepared a Draft Environmental Impact Report (DEIR) for the Los Osos Wastewater Facilities Project to address the following topical areas:

Biological Resources	Cultural Resources	Hydrogeology and Water Resources
Drainage	Geology	Air Quality
Consistency with Adopted Plans and Policies		
Noise	Visual Resources	Traffic and Circulation
Public Health and Safety	Growth-inducing Impacts	Alternatives
Cumulative Impacts		

The Draft EIR was prepared and circulated for public review in accordance with CEQA and the Guidelines for Environmental Review for State Revolving Fund projects. A summary of the conclusions of the Draft EIR is provided in Table 2-1 of the Draft EIR. The DEIR concludes that impacts associated with the project can be mitigated to a level of insignificance except construction related air quality impacts and impacts resulting from the permanent loss of habitat for special status plants and animals. Mitigation measures are recommended to lessen these impacts to the extent feasible.

Sections 15089 and 15132 of the State CEQA Guidelines require the preparation of a Final Environmental Impact Report which includes:

- The Draft EIR, or a revised version of the Draft EIR
- Copiers or a summary of comments and recommendations received during the public review of the Draft EIR;
- A list of persons and entities commenting on the Draft EIR;
- Responses to the comments prepared by the Lead Agency; and
- Any other information added by the Lead Agency;

Accordingly, what follows are the comments received during the public review period, followed by written responses prepared by the Lead Agency. Numbered boxes are used to reference individual comments that raise significant environmental issues. The responses begin with a brief summary of the significant environmental issue(s) raised, followed by the Lead Agency's response. Where portions of the Draft EIR are recommended for revision, the section and page number(s) are referenced and the revised language is provided in *italics* and ~~strikeout~~.

It should be noted that the Lead Agency is obligated to respond only to comments that raise significant environmental issues, and that the responses must show a well-reasoned analysis and demonstrate a good faith effort at full disclosure.

II. List of Persons and Entities Commenting on the Draft EIR

Comment Number	Author	Agency/Entity	Date of Comment	Page Number
		WRITTEN COMMENTS		
1	Greg Nuckols, Fire Marshal	Los Osos CSD/South Bay Fire Department	December 14, 2000	6
2	Anne Bell for Diane K. Noda Field Supervisor	US Department of the Interior Fish and Wildlife Service	January 5, 2001	12
3	Warren Morgan, District Manager	Southern California Water Company	January 3, 2001	18
4	Melissa J. Mooney		January 5, 2001	28
5	Louis G. Gibson, Special Projects Engineer	San Luis Obispo County Engineering Department	January 5, 2001	35
6	Marla Morrissey, President	Morro Estuary Greenbelt Alliance	January 4, 2001	44
7	David H. Chipping, Conservation Chair	California Native Plant Society	January 4, 2001	50
8	Gordon Taylor		January 2, 2001	54
9	Gerhardt Huber for Roger W. Briggs, Executive Officer	California Regional Water Quality Control Board	January 3, 2001	58
10	John. N. Curphey, PE District Sanitary Engineer Santa Barbara District	Department of Health Services	December 18, 2000	63
11	Warren Morgan, District Manager	Southern California Water Company	December 12, 2000	66
12	Jim Flegal, Traffic Technician	San Luis Obispo County Engineering Department	November 17, 2000	68
13		Governor's Office of Planning and Research	December 14, 2000	70
14	Mike Wulcan, Senior Planner Long Range Planning	San Luis Obispo County Department of Planning and Building	January 11, 2001	77
15	Diane Edwards Environmental Services Unit	State Water Resources Control Board	January 9, 2001	85
16	Al Barrow		January 5, 2001	94
17	Robert Flaoerke, Regional Manager	California Department of Fish and Game	January 11, 2001	102
18	Charles Lester, District Manager, Central Coast	California Coastal Commission	January 23, 2001	116
19	Rebecca Lent, Ph.D. Regional Administrator	US Department of Commerce National Marine Fisheries Service	January 9, 2001	122

Comment Number	Author	Agency/Entity	Date of Comment	Page Number
PUBLIC TESTIMONY				
20	Al Barrow		November 16, 2000 January 4, 2001	123
21	Mr. Green		November 16, 2000 January 4, 2001	123

III. Comments and Responses

LOS OSOS CSD
SOUTH BAY FIRE DEPARTMENT

Fire Chief
Bruce D. Pickens

Captain-Fire Marshall
Fire Investigator
Christopher J. Pentony

Fire Captain-Paramedic
Fred Haberkorn

Fire Captain-Paramedic
Bill Kershner

Fire Captain-Paramedic
Tim Wilcox

2315 Bayview Heights Drive
Los Osos, California 93402
Phone 805/528-1053
Fax 805/528-3164

December 14, 2000
David Moran
c/o Crawford Mularti Clark & Mohr
Los Osos Community Services District
641 Higuera Street, Suite 302
San Luis Obispo, CA 93402

Following are the departmentcomments regarding the DEIR for the Los Osos Community Services District Wastewater Project.

1. Section 6.9 San Luis Obispo County Fire Department Protection Plan. This paragraph is incorrect. The San Luis Obispo County Fire Department does not provide fire protection to the community of Los Osos. Additionally there is no County Fire Department Hazardous Materials Team. Hazardous Material incidents are mitigated by the San Luis Obispo County Regional Hazardous Materials Response Team. This team is made up of many people from individual fire departments throughout the county with extensive hazardous materials training. 1-1

2. Section 6.9 Collection System Construction related Impacts. The possibly of water main damage will be quite high during the construction period of the wastewater system. Funding for a fire department water tender must be provided as the department has fire and life safety requirements that need to be addressed. This is not a minor or secondary consideration. 1-2

3. Section 6.9 Collection System construction related Impacts. The underground pump stations bring up the issue of OSHA required confined space compliance. Both during, and after construction of the project the district will be faced with these requirements that are directly caused by the impacts of the wastewater project. Funding for training and equipment must be provided for this critical district responsibility. 1-3

Respectfully,

Greg Nuckols
Fire Marshal

Letter 1
Greg Nickols, Fire Marshal
Los Osos Community Services District/South Bay Fire Department
December 14, 2000

1-1 The comment corrects the reference to the provider of fire protection services for the community of Los Osos and the composition of the San Luis Obispo County Regional Hazardous Materials Response Team.

Response: The comments regarding the providers of fire protection services and hazardous materials management for Los Osos are noted and hereby incorporated into the Final EIR.

1-2 The comment refers to the potential for damage to water mains during installation of the wastewater collection system and recommends funding for a water tender to help mitigate the potential loss of water pressure that may occur following damage to a water line.

Response: Mitigation No. PS-4 (page 233) requires the Los Osos community services to mitigate the potential temporary loss of water for fire fighting that may occur as a result of construction activities by either 1) acquiring a water tender, to the satisfaction of the Fire Chief, or 2) through some other equivalent means as determined by the Fire Chief and the Los Osos Community Services District Board of Directors.

1-3 The comment references the requirements of the California Department of Occupational Safety and Health Administration (CALOSHA) regarding safety measures for workers involved in the construction of underground pump stations.

Response: Mitigation No. PS-5 requires all construction contractors to comply with relevant provisions of CALOSHA as it pertains to safety and rescue equipment.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

January 5, 2001

Dave Moran
Crawford Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, California 93401

Subject: Draft Environmental Impact Report for the Los Osos Wastewater Facilities Project in the Community of Los Osos, San Luis Obispo County, California

Dear Mr. Moran:

We have reviewed the draft environmental impact report (DEIR) for the subject project which would involve construction of a wastewater collection, treatment and disposal system with an average dry-weather flow of 1.365 million gallons per day and the capacity to serve a buildout population of 17,283 in the community of Los Osos. The State Water Resources Control Board (SWRCB), in conjunction with the U.S. Environmental Protection Agency (EPA), is proposing to provide funding assistance to the Los Osos Community Services District (LOCSD) for the proposed project. The LOCSD will plan, design, and construct the proposed project. We offer the following comments to help you in preparing a final EIR.

As mentioned above, the proposed project would involve constructing the wastewater collection system, treatment facility and the disposal facilities. The collection system would consist of about 204,000 feet of sewer pipe and all sewage would be collected through a series of gravity and pressurized (pumped) sewer lines which would convey waste to a treatment plant. The connection system consists of three major components: (1) connection lines at each property to convey flow from dwellings to the sewer main in the street; (2) sewer mains to convey flow to the treatment plant; and (3) pump stations to lift the flow over hills and high areas. The hook ups would include connection lines and main pipes which would be buried with approximately 4,774 connections. A series of up to 11 pump stations would be located on vacant lots purchased by the LOCSD or within public right-of-ways.

The preferred treatment facility would consist of a Hybrid Extended Aeration system that would be underground and fully odor scrubbed. The preferred location for the treatment facility is an 11-acre parcel owned by Tri-W located at the northwest corner of Los Osos Valley Road and Palisades Avenue. The treatment facility is expected to occupy about 5 to 6 acres of the site, with the remainder devoted to landscaped open space.

The preferred disposal method is to percolate the highly treated and disinfected wastewater into the groundwater by way of sub-surface leach fields. The leach fields will be located in portions of the community where sufficient depth to groundwater (30 feet or more) exists to accept the treated wastewater without resulting in the saturation of surface soils. The leach fields would be composed of perforated pipe installed about 5 to 6 feet deep and 4 feet on center. The primary disposal site is a 40-acre parcel located south of Broderson Avenue (the Broderson site). The leach fields for the Broderson site would be constructed in linear arrays parallel with Highland Drive on an eight-acre portion of the property toward the southerly property boundary (up-slope). Every five to ten years, the disposal leach fields will require maintenance in which the field would be completely exposed and rehabilitated.

The overall construction of the project (collection system, treatment, and disposal) would involve grading, excavating, trenching, dewatering, and building facilities and is expected to take about 16 to 24 months. In addition, individual property owners will be responsible for de-commissioning their septic tanks, the installation of on-site collection laterals, and the replacement of plumbing fixtures with water conserving fixtures. Septic tank de-commissioning involves pumping the tank out, removing the top of the tank, and backfilling the tank with sand.

The community of Los Osos is currently subject to a moratorium on the installation of new septic systems imposed by the Regional Water Quality Control Board because of nitrate contamination in the shallow groundwater aquifer. We understand that the LOCSD is in the difficult position of trying to implement the wastewater system within an area with limited properties available for siting the facilities. In general, we support the proposed development of a wastewater treatment facility to correct the water quality problems associated with the degradation of the groundwater basin, Morro Bay, and the estuary. However, the combination of direct impacts associated with construction of the wastewater facilities (wastewater collection, treatment, and disposal), the use of federal funds for such facilities, and the indirect and cumulative impacts from growth-induced development complicate compliance with the Endangered Species Act of 1973 (Act), as amended. The Service and LOCSD agreed that a consultation, pursuant to section 7(a)(2) of the Act, would be required for the direct impacts of construction of the wastewater facilities. A habitat conservation plan (HCP) or natural community conservation plan (NCCP) would be developed for the indirect (secondary) impacts resulting from the lifting of the moratorium on new septic system within Los Osos, including habitat remaining on individual lots. Having the NCCP or HCP in place and functioning, prior to completion of the wastewater facility, would enable residents and businesses in Los Osos to comply with the Act without applying for section 10(a)(1)(B) permits individually. It would also provide a more biologically responsible and economic means of ensuring the conservation of the area's endangered and threatened species. 2-1

As you know, on July 12, 2000, a proposed rule to designate critical habitat for the Morro shoulderband snail was published in the Federal Register (65 FR 42962) for public review; on November 21, 2000, we published a notice of availability of the draft economic analysis on critical habitat designation for the Morro shoulderband snail (65 FR 69896). A final rule

regarding critical habitat designation is expected to be published in the Federal Register by February 1, 2001.

Section 7(a)(2) of the Act requires federal agencies to consult with us to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a threatened or endangered species, or result in the destruction or adverse modification of critical habitat. "Jeopardize the continued existence" of a species is defined as an appreciable reduction in the likelihood of survival and recovery of a listed species. "Destruction or adverse modification" of critical habitat is defined as a direct or indirect alteration that appreciably diminishes the value of critical habitat for the survival and recovery of the listed species for which critical habitat was designated. Thus, the definitions of "jeopardy" to the species and "adverse modification" of critical habitat are nearly identical (50 CFR 402.2). When multiple units of critical habitat are designated, each unit may serve as the basis of an adverse modification analysis if protection of different facets of the species' life cycle or its distribution are essential to the species as a whole for both its survival and recovery. 2-2

General Comments

The currently proposed wastewater facility would affect less biologically sensitive habitat than the previously proposed facility. We commend the LOCSD for reducing the overall impact of the proposed wastewater facilities on the biological resources of Los Osos.

The proposed 40-acre mitigation site at the 80-acre Broderson parcel would be a substantial addition to the community's greenbelt protection program. However, we are concerned with regard to the potential adverse effects of construction and use of 8 acres of the area as leach fields for the following reasons.

1. The DEIR (geology impact GEO-11; the drainage and surface water quality impact WR-6; and biological resources impact BIO-12 and BIO-13) notes that the construction of the leach fields on the Broderson property will involve soil and vegetative disturbance which will alter on-site drainage and may increase the potential for erosion.

2. The drainage section (impact WR-8) of the DEIR notes that the periodic renovation of the sub-surface leach fields will require excavation activities may adversely affect surface water quality.

3. The DEIR (impact BIO-21) notes that the operation of leach fields is expected to increase soil moisture in areas located in the immediate vicinity and downslope which may stimulate growth of root-rotting fungi, particularly if moisture is present during the summer. Species subject to fungal root-rot infections may die out downslope from the leach fields, and growth of other species may be stimulated due to the presence of moisture. Therefore, the species composition of coastal scrub communities located in the immediate vicinity and downslope of the leach fields could be altered over time.

4. As stated in the DEIR, the leach lines will be buried 5 to 6 feet below ground surface. Plants growing immediately above the leach field may encounter higher moisture content in the soils. The Service and LOCSD agreed the restoration of the land above the leach fields is not considered adequate mitigation for the loss of coastal scrub habitat because of ongoing disturbance related to its renovation.

We are confused regarding the exact location proposed for the leach fields at the Broderson site. Figure 6.11-3 on page 256 and figure 6.11-4 on page 264 show different locations of the approximate limit of leach field siting. Because of the manner in which the operation and management of the leach fields may affect biological resources, including the Morro shoulderband snail, accurate information on its location is essential for readers of the DEIR to understand fully its potential effects. In addition, we recommend that the LOCSD consider locating the leach fields to an area further down-slope in the right-of-way as far as Highland Drive, the existing right-of-way between Broderson Avenue and Doris Avenue, or other locations outside of coastal scrub habitat. 2-3 2-3A

The DEIR does not discuss the measures that would be used when harvesting wells are not functioning properly. To ensure a full evaluation of the potential effects of rehabilitating these wells, the DEIR should include measures intended to avoid or reduce adverse effects to biological resources and a discussion of how these measures would conserve biological resources. To assist readers of the final EIR with evaluating whether the property locations you described in the DEIR for the pump station and disposal sites, including the Powell property, are within proposed critical habitat for the Morro shoulderband snail, the final EIR should provide the legal description for each property. 2-4

We were not able to locate the detailed discussion on HCPs in chapter 5.4 as stated on page 184. The DEIR lacks an in-depth discussion on how to address individual vacant lots and larger parcels and their potential for development where these properties contain habitat for listed species. The LOCSD, the California Department of Fish and Game, the Service, the County of San Luis Obispo, the California Coastal Commission, and the Morro Estuary Greenbelt Alliance have met several times since last fall to discuss possible strategies. However, no decision has been made to date. The agencies anticipate arriving at a final decision on whether to pursue an HCP or NCCP sometime in February or March, 2001. 2-5

Specific Comments

1. Page 152, Impact WR-2: Construction of the treatment plant at the Tri-W site will most likely require dewatering of some excavated areas. Morro shoulderband snails have been found throughout the property adjacent to the Tri-W parcel. The DEIR does not describe what measures you will use to prevent water from flowing into Resource Park or from flooding outside the footprint of the Tri-W property. 2-6

2. On page 261, the reference to the draft recovery plan is incorrect. The Recovery Plan for the Morro Shoulderband Snail and Four Plants from Western San Luis Obispo County, 2-7

California was finalized and signed on September 26, 1998.

3. On page 280, the statement, "Morro shoulderband snail has not been documented in the vicinity of Broderson site" is incorrect. Morro shoulderband snails have been documented at the Broderson and Morro Shores/Tri-W sites in the geotechnical field exploration monitoring completion report. Twenty-six live Morro shoulderband snails were found during geotechnical testing activities between May 5 and 12, and October 30 and November 1, 2000. 2-8

4. The DEIR did not provide the breakdown of total acres of impact by the collection and disposal systems. 2-9

We appreciate the opportunity to review and comment on the DEIR. We look forward to the next LOCSD wastewater facility status meeting on Monday, January 22, 2001 and to working with you to address the issues we have raised. If you have any questions, please write or call Ron Popowski of my staff. Ron uses a text telephone due to his deafness. To contact Ron, please use the Relay Service according to the following protocol.

1) Dial the Relay Service at: 1 (888) 877-5379
2) Give the operator Ron's phone number: (805) 644-7265
3) Once you are connected to Ron, speak to the operator as if you were speaking to Ron. The operator will type what you say for Ron and tell you what Ron has typed in response.
4) Thank you for your cooperation in this process.

Sincerely,

Anna S. Bell

For Diane K. Noda
Field Supervisor

Letter 2
Anne Bell for Diane K. Noda, Field Supervisor
United States Fish and Wildlife Service
January 5, 2001

2-1 Commenter notes that the HCP for secondary impacts incorporated in the project description will assist the USFWS by reducing the need for individual Section 10 HCPs.

Response: Comment is noted. The project approach to habitat loss is to ensure that mitigation provides for a comprehensive and regional protection for the multiple species existing in the Los Osos area. Purchasing a large part of the greenbelt which is within the critical habitat area, rather than a series of smaller, "on-site" mitigations, and preparing a regional HCP, rather than resolving secondary impacts through permit-by-permit means, will assist with the recovery of the species, the ultimate goal of the Endangered Species Act.

2-2 Commenter notes the purposes and requirements associated with the designation of land as critical habitat for an endangered species.

Response: These comments are noted for the benefit of the decision makers.

2-3 Commenter notes that two graphics provide some confusion as to the location of the leachfields on the Broderson properties. Commenter further suggests that the leachfields be located in the rights of way on streets north of the proposed site and out of coastal scrub habitat.

Response: The leachfields are proposed to be located approximately 400 feet south of the property line behind the homes on Highland Drive. The correct location is shown on the attached aerial photograph. The proposed location for the leachfields has been dictated by the results of the geologic investigation for the area, which identified the upper hillside as the only feasible location for disposal of this volume of wastewater as discussed by Cleath and Associates Hydrogeologic Investigation of the Broderson Site, November 2000.

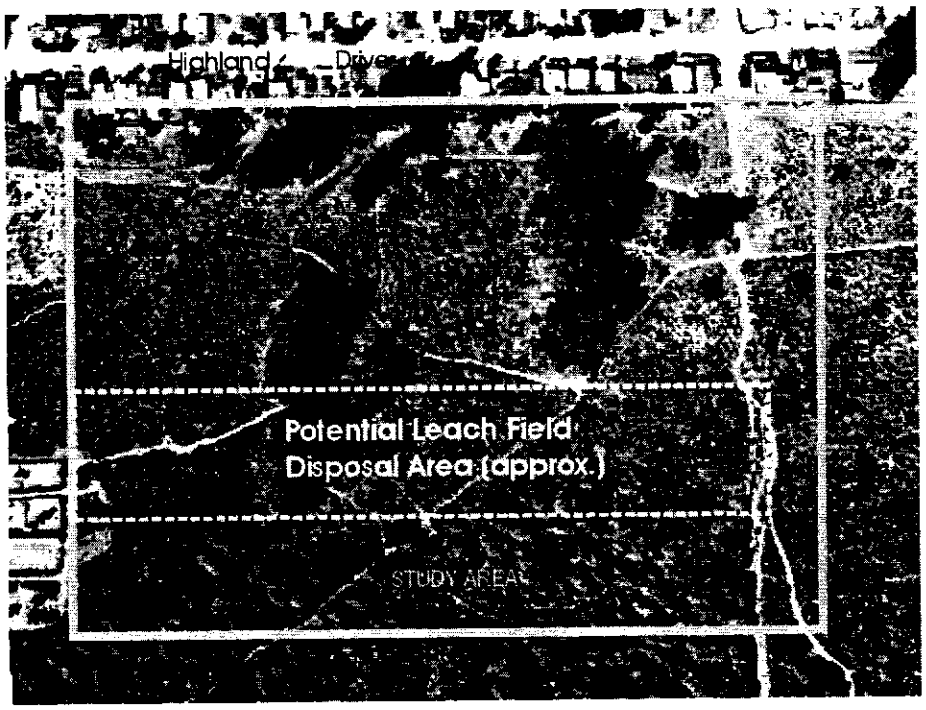
2-3A Commenter recommends locating the leach fields on the Broderson property further downslope in the right-of-way as far as Highland Drive.

Response: The proposed location for the leachfields has been dictated by the results of the geologic investigation for the area, which identified the upper hillside as the only feasible location for disposal of this volume of wastewater.

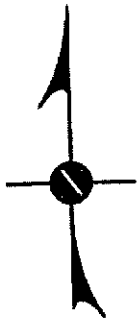
2-4 Commenter suggests the EIR provide information regarding the harvesting wells and how resources will be impacted should these not function properly.

Response: The purpose of the harvesting wells is to maintain the groundwater at acceptable levels, especially as it enters the northernmost part of its migration towards the bay. Because of the very slow travel time of water in a soil medium, the wells can go off-line for several weeks without a resulting significant raising of the groundwater levels at any given location.

2-5 Commenter suggests that the EIR lacks in-depth discussions regarding impacts to lots that may be developed with the lifting of the prohibition. Commenter further notes that the USFWS, CDFG, County, Coastal Commission and the District have been working to finalize direction on an HCP for secondary impacts.



Broderson
Leach Field
Approx. Location



Response: The HCP is described more fully in the Project Description of the EIR (page 60). This description outlines a range of measures that are feasible for inclusion in the HCP. These will be refined with the development of the HCP prior to the implementation of the project.

2-6 Commenter notes that dewatering of the Tri-W site could result in impacts to sensitive species habitats on adjacent properties.

Response: Any dewatering required of the project development will be contained on-site or disposed of in a manner to prevent impacts to adjacent properties and habitats. The site development, because it is in excess of five acres, will be governed by a NPDES permit, which will condition dewatering activities. Project proponent will recommend that the dewatering be done in accordance with this response.

2-7 Commenter notes an error in the reference to the multi species recovery plan mentioned on page 261 of the DEIR.

Response: Correction is noted and appreciated.

2-8 Commenter notes that the DEIR incorrectly states (page 280) that the Morro shoulderband snail has not been documented in the vicinity of the Broderson site.

Response: Comment is noted and appreciated. The Morro shoulderband snail has been found at the Broderson property as evidenced in Figure 6.11-4 on page 264. However, evidence of snail occupation has not been found within the area proposed for the leachfields. Jones & Stokes Associates have postulated that the increasing slope as one progresses south is an impediment to snail movement. This was confirmed during a prior visit by Dr. Barry Roth. Nevertheless, the area is certainly of appropriate snail habitat.

2-9 Commenter notes that the DEIR did not provide a breakdown of total acreage of impact by the collection and disposal systems.

Response: The following table sets forth the acreage of impacts by site from the development of the wastewater facility. Until the project design is finalized, it is not possible to more accurately reflect the impact. However, the am116ount estimated is conservative, and will not likely be in excess of the amount that will be impacted when the project design is complete.

Habitat (acres)	Broderson	Tri-W	Total
Coastal Sage Scrub	–	7.5	7.5
Heather Goldenbush Coastal Scrub	4.48	–	4.48
California Sagebrush Black Sage Scrub	0.086	–	0.086
Dune Lupine Scrub	0.3	–	0.3
Annual Grassland	0.072	–	0.072
Windrow	0.21	2.50	2.71
Ruderal Grassland/Veldt Grassland	0.094	2.30	2.394
Coast Live Oak Forest	1.21	–	1.21
Other	0.45	0.40	0.85
Total:	6.90	11.0	17.90

SOUTHERN CALIFORNIA WATER COMPANY
A SUBSIDIARY OF AMERICAN STATES WATER

COASTAL DISTRICT
1140 LOS OLIVOS AVENUE • LOS OSOS, CA 93402 • (805) 528-6157 • FAX (805) 528-6442

January 3, 2001

Mr. David Moran
Crawford Multari and Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, California 93401

Dear Mr. Moran:

Subject: Draft Environmental Impact Report
Los Osos Wastewater Treatment Facility-SCH#9911103

The Southern California Water Company (SCWC) is one of three water purveyors in the community of Los Osos. SCWC operates under the business name of California Cities Water Company and provides water service to customers residing in the southern portion of the community.

Thank you for the opportunity to be able to provide comments on this project. This project is comprehensive in nature and will have significant impact on our operations. For your consideration, the following comments were developed:

1. The proposed location of the Broderson Leach Field is within 500 feet of a viable drinking water supply well. This well is owned by SCWC and is known as the Highland Well. Although the nitrate concentration in the water produced by the Highland Well is slightly above the drinking water standard, all other water quality parameters are within acceptable ranges. SCWC specifically elected to keep this well in place and not to abandon it due to the possibility of future use. Currently, the well is offline and is not supplying water to the distribution system. 3-1

2. The EIR states that the tentative effluent discharge requirement for total nitrogen (expressed as nitrogen) will be 7 milligrams per liter for a 30-day average and a daily maximum of 10 mg/l. The Maximum Contaminant Level for potable water is 10 mg/l for nitrate measured as nitrogen (or 45 mg/l nitrate). It is SCWC's position that this tentative effluent standard is too high. The stated purpose of constructing the proposed wastewater collection and treatment facility is to protect the groundwater basin from ongoing nitrate contamination through eliminating the majority of the individual septic systems, thus reducing nitrate levels. A more protective standard is merited considering that the treated wastewater effluent will be used to recharge the upper zone of the aquifer and water from this zone will eventually be harvested to supplement drinking water supplies. 3-2

It is well known that common soil bacteria are capable of decomposing organic nitrogenous compounds to produce ammonia by-products that are readily oxidized to nitrite and subsequently to nitrate. The EIR indicates that upon discharge to the leach fields, the treated wastewater will have a travel time ranging from 18 months to 8 years before encountering a harvesting well. This travel time may allow a nearly 100% conversion of nitrogenous compounds to nitrate. A 7-mg/l nitrate, expressed as nitrogen, concentration corresponds to 70% of the drinking water standard for nitrate. 3-3

Further, SCWC has five drinking water supply wells on the western side of the fault line. The nitrate concentrations in three of these wells are below 25% of the drinking water standard for nitrate (two are near or above the MCL for nitrate). With 950,000 gallons per day of treated wastewater with nitrate concentrations as high as 70% of the drinking water MCL being used to recharge the western portion of the aquifer, the water quality of these wells will be at risk of being degraded. Although three of these wells are completed in the lower zone of the aquifer, there is currently no evidence to indicate that the upper and lower zones are hydraulically isolated under the proposed recharge conditions. To minimize the risk, consideration should be given to reduce the effluent standard for total nitrogen to 3 mg/l as nitrogen. 3-4

3. The project description presented in the EIR details a highly coordinated management scheme in which wastewater will be collected, treated and used to recharge portions of the groundwater basin. Clearly, the over-all objective of the project is to protect and proactively manage the groundwater basin to allow long-term safe sustainable use. Since there are three water purveyors as well as other extractors in the Los Osos area, an elevated level of communication and cooperation will be required between all the parties. This is particularly true for protecting against seawater intrusion resulting from over-pumping of the aquifer or inadequate recharge of the basin. Accordingly, all the parties should enter into a groundwater management agreement that details the rights and responsibilities of each party. We strongly suggest that such an agreement be executed prior to project implementation and should be included as a "pre-construction" permit requirement. 3-5

4. The project EIR describes the installation of sewer mains in virtually every street in the community of Los Osos. The potential for damaging water service connections, water mains, and other similar infrastructure will be high. Consequently, SCWC would like to see strict controls implemented to minimize the potential for damage and service interruptions. At a minimum, SCWC would like to see the project proponent implement the following controls: 3-6

- Require all of its contractors to locate and protect water service connections, water mains, and similar infrastructure prior to excavation.
- Inform all of its contractors that "stop work" orders will be issued should the contractor fail to implement adequate infrastructure protective measures or use caution near facilities.
- Execute a Board resolution assuming responsibility for all damages and repairs to existing infrastructure caused by its contractors. Most of the existing water distribution piping consists of AC pipe and the service lines are plastic tubing, so determination of exact line locations may be difficult.

5. The project EIR describes the installation and use of four shallow groundwater wells for harvesting water from the upper zone of the aquifer on the west side of the earthquake fault. These wells are needed to extract 400,000 gallons per day in order to prevent groundwater from surfacing in the lower elevation areas near the bay in western Los Osos. Upon treatment and/or blending, the harvested water will be used to supplement the water supply. 3-7

   Prior to project implementation, SCWC highly recommends that the project proponents determine the level of required treatment for the harvested water. A clear understanding and commitment between the regulatory agencies, the Los Osos CSD and SCWC needs to be made with regards to the required methods of treatment.

Thank you for your consideration of our comments. Should you have questions regarding our comments, please call me at 805-528-7231.

Sincerely,

Warren Morgan

Warren Morgan
District Manager
Southern California Water Company

Cc:
Bruce Buel, Los Osos Community Services District General Manager
Kurt Souza, Department of Health Services
Roger Briggs, Regional Water Quality Control Board

Letter 3
Warren Morgan, District Manager
Southern California Water Company
January 3, 2001

3-1 The comment refers to the location of the Highland Well, owned by the Southern California Water Company and which is stated to be within 500 feet of the Broderson disposal leach field. The comment states that the well has not been abandoned but is currently not supplying water to the distribution system.

Response: Correspondences with the Southern California Water Company subsequent to distribution of the Draft EIR indicate they intend to abandon the well in question.

3-2 The comment states that the tentative effluent discharge requirement for total nitrogen (7 milligrams per liter) is not restrictive enough and that a more restrictive standard is merited considering that treated effluent will be used to recharge the upper aquifer which in turn will be harvested to supplement drinking water supplies.

Response: The tentative discharge requirements are those recommended by the Regional Water Quality Control Board who is the governing agency with regard to the setting of water quality and discharge standards.

3-3 The comment refers to the five drinking water wells located western side of Strand B of the Los Osos fault and the potential for treated reintroduced wastewater to contaminate these wells.

Response: The Project Report prepared by Montgomery Watson Engineers and incorporated herein by reference and available at the Los Osos CSD offices lists the distances and states the minimum travel times to the nearest municipal wells. In all cases the distances are at least 500 feet and the travel times are 20 months in the closest instance and 8 years in all other instances. Cal Cities Highland Ave well will be relocated to conform with these criteria.

3-4 The comment acknowledges the need for a coordinated implementation program to successfully operate the proposed wastewater collection, treatment and disposal system. The comment further recommends that the three water purveyors enter into a groundwater management agreement prior to construction of the system.

Response: The comment is noted and will be forwarded to the Los Osos CSD Board of Directors for their consideration.

3-5 The comment recommends a number of controls to be implemented by the Los Osos CSD in the construction of the project to help minimize the potential for damage to existing infrastructure and to avoid service interruptions.

Response: The comments are noted and will be forwarded to the Los Osos CSD Board of Directors for their consideration.

3-6 The comment recommends the Los Osos CSD determine the level of treatment required for the water harvested from the collection wells located downslope from the Broderson leach fields.

Response: Harvested water to be re-introduced into the drinking water system will be treated (blended and/or additional de-nitrification) to satisfy the standards for the Regional Water Quality Control Board and the California Department Of Health Services.

3-7 The comment recommends that the Los Osos CSD determine the level of required treatment necessary for the recovered water in order to be re-introduced into the drinking water supply.

Response: Harvested water to be re-introduced into the drinking water system will be treated (blended and/or additional de-nitrification) to satisfy the standards for the Regional Water Quality Control Board and the California Department Of Health Services.

Melissa J. Mooney
549 Highland Drive
Los Osos California 93402

January 5, 2000

Mr. Bruce Buel
General Manager
Los Osos Community Services District
2122 Ninth Street
Los Osos, CA 93402

Re: Los Osos Wastewater Facilities Draft EIR

Dear Bruce -

Thank you for the opportunity to comment on the Draft EIR for the Los Osos Wastewater Treatment Facility. I fully support the concept of sewering the community of Los Osos and recognize that the wastewater facility project will greatly benefit the community and the Morro Bay estuary in the long term. I also congratulate you, the elected CSD representatives, and your entire team on getting a Draft EIR out so quickly.

However, I do have the following general concerns, comments and observations regarding the project as described in the Draft EIR:

1. Some components of the project description are not detailed enough to understand all the possible adverse effects of the proposed project. Specifically, the location of the leach fields at the Broderson disposal site does not appear to be indicated accurately. Figures 6.11-4 and 6.11-3 contradict each other with regard to the location of those facilities. Please clarify the project description and these figures to show the specific location of the leach field facilities. Please indicate whether this area and any necessary access roads will be lighted or fenced off.

2. Surface runoff and drainage issues in the vicinity of the Broderson disposal site are not thoroughly addressed or mitigated. Please provide more detail regarding why the concept of injection or gravity wells has been discarded. Like much of the rest of Los Osos, the area south of Highland Drive is prone to flooding and erosion, and runoff during rainstorms regularly flows northerly over the proposed leach field site into the back yards of residences along Highland Drive. I have personally observed incidences of this, and I have anecdotal evidence that at least one home in this area experienced flooding during the winter of 1992 and 1993. It appears that surface runoff finds its way to the many trails in the area, flows along these trails across the proposed leach field site, deepens them, and then drops the sediment load out further downslope. This runoff pattern has existed in the Broderson area for years. I'm sure the SLO County Engineering Department has records for the many times they have had to clean up the deposited sand at the intersections along Broderson, Alexander, and Ravenna. The design of the site must take this situation into account and provide temporary (construction) and long-term (operations) mitigation in the form of site design, and erosion and sediment control, to ensure that there is no treated water flowing into the yards of the

residences on Highland Drive. A drainage analysis and erosion control plan must be in the Final EIR.

The benchlands south of Highland are ecologically valuable and extremely sensitive to disturbance. Veldt grass (*Ehrarta calycina*), an invasive species, is known to take over areas where soil has been disturbed, and once it becomes established, it crowds out native vegetation. The Broderson disposal area is upwind of other Los Osos areas where invasive species are prevalent. If the disposal area is constantly being disturbed to maintain the leach lines, there is a very high likelihood that the wind-blown seed of exotic species like veldt grass and/or pampas grass will be dispersed onto the site. This puts the adjacent excellent quality coastal sage and maritime chaparral communities at risk also. I hope the CSD will instigate a pro-active exotic species *prevention* and control program to avoid this. 4-3

Regarding revegetation in the disposal areas, it seems that the goals of maintaining the leachfields adequately may be in direct conflict with the goals of revegetation and restoration at the site. This will be a challenge. Impact Bio-21 suggests that the vegetation over the leachfield will likely change in composition. If this is the case, I suggest looking into the feasibility of using water-dependent species such as willows (*Salix* spp.), *Myrica californica*, and *Juncus* sp. in the revegetation effort. This area should not end up looking like other Los Osos fenced-in retention basins that are havens for pampas grass! 4-4

Some comparison of the amount of effluent now being proposed to be disposed of in this area with the amount that was proposed with the County's retention ponds might be in order. How does the current proposal compare with the 800,000 gallons per day that were proposed a few years ago?

3. Biological impacts are not quantified, and it is not possible to ascertain how much of what community is being impacted. Please specify the specific acreage of each vegetation or habitat type being affected by construction and/or operation of the facility, and indicate which component of the project is causing the impact. For example, impact BIO-4 indicates that there will be a loss of coastal scrub that provides habitat for the Morro shoulderband snail. The EIR must specify how much and what component of the project has the adverse effect. 4-5

4. There appears to be an increased risk for liquefaction posed to the community, especially the Redfield Woods neighborhood, where the most significant mounding of groundwater will occur due to the subsurface disposal area. This impact is identified as Class II (GEO-13), and two mitigations are proposed: GEO-8 (rotate rehabilitation sites) and GEO-9 (designate access routes). How do these mitigate the liquefaction impacts and reduce impacts to less than significant? 4-6

5. I suggest adding mitigation for an on-site monitor during the construction period to coordinate any archaeological and biological monitoring that must be conducted. 4-7

More specific comments follow.

Section 5, page 102 - There does not appear to be an alternative subsurface disposal site analysis. 4-7A

Geology

GEO-11 - disposal site erosion - this site should be treated just as the treatment plant site is - a detailed erosion control plan needs to be prepared. Such plan should provide for silt fencing. 4-8

water bars, and/or other measures to reduce off-site effects both during construction and during operations.

Mitigation WR-3 - Revegetation - the plan must include performance criteria, removal of exotics and monitoring for at least five years. 4-9

Biology

BIO -12 - What vegetation types will experience loss or adverse effects? With regard to mitigation 5, what does minimizing disturbance beyond the area of development mean? Why is there disturbance beyond the area of development? 4-10

BIO-7 - I have observed nesting Red-shouldered hawks in the eucalyptus grove south of Highland for the past four to five years, and a nest has been present for 8-10 years. I have rarely observed Monarch butterflies in this area. I concur with seasonal restrictions on construction and 40-50 ft. buffers from any raptor nests are recommended. 4-11

Impacts BIO-13 through 19 appear to be repeated. 4-12

Mitigation Bio-13 is the same as Bio-3, except that it recommends marking nesting habitat and avoiding it. Mitigation Bio-3 suggests a 500-ft. no disturbance buffer. This needs to be reconciled. 4-13

Again, thanks for the opportunity to comment on the Draft EIR. I have attached additional information on special status species on the disposal site, and a photograph showing flooding in the Highland area.

Sincerely,

Melissa J. Mooney
Los Osos, CA

LosOsCSD

Photo taken early 1990's -
View to North of residences
on S. side of Highland Drive,
just West of Broderson
Approximately 200 feet from
property line -

M. Morey
Jan. 5 2000

E. altissimum

D-10

Attachment to Mooney comment letter

An Assessment of the Impact of the South Bay Wastewater Treatment Facility's Groundwater Recharge Basins on the Vegetation of Site 6, Los Osos, California

A Botanical Survey Prepared for the Morro Group

by

V. L. Holland, Ph.D., Plant Ecologist
David Keil, Ph.D., Plant Taxonomist

INTRODUCTION

4-15

The Proposed Disposal Site 6 of the CSA 9 Wastewater Treatment Facility is a rectangular parcel oriented along an east-west axis and measuring about 2500 by 4500 feet (about 258 acres). It is bordered to the west by the Cabrillo Estates subdivision and an adjacent horse ranch and to the east by the northwestern portion of Bayview Heights Drive. The northern boundary is the row of houses that borders Highland Drive. The southern boundary is located on an undeveloped, chaparral-covered hillside. The site is located on a north-facing slope with a grade ranging from about three to eight percent. The soil is mostly derived from a Pleistocene dune sheet and is classified as Baywood Fine Sand. The soil is underlain at varying depths by sediments of the Paso Robles formation which outcrop in a few locations near the upper elevation boundary of the site. There are no permanent drainages on the site although several gullies have been cut through the soils, particularly in areas that have been disturbed by human activities. These are subject to periodic flash floods during intense storms. As a result of these flash floods, there are areas of serious sand erosion which have resulted in deep gullies that have been cut into the sand sheet.

The natural vegetation of the site consists, for the most part, of an intergrading assemblage of three plant communities: coastal dune scrub, chaparral and coastal live oak woodland. In addition, two small groves of bishop pines and a few isolated individual pine trees occur on the site. The boundaries of the plant communities are not sharply defined and there is considerable overlap in species composition. In addition to the natural vegetation, there is a plantation of eucalyptus and Monterey cypress trees in the northwestern portion of the site and assorted weedy plants have invaded disturbed sites, especially along trails and near the homes bordering the northern edge of the site. Some of the homeowners along Highland Drive have also planted ornamentals immediately behind their lots. A few ornamentals have escaped from cultivation into the natural vegetation. Most of these are succulents that apparently have become established from clippings dumped into the brush.

COASTAL DUNE SCRUB

Coastal dune scrub occupies the lower (northern) 1/2 to 1/3 of Site 6 (see vegetation map). The vegetation is dominated by a mixture of herbaceous species and low-growing to moderate sized shrubs mostly one to eight feet tall. Much of the community is relatively easy to traverse because the shrubs are comparatively soft-stemmed and there are open areas among the shrubs. These open areas have a mixture of herbaceous plants and exposed soil. The soil surface in much of the dune scrub vegetation is not just bare sand. Much of the soil is covered by a thin crust of

the southern end of Morro Bay. It is known in the South Bay area from near the southern end of Shark Inlet to the vicinity of Hazard Canyon. Individuals have also been located within the boundaries of Site 6. It is a plant of open, dune scrub vegetation and in the Pecho Study Sites of the Morro Bay Kangaroo Rat Recovery Project it has grown vigorously in areas cleared by fire. It is difficult to determine the overall impact of the project on an annual plant such as the Monterey spineflower. This species must regenerate from seeds buried in the soil each spring. It potentially could invade areas border areas disturbed by construction of the Groundwater Recharge Basins (if seeds are available in the disturbed soil). However, construction activity might destroy a portion of the soil's seed bank of this species. The Monterey spineflower is listed by the C.N.P.S. as both rare and endangered , and is included in the C.D.F.G. list of Special Plants. It is a candidate for listing as rare and endangered by the U.S.F.W.S. (1980, 1983).

Erigeron foliosus var. blochmaniae (Blochman's leafy daisy) is a perennial herb that occurs from the South Bay area to northern Santa Barbara county on coastal dunes and sandstone hills. In the South Bay area it ranges from the Morro Bay Sand Spit and the hills near the Los Osos Junior High School to the chaparral-covered hills above Los Osos. Although it is locally common in a few areas, numerous populations have been extirpated by development. Some of the Blochman's leafy daisies are located in areas being considered for construction of the Groundwater Recharge Basins and would be destroyed by the construction activities. If the Groundwater Recharge Basins are constructed in the northwestern portion of Site 6, numerous individuals of this species will be destroyed. The incremental loss of these plants would be a negative impact of the project. This plant is not at present considered to be in danger of extinction, but the C.N.P.S. has placed this plant on its Watch List (Plants of Limited Distribution). It is included in the C.D.F.G. list of Special Plants.

Erigeron sanctarum (Saint's daisy) is known from northwestern San Luis Obispo County (in the vicinity of Arroyo de la Cruz) to Santa Barbara County where it occurs both on the mainland and on Santa Rosa Island. In the South Bay area it has been found only on a ridgetop about 1/4 mile west of the junction of Calle Cordoniz and Bayview Heights Drive along a trail through the chaparral. Only a few individuals were observed in flower at this site (non-flowering plants are easily overlooked). Its occurrence within the overall boundaries of Site 6 has not been documented, but its presence just outside the site boundary and the presence of similar habitats within the site support its inclusion in the discussion. We do not predict any direct impact from the proposed South Bay Wastewater Treatment Facility on this species. Saint's Daisy is not at present in danger of extinction, but the C.N.P.S. has placed this plant on its Watch List (Plants of Limited Distribution). It is included in the C.D.F.G. list of Special Plants.

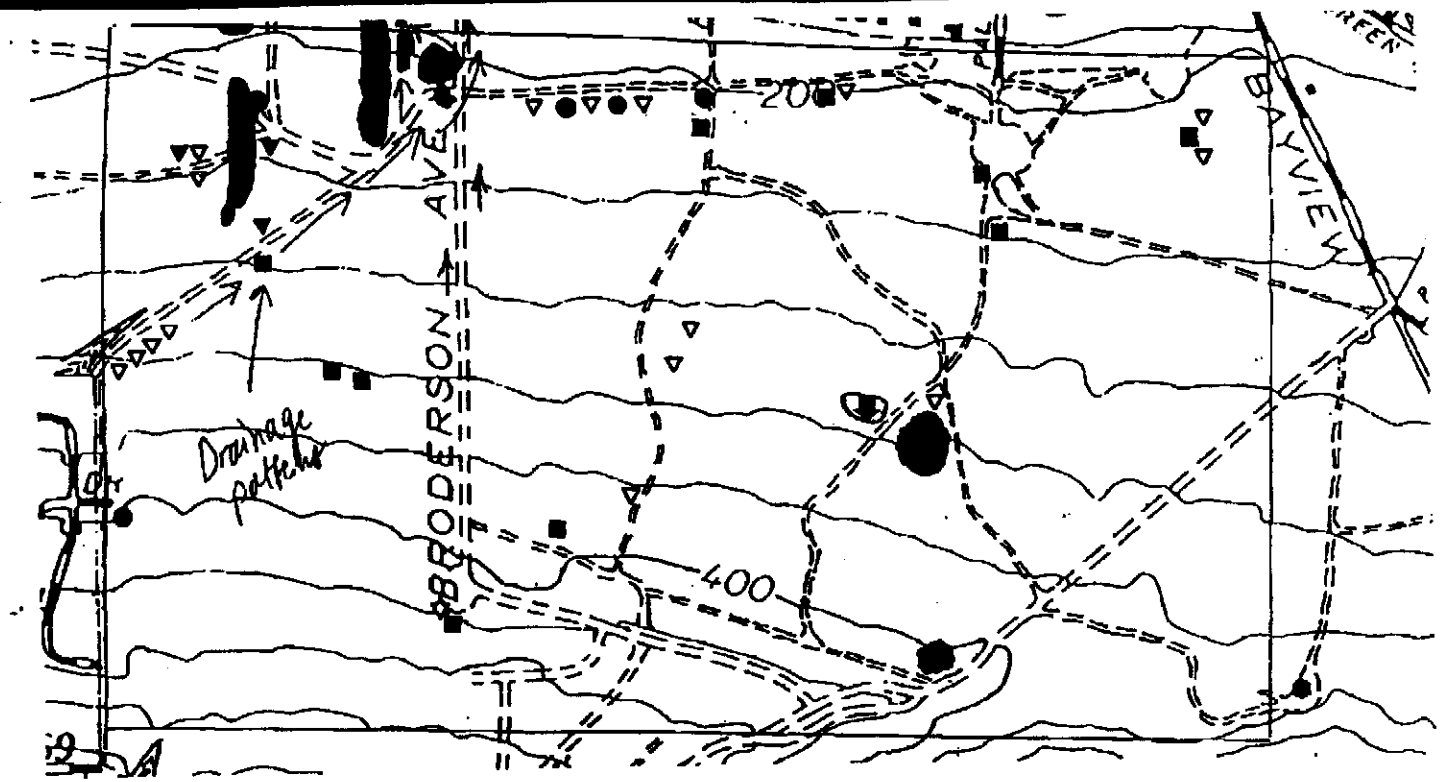
Eriodictyon altissimum (Indian Knob mountain balm) is a slender shrub that is endemic to a very small portion of San Luis Obispo County. It is known to occur only in two areas of the San Luis Range. One population occurs on Indian Knob south of San Luis Obispo. Three very small, isolated populations occur in the hills just south of Los Osos. The South Bay populations occur (1) west of Calle Cordoniz, south of its junction with Bayview Heights Drive, (2) south of Highland Drive between the extensions of Ravenna Avenue and Palisades Avenue, approximately 100 yards west of the extension of Palisades Avenue at about the 250 foot elevation contour, and (3) at a site north of Hazard Canyon below the main crest of the ridge, 1 mile directly south of Cabrillo Estates. An isolated individual discovered by Dr. Dirk Walters in the early 1970's south of the end of Ravenna Avenue was not relocated during the field survey.

Of the documented populations of this species, only South Bay number 2 is located within Site 6. South Bay number 1 is about 300 yards to the east of the site boundary.

Little is known about the ecology of this species. Some species of Eriodictyon, including the closely related E. capitatum, are apparently successional following fires. The lack of fire in recent years in the area occupied by this species may be related to the small present-day populations. These populations consist of only a few individuals and could easily be destroyed by human activity. South Bay number 2 consists of about 25 individuals ranging in size from a few inches to about eight feet tall. Continued development in the hills above Los Osos would threaten these plants with extirpation. Of the rare plant species present in Site 6, the Indian Knob mountain balm is the closest to extinction. Destruction of any of the existing populations would have a serious negative impact on this species. We strongly recommend that the groundwater recharge basins should be situated well away from the area occupied by this species. No construction activity should be allowed in the vicinity of the existing populations of E. altissimum. Eriodictyon altissimum is listed by the C.N.P.S. as both rare and endangered , and has been designated by the C.D.F.G. (1982) as endangered. It is a candidate for listing as rare and endangered by the U.S.F.W.S. (1980, 1983).

Erysimum suffrutescens var. lompocense (San Luis Obispo wallflower) is a low subshrub that occurs on coastal sand dunes from the South Bay area to northern Santa Barbara County. In the South Bay area it is an occasional to locally common component of coastal dune scrub communities. Small, localized populations are scattered throughout the South Bay area, many of them on developable lots. Numerous individuals of this low shrub have been eliminated by development in the South Bay area. Because most the sites in the South Bay area where this species occur are zoned for residential development this species is becoming rarer. Some of the San Luis Obispo wallflowers are located within Site 6, particularly in the open scrub in the lower half of the site. Depending on the precise locality chosen for installation of the basins, some of these plants might be destroyed by the construction activities. If the Groundwater Recharge Basins are constructed in the northwestern portion of Site 6, individuals of this species will be destroyed. The incremental loss of these plants would be a negative impact of the project. The San Luis Obispo Wallflower is not considered at present to be in danger of extinction, but the C.N.P.S. has placed this species on its Watch List (Plants of Limited Distribution). It is included in the C.D.F.G. list of Special Plants.

Monardella undulata var. undulata (curly leafed monardella) is an annual plant that occurs on coastal sand dunes from Sonoma County to San Luis Obispo County where it reaches its southernmost station in the South Bay area. The closest populations to the north are in Monterey County. In the South Bay area it occurs as an occasional to locally common component of coastal dune scrub communities. Numerous individuals of this annual herb have been eliminated by development in the South Bay area. Interestingly, minor disturbance of dune scrub communities sometimes promotes the growth of this species by creating open spots in the vegetation. Because most of the sites in the South Bay area where this species occur are zoned for residential development this species is becoming rarer. Some individuals of the curly leafed monardella are located in areas proposed for construction of the Groundwater Recharge Basins and might be destroyed by the construction activities. Construction activities might temporarily open up habitats suitable for this species to invade (if seeds are available in the affected soil). The curly-leafed monardella is not considered at present to be in danger of extinction, but the C.N.P.S. has placed this species on its Watch List (Plants of Limited Distribution). It is included in the C.D.F.G. list of special plants.



DISTRIBUTION OF RARE AND ENDANGERED PLANT SPECIES (EXCEPT MORRO MANZANITA*) ON THE PROPOSED EFFLUENT DISPOSAL SITE 6 OF THE CSA 9 WASTEWATER TREATMENT FACILITY

● Chorizanthe pungens	Monterey spineflower
▽ Erigeron foliosus var. blochmaniae	Blochman's leafy daisy
● Erigeron sanctarum	Saint's daisy
▼ Eriodictyon altissimum	Indian Knob Mountain Balm
▼ Erysimum suffrutescens var. lompocense	San Luis Obispo Wallflower
✡ Monardella undulata var. undulata	Curly-leafed Monardella
■ Prunus fasciculata var. punctata	Dune Almond

*See vegetation map of Site 6 for distribution of Arctostaphylos morroensis (Morro Manzanita).

Letter 4
Melissa J. Mooney
549 Highland Drive, Los Osos California
January 5, 2001

4-1 The comment questions the location of the leach fields on the Broderson property as it not clearly illustrated in the Draft EIR. The comment also asks whether any access roads will be fenced or lighted.

Response: Please refer to response No. 2-3 which provides an aerial photograph showing the location of the leach fields in relation to existing vegetation and the residences along Highland Drive. Access to the leach fields will not be lighted or fenced.

4-2 The comment raises concerns regarding the drainage associated with the Broderson disposal site and relates anecdotal information regarding past drainage patterns and flooding problems. The comment asks for construction-related and operational mitigation for drainage, erosion and sediment control to protect downslope properties.

Response: Mitigation WR-2 requires the Los Osos CSD to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board in conjunction with construction of the Broderson leach field. The permit will identify Best Management Practices to be used for erosion control and drainage which may include, but are not limited to, the following:

- The incorporation of an on-site runoff/sediment collection system which includes energy dissipation, berms, temporary settling basins, and/or a silt separator for the collection and removal of hazardous materials and sediments.

- Re-vegetating portions of the site as soon as reasonable following grading and excavation.

In addition, Mitigation Measure GEO-2 requires implementation of an erosion control plan for the disposal sites which includes, but is not limited to, recompaction of soils; revegetation of disturbed areas; utilization of soil binding; or other methods for reducing short-term and long-term erosion. The Plan shall be reviewed by the County Office of Planning and Building, and shall be included in contractor bid and contract documents.

The potential for treated wastewater to flow into the yards of residences on Highland Drive was investigated in two studies prepared by Cleath and Associates and incorporated as Appendix C of the Draft EIR. The second study, entitled *Hydrogeologic Investigation of the Broderson Site Phase 2 Impacts Assessment*, November, 2000, presents hydrogeologic modeling data compiled to determine the best way to introduce treated wastewater to the site in a manner that 1) helps cleanse the upper aquifer and 2) avoids surfacing downslope. Based on the analysis of sub-surface geology and the amount of wastewater to be disposed at the site, the study computes horizontal sub-surface travel times for treated wastewater. The study concludes that a disposal leach field located upslope on the Broderson site (see aerial photograph with response to comment 2-3) covering an area in excess of 7 acres and with a maximum disposal rate of 800,000 gallons per day will not result in the daylighting of treated wastewater along Highland Drive or in the Redfield Woods neighborhood in general.

Over time (about 6 years), however, treated wastewater will migrate downslope toward the Bay where groundwater levels are shallower in comparison to areas to the south. To avoid surfacing

of treated wastewater in this area, a series of five harvesting wells are proposed to pump down the groundwater to avoid surfacing. Once the groundwater is pumped down, it would take about two-three weeks for the treated wastewater to surface if all five wells were suddenly inoperative.

Disposal of treated wastewater by deep wells was found to be infeasible, as documented by Cleath and Associates in the Hydrogeologic Investigation of the Broderson Site, Phase I, June, 2000.

4-3 The comment alerts the CSD to the potential for the expansion of exotic plant species on the disturbed portions of the Broderson site following installation of the leach fields and recommends a "pro active" program for the control of exotic species.

Response: As with all mitigation measures, the re-vegetation plan required by Mitigation Measure WR-3 will be subject to ongoing monitoring to ensure ongoing compliance with its purpose and intent, which is, namely, to ensure the disturbed area is returned to as natural state as possible as soon as possible.

4-4 The comment recommends the use of water-dependent plant species such as willows in the re-vegetation plan for the Broderson leach fields.

Response: The comment is noted and will be forwarded to the CSD Board for their consideration.

4-5 The comment states that biological impacts are not quantified, making it impossible to ascertain how much of a given plant community is impacted.

Response: Quantities of the different habitat types disturbed as a result of the project are summarized in Response 2-9.

4-6 The comment refers to an apparent increased risk for liquefaction in the community, especially in the Redfield Woods area.

Response: An analysis of potential liquefaction impacts associated with the disposal system following the cessation of the use of individual septic leach fields was prepared by CFS Geotechnical Consultants, Inc. and incorporated as Appendix B in the Draft EIR. The conclusions of the study are summarized on Table 6.1-1 of the Draft EIR. The study concludes that liquefaction potential on the various sites where sub-surface leach fields are proposed would be no different than at present. Nonetheless, Mitigation Measure GEO-6 requires the design of system components to incorporate recommendations contained in the California Division of Mines and Geology publication "Guidelines for Evaluating and Mitigating Seismic Hazards in California".

The purpose of rotating the renovation of the leach fields is 1) to ensure the leach fields are all operating at peak efficiency and 2) to ensure that there is sufficient capacity in the remaining fields to accommodate the treated wastewater.

4-7 The comment recommends that an on-site monitor be employed during construction to coordinate archaeological and biological monitoring.

Response: On-site monitors for archaeology and biology will be employed to monitor construction activities.

4-7A Comment states that there does not appear to be an analysis of subsurface disposal site alternatives.

Response: Section 5 provides a screening analysis used to determine the range of feasible alternatives to be considered for further analysis on the Draft EIR. All of the alternative disposal sites were considered. Page 102 of the Draft provides a screening analysis for bio-solids recycling sites. Subsurface disposal was not considered.

4-8 The comment recommends treating the disposal sites in the same fashion as the treatment plant site with regard to the mitigation of erosion.

Response: Mitigation Measures GEO-1, GEO-2, WR-2 and WR-3 address erosion control during construction of the disposal leach fields.

4-9 The comment recommends the re-vegetation plan required by Mitigation Measure WR-3 include performance criteria, the removal of exotic plant species and monitoring for at least five years.

Response: The comment is noted and will be forwarded to the CSD Board for their consideration.

4-10 The comment questions what vegetation types will experience loss or adverse effects, and the meaning of "minimizing disturbance beyond the area of development".

Response: Response 2-9 provides a summary table of the acres of habitat disturbed by the project.

With regard to minimizing disturbance outside the development area, Mitigation BIO-5 anticipates the fact that construction activities sometimes result in the disturbance of areas outside the construction zone. For example, providing access to and from a site often requires the movement of equipment and materials across adjacent sites. This measure recommends confining the areas of disturbance to the construction site as much as possible to minimize impacts to surrounding sensitive biological resources.

4-11 The comment relates observation of nesting red-shouldered hawks in the eucalyptus trees south of Highland (on the Broderson disposal site). The comment concurs with the restrictions on construction timing recommended by Mitigation Measure BIO-13.

Response: The comments are noted.

4-12 The comment states that impacts BIO-13 through 19 appear to be repeated.

Response: These impacts, while identical to those listed for the treatment plant site, are particular to the construction at the disposal sites.

4-13 The comment states that Mitigation BIO-13 is the same as BIO-3.

Response: The comment is noted.

4-14 This is additional provided in support of the previous comments.

Response: The information is generally consistent with the survey prepared for the Broderson disposal site and as contained in the Draft EIR.

SAN LUIS OBISPO COUNTY ENGINEERING DEPARTMENT

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SPECIAL DISTRICTS

January 5, 2001

Mr. David Moran
Crawford Multari Clark & Mohr
641 Higuera Street, Suite 302
San Luis Obispo, CA 93401

Subject: Los Osos Community Services District Wastewater Facility Draft Environmental Impact Report

Dear Mr. Moran:

The following items raise possible concerns and potential impacts in reference to responsibilities and facilities associated with the San Luis Obispo County Engineering Department and San Luis Obispo County Flood Control and Water Conservation District:

1. After treatment disposal of any remaining bio-solids requires detailed discussion of product quality, makeup, and quantity. Analysis of disposal location, transportation method, and transport routing should be included. Odor and vector impacts should be included at both the treatment location and disposal location. 5-1

2. Sludge handling vehicle traffic movements approaching and exiting the plant site, and internal traffic turning movements within the plant boundaries should be described and illustrated to demonstrate available and adequate maneuvering space. 5-2

3. Collection system construction within roadways, trench repair, traffic control, detours, encroachment permit condition and mitigation requirements should be analyzed and referenced where applicable. Regulatory permitting requirements should be listed and analyzed for possible project impacts (such as construction staging site(s) NPDES Phase II permitting requirements from the Regional Water Quality Control Board). All work within designated County roadways will require an encroachment permit approved by the County Engineer. 5-3

4. Road improvement design standards, right-of-way alignments, and ancillary infrastructure requires County approval prior to construction if the proposed 5-4

road system is to be presented for inclusion in the County's maintained road system. Road design requires complete drainage system review due to known flooding problems in the project area. All road construction activity should be included in the project description.

5. Treatment site development will require an NPDES permit for grading and site disturbance. Export of grading material requires transport routing and location disclosure. Disposal area may require a separate NPDES permit. 5-5

6. The proposed treatment site accepts large volumes of natural drainage flows without any flow exiting the site. No natural drainage course exits the site to the Bay. Site development may alter existing natural groundwater replenishment and flow to the Sweet Springs area. Directing any storm flows to the Bay will require NPDES II permitting. Treatment of storm water may be required and analysis should be included covering possible treatment needed, treatment method and location, and maintenance/disposal method of collected contaminants. DEIR discussion on this issue is incomplete. 5-6

7. Any potential impacts stemming from maintenance activities associated with the operation of the disposal facilities within road right of ways should be included and reviewed with emphasis on traffic routing and local, residential access. 5-7

8. The use of offered/dedicated road right of way for purposes other than specifically described may require further legal review. The project may have to "acquire" the right to dispose of treated effluent from the fronting/adjacent fee holders. This matter may also affect documentation associated with the project's assessment district and its formation. No discussion of this issue is included within the DEIR. 5-8

9. The treatment site is located adjacent to a known earthquake fault. Potential impacts caused by treatment plant structural failure should be included. Damage to existing and proposed public infrastructure (roads, drainage, utilities, etc.), and un-contained raw sewage flow to the Bay requires discussion. Emergency storage volumes and an emergency operations plan are not included in the project description. Both should be included and fully analyzed in terms of completeness and ability to handle any potential emergency situation. 5-9

10. The description of the shallow ground water harvesting portion of the project lacks sufficient detail to review and therefore comment. Based on the information provided, possible impacts to existing roads may occur. Additional detail and illustration of the proposed system is needed. 5-10

11. Project cost estimates, long term financing options, and financial impacts on the community have always been a major part of providing wastewater

facilities to the community of Los Osos. Although not usually a part of an environmental review, it has been demonstrated that the community has a particular interest in this issue. Overall project costs, project financing, and individual property owner financial impacts should be included in any review of project impacts. Anticipated trench repair conditions and specifications for work within County roads should be included for potential cost impacts. 5-11

12. Set back requirements from private property and public right-of-way requires analysis and review. The proposed project description shows treatment facilities immediately adjacent to these areas. Original community standards for such a use would suggest a minimum set back of 200 feet. Potential impacts of lesser set back requires review. 5-12

13. Treatment site drainage is not detailed. Drainage facilities must include a design capable of handling a 50 year (2% storm) design Q in a fully retained facility, and have the ability to pass a 100 year (1% storm) design Q without damage. No known outflow exists from the proposed site. Storm drainage infrastructure requires description and analysis. 5-13

14. The treatment site and disposal areas require site development description in terms of fronting roadways, driveways/access locations, interior drainage infrastructure and analysis of potential offsite drainage impacts. There is insufficient detail to make specific comments on any potential impact. 5-14

15. The site location for the treatment facility should be reviewed with respect to traffic movements. The amount of traffic assigned to septage handling and septic tank maintenance appears to be too low. Regional traffic from septage handlers does not appear to have been included. Location of what can best be described as a municipal / industrial type complex and associated traffic issues does not appear to be compatible with adjacent residential and recreational uses. 5-15

16. With specific reference to the "Collection System" - any construction activity associated with any ancillary facility such as valve boxes, manholes, junction boxes, pressure lines, blowoffs, utility connections, meter poles, emergency generator facilities or similar infrastructure located within the public right-of-way shall require an encroachment permit as conditioned and authorized by the County Engineer. The permit's condition of approval shall include all conditions and mitigation requirements as certified in the final EIR, and may include additional requirements as deemed necessary by the County Road Commissioner. Said permit also requires a financial surety to be demonstrated prior to its issuance for the protection of public property. Additional detail is necessary to be able to comment on these potential impacts, the description as presented is incomplete. 5-16

Any impacts associated with public roadway impacts, area wide drainage issues, groundwater concerns, grading and erosion control measures, or water quality changes is of concern to the County Engineering Department and Flood Control District. The Department and the District has a wealth of information and history concerning the Los

Osos area and can make this information available to your efforts if requested. If there are any questions or comments on the above information, please contact me at 805-781-4469. Thank you for the opportunity to review and comment on the Draft EIR. We look forward to its certification.

Sincerely,

LOUIS G. GIBSON
Special Projects Engineer

File: Districts/LOCSD

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Letter 5
Louis G. Gibson, Special Projects Engineer
San Luis Obispo County Engineering Department
January 5, 2001

5-1 The comment states that a discussion and analysis of the composition and disposal of after-treatment biosolids is needed.

Response: The analysis of biosolids operational impacts is provided on page 232 of Chapter 6.9 of the Draft EIR. The hybrid extended aeration plant is expected to produce about 1,640 pounds of brown sludge (bio-solids) would be produced by the wastewater treatment plant per day. Once treated to satisfy federal and state requirements, treated bio-solids would be removed from the Wastewater Treatment facility about three times per week and hauled by truck to a Class I or Class II landfill. To be disposed of in a landfill, bio-solids must meet the pollutant concentrations specified by Title 40 Section 503.23 of the Code of Federal Regulations, which also prescribes landfill management practices to be followed for bio-solids handling. The bio-solids would be classified as Class B and be fully oxidized and stable. The moisture content would be approximately 25%.

5-2 The comment asks that sludge handling vehicle traffic movements approaching and exiting the plant and internal traffic movements be illustrated to demonstrate adequate maneuvering space.

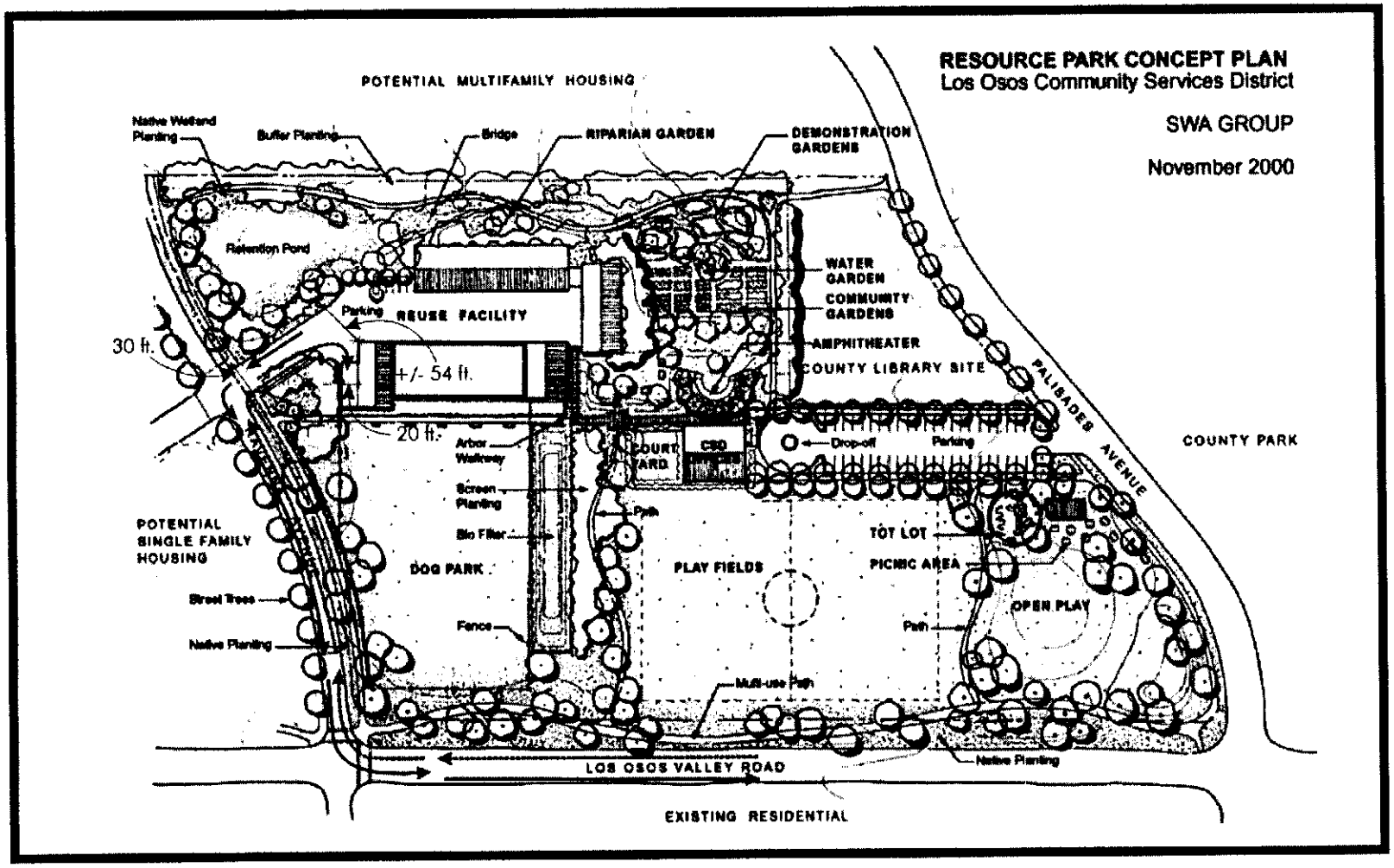
Response: Final design plans for the treatment plant site and biosolids handling facilities have not been prepared. However, Figure 3-8 of the Draft EIR provides a conceptual illustration of how the site could be developed with the treatment plant and play fields. The attached copy of Figure 3-8 shows the expected circulation route for bio-solids handling transport (trucks) and the approximate dimensions of the biosolids facility and parking/turning area. We would expect biosolids to be hauled three times per week by a single truck that would approach the site from the east along Los Osos Valley Road, make a right turn on the northerly extension of Ravenna and enter the site. The biosolids handling facility is entirely enclosed on the west end of the Reuse Facility. Trucks would pull completely inside the building where biosolids would be loaded. They would then exit the site and re-trace their route along Ravenna and Los Osos Valley Road.

5-3 The comment states that collection system construction activities within roadways should be analyzed and referenced where applicable, and that the regulatory requirements for construction should be listed and analyzed for possible project impacts.

Response: Construction of the collection system will be preceded by preparation of a Construction Mitigation Plan as required by Mitigation No. TR-1 which will address, among other things, the location of equipment and trenches to be used; sequencing/phasing of installation; the location of materials and equipment staging areas; and proposed detour routes. The plan shall also provide for adequate emergency access, and routing of construction-related vehicles to minimize impacts to sensitive land uses. The plan shall also provide for the scheduling of construction related traffic so that it does not create safety hazards to school children and other pedestrians.

Regulatory permits required for the project are discussed in general in the Draft EIR in Chapter I, page 9 and more specifically under each topical discussion provided in Chapter 6.

The comment regarding the requirement for an encroachment permit for any work within the County rights-of-way is noted.



LOS OSOS COMMUNITY SERVICES DISTRICT
WASTEWATER FACILITIES PROJECT

Figure 3-8
Conceptual Treatment Plant Site Plan

5-4 The comment states that road improvements design standards, road alignments and other infrastructure designs require approval by the County prior to construction.

Response: Final design plans for the treatment plant and associated off -site improvements, including roadways, have not been prepared and will be subject to a coastal development permit processed through the County. All roads and alignments will be subject to County review and approval and will be constructed to County standards.

5-5 The comment refers to the requirement that an NPDES permit will be required for construction of the treatment plant and that the export of excess grading material (if any) will require transport routing and location disclosure.

Response: The requirement for an NPDES permit for construction activities is acknowledged by Mitigation Measures GEO-1, H-1, and WR-2. The transport route and disposal location for exported graded material will be disclosed as part of the Construction Mitigation Plan required by Mitigation No. TR-1.

5-6 The comment refers to the drainage that arrives on the north side of Los Osos Valley Road that originates in the neighborhoods to the south.

Response: Final design and improvement plans for the treatment plant site have not been prepared and will be prepared to accompany the materials for the Coastal Development Permit which will be processed by San Luis Obispo County. The application materials will include complete grading and drainage plans, as well as a geotechnical investigation of the treatment plant site, among other items.

The runoff originating from the south side of Los Osos Valley Blvd and to the southwest of the Tri W site flows predominately towards a natural ground depression to the west of the Tri W site without crossing the Tri W site. However, the project site is large enough to afford sufficient flexibility for incorporating drainage facilities to accommodate the anticipated flows originating upslope to the south.

Some flow originating from the south side of Los Osos Valley Blvd and to the immediate south of the Tri W site flows onto the Tri W site, as does some flow originating from the immediate east of the Tri W site. These flows, plus runoff from the paved and roofed areas of the Tri W site will be diposed of on site. The site is 11 acres of which four to five acres will be paved or roofed. The remaining area of six to seven acres will be available for percolation of runoff. The conceptual site plan has large play fields, open play areas, ampitheatre and other grassed areas that will be available as percolation areas. The play fields and play areas in particular can be graded in a manner that will retain accumulated runnoff until it percolates through the underlying sand dune strata.

5-7 The comment refers to potential impacts associated with the ongoing maintenance of disposal leach fields and other facilities located within the County rights-of-way.

Response: Construction related traffic impacts are addressed by Mitigation Measures TR-1. However, Mitigation TR-1 will be modified to clarify that it applies to maintenance activities as follows:

Mitigation TR-1: Construction *and Maintenance* Traffic Mitigation Plan. The LOCSD shall prepare a construction *and maintenance* traffic mitigation plan which

identifies the location of equipment and trenches to be used; sequencing/phasing of installation; the location of materials and equipment staging areas; and proposed detour routes. The plan shall also provide for adequate emergency access, and routing of construction-related vehicles to minimize impacts to sensitive land uses. The plan shall also provide for the scheduling of construction *and maintenance* related traffic so that it does not create safety hazards to school children and other pedestrians.

5-8 The comment questions the legality of using dedicated road right-of-way for disposal leach fields.

Response: The project description currently identifies a number of road rights-of-way throughout the community that are intended for the installation of disposal leach fields. In the event road rights-of-way cannot be used, adjoining private properties may be acquired by the CSD for leach fields. However, according to County Counsel and verified by Los Osos CSD Counsel, the use of County rights-of-way for disposal purposes is a legal use.

5-9 The comment states that the treatment plant site is located adjacent to a "known earthquake fault" which may cause structural failure to the plant in the event of a quake. The comment raises questions about the potential damage to existing and proposed public infrastructure and the possibility that un-contained sewage may flow to the Bay.

Response: There are no known earthquake faults adjacent to the treatment plant site. However, as discussed in Section 6.1: Geology, there may be a northerly extension of the Los Osos Fault (Strand B) to the east of the treatment plant site. The presence or exact location of any faults ain this area has never been documents. Geologic work done previously by Pacific Gas and Electric Company and others, and well data from east and west of this area suggests that there may be a strand of the fault tending approximately as shown on Figure 6.1-3 of the Draft EIR. As stated on page 119, if the fault does exist in this area it is not considered active and previous analysis cited a low probably of ground rupture. Impacts associated with seismic hazards are addressed by Mitigation Measures GEO-3, GEO-4, GEO-5 and GEO-7.

With regard to emergency storage in the event of a plant failure or a long-term interruption of power, the treatment plant will be provided with two emergency diesel generators each of which will be capable of powering the plant indefinitely for as long fuel permits. In the unlikely event that both generators are inoperative, a retention basin has been incorporated into the design of the project that provides 18 hours of emergency storage. With regard to the potential damage to wastewater infrastructure caused by a seismic event, these impacts will be mitigated by Measures GEO-1, GEO-6, GEO-7.

5-10 The comment requests additional information regarding the harvesting wells.

Response: As summarized in the table on page 52 of the Draft EIR, the four harvesting well sites (plus one alternate) are located at existing well sites owned and operated by the three water purveyors in Los Osos which are: Cal Cities Water Company, Los Osos CSD, S&T Mutual Water Company. An additional site located within the Broderson right-of-way is not located on an existing well site. Since the harvesting wells will be located at existing well sites, potential impacts to roads from their construction and operation is considered not significant.

5-11 The comment raises concerns about project costs.

Response: The potential economic and financial impacts of a project are not considered environmental impacts for purposes of CEQA compliance, unless financial limitations result in

direct environmental impacts. This may occur, for example, if funding is not available to operate and maintain equipment that minimizes environmental impacts. In this case, although the cost of the project to rate payers is clearly an important community issue, it does not fall within the scope of an environmental impact that would require analysis in the Draft EIR. However, the cost of the project and alternatives will be addressed in the Project Report which will be submitted to the Regional Water Quality Control Board.

5-12 The comment questions the adequacy of the setbacks shown for facilities on the treatment plant conceptual illustration (Figure 3-8).

Response: Final development plans for the treatment plant have not been prepared at the time the Draft EIR was prepared. The conceptual treatment plant site plant provided as Figure 3-8 shows park and open space facilities constructed on the southerly portion of the site, with treatment facility buildings located toward the northwest corner of the site. All buildings on the site observe a property line setback of at least 60 feet from the nearest property line. No specific setback requirements are provided for Public Facilities in Coastal Zone Land Use Ordinance section 23.04. However, if this is considered an industrial use, the required setbacks established by sections 23.04.108, 110, and 112 are:

Front Yard:	25 feet
Side Yard:	13 feet (where adjacent to residential land use, and assuming a 20 foot tall building)
Rear Yard:	13 feet (where adjacent to residential land use, and assuming a 20 foot tall building)

Thus, the conceptual site plant shows consistency with these setback requirements.

5-13 The comment states that treatment site drainage is not detailed and that retention facilities must be capable of handling a 50 year storm and be capable of passing a 100 year storm. The comment notes that there is no known outflow for drainage from the treatment plant site.

Response: Final grading and drainage plans for the treatment plant site have not been prepared. However, the retention basin provided on the conceptual site plant is designed to accommodate a 50 year storm and the passing of a 100 year storm.

5-14 The comment refers to the lack of detail in the project description regarding infrastructure improvements for street frontages, drainage, driveway access and offsite drainage.

Response: Detailed design plans for the treatment plant site have not been prepared and will be submitted as part of the coastal development plan review that is required for the project.

5-15 The comment states that traffic movements into and out of the treatment plant site should be reviewed and that traffic assigned to septage handling and septic tank maintenance appears too low.

Response: Traffic impacts associated with the project, including septage handling and other operations at the treatment plant site, are discussed in Chapter 6.6 of the Draft EIR. Please refer to the analysis provided on page 191 under Operational Impacts.

5-16 The comment states that any portion of the collection system located within a County public right-of-way will require an encroachment permit from the County.

Response: The comment is noted and will be forwarded to the CSD Board for their consideration.

MORRO ESTUARY GREENBELT ALLIANCE
PO Box 6801 Los Osos Ca 93412

Crawford Multari & Clark
641 Higuera Street, Suite302
San Luis Obispo, Ca 93401
Attn: David Moran

January 4, 2001

Thank you for the opportunity to comment on the DEIR for the Los Osos Wastewater Facilities Project and for all the fine effort of work which has gone into planning this project. The Morro Estuary Greenbelt Alliance is a nonprofit working in partnership with multiple Federal, State, and Local Agencies, nonprofits, and local citizens to protect by acquisition the globally imperiled Coastal Dune Habitat and watershed of lands surrounding Morro Bay in Los Osos. To date the partnership has raised over 8 million dollars and purchased 239 acres with part of those funds. Few other places in California offer so much rare habitat, so imperiled, and with the density of biodiversity at odds with development. The protection of this eco-system is a good investment for our State's natural resources, increased property values, watershed protection,and tourist dollars and should be viewed as an asmenity, rather than a burden. Within this framework of perception we offer the following comments to the DEIR. Page numbers refer to the November 13th release of the DEIR.

SUMMARY OF MAIN POINTS:

* Data adequacy of ground water resources and withdrawl of groundwater effects on Los Osos stream flow quantities is needed.

* Incorporation of some Components of Phase II NDPES Stormwater Plan and some mitigation directed toward increased secondary growth impacts of paved surfaces are needed.

* A resolution of the HCP and NCCP to address secondary impacts on habitat to occur before the building moratorium is lifted is needed. Planning should not be considered to be mitigation.

* Details of the eastside leach-field impacts and their mitigation are needed.

* The designation of F&G and USF&WS to become the receivers of the mitigation properties is needed, along with the properties to be managed in partnership following a NCCP or Implementation Agreement.

* A revegetation plan containing calendar dates for work and site visitation, and a performance requirement to implement the plan for (1) habitat already impacted by the test -well sites and (2) lands within the scope of this DEIR, with the plan to be in place before the project commences.

* There are hundreds of species in the ecosystem impacted by the project. While some of these are listed, the intent of CEQA is to consider a broader protection of rare ecosystems . This requires mitigation that will leave a viable and intact ecosystem for future generations

SPECIFIC COMMENTS

* Water Resources 6.2

1. When will the groundwater model be finished and the information incorporated into the DEIR? 6-1

2. How will future water demand "greatly exceeding supplies" affect Los Osos creek flow and the threatened species Steelhead and endangered red-legged frog? (DEIR p141) 6-2

* Drainage 6.3

3. The secondary impacts of buildout will increase the paved surface of the community band could increase pavement by 10-15% . A significant threshold will create or contribute runoff which would exceed the capacity of existing or planned stormwater drainage systems. Some mention should be made regarding these secondary impacts, what the Phase II NPDES Storm Water Regulations are, and specifically how this new Wastewater 6-3

Project will meet these requirements. The CCWQCB has encouraged planning and engineering agencies to consider Phase II regulations when planning new developments (July 21, 2000). This is an excellent opportunity to begin and incorporate Phase II NPDES Regulations into the Wastewater Project. We suggest adding this secondary impact to the EIR and adding a component of Phase II NPDES (both the management plan AND SOME ON THE GROUND IMPLEMENTATION OF THE PLAN SUCH AS A NEW CATCH BASIN OR PROPERTY TO ACT AS DRAINAGE COLLECTION as the mitigation measure. (DEIR p149)

* Cultural Resources 6.4

4. In Mitigation C-1 there is a reference to suggested measures for mitigation shall be adhered to..... What are the suggested measures? Also, please consider the potential for land preservation of middens to act as mitigation. This concept is being explored (in part from multiple impacts from the fiber-optic impacts on Cultural Resources) by Steve McMasters SLO County Planning and by Gail McNulty Native American Heritage Commission in Sacramento. (DEIR p161) 6-4

* Consistency with Adopted Plans 6.5

5. Re HCP discussed in 5.4 - I couldn't locate that ..... Our concern is that the building moratorium would be lifted before HCP is accomplished..... 6-5

* Biological Resources 6.11

6. Regarding the setting please expand description of the incredible unique character of the globally imperiled Coastal Dune Ecosystem here in Los Osos. It is rarer and more threatened than rain forest ecosystems according to a World Wildlife Survey . It has been designated for a National Refuge Evaluation. It contains critical habitat for endangered species. It is in the Watershed of National Estuary. Hundreds of species exist in the greenbelt. There is Coast Live Oak on sand dunes! Its uniqueness and beauty is a destination for tourists from around the world. As we commented in the Estero Plan please strengthen language to show the wealth of natural resources and environmental assets that define the character of our beautiful area! (p.245). 6-6

7. Under nonvascular plants change some lichens being considered for listing, and up to 6 species were considered in a previous EIR. 6-7

8. Please double check about Lupine being on the Tri-W site (DEIR p273). 6-8

9. The mitigation for leach-field impacts on the Powell Senior Property should occur on a close by property of good habitat value, closest to the contiguous design of the greenbelt corridor, and protect habitat in greatest imminent jeopardy of loss. This would follow the acquisition priorities of the Framework for the Protection of the Los Osos Coastal Dunes produced by the Partners for the Conservation of the Los Osos Coastal Dunes. (DEIR p 280-281) 6-9

10. Re. the HCP being prepared... The preparation of a plan is quite necessary, but a plan should not be considered as mitigation itself. This is especially true given that no Timeline is forcing its completion nor is there a mandated implementation or management agreement in effect. DEIR p. 281 6-10

11. The HCP and potential NCCP should perform in conjunction with an Implementation Agreement between the parties and experts knowledgeable in habitat management to best protect this fragile landscape for generations in the future. The primary leads on holding that management plan should be an Agency (Agencies) whose primary mission is ecosystem and habitat preservation. Their focus can then concentrate on the primary purpose of habitat preservation for the mitigation lands. (DEIR, p282) 6-11

12. The receiver of the mitigation properties should be F&G and F&W in partnership. (DEIR p283) 6-12

13. Many references are made in the DEIR regarding restoration. In July 2000 MEGA made a request of the LOCSD that a Plan for restoring the drilling test sites already impacted for the Waste Water Project be produced with a Calendar for non-native species eradication. We have not received this to date. Before this EIR is approved there must be at a minimum a Management plan which specifically outlines how non-natives will be disallowed from spreading from the Projects impacts. This will save a lot of time and money later in removal of 6-13

these exotic pests. At the same time a seed collection effort should begin ahead of the project to build the seed bank for restoration. Although these types of efforts usually occur at the end of projects (or don't occur at all), a great deal of money could be saved just by a very excellent plan of non-native eradication and broadcast of native seeds. Because the seed must be collected over a years time this would allow for a truly successful revegetation program to occur. (6.11 etc., p.284)

14. A performance requirement must be added to the plan and a Trustee agency defined who could best be sure the restoration is properly accomplished. Annual visits by F&G to assess the work of the contractor would be needed. p284 This is more important than some of the details of transplanting - although that potential should certainly be allowed. p286 6-14

15. There are hundreds of species in the ecosystem impacted by the project. While some of these are listed, the intent of CEQA is to consider a broader protection of rare ecosystems . This requires mitigation that will leave a viable and intact ecosystem for future generations (p.288). For this reason the failure of the DEIR to address cumulative impacts concerning the growth induced by the project is a major problem. This is especially troublesome as the allowance of growth are listed as "goals" of the project (DEIR, p.34.). 6-15

I still wish all of the Los Osos community was united in the Wastewater Project. We have all contributed to contamination of our groundwater whether by leachfield or surface by our use of our neighbors facilities, we all drive the roads here and contribute to surface runoff and we all use the drinking water. Is there still some remote chance that the community can be re-configured as one with everyone contributing to the costs of the solution? As Goal 13 (DEIR p. 34) speaks to making connections outside of the prohibition area, we are concerned about having a goal of opening up the greenbelt for development, and developed areas should be serviced before any undeveloped areas are developed. We would like to see Goal 13 struck. 6-16

Again thank you for this opportunity to comment on this DEIR and the accomplishment of moving closer to all the components required for a successful Wastewater Treatment Facility!

Sincerely

Maria Morrissey: President of MEGA

Letter 6
Morro Estuary Greenbelt Alliance
Marla Morrissey, President
January 4, 2001

6-1 The commenter asks when the groundwater model and whether it will be incorporated into the Draft EIR.

Response: Groundwater modeling efforts are currently (January, 2001) underway which will lead to the preparation of a groundwater management plan that is expected to be completed in the spring of 2001. An exact date of completion is not known. However, if the information will be made available when completed and will be incorporated into the Final EIR if completed prior to certification.

6-2 The comment questions the impact of increased future water demand on flows in Los Osos Creek and the special status animals that live there.

Response: Project impacts to Los Osos Creek are discussed on page 140 and 141 of the public review draft EIR, an in the errata distributed for the pre-release draft. At present, most of the wastewater returned to the basin from septic systems east of the fault flows toward Morro Bay. However, a sizeable portion flows east toward Los Osos Creek due primarily to the pronounced "mound" of groundwater that has been mapped in the vicinity of Pismo Avenue and 14th Street (see Figure 6.2-2: Groundwater Elevations). Generally, the higher groundwater causes areas east of 15th Street to flow toward the Creek where the freshwater helps support riparian and wetland vegetation in that area. The Wastewater Facilities Project proposes to eliminate septic system replenishment in favor of sub-surface leach fields in selected locations (see Figure 3-7). The disposal locations were chosen in part to help ensure that existing problems related to shallow groundwater and ponding are not worsened. The quantity of treated wastewater reintroduced to the basin is expected to maintain balance between the east and west sides of the fault.

Note that the disposal site located at the east end of El Moro Avenue is estimated to have a disposal capacity of about 175,000 gallons per day. Assuming 300 gallons per day of wastewater per single family residence, this is roughly equivalent to 583 dwelling units which is slightly less than the number of units east of 15th Street and south of El Moro Avenue. This suggests that disposal in the vicinity of the El Moro site will more or less maintain existing subsurface flows toward Los Osos Creek, albeit in a more concentrated area.

6-3 The comment states that secondary drainage impacts associated with buildout of the community could increase the amount of pavement by 10-15%, which may impact existing or planned stormwater drainage systems. The comment goes on to state that some mention should be made of these secondary impacts.

Response: Mitigation Measures GEO-1, H-1 and WR-2 require compliance with relevant provisions of the National Pollution Discharge Elimination System (NPDES) permit requirements. The most significant potential secondary impact associated with the wastewater facilities project is the lifting of the building moratorium which will enable development of the remaining vacant lots in Los Osos consistent with the Estero Area Plan. The amount of new development that could be accommodated is difficult to accurately predict, in part because the Estero Area Plan is currently undergoing a comprehensive revision and the land uses associated with that plan are presently unknown. However, a buildout population of about 20,000 residents is possible under current land use regulations, as summarized in Table 3-5 of the Draft EIR. The secondary impacts associated with this development would be subject to the same NPDES requirements as the wastewater treatment facilities project and would be applied at the time of

development when a more accurate understanding of the extent and intensity of development is known.

6-4 The comment asks what measures are being referred to in Mitigation Measure C-1.

Response: Mitigation C-1 speaks to the discovery of previously undiscovered cultural resources during construction activities and requires that all work stop until a qualified archaeologist determines the significance of the resources and recommends an appropriate course of action. The "suggested measures" referred to in the language of the mitigation measure refers to the measures recommended by the archaeologist following investigation of the previously undiscovered resources. Such measures may include avoidance, documentation and burial, and other measures commensurate with the significance of the resources.

6-5 The comment refers to a concern that the building moratorium currently in place could be lifted prior to completion and implementation of a Habitat Conservation Plan.

Response: The Habitat Conservation Plan will be completed before the lifting of the RWQCB prohibition. In fact, the HCP will be completed before project permitting is completed in early 2002, although it is not appropriate to fully implement the HCP until permits are granted, given that the HCP will likely require a considerable expenditure of resources by the LOCSD.

6-6 The comments requests that environmental setting section of Chapter 6.5: Biological Resources be expanded.

Response: The setting section documents the predominant biological resources characteristic of the Los Osos area in sufficient detail to provide a meaningful discussion of the impacts associated with the project. It is not intended to be an exhaustive inventory of species that are (or may be) present in the area.

6-7 The comment refers to the discussion of lichens.

Response: The comment is noted and does not raise a significant environmental issue. The Fugro West FEIR of 1997 has a considerable discussion of lichen and has been incorporated in this document by reference.

6-8 The comment questions the presence of lupine on the Tri-W (treatment plant) site.

Response: Lupine was observed at the time the resources inventory for the Draft EIR was prepared. Mitigation BIO-12 will be applied.

6-9 The comment suggests that mitigation for the loss of habitat associated with leach field construction on the Powell property be located on nearby land of higher quality habitat.

Response: In order to protect the sensitive biological and archeological resources of the Powell site, the location of the proposed leachfield has been moved to the nearby roadway of El Moro.

6-10 The comment questions the value of preparation of a Habitat Conservation Plan (HCP) as mitigation.

Response: One of the key concerns raised several years ago by the USFWS during the County proposal was the proliferation of §10 consultation requests by individual landowners once the prohibition was lifted. This concern was echoed with the LOCSD proposal as well. To alleviate the permitting of disparate properties, and the resultant set of unrelated mitigation measures,

the LOCSD has proposed to develop an HCP to provide for a comprehensive mitigation strategy for ALL permitting within the habitat area, even that outside the prohibition zone. Therefore, the HCP will result in improved consultation processing for the USFWS and, more significantly, a more effective overall mitigation of impacts to coastal habitats.

6-11 The comment recommends that the HCP perform in conjunction with an implementation agreement among stakeholders charged with protection and management of conserved resources.

Response: The comment is noted and will be forwarded to the CSD Board for their consideration. This management strategy is under development in coordination with the USFWS, CDFG, Coastal Commission, County and MEGA.

6-12 The comment recommends that the California Department of Fish and Game and the US Fish and Wildlife Service be the recipients of mitigation properties.

Response: The comment is noted and will be forwarded to the CSD Board for their consideration. The appropriate recipient will be determined during the development of the HCP. LOCSD will seek the guidance of the technical steering committee (USFWS, CDFG, Coastal Commission, County and MEGA) as to the disposition of properties.

6-13 and 14 The comment recommends that a restoration management plan be prepared prior to certification of the Final EIR.

Response: The comment is noted and will be forwarded to the CSD Board for their consideration. This management strategy is under development in coordination with the USFWS, CDFG, Coastal Commission, County and MEGA.

6-15 The comment states that the DEIR fails to address cumulative impacts to biological resources.

Response: The cumulative impacts of the project on biological resources are readily identifiable because of the very limited geographical extent of the habitats. By and large, the affected species are resident on, and in some cases endemic to, the Baywood fines aeolian sand complex. This region is within the confines of Los Osos creek, the northern edge of the Irish Hills, and the ocean. The cumulative impacts are those that would occur outside of the prohibition zone, but within this region. This is a rather small area occupying most of the so-called "greenbelt" of Los Osos. The cumulative impacts are addressed in the table on Figure 6.11-1. The Habitat Conservation Plan for the sewer described in the Project Description will provide protection for all impacts to habitats within the greenbelt area, thereby addressing direct, secondary and cumulative impacts of the project.

6-16 The commenter expresses a desire that all of the community was united behind the wastewater project.

Response: The comment will be forwarded to the CSD Board for their consideration.

California Native Plant Society

Crawford Multari & Clark
641 Higuera Street, Suite302
San Luis Obispo, Ca 93401
Attn: David Moran

January 4, 2001

Dear Mr. Moran:

The following is comment on the Draft EIR for the Los Osos Wastewater Facilities Project SCH#9911103, based on an edition of November 13, 2000. Page references are to the document. We thank you for this opportunity.

p.19

Mitigations GEO-8 and GEO-9 have nothing to do with mitigating the effect of high water table and liquefaction of impact GEO-13. On p.120 the text states that analysis shows that there is no increased liquefaction potential at Broderson and appears to have done sufficient analysis of the issue on alternative sites. We recommend that the section be rewritten to remove invalid cause-and-effect mitigation and to better reflect the conclusions in Table 6.1-1. 7-1

p.21 and Section 6.4, p.160-162.

We do not believe that all of the alternative disposal sites can be mitigated to less than significant impact regarding archeological resources. We are particularly concerned with the assessment that the Powell site has no archeological sites. This is a continuation of the Los Osos Middle School site, and is one of the largest occupational sites in the County. In contains very extensive kitchen middens, and the access to fresh water and to the marine resources of Morro Bay would have made this a logical site. It is also very close to the route take by the Portola expedition, which would have most likely followed existing pathways used for millenia by the native people. The Portola "cross" was located on a tree a few tens of feet from the Powell western fence line. We find the table on page 162 of the DEIR to be in substantial error. 7-2

p.27 and biological mitigation section in general

Mitigation BIO-4 and BIO-15 address mitigation through purchase of lands for conservation purposes. Paragraphs A, B of BIO-4 are statements of process and are therefore not mitigation in and of themselves. Paragraph C makes a good assessment of what purchase of these lands might require in terms of suitability, but fails to make a quantitative statement of what the design intentions will provide in terms of either funding or the indicated willingness of the CSD to define either funding or acreage values as part of the project, which should be required for a full CEQA evaluation of total impact (CEQA Guidelines 15126(d)). We do not think that deference to USFWS and CDFG consultation sufficient to fulfill full project disclosure requirements, unless the proponent is going to tier the EIR process. 7-3

We have been lead to believe that final project design cannot be completed until certain ground water modelling issues have been completed, and this includes not only a final choice of disposal site but also placement of the disposal system within that particular site. Due to the very high ecological value of these lands, we believe that final evaluation under CEQA is not possible at this time, until the project description and alternatives have been made specific. 7-4

Dedicated to the preservation of California native flora

Paragraph D of BIO-4 mitigation speaks to restoration in terms of suitable planting of native plant species and weed removal.(see also p.284), We are pleased to see this section, but would like to see a financial and operational obligation defined in the fifth bullet "An ongoing maintenance and restoration program", as the disturbed areas will be very susceptible to invasion of veldt grass, long-leaf ice plant and other problem weeds. A long term stewardship program must be developed, with responsible parties defined and financial obligations ensured. A restoration and maintenance obligation should apply also to any lands bought by the CSD with the intention of using the land for mitigation purposes. This is not addressed directly, as it is difficult to see if BIO-4 restoration is to apply to all land or only project-disturbed land under CSD control, and if restoration is going to be a onetime or ongoing process. This is also unclear in Mitigation BIO-7 on p.285, which only addresses short term restoration. 7-5

p.28 BIO-6 and mitigation BIO-12.

We have no problem with this section, but would point out that Beach silver lupine, the prime habitat for the Morro blue butterfly, is very easily grown from seed and may be introduced easily into the restoration options for disturbed sites. MEGA takes this opportunity to point out that restoration goals will be met only if seed and plant resources are available, as use of local genetic stock should be a requirement condition in any restoration mitigation program. The EIR should address the availability of these materials in any assessment of the likely significance of restoration based mitigation. MEGA would like to see the project conditioned upon proof that restoration would in fact (and not in theory) be possible with suitable materials. 7-6

p.34

The DEIR does not sufficiently examine the cumulative impacts under CEQA. The project goals under "Project Objectives" include:

• Goal 4 (ending moratorium allowing community to 'evolve', which we presume means that the project enables growth);
• Goal 13 (design collection system to facilitate future connection of development connections outside of the prohibition zone). By "future connections", we assume that the project means "growth".

The DEIR does not sufficiently address the loss of habitat that might result from fulfillment of project objectives, nor define how that might be mitigated. While it may be possibly argued that mitigation of individual development projects enabled by the CSD project if not actually part of the project, the cumulative impacts evaluation must evaluate this issue in a quantitative manner, particularly in terms of take of critical habitat through attainment of objectives. 7-7

• Goal 14 (enhance "sense of community" and the "opportunity for multiuse facilities that include .....trails, bikeways and open space")

It appears that the CSD may have plans for the lands under its control that may not be compatible with BIO-related mitigation, and these should be reflected in design specific project description. It is difficult to see how trails would be part of the actual treatment site, and therefore project goals would have to be satisfied within the greenbelt. While that may be possible, the intentions of the CSD in this regard cannot be evaluated in the current CEQA document.

p.49 para.2

We have no problem with this paragraph, but would like to see a further statement that the fault has not been specifically defined as being presence, and alternative explanations such as buried coastal terraces may explain the geology. The fault has not been located in any studies, and is inferred 7-8

through differences in well logs and water table on either side of the lineament. It is important that the concept of a fault does not become entrenched in the literature without further proof.

p.58 MEGA concurs that the purchase of the Broderson site may fulfill some of the mitigation obligations in terms of habitat take and direct take of the complex of species the make up the highly threatened dune plant community. We would question if this is sufficient to fulfill all mitigations for all species, in particular that of the shoulderband snail. The secondary impacts of growth that is enabled through attainment of project goals (see comments on DEIR, p.34, above) may not be sufficiently satisfied. 7-9

p.246 The DEIR is inconsistent regarding the common name used for Ericameria ericoides. It is commonly know as Mock Heather in the area, which the DEIR uses at the base of p.247, and not as heather goldenbush, which the document uses on p.246. The latter is consistent with the Manual of California Vegetation (Sawyer and Keeler-Wolf). 7-10

p.273 Impacts to lichens are not dealt with in sufficient detail. A previous EIR for this project (FUGRO-WEST, 1997) notes that, while CNPS has not yet designated a listing status for lichens, the following would probably achieve CNPS List 1B or List 2 status. These are Popcorn lichen (Cladonia firma- suggested List 2), Los Osos Black-and-white lichen (Hypogymnia mollis -suggested List 1B), Long fingered white parmotrema (Parmotrema hypoleucinum- suggested List 1B), and Splitting yarn lichen, which is discussed in the DEIR Impact BIO-10. The FUGRO-WEST report cites scientific authority. Several of these species are Los Osos endemics that are confined to dune substrate, and therefore should be evaluated more fully in terms of the project alternatives. 7-11

p.286 Mitigation BIO-9

The mitigation of "transplantation" is not possible for many of the species to be affected.Large woody shrubs with extensive tap root systems such as Morro manzanita, Indian Knob mountain balm and dune almond can be expected to fail. Broom-rape is a root parasite, and therefore could not be easily transplanted, and suffrutescent wallflower is an annual for whom transplantation would be meaningless. The DEIR correctly states that transplantation may fail entirely, and this should be restated with vigor. MEGA considers the DEIR to be the document in which potential mitigation success is evaluated, rather than some study that will be done "prior to implementing these operations". The final EIR should include a more thorough estimation of reproductive success of the mitigation alternatives of transplantation, taking cuttings, and starting from seed. 7-12

p.288 For BIO-15 the proposed mitigation ratio of 1:1 or 2:1 would require a total of either 50% or 33% loss of total habitat. This would seem to be unacceptably high if were talking about the critical habitat of an endangered or threatened species. 7-13

Under residual impacts, the DEIR does not address buffers and edge effects regarding project impacts, but only direct footprint-generated take. Therefore project impacts are underestimated throughout the DEIR 7-14

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Letter 7
California Native Plant Society
David H. Chipping, Conservation Chair
San Luis Obispo Chapter

7-1 The comment points out that the analysis of potential liquefaction impacts provided in section 6.1 concludes that the use of disposal leach fields at the sites identified will not result in a greater risk than at present.

Response: Mitigation GEO-9 requires implementation of the strategies recommended by the California Division of Mines and Geology for the mitigation of potential liquefaction hazard. Although the CDMG Guidelines primarily address potential impacts to structures, the concepts relating to the avoidance of liquefaction hazards are applicable.

7-2 The comment questions the conclusion of the DEIR that there are no known archaeological sites on the Powell disposal site.

Response: The Cultural Resources analysis errs when it concludes that no known archaeological sites exist on the Powell property. In fact, the property in question is part of a large archaeological site previously documented by Gibson and others. Subsurface testing conducted on the site in 1985 in conjunction with a storm drain project proposed by San Luis Obispo County revealed that previously recorded site SLO-214 occupied a portion of the Powell property. According to Gibson, the site associated with the Powell property is one of the largest in San Luis Obispo County and contains weathered shellfish fragments, occasional stone flakes and burnt rocks and tool fragments. No burials were identified by Gibson in previous subsurface excavations which were conducted in an immediately east of the Middle School play fields.

Because of the sensitivity of the Powell site with regard to biological and archaeological resources, the Los Osos CSD plans to relocate the disposal leach field to the El Moro right-of-way and the parking lot for the Middle School. Although these areas are in the vicinity of recorded site SLO-214, any remaining resources are very likely disturbed due to the parking lot and street that cover them. Thus, the intactness of the resources under these paved areas is questionable. Nonetheless, Mitigation C-1 and C-2 relating to the discovery of previously undiscovered archaeological resources and the ongoing monitoring of construction activities would be applied.

7-3 Commenter notes a lack of quantitative proposals for either acreage of mitigation land or dollars for management.

Response: The District is proposing to purchase 70 plus acres of high quality coastal scrub and manzanita habitat for the direct impacts of the project. In addition, the District is proposing an annual budget of $10,000 for managing and maintaining the land protected as part of the mitigation.

7-4 Commenter notes a lack of detail in several mitigation measures relating to biological impacts from the project.

Response: As noted above, the District has committed $10,000 annually to the maintenance of the conserved lands. The restoration of the Broderson site will be in addition to the maintenance budget. Thus, the $10,000 can serve in part to maintain the land once it is restored.

7-5 & 7-6 Commenter requests that the project be conditioned upon proof of satisfactory restoration, especially in light of the complexities associated with developing sufficient local genetic stock.

Response: This comment is noted for the decision makers and could be made a part of the project conditions.

7-7 Commenter suggests that the EIR does not sufficiently analyze cumulative impacts of the project because it has not sufficiently identified where the wastewater system might be expanded.

Response: The cumulative impacts of the project on biological resources are readily identifiable because of the very limited geographical extent of the habitats. By and large, the affected species are resident on, and in some cases endemic to, the Baywood fines aeolian sand complex. This region is within the confines of Los Osos creek, the northern edge of the Irish Hills, and the ocean. The cumulative impacts are those that would occur outside of the prohibition zone, but within this region. This is a rather small area occupying most of the so-called "greenbelt" of Los Osos. The cumulative impacts are addressed in the table on Figure 6.11-1. The Habitat Conservation Plan for the sewer described in the Project Description will provide protection for all impacts to habitats within the greenbelt area, thereby addressing direct, secondary and cumulative impacts of the project.

There are two important sources of information that identify, to the extent presently possible, the cumulative impacts to biology from the project. Jones and Stokes Associates prepared the Los Osos/Baywood Park Greenbelt Conservation Plan that surveyed and quantified the various habitats in the greenbelt area. The mapping and quantities developed in this study are depicted in figure 6.11-1 Vegetative Communities in the Draft EIR. It is extremely unusual and fortuitous that this level of quantitative data would be available for cumulative impacts. The second document important to this inquiry is the Estero Area Plan update (and its EIR) prepared by the County of San Luis Obispo. This Plan identifies the type and quantity of development that could take place within the cumulatively impacted area.

Mitigation for cumulative impacts is a component of the HCP being prepared by the project proponent in concert with MEGA, USFWS, CDFG, the Coastal Commission and the County. Land use authority to implement this mitigation will lie outside of the jurisdiction of the District and within the authority of the County and the Coastal Commission.

7-8 The comment states that a fault has never been documented in the vicinity of the treatment plant site and that other explanations are available for the phenomenon distinguishing areas east and west of the site.

Response: The comment is noted. Other explanations, such as buried coastal terrace could explain the well data obtained east and west of this area.

7-9 Commenter suggests that the Broderson purchase may be sufficient for some of the mitigation requirements of habitat take, but may not satisfy all of the secondary impacts of the project.

Response: The acquisition of the remaining 70 plus acres of the Broderson site is intended for the mitigation of the direct impacts of the project. The secondary impacts of the project will be mitigated through implementation of measures developed with the area-wide HCP, especially in concert with the County of San Luis Obispo.

7-10 Commenter notes an inconsistency in the EIR with the nomenclature for Ericameria ericoides.

Response: Comment noted and appreciated.

7-11 Commenter suggests that impacts to lichen are not dealt with in sufficient detail.

Response: The Fugro West EIR (1997) described in detail the extent and impacts of lichen from the project. This report is included by reference in the current EIR. As the commenter notes, the lichen are not a protected species, they are recognized as endemic to this limited habitat. Lichen are described in the DEIR (page 271) and a comparison of the relative impacts to splitting yarn lichen at the alternative locations for the project components is made in the table on page 292.

7-12 Commenter notes the difficulty of translocation of various woody species found in the habitats to be impacted by the project.

Response: This comment is noted. The essential mitigation for the project is the purchase of additional habitat in the greenbelt to replace that which would be lost to the project development. The purchased habitat will be at a ratio in excess of that which is taken, and, in general, of a much higher quality. The mitigation also includes the objective of improving acquired habitat through transplanting or growth from seeds of new stock.

7-13 Commenter states that the proposed mitigation ratio of 1:1 or 2:1 would require a total of either 50% or 33% loss of total habitat and that this would be unacceptably high for critical habitat.

Response: The Tri-W site habitat totals 11 acres and represents 100% of the land on that site. However, the habitat at this location is of low to moderate quality with a high percentage of the area cultivated with the invasive veldt grass. Furthermore, this habitat is in the center of the urbanized area of Los Osos and is not identified as critical habitat by the USFWS.

The leachfield location at the Broderson site is located within the area proposed for designation as critical habitat. At Broderson, the area impacted is approximately 25% of area of habitat that would be affected. Furthermore, the area of impact is located in the portion of the site with the least occurrence of the Morro shoulderband dune snail (refer to Figure 6.11-4 which shows the area of occupation as outside the proposed location of the leachfields.

The Powell leachfield site is no longer part of the project.

7-14 Commenter suggests that the EIR underestimates impacts because it does not take into account buffers and edge effects.

Response: It is presumed that this type of effect is the result of requiring a construction area that exceeds the actual footprint of the project. The Tri-W treatment plant will consume the entire site, and this impact is identified (eleven acres). The leachfield installation (especially at Broderson) impacts will be minimized by the following measures:

- Pre-construction surveys to find the lowest quality habitat for access, construction and staging.
- After the project engineer has determined the design requirements, the proponent will work with CDFG and USFWS to identify the least damaging areas and methodologies for carrying out the components of the projects within the parameters of the design.
- The construction staging will be accomplished in a way to utilize land that will later be disturbed for the project. For example, in the construction of the leach fields, phasing will be utilized so that staging can take place over an area that will be used in a later phase for leach lines.

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RECEIVED
JAN 02 2001
BY:

Bruce Buel, Gen. Mgr.
LOCSD
2122 9th St.
Los Osos, CA 93402

January 2, 2001

Subject: Draft EIR Comments

I would like to say that I have read every word of the document. But it would be a lie. Every member of the SLO County AMA should get copies to be used in treatment of insomniacs. A copy on the bedside table would be better than sleeping pills.

Seismic Effects - Impact GEO-7 says the exact location of the Strand B of the fault is unknown, but is thought to be in proximity to the Tri-W site. Mitigation GEO-5 calls for a study of the site and then appropriate mitigation based on the results of the study to reduce risk after mitigation to "Less than Significant". It is not beyond the realm of possibility that this would prove to be impossible. 8-1

There are those of us who were brought up to believe that the appropriate place for a treatment facility is on the outskirts of town. Site selection criteria were weighted heavily (community recreation and park needs, economy of plumbing) toward locating the facility in the middle of a residential area . The proposed facility has extensive (and expensive) odor scrubbing. A "Hazardous Materials Management Plan" is called for (Mitigation PS-1). But, I guess I have a problem with the fact that there was no consideration in the cumulative impact section of the risk to Air Quality and Public Safety if there were a seismic problem. 8-2

Cost for providing the potential mitigation mentioned (foundation piers to ???, for example) have not been considered. The mitigation requires that the County Engineering Department shall "review and approve" the Geotechnical investigation. Mr. Gibson is on record (Letter December 6, 1999, Item #7) as questioning the location. So, it seems to be a dice roll. If the investigation shows an unmitigable risk - or a risk that is even 99% mitigable - a major part of the project would have to start over again from ground zero.

Step/Steg - It is probably nit-picking to point out there is really no quantitative basis established for favoring this over a gravity collection system. Yes, the trenches would be shallower and , for this reason, there might be less disturbance. But the use of trenchless technology would not be widespread. Stub connections would have to be made every 40 some feet, on the average. I don't believe this would be practical with trenchless technology. So it would seem the benefit would end up being very slight, indeed. 8-3

Typos - There seem to be some disagreements between Table 2-1 and the text in Chapter 6. Table 2-1 shows GEO 7,8,9 as mitigations for Impact GEO-3. Chapter 6 does not. Chapter 6 shows Mitigation 6 for Impact 9, Table 2-1 does not. Table 2-1 shows Mitigation GEO-9 for Impact GEO-15, Chapter 6 does not, etc. On page 139, it states that there would be a requirement to harvest "about 300,000 gallons per day". On page 141, this is 400,000. 8-4

Letter 8
Gordon Taylor

8-1 The comment raises concerns regarding the location of the treatment plant in relation to the inferred trace of Strand B of the Los Osos fault.

Response: As stated in section 6.1, page 119, the existence of a fault that extends north in the vicinity of the Tri-W site has never been documented. Moreover, previous investigations of the Los Osos fault (such as the 1989 Supplemental EIR for the CSA 9 Wastewater Project) suggest that if a fault is present it is inactive and poses a minimal risk of surface rupture during a seismic event. The geotechnical investigation of the treatment plant site will determine the presence or absence of a fault underlying the treatment plant. Accordingly, if a fault is discovered, the plant will be relocated on the site avoid its trace and will be constructed to satisfy the Uniform Building Code of structures in Seismic Zone 4 as required by Mitigation GEO-3.

8-2 The comment states that there was no consideration in the cumulative impacts discussion of the risk to air quality and public safety in the event of a seismic problem.

Response: Potential seismic related impacts to the collection, treatment and disposal system are assessed under the discussions provided for impacts GEO-4 on page 118, GEO-7 on page 119, GEO-8 on page 120, and GEO-12 on page 121 which are mitigated by Measures GEO-3, GEO-4, and GEO-5. Potential impacts to public safety resulting from a seismic event are addressed by Mitigation PS-1.

8-3 The comment questions the conclusion that a STEP/STEG system would result in less environmental impacts than a gravity collection system.

Response: A comparison of alternative collection systems is provided in Section 8 and summarized on Table 8-1. Table 8-1 shows that the potential environmental impacts associated with a STEP/STEG system are less than those for a gravity system, but not by a wide margin. Note that a STEP/STEG system was found to result in comparable impacts for three of the eleven impact categories identified, and a greater impact for one of the categories (traffic). Of the seven impact categories found to be less than those associated with a gravity system, four were found to be "slightly less" than those associated with a gravity system.

8-4 The comment identifies a number of discrepancies between the list of impacts and mitigation measures provided at the end of section 6.1 and the summary provided in Table 2-1, and questions the correct quantity of water to be recovered by the harvesting wells.

Response: The correct quantity of harvested water is 400,000 gallons per day.

California Regional Water Quality Control Board
Central Coast Region

Winston H. Hickox
Secretary for Environmental Protection

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Gray Davis
Governor

January 3, 2001

RECEIVED
JAN 0 4 2001
BY:

David Moran
Crawford Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, CA 93401

Dear Mr. Moran:

DRAFT ENVIRONMENTAL IMPACT REPORT FOR LOS OSOS WASTEWATER FACILITIES PROJECT, LOS OSOS, SAN LUIS OBISPO COUNTY

Thank you for the opportunity to review and comment on the draft Environmental Impact Report (DEIR) for the Los Osos Community Wastewater Facilities Project. We have reviewed the report and find it provides a comprehensive evaluation of potential impacts that could result from the project. Also, the report provides such information in a straightforward and easily-understandable manner, which is helpful in evaluating the potential impacts and alternatives to this complex and difficult project. We have the following comments.

1. Page 4, paragraph 2 lists issues of concern regarding the project proposed by San Luis Obispo County in 1997. You should clarify that these concerns are based upon public perception and are not necessarily scientifically based. 9-1

2. Page 9, paragraph 9 indicates a National Pollutant Discharge Elimination System (NPDES) permit will be issued for construction and operation of the wastewater facility. This is true, coverage under the statewide general NPDES permits for construction and industrial sources of storm water will be necessary to prevent pollution of storm water runoff. However, Waste Discharge Requirements (a separate type of discharge permit) will also be required for the proposed effluent discharge. Waste Discharge Requirements should be included under "Discretionary Approvals Required". 9-2

3. Page 13, paragraph 3 provides a project description. This description, and several other locations throughout the report, indicate the project is designed to reintroduce effluent to ground water. Ultimately, most of the effluent discharged to the ground (leachfields, percolation basins, or other methods) will incidentally percolate to ground water, however we are unaware that ground water recharge is specifically included as part of the proposed project. If the District includes ground water recharge as one of the specific goals of the project, then it must demonstrate compliance with California Department of Health Services requirements for such systems. 9-3

4. Page 35, Table 3-1 specifies units of measurement for biochemical oxygen demand, suspended solids and total nitrogen in milliliters per liter. These units should be corrected to state milligrams per liter. 9-4

5. Page 35, paragraph 4 lists proposed project components. Item D of the list should be reworded to "Wastewater disposal facilities and ground water harvesting and monitoring wells" to clearly indicate that harvesting and monitoring apply to ground water, not effluent. Similarly, throughout the report, 9-5

terms such as "recovery" and "harvesting" should be clearly identified with ground water to prevent confusion that the District proposes to harvest or recover effluent.

6. Our copy of the draft EIR appears to be missing Page 42. Please send us this page to complete our copy of the report. 9-6

7. Page 55, paragraph 1 states that biosolids will be disposed at a Class I or Class II landfill. Class I and Class II landfills are reserved for hazardous and designated wastes respectively, therefore would be an inappropriate disposal site for biosolids (which are relatively inert). Biosolids can be disposed at some Class III landfills (standard municipal wastes). Also, San Luis Obispo County Health Department is currently developing policy regarding land application biosolids, which is likely to be considered by the Board of Supervisors early next year. 9-7

8. Page 60 describes future phases of the proposed project. We commend the District's continuing efforts to address the wastewater project in a manner designed for long-term success and cost-effectiveness, as well as in a comprehensive (multi-resource) manner. 9-8

9. Page 138, paragraph 7 states that a STEP/STEG collection system is less susceptible to infiltration during storm events. Regardless of weather conditions, shallow ground water areas of Los Osos are likely to be an almost limitless source of infiltration into a STEP/STEG system due to the difficulty in making the residential on-site portion of the system truly water-tight. It is our opinion that the statement on page 138 is not applicable in Los Osos. 9-9

10. Page 141, paragraph 3 states that harvested ground water will be returned to the wastewater facility for further treatment. It may be more clear to state that additional water treatment will be provided when needed. In this way the statement does not leave the reader thinking ground water will be treated with (or in the same processes) as wastewater. 9-10

11. Page 228 and the table on page 233 indicate there would be comparable potential impact to public health and safety associated with sewage spills from the STEP/STEG system than with the proposed system. We disagree with this evaluation and believe that the large number of pumps and the cumbersome nature of maintaining a STEP/STEG system (pump and tank maintenance) poses higher likelihood of impacts to public health and safety due to more frequent sewage spills. 9-11

12. Traffic impacts resulting from the collection system alternatives do not appear to be addressed in the report. Operation and maintenance of a STEP/STEG collection system is likely to result in considerably more truck traffic due to pump and tank maintenance throughout the service area. 9-12

Despite the length of the list of items above, they are mainly minor issues that can be easily addressed in the final EIR. Again, we found the DEIR comprehensive and clear and look forward to completion of the final document as an important step toward resolving wastewater issues in Los Osos.

If you have questions regarding these comments, please call Sorrel Marks at (805) 549-3695 or Gerhardt Hubner at (805) 542-4647.

Sincerely,

for Roger W. Briggs
Executive Officer

California Environmental Protection Agency

Recycled Paper

S:\wb\southern\staff\sorrel\lososos\deir comments.ltr
Task: 121-01
File: Los Osos CSD

cc: Bruce Buel, Los Osos CSD, P. O. Box 6064, Los Osos, CA 93412
Sarah Holmgren, Montgomery Watson, 1340 Treat Blvd., Ste.300, Walnut Creek, CA 94596

Letter 9
Gerhardt Huber for Roger Briggs, Executive Officer
California Regional Water Quality Control Board
Central Coast Region

9-1 The comment states that issues of concern over San Luis Obispo County's previous wastewater project for Los Osos expressed in a previous EIR were based on public perception and not necessarily scientifically based.

Response: The comment is noted and will be passed along to the CSD Board for their consideration.

9-2 The comment clarifies the requirement of an NPDES discharge permit.

Response: The comment that an NPDES discharge permit will be required for effluent discharge associated with the project is noted.

9-3 The comment alerts the CSD Board to the fact that the re-introduction of treated wastewater will result in recharge of the groundwater aquifer and will be subject to the safe drinking water standards of the State Department of Health Services.

Response: Since the Draft EIR was prepared, the CSD has held discussions with representatives of the State Department of Health Services regarding the reintroduction of treated wastewater into the groundwater basin. DHS staff have indicated that the system proposed by the project description will satisfy State laws regarding groundwater re-charge. Page 5-13 of the Draft Project Report prepared by Montgomery Watson Engineers (January 17, 2001) provides a table (Table 5-6) comparing the quality of treated wastewater to be disposed in the leach fields with DHS standards for groundwater recharge. Table 5-6 shows that the project will satisfy DHS standards.

9-4 The comment states that the units for the measurement of biochemical oxygen demand (BOD) provided on page 35 should be revised to say milligrams per liter instead of milliliters per liter.

Response: The comment is noted and the table is revised accordingly.

9-5 The comment asks that item D. on page 35 be amended to clarify that the harvesting well and monitoring wells will be used to harvest and monitor groundwater, not effluent.

Response: The comment is noted and item D. is revised as follows:

D. Wastewater disposal facilities and *groundwater* harvesting and monitoring wells.

9-6 The comment states that page 42 is missing in the RWQCB copy of the Draft EIR.

Response: Page 42 is attached to these responses.

9-7 The comment states that biosolids may be disposed of at Class III landfills.

Response: The comment regarding disposal of biosolids in a Class III landfill is noted. However, Section VI.A.7 of the Regional Water Quality Control Board's Basin Plan for the Central Coast Region states:

Sludge treatment methods are evolving as disposal is discouraged and beneficial reuse is encouraged. Ocean disposal of sludge is prohibited by the California Ocean Plan. Landfilling of sludge is generally allowed if the sludge is nonhazardous and meets specific moisture content requirements. Sludge may be disposed in Class I and Class II waste management units, but this practice is uncommon due to its high cost. Disposal of sludge is becoming less attractive as landfill capacity decreases, recycling mandates (Assembly Bill 939) must be met, and society becomes aware that sludge can be a valuable resource as a soil amendment/fertilizer.

9-8 The comment commends the CSD in its continuing efforts to address the wastewater project.

Response: The comment is noted and will be passed along to the CSD Board.

9-9 The comment states that a STEP/STEG system will be subject to infiltration because the residential on-site portion of the system is difficult to maintain water tight.

Response: The comment is noted. The statement at the bottom of page 138 is that a STEP/STEG system may be less susceptible to infiltration during storm events than a conventional system. However, a STEP/STEG system may exhibit comparable or greater infiltration than a conventional system from the residential in-site portion of the system.

9-10 The comment recommends clarifying that harvested groundwater will undergo additional treatment before being re-introduced into the drinking water supply.

Response: The comment is noted. Following discussions with the State Department of Health Services (DHS), they have recommended that harvested groundwater be blended with existing drinking water supplies to meet safe drinking water standards, rather than to undergo additional treatment. Based on these discussions, the preferred option for re-introducing harvested groundwater is blending, not additional treatment.

9-11 The comment states the opinion that a STEP/STEG system would result in a greater potential impact to public health from spills than a conventional system.

Response: The comment is noted. However, while it is true that a conventional collection system will require fewer pumps and other infrastructure, it is also true that any collection system would be designed and constructed with new state-of-the--art components. Once installed, all aspects of the collection, treatment and disposal system will require extensive management and maintenance which will help minimize the risk of spills.

9-12 The comment states that operational traffic impacts associated with a STEP/STEG system have not been evaluated.

Response: Operational traffic impacts associated with maintenance of the gravity collection system are expected to be minimal as discussed on page 189. Total trips associated with pump station maintenance are not analyzed, but are expected to be about two trips per month per pump station, or about 22 trips per month. Even if this number were to double under a STEP/STEG system, the resulting 44 trips per month (about 2 per working day) would result in an imperceptible impact on traffic.

Sludge treatment methods are evolving as disposal is discouraged and beneficial reuse is encouraged. Ocean disposal of sludge is prohibited by the California Ocean Plan. Landfilling of sludge is generally allowed if the sludge is nonhazardous and meets specific moisture content requirements. Sludge may be disposed in Class I and Class II waste management units, but this practice is uncommon due to its high cost. Disposal of sludge is becoming less attractive as landfill capacity decreases, recycling mandates (Assembly Bill 939) must be met, and society becomes aware that sludge can be a valuable resource as a soil amendment/fertilizer.

9-8 The comment commends the CSD in its continuing efforts to address the wastewater project.

Response: The comment is noted and will be passed along to the CSD Board.

9-9 The comment states that a STEP/STEG system will be subject to infiltration because the residential on-site portion of the system is difficult to maintain water tight.

Response: The comment is noted. The statement at the bottom of page 138 is that a STEP/STEG system may be less susceptible to infiltration during storm events than a conventional system. However, a STEP/STEG system may exhibit comparable or greater infiltration than a conventional system from the residential in-site portion of the system.

9-10 The comment recommends clarifying that harvested groundwater will undergo additional treatment before being re-introduced into the drinking water supply.

Response: The comment is noted. Following discussions with the State Department of Health Services (DHS), they have recommended that harvested groundwater be blended with existing drinking water supplies to meet safe drinking water standards, rather than to undergo additional treatment. Based on these discussions, the preferred option for re-introducing harvested groundwater is blending, not additional treatment.

9-11 The comment states the opinion that a STEP/STEG system would result in a greater potential impact to public health from spills than a conventional system.

Response: The comment is noted. However, while it is true that a conventional collection system will require fewer pumps and other infrastructure, it is also true that any collection system would be designed and constructed with new state-of-the--art components. Once installed, all aspects of the collection, treatment and disposal system will require extensive management and maintenance which will help minimize the risk of spills.

9-12 The comment states that operational traffic impacts associated with a STEP/STEG system have not been evaluated.

Response: Operational traffic impacts associated with maintenance of the gravity collection system are expected to be minimal as discussed on page 189. Total trips associated with pump station maintenance are not analyzed, but are expected to be about two trips per month per pump station, or about 22 trips per month. Even if this number were to double under a STEP/STEG system, the resulting 44 trips per month (about 2 per working day) would result in an imperceptible impact on traffic.

STATE OF CALIFORNIA—HEALTH AND HUMAN SERVICES AGENCY

GRAY DAVIS, Governor

DEPARTMENT OF HEALTH SERVICES
DIVISION OF DRINKING WATER AND ENVIRONMENTAL MANAGEMENT
1180 Eugenia Place, Suite 200
Carpinteria, CA 93013-2000
(805) 566-1326
FAX (805) 566-4790

December 18, 2000

Mr. David Moran
Los Osos Community Services District
c/o Crawford Multari Clark & Mohr
641 Higuera Street, Suite 302
San Luis Obispo, CA 93402

RECEIVED
JAN 04 2001
BY:

Attn: Mr. David Moran

Re: Los Osos Wastewater Project
SCH# 9911103

The State Department of Health Services Drinking Water Field Operations Branch (SDHS-DWFOB) has reviewed the draft environmental impact report (DEIR) for the proposed Los Osos Wastewater Project dated November 2000 which will consist of a gravity and pumped sewage collection system and a hybrid Extended Aeration system that would be underground and fully odor scrubbed. The collection and treatment system would replace the existing individual septic tanks and leach lines. Disposal of the wastewater treatment system effluent would be to sub-surface leach fields designating the re-introduced treated water to the upper aquifer.

The Los Osos Community Services District is the lead agency for the project. Los Osos, including Baywood Park, is an unincorporated community of about 14,000 residents. The community has utilized septic tank disposal for many years which has significantly impacted the nitrate level in the underlying ground water. In concentrated areas of septic tanks, the septic tank effluent which is undisinfected can surface during periods of heavy rain, resulting in health hazards to the community. The Regional Water Quality Control Board (RWQCB) has taken action including a moratorium until the problem is corrected. In November 1998, the Community Services District was formed.

The proposed wastewater treatment facility will use a hybrid Extended Aeration system and have an average day capacity of 1.3 MGD. Disposal of the effluent of the facility will be to sub-surface leach fields designating the re-introduced treated water to the upper aquifer which is used for drinking water extraction wells. The project also includes harvesting wells which will extract water from the upper aquifer to prevent ground water mounding to the surface due to the sub-surface disposal. The harvesting wells will need to pump an estimated 400,000 gpd and will be used to supplement the drinking water supplies in the area.

The DEIR is not clear on several issues. The SDHS-DWFOB requests the opportunity to comment on an engineering report describing the specific project and treatment scheme. The engineering report needs to include if any of the treated wastewater is to be used as recycled water (e.g. irrigation of parks or a golf course) as mentioned in the

DEIR. The LOCSD will need to provide a Title 22 engineering report that complies with the Water Recycling Criteria if recycled water is proposed. 10-1

The DEIR discusses harvesting wells used to prevent mounding of groundwater and to supplement the drinking water supplies in the area. The wording in this section implies indirect reuse and may be interpreted as a groundwater recharge project. The LOCSD needs to provide in an engineering report and evaluation of the disposal areas being considered a planned groundwater recharge project. The distances and time of travel of the disposed treated wastewater from each leach field area to each existing domestic water well and each proposed harvesting well needs to be determined. A specific distance of 3500 feet to a domestic well and a time of travel of 8.5 years is mentioned in the DEIR. There are existing domestic water supply wells closer than 3500 feet from the proposed leach field areas. The separation distance from a domestic supply well and an individual leach line is defined. The separation distance from a domestic well and the proposed large leach fields need to be evaluated on a case be case basis. 10-2

The DEIR indicates harvesting wells will be used to supplement drinking water supplies in the area. The harvesting wells will be treated or blended to comply with all drinking water standards. The water systems which use the harvesting wells as a drinking water source will need to apply for a domestic water supply permit from this office. Since the wells are utilizing mounding water which is created by wastewater disposal, the wells will need to be sampled as a vulnerable source to VOCs and SOCs. Other chemical and microbial constituents may need to be monitored more frequently. The monitoring will be determined by this office on a case by case basis. 10-3

Disposing and re-introducing the treated wastewater into the upper aquifer may over time increase the hardness and other chemical constituents of the water in the upper aquifer. The LOCSD needs to utilize monitoring wells to evaluate the impact of the large disposal leach fields on the upper aquifer. The SDHS-DWFOB will require additional treatment on any wells used for drinking water purposes if needed. 10-4

If you have any further questions concerning this letter, please contact me at (805) 566-1326.

Sincerely,

John Curphey

John N. Curphey, P.E.
District Sanitary Engineer
Santa Barbara District (SDHS-DWFOB)

cc: RWQCB - SLO
San Luis Obispo County Environmental Health Services
Cal Cities Water Company – Los Osos

Letter 10
California Department of Health Services
John N. Curphey, P.E., District Sanitary Engineer

10-1 The comment states the desire to review the Draft Project Report regarding plans to to re-introduce treated wastewater into the groundwater basin.

Response: The Draft Project Report (Montgomery Watson Engineers, January, 2001) is incorporated herein by reference and will be made available to the Department of Health Services.

10-2 The comment raises concerns regarding the use of harvesting wells and the time of travel between disposal leach fields and domestic water wells.

Response: The Draft Project Report provides a map illustrating the location of existing and proposed drinking water wells. The Report goes on to state:

> *The use of leach field disposal is not expected to impact the operation of existing drinking wells given the horizontal separations and travel times involved. The horizontal distance is at least 500 feet in the closest instance, and is between 1000 ft and 1700 ft in all other instances. Groundwater modeling by Cleath and Associates, Inc. Has indicated the expected travel time between leach field and well head is 20 moths in the closest instance, and at least 8 years in all other instances. Thus, very good margins of safety are provided with this concept. Also, it is important to note that Cal Cities will be abandoning their well above Highland Avenue near the Broderson site.*

10-3 The comment states the requirement to obtain a domestic water supply permit from DHS for the harvesting wells.

Response: The requirements associated with a domestic water supply permit are noted and will be forwarded to the CSD Board.

10-4 The comment states that the re-introduction of treated wastewater into the upper aquifer may over time increase the mineral content of the water. The comment recommends the use of monitoring wells to continually assess the quality of the groundwater following implementation of the project.

Response: The comment is noted. Included in the project description is a series of 30 monitoring wells will be employed to continually assess the quality of groundwater following project implementation.

SOUTHERN CALIFORNIA WATER COMPANY
A SUBSIDIARY OF AMERICAN STATES WATER

COASTAL DISTRICT
1140 LOS OLIVOS AVENUE • LOS OSOS, CA 93402 • (805) 528-6157 • FAX (805) 528-6442

December 12, 2000

Mr. Bruce Buel
General Manager
Los Osos Community Service District
2122 Ninth Street
Los Osos, California 93402

Subject: Shallow Zone Groundwater Harvesting in Western Los Osos.

Dear Mr. Buel:

Thank you for the opportunity to discuss the Los Osos Community Services District's proposal for actively managing the upper shallow groundwater basin in western Los Osos. As I understand your intentions, managing the basin is a major part of the over-all wastewater collection, treatment, and disposal plan. The Southern California Water Company supports your Board's efforts in eliminating the discharge of individual septic systems into the groundwater basin and shares your concerns to protect and improve the water quality of the basin. As you know, SCWC has two wells in Los Osos that are currently inactive as a result of nitrate concentrations at or above the drinking water standard.

The proposed Los Osos CSD wastewater project would recharge the upper zone of the western part of the groundwater basin by discharging 600,000 gpd of treated wastewater through leach fields. Your assurance that the treated wastewater will meet drinking water standards prior to disposal coupled with the elimination of the septic tank discharge leads me to believe that significant improvement to the groundwater quality can be achieved. I also understand that it will be necessary to harvest water from the upper shallow basin to prevent hydraulic problems within the basin.

I agree in concept with the CSD's groundwater management plan, which involves the harvesting of the groundwater for domestic uses. Southern California Water Company has the financial and technical ability to move forward with the implementation of the plan upon its acceptance by the community and others.

However, the Company has an obligation to its customers to ensure that they benefit from participation in the proposed groundwater basin management plan. Prior to a commitment from SCWC, the California Department of Health Services will need to approve the plan. I would also request that SCWC be an active participant in the further development of the groundwater basin plan. SCWC has significant in-house technical expertise that can be a great benefit to the community of Los Osos.

Thank you for the opportunity to participate in this significant project. I feel that this project has the potential to dramatically improve the water quality of the basin. If you have any questions or would like to discuss this project further, please call me at 805-528-7231.

Sincerely,

W Morgan

Warren Morgan
District Manager

cc:
J. Brady
B. Gedney
R. Hanford
H. Szopinski
File Copy

Letter 11
Southern California Water Company
Warren Morgan, District Manager

Response: The letter does not raise any significant environmental issues with regard to the Draft EIR.

SAN LUIS OBISPO COUNTY ENGINEERING DEPARTMENT

COUNTY GOVERNMENT CENTER • ROOM 207 • SAN LUIS OBISPO, CALIFORNIA 93408

PHONE (805) 781-5252 • FAX (805) 781-1229

TIMOTHY P. HANSON
COUNTY ENGINEER
GLEN L. PRIDDY
DEPUTY COUNTY ENGINEER
ENGINEERING SERVICES
NOEL KING
DEPUTY COUNTY ENGINEER
ADMINISTRATION

ROADS
SOLID WASTE
FRANCHISE ADMINISTRATION
WATER RESOURCES
COUNTY SURVEYOR
SPECIAL DISTRICTS

RECEIVED
NOV 21 2000
BY:

November 17, 2000

Los Osos C.S.D.
Bruce Buel, General Manager
2122 9th Street
Los Osos, CA 93402

Subject: Bus Stop

Dear Mr Buel:

We received a call from a local resident who rides C.C.A.T. route 11. They suggested putting in a turn out for a bus stop on Los Osos Valley Road just west of Palisades Avenue on the north side. I also ride route 11 and agree with this suggestion as does the Traffic Division. Currently route 11 drops off people on a regular basis at this location and a bus stop would fit the plan. 12-1

If you have any questions please give me a call at 781-1596.

Sincerely,

JIM FLEGAL
Traffic Technician

Attachment: Map

cc: Mikel Goodwin, Development Services Division
John Bates, Regional Transit Manager

File: Road No. 2088

L:\Trans\Nov00\LO_RES_PARK_BUS_STOP.wpd.LNID.JF

Letter 12
San Luis Obispo County Engineering Department
Jim Flegal, Traffic Technician

12-1 The comment recommends incorporating a bus turnout into the design of frontage improvements along Los Osos Valley Road.

Response: Plans for the street frontage improvements along Los Osos Valley Road have not been finalized for the project. However, incorporation of a bus turnout is an appropriate consideration for the treatment plant site since a portion will devoted to park and recreation facilities. This comment will be forwarded to the CSD Board for their consideration.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

Gray Davis
GOVERNOR

Steve Nissen
ACTING DIRECTOR

ACKNOWLEDGEMENT OF RECEIPT

DATE: December 14, 2000

TO: Bruce Buel
Los Osos Community Services District
2122 9th Street
Los Osos, CA 93402

RE: Los Osos Wastewater Facilities RR.
SCH#: 1999111103

This is to acknowledge that the State Clearinghouse has received your environmental document for state review. The review period assigned by the State Clearinghouse is:

Review Start Date: November 28, 2000
Review End Date: January 11, 2001

We have distributed your document to the following agencies and departments:

California Coastal Commission
Caltrans, District 5
Department of Conservation
Department of Fish and Game, Region 3
Department of Health Services
Department of Parks and Recreation
Department of Water Resources
Native American Heritage Commission
Regional Water Quality Control Board, Region 3
Resources Agency
State Lands Commission
State Water Resources Control Board, Clean Water Program

The State Clearinghouse will provide a closing letter with any state agency comments to your attention on the date following the close of the review period.

Thank you for your participation in the State Clearinghouse review process.

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
916-445-0613 FAX 916-323-3018 WWW.OPR.CA.GOV/CLEARINGHOUSE.HTML

Letter 13
Governor's Office of Planning and Research

Response: This letter merely acknowledges compliance with State law for the public review and distribution of Draft EIRs through the State Clearinghouse.

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PLANNING AND BUILDING

VICTOR HOLANDA, AICP
DIRECTOR

BRYCE TINGLE, AICP
ASSISTANT DIRECTOR

ELLEN CARROLL
ENVIRONMENTAL COORDINATOR

FORREST WERMUTH
CHIEF BUILDING OFFICIAL

January 11, 2000

Dave Moran
Crawford, Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, CA 93401

Dear Mr. Moran:

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOS OSOS WASTEWATER FACILITIES PROJECT

Thank you for sending us the Draft EIR for the Los Osos Wastewater Facilities Project. We have reviewed the EIR and have the following comments. Our comments are listed according to the page, paragraph and/or section that the item is discussed in the EIR. Please note that the following page numbers refer to the "pre-release" draft EIR, so they may not correspond to the official draft document.

Page 51, paragraph 2: How would the approximately 9,500 gallons per day of brine solution and miscellaneous rinse water resulting from treatment of extracted groundwater be transported to the Duke Energy Morro Bay Power Plant ocean outfall? Subsequent sections of the EIR should address potential impacts of this aspect of the project, as applicable. 14-1

Page 59, Tables 3-5 and 3-6, Population: It should be noted that the yet-to-be-released revised draft Estero Area Plan will include a buildout estimate of about 21,400 persons within the Los Osos urban reserve line (URL), assuming no development on both the 204-acre Morro Palisades property and the northern 40 acres of the Broderson site. This contrasts with about 22,900 in the existing Estero Area Plan (using the same assumptions about the Morro Palisades and Broderson properties) and 20,590 in the EIR. 14-2

It should also be noted that based on the recommendations of the yet-to-be-released revised draft Estero Area Plan, buildout within the area to be served by the wastewater facilities project (the "collected area") would be about 19,000 persons, compared to the EIR's estimate of 17,963.

COUNTY GOVERNMENT CENTER • SAN LUIS OBISPO • CALIFORNIA 93408 • (805)781-5600 • 1-800-834-4636
EMAIL: lpcoplng@slonet.org • FAX: (805)781-1242 • WEBSITE: http://www.slonet.org/vv/lpcopling

Page 80, paragraph 1, Wastewater Flows: Based on our estimates of buildout within the "collected area," wastewater flows would be higher than estimated in the EIR under the existing general plan, as well as under the yet-to-be-released revised draft plan. 14-3

Page 82, paragraph 1 (table): The approximate acreage of the Office and Professional and Commercial Retail land use categories within the area referred to as the Resource Park should be about 3 and 8 acres, respectively. The minimum parcel size for those categories is 6,000 square feet, assuming the use of community water supply and sewer disposal. Also, there is no Recreation category within the Resource Park. 14-4

Page 96, Table 5-5, Screening of Alternative Wastewater Treatment Plant Sites: Row "LU-1" should be corrected to reflect that wastewater treatment plant sites are allowable uses in the land use categories of all of the alternative sites (except for the preferred treatment location), subject to special development standards. 14-5

Page 98, Table 5-5, Screening of Alternative Wastewater Treatment Plant Sites: Why aren't the alternative treatment plant sites evaluated against criteria "F-2" regarding runoff? 14-6

Page 123, paragraph 5, Mitigation GEO-5: We recommend that the geotechnical investigation be performed by a **certified engineering geologist** and be submitted to the County Department of Planning and Building **prior to the issuance of construction/grading permits.** 14-7

Page 124, paragraph 3, Mitigation GEO-7: We recommend that a complete grading and drainage plan be submitted to the County Department of Planning and Building **prior to issuance of construction/grading permits.** 14-8

Page 129, paragraph 2, Previous Investigations of the Los Osos Basin: The 2000 *Annual Resource Summary Report* **recommends** a "level of severity II" for water supply in Los Osos, but this has **not been certified** by the Board of Supervisors. 14-9

Page 140, paragraph 3, Impact H-5: Please note that future water demand would be slightly higher than stated in the EIR, using the population buildout of about 21,400 within the URL that will be included in the yet-to-be-released revised draft Estero Area Plan. 14-10

Page 141, paragraph 4, Mitigation Included in the Project Description: What is the basis of the statement that even with a water conservation program, "future water demand will greatly exceed supplies"? The rationale for this conclusion does not appear to be discussed on the previous page under "Impact H-5." 14-11

Page 164, paragraph 3, IV. Local Coastal Program Policy Document: The last sentence of this paragraph should be revised to read: "The Local Coastal Program Policy document, together with the Coastal Zone Land Use Ordinance (CZLUO), Framework for Planning, Coastal Zone, and the coastal area plans contain the land use development standards and policy guidance for land use decisions within the coastal zone." (underlined language added) 14-12

Page 164, paragraph 4, Table 6-5-1: Land Use Designations - Resource Park: Please refer to our preceding comments listed under page 82, paragraph 1. 14-13

Page 164, paragraph 5, Land Use Regulations: Wastewater treatment facilities are included in the land use definition, "Public Utility Facilities," not "Public Utility Center." In addition, such uses are allowable, subject to special development standards, in all land use categories except for Recreation and Open Space. However, it should also be stated in the EIR that a planning area standard (standard No. 3 for the Commercial Retail category) that applies to the portion of the Morro Shores property within the Commercial Retail category precludes Public Utility Facilities uses. Therefore, a general plan amendment would be required in order to make the proposed wastewater treatment facility an allowable use on the proposed site. 14-14

Page 165, paragraph 4, Resource Management System: Please note that the specified levels of severity for water supply and sewage disposal in Los Osos are **recommended** in the 2000 *Annual Resource Summary Report*, but have **not been certified** by the Board of Supervisors. 14-15

Page 167, paragraph 4, Planning Area Standards: This paragraph should state that a planning area standard (standard No. 3 for the Commercial Retail category) that applies to the portion of the Morro Shores property within the Commercial Retail category precludes Public Utility Facilities uses. Therefore, a general plan amendment would be required in order to make the proposed wastewater treatment facility an allowable use on the proposed site. 14-16

Page 168, paragraph 1, Urban Reserve Line/Urban Services Line: The second sentence should be revised to read: "The urban services line represents the area within which urban services are expected to be provided within a 5 to 10-year time frame, and across which extension of community water or sewer services is generally precluded. ~~conversely, defines areas where development is prohibited until such time as adequate water and wastewater services can be provided.~~" (underlines mean language to be added, strike-outs mean language to be deleted) 14-17

Page 168, paragraphs 3,4 and 5, Population Projections and Treatment Capacity: This section should be revised to reflect the following:

- Our estimate of the population of Los Osos as of January 1, 2000 is 14,724.
- Our latest estimate of population buildout within the URL, based on the existing Estero Area Plan (assuming no development on both the 204-acre Morro Palisades property and the northern 40 acres of the Broderson site) is about 22,900.
- The yet-to-be-released revised draft Estero Area Plan will include a buildout estimate of about 21,400 persons within the Los Osos URL, assuming no development on both the 204-acre Morro Palisades property and the northern 40 acres of the Broderson site. 14-18
- According to Table 3-6 on page 59 of this EIR, the proposed wastewater facilities project is designed to serve a buildout population of 17,963, not 19,200 as stated in paragraph 4 on page 168.
- Based on the yet-to-be-released revised draft Estero Area Plan, we estimate that population buildout within the collected area would be about 19,000, compared to the EIR's estimate of 17,963. The discrepancy between these two buildout figures is not due to retirement of development potential to mitigate for loss of sensitive habitat, as stated in paragraph 4.

Page 172, paragraph 2, LCP Requirement: Design Projects to Minimize Impacts on Sensitive Resources: Policy 27 is implemented by and should be evaluated according to Coastal Zone Land Use Ordinance Section 23.07.176. 14-19

Pages 173 and 174, LCP Requirement: No Significant Impact to Environmentally Sensitive Habitats, Ensure Biological Continuance of Sensitive Species: Policies 1,2 and 33 are implemented by and should be evaluated according to Coastal Zone Land Use Ordinance Sections 23.07.170-178. 14-20

Page 177, Analysis: The service area for the Wastewater Facilities Project **does not** coincide with the Los Osos URL, as stated. Instead, the boundaries of the service area are similar to those of the urban services line (USL). More importantly, the EIR does not demonstrate that the proposed wastewater project can accommodate buildout (according to our estimate) within the URL, the USL or its own service area (according to our estimate), consistent with Policy 2 for Public Works. The land use implications of this discrepancy should be discussed. 14-21

Page 179, LCP Requirements for Visual Resources: LCP Policy 6 for Visual and Scenic Resources is not applicable, as the proposed project (other than a portion of the collection system within the Baywood Park commercial area) is not within a "small-scale neighborhood" or "special community" as defined in the Coastal Zone Land Use Ordinance. 14-22

Page 187, Regulatory Setting: The EIR should consider how the proposed project relates to the *Los Osos Circulation Study*, as amended in 2000. 14-23

Page 218, Noise Sensitive Uses: The EIR should identify future residences in the tentatively approved subdivision (Tract 1643) adjacent and to the west of the proposed treatment plant site as noise sensitive uses, and potential noise impacts to those residences should be evaluated. 14-24

Page 223, Mitigation Measures: The EIR does not demonstrate how mitigation for construction of the collection system will reduce the average total noise level of 91.4 dBA (or other noise levels specified in Table 6.8-3 on page 220) to a less than significant level of 65 dBA (10 dBA above the ambient noise level of 55 dBA). 14-25

Page 239, Regulatory Setting: Please refer to our preceding comment regarding special communities and small-scale neighborhoods under Page 179. 14-26

Page 241, Treatment Plant: The EIR should consider potential visual impacts to future residences in the tentatively approved subdivision (Tract 1643) adjacent and to the west of the proposed treatment plant. 14-27

Page 270, Regulatory Setting, Local Coastal Program/Coastal Zone Land Use Ordinance: Limitations on development within and near Sensitive Resource Areas and Environmentally Sensitive Habitat are addressed by the *Coastal Plan Policies* and by **standards** (not policies) in the Coastal Zone Land Use Ordinance. 14-28

Page 282, Mitigation Measures, Mitigation BIO-2: Preconstruction surveys and fencing of potential roosting sites do not appear to address the impact of removal of habitat identified in "Impact BIO-5" and "Impact BIO-14." 14-29

Page 290, Mitigation BIO-15: The county wishes to continue working with the Los Osos Community Services District and other agencies on habitat conservation issues, and looks forward to working with them in preparing and implementing a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). 14-30

Page 294, paragraph 1, Growth-Inducing Impacts: A Draft EIR has been prepared for the public hearing draft of the Estero Area Plan (February 1999); however, **a Final EIR has not been prepared or certified**, as stated. Furthermore, it is likely that a revised Draft EIR will be need to be prepared to address planned revisions to the draft Estero Area Plan. 14-31

Thank you for considering our comments. Please feel free to call me at 781-5608 if there are any questions.

Sincerely,

Mike Wulkan

MIKE WULKAN
Senior Planner, Long Range Planning

c: Ellen Carroll, Environmental Coordinator

Letter 14
San Luis Obispo County Department of Planning and Building
Mike Wulcan, Senior Planner, Long Range Planning

14-1 The comment questions how brine solution and miscellaneous rinse water from treated groundwater would be transported to the Duke Energy Morro Bay Power Plant.

Response: At the time the Draft EIR was written, one option for re-introducing recovered groundwater back into the drinking water supply involved treating harvested water through an ion exchange process that generated brine as a by-product. Recent discussions with the State Department of Health Services, however, indicate that recovered water could be blended with existing drinking water supplies to meet safe drinking water standards, thus eliminating the need for additional treatment and the potential generation of brine. However, had the ion exchange treatment process been pursued, the resulting brine would have been transported to the Morro Bay power plant by tanker truck. This would have involved three truck trips per week.

14-2 The comment questions the population buildout estimates for the Los Osos urban reserve line provided in the Draft EIR. Estimates prepared for the yet-to-be released Estero Area Plan, adjusted for no development on the Morro Palisades property and the northern Broderson property result in a population of about 19,000 within the collected area, compared with about 18,000 estimated by the Draft EIR.

Response: The discrepancy between the two population estimates is noted. It should also be noted that the wastewater treatment plant will be designed with sufficient capacity to accommodate a buildout population of 19,000 residents within the collected area. Moreover, the difference between the estimated population provided in the Draft EIR and the estimate contained in the yet-to-be-released Estero Area Plan are smaller than stated. According to Table 2-1 contained in the Draft Project Report prepared by Montgomery Watson Engineers (Jnauary, 2001), the wastewater treatment plant will be designed to serve a buildout population of about 18,428, a difference of about 3% from the County estimate. Moreover, the CSD Board has expressed a desire to purchase the southerly 40 acres of the Broderson property for biological mitigation which would further reduce the buildout population of Los Osos by retiring the development potential there.

The wastewater treatment plant is expected to accommodate 1.3 million gallons per day dry weather flow to 1.6 million gallons per day wet weather flow. The dry weather flow associated with the additional 572 residents accommodated by the County population estimate is about 40,000 gallons per day (assuming 69 gallons per day per person dry weather flow), which is an increase of about three percent and well within the capacity of the treatment plant.

14-3 The comment states that buildout wastewater flows within the collected area would be higher than estimated in the Draft EIR.

Response: See response to item 14-2, above.

14-4 The comment corrects the acreage designated for different land use categories on the Resource Park site.

Response: The table on page 82 summarizing land use designations for the Resource Park site will be amended as follows:

Land Use Category	Acres (approx.)	Density/Maximum Parcel Size
Residential Single Family	22	1-7 du/acre
Residential Multi-family	28	8-38 du/acre
Commercial Retail	~~6~~ 8	6,000 sq.ft. - 2.5 acres
Office and Professional	~~5~~ 3	6,000 sq.ft. - 1 acre
~~Recreation~~	~~5~~	~~6,000 sq.ft. - 20 acres~~
Total:	~~66~~ 61	

14-5 The comments states that row LU-1 of Table 5-5 should be corrected to reflect that wastewater treatment plant sites are allowable uses in the land use categories of all of the alternative sites, subject to special development standards.

Response: The comment is noted. However, none of the alternative sites were screened out of the environmental analysis on the basis of whether a treatment plant was an allowable use.

14-6 The comment asks why each alternative treatment plant site evaluated against criteria F-2 relating to drainage in Table 5-5.

Response: Criteria F-2 on Table 5-4 favors treatment plant sites without creeks or direct drainage courses to Morro Bay. Of the alternatives screened on Table 5-5, the Holland, Morro Shores Southwest, Turri Road, and Resource Park sites could arguably provide a direct (or nearly direct) drainage to Morro Bay. In addition, the project site also falls into this category.

14-7 The comment recommends the geotechnical investigation required by Mitigation GEO-7 be performed by a certified engineering geologist and be submitted to the County Planning Department prior to construction permit issuance.

Response: The comment is noted and will be incorporated into the mitigation monitoring and reporting program.

14-8 The comment recommends a complete grading and drainage plan be submitted to County Planning prior to the issuance of permits.

Response: The comment is noted and will be incorporated into the mitigation monitoring and reporting program for Mitigation WR-1 and GEO-7.

14-9 The comment states that the 2000 Annual Resource Summary Report recommends a level of severity II for water supply in Los Osos which has not been certified by the Board of Supervisors.

Response: The comment is noted.

14-10 The comment states that future water demand within the Los Osos urban reserve line would be slightly higher than stated in the DEIR because the estimated buildout population associated with the yet-to-be-released Estero Area Plan is slightly higher.

Response: As stated in the response to comment 14-2, the wastewater treatment plant will be designed to serve a buildout population of about 18,428, a difference of about 3% from the

County estimate. The water demand associated with the additional population would be about 86 acre-feet per year, an increase of about 9% over the estimate provided for buildout in the Draft EIR. Nevertheless, the DEIR concludes that operation of the wastewater water system will have a beneficial impact on water supply by cleansing the upper aquifer and rendering it available for consumption.

14-11 The comment questions the basis for the determination that future water demand will greatly exceed supplies.

Response: The statement that future water demand will greatly exceed supplies overstates the predicted conditions with the groundwater basin. However, there is evidence of overdraft conditions at present from rising salinity (probably caused by sea water intrusion) in wells on the east side of town. Absent some alteration in the management of the groundwtaer withdrawals, this condition will only worsen. Thus, the Draft EIR states that demand will exceed supplies.

The precise nature of the safe yield of the groundwater basin is not clearly understood and is currently being investigated as part of the Water Management Plan being prepared for the District. Although the DEIR concludes that long term demand for water will increase as a result of additional development (impact H-5), the project includes recovery of about 448 acre-feet of water per year that will be blended with, and augment, existing supplies. Whether this recovered water is sufficient to offset the overdraft conditions will need to await completion of the Water Management Plan.

14-12 The comment recommends amending paragraph 3 on page 164 regarding consistency with adopted plans and policies.

Response: The last sentence of paragraph 3 under part IV. will be amended as follows:

> The Local Coastal Program Policy Document, together with the Coastal Zone Land Use Ordinance (CZLUO) *Framework for Planning, Coastal Zone, and the coastal area plans* contain the land use development standards and policy guidance for land use decisions within the coastal zone.

14-13 The comment refers a preceding comment regarding the land use designations for the Resource Park site.

Response: Refer to comment and response No. 14-4, above.

14-14 The comment clarifies the discussion of Public Facilities as described in the DEIR and identifies the need for a general plan amendment.

Response: The comment is noted. The Los Osos CSD is currently preparing an application for a general plan amendment to address this issue.

14-15 The comment refers to the levels of severity recommended by the 2000 Annual Resource Summary Report.

Response: The comment is noted.

14-16 The comment re-states the need for a general plan amendment for the Tri-W site to allow a wastewater treatment plant.

Response: The comment is noted. The Los Osos CSD is currently preparing an application for a general plan amendment to address this issue.

14-17 The comment clarifies the limitations implied by the adopted urban services line.

Response: Paragraph 1 on page 168 is amended as follows:

> The Urban Services Line represents the area within which urban services are expected to be provided within a 5 to 10 year timeframe, *and across which the extension of community water or sewer services is generally precluded.* ~~conversely, defines areas where development is prohibited until such time as adequate water and wastewater services can be provided.~~

14-18 The comment provides population estimates for the wastewater collection area that differ from those provided in the DEIR.

Response: Please refer to response 14-2, above.

14-19 The comment states that Local Coastal Program Policy 27 is implemented by and should be evaluated according to Coastal Zone Land Use Ordinance Section 23.07.176. Coastal Zone Land Use Ordinance Section 23.07.176 speaks to the issue of protecting and preserving rare and endangered species of terrestrial plants and animals by preserving their habitats. Part (a) states that vegetation that is rare or endangered or that serves as habitat for rare or endangered species shall be protected. Development shall be sited to minimize disruption of habitat. Part (b)(1) states that native plants shall be used wherever vegetation is removed. Part (b)(2) states that areas to be disturbed shall be shown on the site plan fore development. Part (3) states that any trails through the habitat shall be shown and marked on the site.

Response: Development of the Tri-W site with a wastewater treatment plant and construction of a disposal leach field on the Broderson property will not be consistent with this Section. As stated in the analysis on pages 170 - 171 the Andre property is a feasible treatment site alternative that avoids or minimizes impacts to sensitive habitats, consistent with LUO and Coastal Act policies.

14-20 The comment states that Local Coastal Program Policies 1,2 and 33 are implemented by and should be evaluated according to Coastal Zone Land Use Ordinance Section 23.07.170-178.

Response: Coastal Zone Land Use Ordinance Sections 170-178 speak to the protection of "environmentally sensitive habitats", including wetlands, streams and riparian vegetation, terrestrial habitats (see response to 14-19, above) and marine habitats. The analysis provided on pages 170-175 of section 6.5 of the Draft EIR: Consistency With Adopted Plans, and section 6.11: Biological Resources, suggests that development of the Tri-W site with a wastewater treatment plant, and construction of a disposal leach field on the Broderson property will not be consistent with these standards. Mitigation measures provided in Section 6.11 are recommended to reduce potential impacts to rare and endangered habitats as much as possible. However, impacts for each site are considered adverse and unavoidable.

14-21 The comment states that the service area for the wastewater facilities project does not coincide with the Los Osos URL and that the SEIR does not demonstrate that the wastewater project can accommodate buildout of the URL, USL or the project's own service area.

Response: The comment regarding the boundaries of the service area in relation to the Los Osos Urban Reserve Line are noted. With regard to the population service capacity of the wastewater treatment plant, please refer to responses 14-2 and 14-8.

14-22 The comment states that LCP policy 6 for visual and scenic resources is not applicable.

Response: The comment is noted.

14-23 The comment states that the DEIR should consider how the proposed project relates to the Los Osos Circulation Study as amended in 2000.

Response: The Los Osos Circulation study assumed construction of a commercial center on the Tri-W site in accordance with the adopted Estero Area Plan. Traffic associated with the wastewater treatment facility will be substantially less than that assumed for a shopping center.

14-24 The comment states that the DEIR should identify future residences in the tentatively approved subdivision (Tract 1643) as noise sensitive uses and evaluate the impacts.

Response: Future residents of Tract 1643 would be considered sensitive receptors similar to the residences to the south across Los Osos Valley Road. The DEIR states on page 221 that noise sensitive uses, such as residences, within 600 feet of the construction site would be adversely impacted by construction noise which would exceed County standards for the 12-18 month construction period. Operational noise generated by the treatment plant is considered adverse but not significant.
With regard to residences to be constructed on property adjoining the treatment plant site, it should be noted that no residential construction may occur until the building moratorium is lifted which can only occur after the treatment plant is constructed. Thus, construction related noise impacts will cease before any residences are present to the north and west.

14-25 The comment states how mitigation for noise associated with construction of the collection system will meet County standards.

Response: Mitigation Measures N-1 and N-2 speak to the issue of construction-related noise impacts. Among the requirements of these measures are limitations to the hours of construction and the use of construction technologies that minimize noise. With regard to reducing noise levels below those identified on Table 6.8-3, Mitigation Measure N-2 requires the use of noise barriers around construction equipment areas where necessary to minimize noise. Noise barriers for stationary sources can attenuate 5-10 decibels from a line of sight source as shows on the following table (from *US Department of Transportation, Federal Highway Administration, April, 2000*).

Sample Barrier Attenuation

Reduction in Sound Level	Reduction in Acoustic Energy	Degree of Difficulty to Obtain Reduction
5 dBA	70%	Simple
10 dBA	90%	Attainable
15 dBA	97%	Very Difficult
20 dBA	99%	Nearly Impossible

Barriers do have limitations. For a noise barrier to work, it must be high enough and long enough to block the view of a road. Noise barriers do very little good for homes on a hillside overlooking a road or for buildings which rise above the barrier. Openings in noise walls for driveway connections or intersecting streets greatly reduce the effectiveness of barriers. In some areas,

homes are scattered too far apart to permit noise barriers to be built at a reasonable cost. It should be noted that construction of the collection system will move through the community in 200 foot increments thereby exposing a given receptor to the peak noise for a short period of time. Noise barriers, combined with the nature of the construction activities will reduce impacts to a less than significant level.

14-26 The comment re-states that LCP policy 6 for visual and scenic resources is not applicable.

Response: The comment is noted.

14-27 The comment states that the DEIR should consider potential visual impacts to future residents of the adjoining residential subdivision (Tract 1643).

Response: Visual impacts to the future residents of Tract 1643 would likely be less than those experienced by existing residences to the south and west. The primary view corridor for future residents of Tract 1643 is to the north toward Morro Bay. Views of the Irish Hills to the south are obscured by the existing residential neighborhoods south of Los Osos Valley Road. The treatment plant site is upslope of Tract 1643 and would not impose a significant barrier to views of the Irish Hills because the treatment plant will be constructed largely underground. Moreover, the treatment plant will be constructed before the surrounding residences because the facility is required in order to remove the building moratorium. Thus, the treatment plant will be in place when future residents purchase their homes in Tract 1643 and the views to the south at that time will include the treatment plant and accompanying park development.

14-28 The comment clarifies that limitations on development within and near Sensitive Resource Areas are addressed by the Coastal Plan Policies and standards in the Coastal Zone Land Use Ordinance.

Response: The comment is noted.

14-29 The comment states that Mitigation BIO-2 does not address the impact of removal of habitat as identified in Impact BIO-5 and 14.

Response: The Broderson site contains several acres of eucalyptus windrow, only a portion of which would be removed to construct the leachfields. The actual location of the leachfields will be determined in consultation with USFWS and CDFG after project design parameters are complete. This will allow the least amount of impact to the resources. It is important to note that resource agencies have indicated a desire to improve the snail habitat at the Broderson site by, in part, removing the eucalyptus windrows. This would be a situation where the snail habitat is deemed more valuable than the butterfly, the latter not being listed as endangered.

14-30 The comment states that the County wishes to continue working with the Los Osos CSD on habitat conservation issues.

Response: The comment is noted and will be forwarded to the CSD Board for their consideration.

14-31 The comment notes that a draft EIR has been prepared for the Estero Area Plan draft of February, 1999 and that a revised draft EIR may be required to address revisions to the Area Plan.

Response: The comment is noted.

State Water Resources Control Board

Division of Clean Water Programs
1001 I Street, 16th Floor, Sacramento, California 95814 • (916) 341-5657
Mailing Address: P.O. Box 944212 • Sacramento, California • 94244-2120
FAX (916) 341-5707 • Internet Address: http://www.swrcb.ca.gov
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Winston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

JAN 9 2001

Mr. Bruce Buel
Los Osos Community Services District
2122 Ninth Street
Los Osos, CA 93402

15-1

Dear Mr. Buel:

DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE LOS OSOS COMMUNITY SERVICES DISTRICT (DISTRICT) - WASTEWATER FACILITIES PROJECT – STATE REVOLVING FUND (SRF) LOAN NO. C-06-4014-110

Thank you for the opportunity to review the above referenced document. We understand that the District will be seeking an SRF loan from the State Water Resources Control Board (SWRCB), Division of Clean Water Programs (Division) for the above project.

Thank you for following the *Environmental Review Guidelines* developed for SRF loan projects. Although we do not have any specific comments pertaining to the DEIR, we would like to list several procedural items and SRF loan program requirements for your information.

1. The SWRCB will be a responsible agency under the California Environmental Quality Act (CEQA) and will use the environmental document when deciding whether to approve a loan for the project. If a loan is being requested, please provide us with a copy of: (1) the Final EIR, including copies of comments and responses, (2) the resolution certifying the Final EIR and making CEQA findings, (3) the adopted Mitigation Monitoring and Reporting Program, and (4) the Notice of Determination filed with the Governor's Office of Planning and Research, when available. In addition, we would appreciate notices of any hearing or meeting held regarding environmental review of the project.

2. As your are aware, SRF loans are partially funded by the Environmental Protection Agency (EPA), and require additional "CEQA-Plus" environmental documentation and review. The Division is required to consult directly with agencies responsible for implementing federal environmental laws and regulations. Accordingly, a copy of your DEIR was distributed to the appropriate federal agencies on December 15, 2000. Federal agencies are provided 45 calendar days to review and comment on your DEIR. Six days mailing time is also added to the review period. The federal review period will expire on February 4,2001. We will send you copies of any comments we receive during the review period and request your responses.

3. SRF loan applicants must comply with federal laws pertaining to cultural resources, particularly Section 106 of the National Historic Preservation Act. Please submit a copy of your environmental document to the Division's Cultural Resources Officer, Ms. Cookie Hirn. She will consult with the State Historic Preservation Officer (SHPO) on your behalf at several points in the compliance process. She will first work with the District and the SHPO to establish the project's Area of Potential Effects (APE). After the APE is established, please provide documentation of the following: background research for cultural resources—including a records search with the California Historical Resources Information System for an area one-half mile around the APE and consultation with the Native

American Heritage Commission, interested Native Americans, local historical societies, and any other interested parties. Additional submittals, including a field survey by a qualified archaeologist and, if appropriate, an historical specialist may be required to document resource significance and/or project effects. When adequate information has been submitted, she will review it for Section 106 compliance and will forward approved documents to the SHPO. The SHPO has a 30-day review period in which to comment or to concur that the process is complete. Please contact Ms. Hirn at (916) 341-5690 with any questions you may have regarding the Section 106 process.

4. SRF projects are also subject to provisions of the Federal Endangered Species Act and must obtain a Section 7 clearance from the U.S. Fish and Wildlife Service (FWS). Accordingly, a copy of your environmental document has been forwarded to the FWS for their review. Any issues raised by federal agencies will need to be resolved before SRF funding can be approved

Please contact me at (916) 341-5667 if you have any questions regarding the environmental review of this project.

Sincerely,

Diane Edwards

Diane Edwards
Environmental Services Unit

cc: Mr. Brad Hagemann
Central Coast Regional Water Quality
Control Board
81 Higuera Street, Suite 200
San Luis Obispo, CA 93401-5427

Mr. David Moran
Crawford, Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, CA 94301

Governor's Office of Planning & Research
State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

Letter 15
State Department of Water Resources
Division of Clean Water Programs
Diane Edwards, Environmental Services Unit

15-1 The letter from the Department of Water Resources alerts the Los Osos CSD to procedural requirements associated with projects seeking State Revolving Fund monies for wastewater projects.

Response: The letter does not raise any significant environmental issues associated with the Draft EIR. However, the comments regarding procedural requirements are noted.

ANSWER TO DEIR JAN 5 01

(10)

FOR QUESTIONS OR CLARIFICATION 534-0800

ALFRED C. BARROW
700 EL MORRO
LOS OSOS CA
93402
B.A. U. of Oregon
1980

PREFACE

For two years I have attended all wastewater committee & CSD meetings, reading the docket and researching topic via internet, CAWS, TAC & Blue Ribbon committees appointed by SLO County Board of Supervisors. Also read McCarty/Eddy wastewater facilities plan & the TASK

I have conferred with wastewater plant managers in California and ponds/conventional plants. And downloaded websites. From CA/SWCB, USA EPA 9 & other sites.

In short I have had a two year crash course on wastewater management. I have discussed open trench, directional boring with local and national concerns. As well as many decentralization systems old & modern.

Pondmy system designers throughout the country have generously donated time & treatment plans.

Here are my conclusion after viewing Metcalf/Eddy and Oswald/Green and PDS systems.

① The Los Osos voted Nov 1998 to dump the Flame SLO County Plan & Build AWPS with collection of Solid waste by Truck & Piping liquid. Several Technologies including Trenchless & Directional Boring were preferred over conventional collection (The most environmental damaging of all).

- Conventional Sewer plants need a steady diet of Solids to keep the Bacteria up. (See UC Davis Document) Hence a conventional Collection system.

Problems include: Shoring open Trench
: Water causing caveins
: Hence existing pipes break causing potential explosion & flooding.
Case in point 2 homes
This December flooded by [illegible]

(3p) 32 miles of existing Asphalt will be torn out to be trucked away somewhere? And later replaced with new.

4774 laterals will have to be dug from center of streets to the property line. 16-1

The construction will destroy existing habitat on side of streets (not the case in Directional boring)

Sand from pipeline may have to be moved twice multiplying dust & Desiel Noise and smoke

Traffic will be blocked & many will want to walk on habitat to get home.

EPA small flows say sewer not necessary see James Kreissl en eng of EPA Cincinnati Report to Metcalf/Eddy which you must have a copy.

RWQCB causes Grover Beach to Sewer but nitrate in Groundwater Remain High

(4P) <4000 Beach Spill yearly on California Coast Hightite Danger of unforgiving conventional collection & Treatment system. See Beach closing Document

Bio Solids/ sludge A/b

U C DAVIS Rates Land fill APPLICATION the worst of ALL option for solid waste Disposal - see "MT. San Diego" Apile of solids sitting for vectors TO SPREAD diseases - see center For Disease control comment on health Risk to humans/Animals etc.

I refer to 800 page Go ORDER From SWCB TODD Thompson In the Middle somewhere you will see coastal zone is not included for provision of biosolid Application etc.

16-2

(5e) Without Septic Systems or BMDS you
Have Sludge. See objections in
HARVARD University letter.
U C DAVIS Documentation Responses to my
Inquiry

NIOSH HAZARD to Workers, Field Application
& Sewer Workers & surrounding citizens
a) Dried spores blow & are inhaled from
Dust & odor scrubbed ventilation of plant
On site showers need be included & laundry
facilities and locker room to change to
"Street" clothes.

The Bay gets Most pollution from Los Osos
Creek Dumping from AG operations and the
Old Dump I lived but it frequently saw the
mess Dodged by old BRIDGE at end of
Santa Isabel Ave in Los Osos.

(6P) And Chorro Creek Again Ag and Prison Sewer Spills (Re: convicted employees of offense)

Developers want Mitigation of Sewer impa paid by Existing home owners (wastewater committee members "sucking up" to Sorrel Marks & Gebhardt Hubert of RWQCB

See Article on "more bad smells" down wind of town

See TASK "F" Metcalf & Eddy

Page 5-23 Technical Advisory council

Dumping wells for Denitification
Septic Tank Leachfield
Maintenance Program

A 5.1 Page 5.1
2
3
4
5
6 Page 5.2
7
8

16-3

(7p)

Disposal Problems –

Pumping up hill to Broderson continually 800,000 to 1 million gallons down hill by injection wells.

Supervisors Biachi's husband an expert in his own right says hill won't take it and many factors can cause instability in downsloping sandy soil. Confirmed by seismic report to lo CSD. 16-4

Also unwise to locate all that and sewer on fault. 16-5

Dewatering wells to take 400,000 gal leaving 400K to 600K gal to go down to housing at Bincarth & below to Ramona putting Morro Shores and other housing at risk of high ground water. 16-6

The M.B. Bay will see a change to more freshwater flora/fauna & subsequent corrective organisms

8p The MB NESTUARY WATERSHED an
~~HABITAT~~ Conservation documents indicat
Their are 25,000 acre/sq on Both sides
of ~~to~~ MORROS.
with Cleath flow estimation from
BRODERSON TO Sweet Springs we will
HAVE A TRAVEL time of A 'CENTURY'
FOR OUR BASAL water supply not inclu
RAINS.
The US WEATHER SERVICE estimates A
10 year semi DROUGHT IN OUR AREA
INDICATING water Levels will be lowering
bact to PRE-1970 LEVELS giving
OUR GROUNDWATER to SURFACE MORE SPACE
FOR NATURAL DENITRIFICATION

Al BARROW

Letter 16
January 5, 2001
Al Barrow 700 El Moro
Los Osos, CA

16-1 The comment refers to potential impacts to biological and air quality resources associated with construction activities.

Response: Impacts to biological resources from construction activities are discussed in Section 6.11 of the Draft EIR. Construction related air quality impacts are analyzed in Section 6.7 of the Draft EIR.

16-2 The comment raises questions regarding the impacts of land disposal of bio-solids.

Response: Impacts associated with the disposal of bio-solids are discussed in Section 6.9 under impact PS-9. In the event land disposal of bio-solids is pursued by the Los Osos CSD, it will be in accordance with the provisions of Title 40, Section 503.23 of the Code of Federal Regulations, which prescribes landfill management techniques to mitigate the concerns raised regarding vectors and risk to animals.

16-3 The comment raises concerns regarding odors downwind of the community associated with operation of a wastewater treatment plant on the Tri-W site.

Response: Potential odor impacts are discussed under Section 6.7 under impact AQ-4.

16-4 The comment raises concerns regarding potential impacts to downslope soils resulting from disposal of 800,000 gallons per day of treated wastewater on the Broderson site.

Response: Potential impacts to downslope soils are discussed in Section 6.1 under impact GEO-13. The DEIR concludes that potential liquefaction impacts associated with the project would be less than significant.

16-5 The comment states that it would be unwise to locate a treatment plant on a fault.

Response: Presumably this comment refers to the inferred trace of Strand B of the Los Osos fault which may exist in the vicinity of the treatment plant site. There are no known earthquake faults adjacent to the treatment plant site. However, as discussed in Section 6.1: Geology, there may be a northerly extension of the Los Osos Fault (Strand B) to the east of the treatment plant site. The presence or exact location of any faults ain this area has never been documents. Geologic work done previously by Pacific Gas and Electric Company and others, and well data from east and west of this area suggests that there may be a strand of the fault tending approximately as shown on Figure 6.1-3 of the Draft EIR. As stated on page 119, if the fault does exist in this area it is not considered active and previous analysis cited a low probably of ground rupture. Impacts associated with seismic hazards are addressed by Mitigation Measures GEO-3, GEO-4, GEO-5 and GEO-7.

16-6 The comment raises concerns regarding the risk of higher groundwater in the Binscarth Avenue area as a result of the disposal leach fields on the Broderson site.

Response: The potential for treated wastewater to flow into the yards of residences north of the disposal site on Highland Drive was investigated in two studies prepared by Cleath and Associates and incorporated as Appendix C of the Draft EIR. The second study, entitled *Hydrogeologic Investigation of the Broderson Site Phase 2 Impacts Assessment*, September, 2000,

presents hydrogeologic modeling data compiled to determine the best way to introduce treated wastewater to the site in a manner that 1) helps cleanse the upper aquifer and 2) avoids surfacing downslope. Based on the analysis of sub-surface geology and the amount of wastewater to be disposed at the site, the study computes horizontal sub-surface travel times for treated wastewater. The study concludes that a disposal leach field located upslope on the Broderson site (see aerial photograph with response to comment 2-3) covering an area in excess of 7 acres and with a maximum disposal rate of 800,000 gallons per day will not result in the daylighting of treated wastewater along Highland Drive or in the Redfield Woods neighborhood in general.

Over time (about 6 years), however, treated wastewater will migrate downslope toward the Bay where groundwater levels are shallower in comparison to areas to the south. To avoid surfacing of treated wastewater in this area, a series of five harvesting wells are proposed to pump down the groundwater to avoid surfacing. Once the groundwater is pumped down, it would take about two-three weeks for the treated wastewater to surface if all five wells were suddenly inoperative.

State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

GRAY DAVIS, Governor

January 25, 2001

Mr. David Moran
Crawford, Multari, and Clark
641 Higuera Street, Suite 302
San Luis Obispo, California 93401

Dear Mr. Moran:

Draft Environmental Impact Report (DEIR)
Los Osos Wastewater Treatment Facilities Project
San Luis Obispo County, SCH Number 9911103

Department of Fish and Game personnel have reviewed the DEIR for the Los Osos Wastewater Treatment Facilities Project, including wastewater collection, treatment and disposal systems. The Department recognizes the need for, and supports the construction of these facilities in order to reverse the degradation of Morro Bay. Our comments on the DEIR are offered in order to encourage the Los Osos Community Services District (LOCSD) to choose an alternative which will minimize the impacts to terrestrial resources and fully mitigate those impacts.

Although a number of sites are analyzed for the project, it is our understanding that the preferred project currently is expected to utilize the Tri-W site for construction of the treatment facilities; and will utilize the Broderson and Powell sites, as well as several roadway rights-of-way for disposal via leach fields. It is expected the project will impact coastal dune and maritime chaparral habitats, which are recognized by our Natural Diversity Data Base as limited in occurrence and threatened. These two natural communities provide habitat for the Morro Bay kangaroo rat (State and Federally endangered), Morro shoulderband snail (Federally threatened), Morro manzanita (Federally threatened), Monterey spineflower (Federally threatened), and Indian Knob mountain balm (State and Federally endangered), as well as a number of other plant and animal species which warrant consideration under the California Environmental Quality Act (CEQA). In addition, we are concerned about the potential impacts to wetlands that may be altered as a result of disposal of effluent and the effects on species associated with wetland habitats, including black rail (State threatened), steelhead (Federal threatened), and California red-legged frog (Federal threatened). Areas which support these species and

Conserving California's Wildlife Since 1870

habitats meet the definition of Environmentally Sensitive Habitat Area (ESHA) under the Coastal Act, and certain development standards apply. We are concerned that the mitigation measures identified in the DEIR for offsetting the direct (primary) impacts of the project are not sufficient to mitigate to a level of less than significant, and recommend that measures intended to mitigate impacts be in place and functional prior to commencement of operation of the project.

In addition to direct (primary) impacts resulting from construction and operation of the wastewater treatment facilities, we are concerned that the LOCSD adequately characterize and fully mitigate the indirect (secondary) impacts resulting from build out of the area that would result from lifting of the building moratorium currently in effect. CEQA requires that an EIR identify all environmental impacts of a proposed project; this would include analysis of "significant environmental effects the project might cause by bringing development and people into the area affected" (CEQA Guidelines 15126.2 (a)); any significant irreversible environmental changes which would be involved in the proposed action should it be implemented, including "primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generation to similar uses" (Section 15126.2 (c)); and growth inducing impacts of the project, including "projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)" (Section 15126.2 (d)). We are concerned that mitigation measures identified in the DEIR for the secondary impacts are not sufficient in detail to determine if impacts would be mitigated to a level of less than significant, and rely on deferring identification and implementation of mitigation measures to a later date.

Direct project impacts and mitigation

The DEIR states that the northern 40 acres of the Broderson site would serve as mitigation for the direct (primary) impacts of this project; the LOCSD recently indicated they would be purchasing all of the Broderson site (80 acres) for that purpose. While we believe that the Broderson site is appropriate for conservation, we are concerned that neither option would fully mitigate direct project impacts. The Department has consistently recommended that both direct and indirect impacts be mitigated through conservation and management of habitat at a ratio of three-to-one for high-quality and/or large blocks of habitat; and 17-1

at a ratio of one-to-one for smaller parcels that are isolated from other habitat. Mitigation should be primarily "in-kind," that is, coastal dune habitat set aside and managed as mitigation for impacts to coastal dune habitat.

Although the impacts are not well quantified, it appears that the Tri-W site will remove about 11 acres of snail habitat that is also adjacent to a larger block of habitat; the leach fields on the Broderson site will impact another 8 acres of coastal dune habitat (also adjacent to other large blocks of high quality habitat); and the leach fields on the Powell site will impact two to four acres of habitat adjacent to other large blocks of habitat. The impacts of the leach fields in the county road ROWs to coastal dune habitat has not been determined. The direct impacts of the wastewater treatment facilities on coastal dune habitat are projected to be 21 to 23+ acres.

The Broderson site is a total of 80 acres, of which about 32 have been determined to be habitat for snail, and about 40 is habitat for other sensitive species such as Morro manzanita and Indian knob mountain balm. Approximately 8 of the 32 acres of snail habitat could be impacted by the leach fields, leaving about 24 acres of coastal dune habitat remaining. It is unclear what the effect of increased water availability will be on the remaining habitat on the Broderson site, and the figure of 24 acres of habitat remaining may be optimistic. While we recognize the importance of conserving the upper half of the Broderson site, we do not believe that the set-aside identified will mitigate the direct (primary) impacts of the project to coastal dune habitats to a level of less than significant. That area may be useful in offsetting secondary impacts of the project. 17-1

We recommend that the project impacts be further reduced by siting the leach fields in such a way as to minimize impacts on the coastal dune habitat, and the leach fields be configured in such a way as to minimize both spatial and temporal disruption of the habitat. In addition, 8 acres of the Broderson site is currently occupied by eucalyptus groves and veldt grass stands; if it is not feasible to site the leach fields in these areas, they provide an excellent opportunity for restoration to coastal dune habitats. In addition, we recommend that the LOCSD identify another coastal dune site for purchase and set-aside in order to fully mitigate for the direct (primary) impacts of the project; that site would be between 30 and 45 acres, depending upon calculation of total impacts of the project and assuming that impacts to sensitive resources are fully mitigated at a ratio of three-to-one.

Indirect project impacts and mitigation

Figure 6.11-1 assists us in determining impacts related to build out of the project; however, while areas that support resources other than Morro shoulderband snail are mapped, there is no summary of the habitats impacted other than snail habitat. The figures also appear to include the Morro Palisades property, which was recently purchased by the Wildlife Conservation Board, and the Broderson site, which is being addressed separately in the DEIR. In addition, the map and map legend do not distinguish between those properties which are within the Prohibition Zone/Wastewater Collection Area (and thus the subject of indirect (secondary) impacts) and the area within the Urban Reserve Line/Septic System Management Area but outside of the Prohibition Zone (and thus the subject of cumulative impacts). 17-2

We fully support the preparation of a Habitat Conservation Plan (HCP); however the scope and intent of the plan have not been specified, and we remain concerned that an HCP, which is a Federal document intended to support issuance of a permit for incidental take of Federally-listed animal species, would not necessarily address other species/habitats that are required to be addressed pursuant to CEQA. We recommend the scope and conservation goals of a subsequent conservation plan be consistent with mitigating the identified impacts to all of the resources in the project area, in order to address all of the species and habitats that warrant consideration under CEQA, not just those species regulated under the Federal Endangered Species Act. 17-3

The DEIR identifies the intent of the LOCSD in establishing a conservation bank for mitigating secondary impacts of the project to sensitive biological resources (3. Project Description, H. Mitigation of Biological Impacts). While a bank may be an appropriate mechanism for mitigating these impacts, such a bank would have to be demonstrated as economically and biologically feasible. The habitat bank area would have to be large enough to be biologically significant, and preserved up front; provisions and funding for preservation and management would have to be in place prior to selling credits from the bank, and the costs for underwriting debt for purchase of the habitat area and management of the area would have to be borne by the bank until sufficient credits are sold to recoup costs. In addition, it would have to be demonstrated that there would be sufficient use of the bank over the life of the project, and the cost of credits consistent with the time frame of the bank, to make the conservation bank feasible as mitigation; lower cost alternatives could bankrupt the bank and render the bank infeasible as a mitigation measure. 17-3

In addition, the courts have ruled that selection of specific mitigation measures cannot be deferred until a later date; preparation of a plan does not satisfy either the need for full public review or full mitigation of impacts, particularly if the EIR does not identify a standard of performance for the plan which would mitigate the significant effects of the project and provide specific provisions for implementation. We are concerned that the mitigation measures identified for offsetting the indirect (secondary) impacts of the project are not sufficient to mitigate to a level of less than significant, and recommend that measures intended to mitigate those impacts be in place and functional prior to commencement of operation of the project.

Other comments

This project has the potential to affect plant and animal species listed under the California Endangered Species Act (CESA). The DEIR states (Mitigation BIO-4) that a Memorandum of Understanding (MOU)/Memorandum of Agreement (MA) would be needed from the Department, and the MOU/MA would be based on the Section 7 consultation; in fact, a permit would be required pursuant to §2081 of the CESA. While we do have the ability to adopt a Federal incidental take statement or permit, we can only do so if it is consistent with the CESA. If this project will result in the need for a CESA permit, discretionary approval from the Department of Fish and Game would also be required, and the Department would be a Responsible Agency, in addition to a Trustee Agency (Section1, Introduction). 17-4

Impacts to wetlands were identified in Impact BIO-1, but impacts to species which may be affected by a change in wetlands resulting from an alteration in the pattern of effluent disposal have not been identified; this would include the black rail, steelhead, and red-legged frog. We would consider such impacts to be significant. A program for detecting impacts to wetlands, and impacts to species associated with potentially affected wetlands should be developed, including identification of remedial measures and thresholds for implementation of remedial measures should impacts to these resources be detected. 17-5

The DEIR recommends but does not require the restoration of habitat as a mitigation, and has no requirement for management of habitat lands; we recommend the language of Mitigation BIO-4, D, be amended to read: "After securing the land *described in C. above*, the District *shall manage and* restore the land so that it functions as suitable habitat..." In addition, a Restoration and Management Plan (rather than a planting program) should be 17-6

required to be developed by the LOCSD to restore coastal dune and maritime chaparral habitats; goals, methods, materials, management and maintenance activities, success criteria and a monitoring program must be included. The EIR should provide for the Restoration and Management Plan to be reviewed and approved by U. S. Fish and Wildlife Service (USFWS) and the Department.

The DEIR suggests measures that would minimize the introduction of invasive exotic plants during the construction and maintenance of the project; we recommend that a measure be added to Mitigation BIO-8: "Remove existing stands of invasive exotic plants, including but not limited to veldt grass, pampas grass, and iceplants, in order to limit their spread." 17-7

The DEIR recommends transplantation of special-status plant species located within the construction zone (Mitigation BIO-9). The Department does not recognize translocation as appropriate mitigation for sensitive plant species due to its experimental nature. Should the LOCSD wish to use salvaged plants for restoration work, they may indicate appropriate methodology in the Restoration and Management Plan as suggested for inclusion in Mitigation BIO-4. 17-8

Department personnel remain committed to working with you on identifying a project which will meet the objectives relative to restoring water quality to Morro Bay, while minimizing and fully mitigating project impacts on sensitive resources. Please continue to work with Ms. Deborah Hillyard, Plant Ecologist, at (805) 772-4318; and Mr. Bob Stafford, Associate Wildlife Biologist, at (805) 528-8670, on this issue.

Sincerely,

Robert W. Floerke
Regional Manager
Central Coast Region

cc: See Next Page

Letter 17
January 11, 2001
California Department of Fish and Game
Robert Floerke, Regional Manager, Central Coast Region

17-1 Commenter states that the mitigation proposed for the direct impacts of the project is inadequate.

Response: There are several options that would improve the mitigation arrangement of the district vis-a-vis the resource agencies' requirements for adequate and appropriate mitigation of habitat to endangered species. Furthermore, it is important to understand the context in which the mitigation is proposed to fully understand how the direct impact mitigation contributes to the overall protection, management and recovery of the species of concern.

The LOCSD, through representatives, has been in discussion with the several resource protection agencies that have either direct jurisdiction over the project, or are advisory to those who do – U. S. Fish & Wildlife Service, California Coastal Commission, the County of San Luis Obispo, California Department of Fish and Game and the Morro Estuary Greenbelt Alliance (the latter is a non-profit organization whose mission is to protect the greenbelt of Los Osos). These discussions have centered on providing mitigation to the loss of coastal dune habitat that would occur as a result of the construction of the wastewater facility in Los Osos. In addition, the meetings have also discussed the development of a Habitat Conservation Plan for Los Osos.

The HCP would be for the benefit of the multiple species that occupy the greenbelt. It's procedural objective would be to reduce the number of individual (§10) HCPs that USFWS would have to process, and improve the likelihood of a coherent protection of all the resources in the greenbelt. This is a unique approach to mitigating the loss of habitat in Los Osos. Prior permitting activities have resulted in individual HCPs requiring small set-asides of habitat, preferably on the same or adjacent property. The objective of the regional HCP would be to insure that all mitigation for impacts contributes to an ecosystem-wide protection strategy designed for the recovery of the species.

The essence of the recovery strategy is to protect the greenbelt.

LOCSD's mitigation proposal for the direct impacts to the wastewater treatment site is to purchase the single largest remaining privately held undeveloped parcel in the greenbelt, which totals 80 acres, use 10% of this land for a buried and restored leachfield, then donate the entire parcel to a resource agency or organization deemed acceptable to those groups listed above.

The direct impacts from the project are eleven acres at the Tri-W site, eight acres at Broderson, and a small amount scattered around the community. The quality of the habitat at each of these sites varies considerably, as well as its viability.

- The Tri-W site is located in the center of the developed area of Los Osos. While it is part of a large block of undeveloped land containing coastal scrub habitat, it has been considerably degraded by veldt grass. In addition, most agencies have acknowledged that this land would be developed. In fact, the USFWS removed this area from its Draft Recovery Plan.

- The Broderson site is part of the Los Osos greenbelt. It consists of coastal sage scrub, maritime chaparral, and eucalyptus-dominated windrow. Approximately 40 acres of this site is dominated by Morro manzanita. Approximately eight acres of this site would be used for leachfield and access road. The leachfield should be at least 400 feet behind the homes on the

north of the site, but could be placed farther up the hill to the south. The Broderson site is within the critical habitat area of the snail.

- The remaining impacts will be the result of installing the collection system and some of the leachfields. By and large these impacts will be to very low quality habitat in the developed portions of the community. For example, collection lines will traverse the fronts of empty lots, some of which have a residuum of coastal habitat, though severely degraded. These parcels eventually will be developed, mostly with single family homes.

- The Powell property east of the middle school is **no longer proposed** as a leachfield site. The proposal had been to use up to four acres of land. Because of the sensitivity of this site for biological and archaeological resources, and because the site is under agreement for purchase as a conservation property, efforts were made to find a suitable replacement site for the leachfields in this area. The leachfields will be located in a road right of way nearby. The Powell property had excellent habitat qualities and is within the critical habitat area of the shoulderband snail.

As mentioned above, the mitigation for the direct impacts of the project listed above is to protect in perpetuity the remaining seventy-plus acres of greenbelt at the Broderson site.

The commenter has suggested that a large portion of the Broderson site may not be suitable as mitigation, since it is dominated by a plant species (manzanita), albeit threatened, that does not support the endangered snail. According to the letter, if the leachfields are constructed in land suitable for snail occupation, the remainder of the snail habitat will not be sufficient to mitigate the direct impacts of the project.

The commenter recommends that the leach fields be sited "in such a way as to minimize impacts on the costal dune habitat." The LOCSD could locate the leachfields farther up the hill on the Broderson site, within the area dominated by manzanita, which does not appear to support snails. Doing so would eliminate most of the impacts (a roadway up to the leachfields would be required)[1] to the coastal sage scrub. This would be in harmony with the critical habitat designation. This designation defines critical habitat for the snail as providing the primary biological needs of foraging, sheltering, reproduction, and dispersal. As stated in the designation, "These areas we are proposing to designate as critical habitat provide these primary constituent elements, which are: sand or sandy soils needed for reproduction; a slope not greater than 10 percent to facilitate movement of individuals; and the presence of native coastal dune scrub vegetation. This vegetation is typically, but not exclusively, represented by mock heather, buckwheat, eriastrum, chamisso lupine, dudleya, and in more inland locations, California sagebrush, coyote brush, and black sage. Some of the habitat in the critical habitat untis could be improved through habitat rehabilitation or improved management (e.g. removal of nonnative species)." [66 FR 9236] The designation goes on to say that special management considerations for protection of the snail in this unit of critical habitat are not in place. With the development of the wastewater facility, the protection and management of this area is possible.

Under this approach, the loss of the manzanita would be mitigated at a ratio of approximately five-to-one.

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[1]The end of Broderson Street turns into an unpaved trail leading south up the hillside. It is currently gullied and provides considerable sediment to the properties down gradient. The leachfields offer an opportunity to develop a controlled access to the LOCSD site and eliminate the drainage problem in the area.

The loss of habitat at the Tri-W site would be mitigated by the thirty-plus acres of undisturbed snail habitat remaining at Broderson (assuming a worst case for the remaining habitat). The Broderson habitat is of considerably higher quality and is part of the designated critical habitat for the endangered Morro shoulderband snail [66 FR 9233]. The district proposes to protect and restore this critical habitat, and donate the land to an appropriate resource conservation agency or organization, as described above. Some of the area on Broderson is infested with veldt grass and the district proposes to remove this invasive species. The mitigation ratio for this proposal would be approximately three-to-one.

There is no established ratio for mitigation of habitat loss in this area. No agency or organization has undertaken a study of what appropriate mitigation for loss of habitat would be. The district's proposal, as modified, would not only protect a large area of critical habitat, it would meet or exceed the commenter's requested ratios.

Therefore, under both theories of mitigation ~ greenbelt protection or mitigation ratio ~ the LOCSD has proposed a very significant contribution to the protection of endangered species in Los Osos, in conformance with the expectations of the commenter.

Note, the area recommended under this response for installation of the leachfields could be situated at the boundary of the coastal scrub and manzanita. No snails were found by Jones & Stokes Associates during a study of the Broderson site in the area recommended for the leachfields. It was postulated that the slope was too great for there movement. Roth also noted a lack of snails as you moved beyond 300 feet from the north boundary of the site [1997, pers. comm.] Furthermore, the manzanita is relatively sparse here as one habitat transitions into the other. Using this "middle ground" may provide the best protection for the snails and the manzanita.

As stated elsewhere in these responses, the final location of the leachfields on Broderson can be refined with the assistance of the resource agencies to maximize the conservation potential of the remaining acreage of the site. The discussion in the EIR is sufficient to allow this flexibility, and no impact will occur that has not been contemplated in the document.

In addition to the land proposed for acquisition to satisfy mitigation, the district is proposing to spend $10,000 per year in perpetuity for the management of the property, even though it will eventually be owned by a different party. Furthermore, the district has proposed to improve the habitat qualities of the Broderson site by removing exotics and trash within the property. The issue that should be resolved in discussions with USFWS and CDFG is whether the windrows should be removed to enhance snail habitat, or whether they should be left for raptor habitat and possible monarch butterfly habitat.

One option for consideration if the approach to mitigating habitat is unacceptable as described above, is for the district to partner with an agency or organization on the Broderson purchase, and use the additional funds in the project budget to buy coastal sage scrub.

In either event, the LOCSD has committed to purchase 70 plus acres of greenbelt, both as mitigation for direct impacts of the project, and as part of a comprehensive protection strategy for all the important natural resources of the Los Osos greenbelt ecosystem.

17-2 Commenter states that the secondary and cumulative impacts are not fully identified.

Response: The comment states that Figure 6.11-1 assists in determining the impacts related to build-out of the community. Those parcels within the prohibition zone have been identified as secondary impacts of the project, because the development of the wastewater facility would

remove a considerable obstacle. Those parcels outside the prohibition zone are considered the extent of the cumulative impacts of the project, as they do not require sewer connections to be developed. However, the latter parcels, which are of limited geographic scope, do contain habitat recognized as important for the survival of many species in Los Osos.

The table on Figure 6.11-1 differentiates between those parcels within the prohibition zone (secondary impacts) and those outside (cumulative impacts). The upper portion of the table documents acreage of varies vegetative communities within the prohibition zone, and the lower portion of the table identifies those outside.

17-2 Commenter states that the HCP proposal is not adequately defined.

Response: This region merits a comprehensive approach to resource protection according to the USFWS and other concerned resource agencies and organizations. The County of San Luis Obispo has identified an HCP as an appropriate mechanism for planning and implementing the protection of multiple species in Los Osos, and has recently made this a recommended program of their draft Estero Area Plan. The LOCSD has proposed, as part of its mitigation for the wastewater facilities, to prepare an area-wide, or regional HCP for several of the species identified as threatened, endangered, or identified as susceptible to such a fate. Recent discussions with resource agencies have suggested that a NCCP may be the appropriate mechanism for Los Osos. The LOCSD will continue to work with all the appropriate agencies and organization in the direction deemed most appropriate for the resources.

The following is the HCP development program contracted by LOCSD. Again, this can be modified as the development of the plan continues:

HABITAT CONSERVATION PLAN AND SECTION 7 CONSULTATION
The following tasks describe the scope of work for development of the HCP and the Section 7 Consultation:

Task 1 - Project Management
CMCA will manage the preparation of the HCP, coordinate the Section 7 Consultation, and be responsible for delivery of products described above and for establishing contacts with USFWS and other HCP participants. Regular (at least every two weeks) reports will be forwarded to the District Manager regarding the status of the project. This task also includes administration of the contract requirements of the LOCSD and establishment of internal Quality Assurance/Quality Control procedures.

Deliverable: Biweekly written reports (5 copies)
Due Date: Throughout HCP development

Task 2 – Meetings
Development of the HCP will require meeting with various agencies and individuals. The anticipated meetings are described below:

Task 2.1 Meetings with USFWS (5). It is anticipated that up to five meetings will be held with USFWS in Ventura to work through the development of the HCP. Additional meetings will be charged at the rate set forth in Exhibit B. CMCA will attend at least two meetings with USFWS.

Task 2.2 Meetings with LOCSD (5). CMCA will attend up to five meetings with LOCSD to discuss development of and progress of the HCP.

Task 2.3 Meetings with Landowners & Stakeholders (8). CMCA will attend up to eight meetings with landowners and other stakeholders, individually or with groups. This will include both agencies (especially DPR, DFG), environmental groups (MEGA) and private owners.

Task 3 - Define Boundary of HCP
The boundary of the HCP will be presented as the limit of the Baywood fine sands, as this is coterminous with the habitat of the multiple species to be protected under the HCP. The delineation will be appended with a justification for setting this boundary to the HCP. Supporting documentation from experts associated with the various species will be appended to this discussion. The boundary will be mapped and overlain on property and resource data layers.

Task 4 - Collect and Synthesize Biological Data
A majority of Los Osos has been studied in detail and the remaining areas have been mapped and/or had a cursory field assessment. All available existing data will be accumulated and evaluated for accuracy and completeness. The data gathering will include all special status plant and wildlife species that are known to occur in the area. Based on the data collected, a preliminary "covered species" list will be developed. The covered species list will include all plant and wildlife species that the HCP may cover. Further evaluation of these species during the HCP process will determine which species can be adequately covered under the HCP.
The key information needed to determine whether a species is included in the Los Osos HCP covered species list is 1) whether or not the level of "take" can be accurately determined, 2) how much avoidance can be achieved, 3) will minimizing impacts, such as through development only of low-quality areas, be significant, and 4) can mitigation measures adequately compensate for the level of "take?

Task 5 - Determine Proposed Activities/Biological Goals
Documentation developed for the EIR will be expanded to include greater details regarding specific impacts of species protected under the HCP.

In addition, this task will identify and set forth the specific biological goals for each of the species protected in the HCP.

Task 6 - Determine Anticipated Take Levels
CMCA will determine, within the confines of the data, the anticipated take of the various species protected under the HCP. This determination is essential to establish the level of specific mitigation necessary for individual projects that will be developed after the lifting of the current building moratorium by the RWQCB.

The HCP will be designed for tiering of CESA §2080.1 (tier to federal permit for dually listed species) or §2081 (incidental take permit) compliance for state listed species.

Task 7 – Refine Indirect Project Impacts
The indirect impact analysis prepared by Fugro in 1997 will be refined to account for changes to the project. This information will be presented in a format for use in both mitigation discussions with the USFWS and as a component of the HCP for later use by those seeking individual permits to build. The purpose of the indirect impact analysis will be to provide the LOCSD with a means to identify costs and/or procedures associated with buildout after the restriction is lifted.

Task 8 – Develop Minimization and Mitigation Programs & Standards
A range of mitigation measures will be developed that will reduce impacts of the project. Many of these will be adapted and expanded upon from the EIR. In addition, we will consider measures that avoid impacts as well as mitigate them. Reference will be made to efforts of the County and Coastal Commission. Included will be a discussion of funding approaches to achieve mitigation. Monitoring will include two types: HCP compliance monitoring and effects/effectiveness monitoring.

Task 9 – Incorporate Appropriate Adaptive Management Measures
Recently, USFWS regulations were revised to include an investigation of adaptive management for the HCP. By this, it is meant that the program may need to be refined or modified over time as environmental conditions change or evolve. While this is a programmatic product, it provides the USFWS assurance that today's standards can be modified to meet changing conditions. This will incorporate necessary findings for the "no surprises policy" of the USFWS, a policy designed to prevent the Service from coming back and changing the rules of the HCP. For this reason, we will cover unlisted species that may be listed in the near future (Morro manzanita) so the HCP will not require further modification.

Task 10 – Analyze Alternatives
The Endangered Species Act requires that alternatives be analyzed that could reduce the impacts of the project. Many of the alternatives will have been studied in the EIR, and this task will largely incorporate those findings. However, specific information regarding species protection (or, conversely, take) will require elaboration in the HCP. Alternative actions will be discussed that would not result in take, and why they were not pursued (e.g. not building a wastewater facility).

Task 11 - NEPA Compliance
The HCP is likely to require an EA or EIS. The EIS/EIR to be completed for the wastewater facility project will contain all necessary information to comply with the requirements of the Section 7 Consultation process, with no additional cost within this scope.

Task 12 – Develop Monitoring Program
A monitoring program will be developed in order to assure the long-term success of the HCP. The program will describe the responsibilities of the District, or who ever becomes the ultimate holder of title to properties under the plan.

Task 13 - Landowner Participation Program/Implementing Agreement
CMCA will work with the District and landowners to coordinate a strategy for the eventual protection of the requisite areas of suitable habitat. It is not intended under this scope of work that final negotiated agreements will be established with all of the property owners. This is considered the initial step of developing contacts and establishing with each owner an understanding of the program and project expectations.

This task will conclude with the development of a sample or draft Implementing Agreement that can be used to establish landowner participation in the program.

Task 14 - Mapping
CMCA will develop two sets of maps; 1) known locations of special status plant and wildlife species within Los Osos and 2) plant communities, habitats, and land uses.

Special status species maps will use the California Natural Diversity Database as a preliminary source. Experts on particular species and local biologists will be consulted regarding recent information. Other data sources will include HCPs, Environmental Assessments, Environmental

Impact Statements, Environmental Impact Reports, and technical reports available from the USFWS, California Department of Fish & Game, and the County.

Plant community and habitat mapping will use the Los Osos greenbelt map as a preliminary source. The mapping scale of the greenbelt map will be evaluated to determine if it is adequate. Additional plant communities and habitats not currently mapped in a geographic information system (GIS) will be digitized.

CMCA will prepare maps showing project alternative locations and indirect impacts, updating information from previous studies.

Deliverable: Special status species and impact maps (5 copies each)
Due Date: As developed

Task 15 – Prepare Habitat Conservation Plan Document
Upon approval by the USFWS, CMCA will prepare the Habitat Conservation Plan document that contains the sections listed above and details the short-term and long-term provisions of the HCP. The final HCP will be presented at a regularly scheduled meeting of the LOCSD Board of Directors. The presentation will include an explanation of the various requirements of the HCP.

Deliverable: Habitat Conservation Plan document (25 copies)
Due Date: Upon USFWS approval

Task 16 – Perform Data Gap Field Surveys (Optional Task)
Based on the existing data analysis, map information and discussions with experts an evaluation of data gaps will be made. The most likely gaps will be for site specific information. Some properties within Los Osos may not have been surveyed adequately to determine the presence or absence of particular covered species. If these data gaps limit the ability of the HCP to adequately determine "take," then field surveys may be needed. This task will be viewed as optional based on additional data needs.
Economics (Not Included)

This scope of work does not include an economic analysis of the environmental impacts, which would be appropriate for defining fees associated with take of species for later development projects included in the HCP. This element can be added later if the LOCSD so requests.

This program may be appropriate for modification given the needs of the various participating agencies. Nevertheless, it represents a comprehensive approach towards resource protection.

17-4 Commenter states that an MOU may be required under CESA from CDFG.

Response: This comment is noted and forwarded to the decision makers for their consideration.

17-5 Commenter states that impacts to wetland species resulting from changes in groundwater regime have not been fully identified or mitigated, and suggests a monitoring program to identify these impacts.

Response: Monitoring wells will be established on both sides of the inferred fault trace in order to review the modifications to groudwater. In addition, the areas of fresh and salt water wetlands that may be effected will be monitored. The design of the leachfields is such that the volume of water leached can be modified and adjusted in any of the system leachfield components. This will allow the adjustment to correct any adverse effects. Predicting those effects with any degree of accuracy beyond what was stated

in the EIR is unlikely. The real evidence of impact, as correctly implied by the comment, can only be determined through observation.

17-6 Commenter suggests that Mitigation BIO-4, D, be amended to read: "After securing the described in C above, the District shall manage and restore the land so that it functions as suitable habitat..." and further requests a Restoration and Management Plan be developed for the mitigation land.

Response: Comment noted. The district will amend the aforementioned mitigation measure accordingly. The LOCSD has committed $10,000 annually to the management of the mitigation land. The district will prepare a Restoration and Management Plan for the Broderson site.

17-7 Commenter suggest that Mitigation BIO-8 be modified by adding "Remove existing stands of invasive exotic plants, including but not limited to veldt grass, pampas grass, and ice plants, in order to limit their spread."

Response: Comment noted. Mitigation BIO-8 will be modified accordingly.

17-8 Commenter notes that his agency does not recognize translocation as appropriate mitigation and that the Restoration and Management Plan have appropriate methods for improving habitat.

Response: Comment noted. Mitigation BIO-4 will be modified accordingly.

STATE OF CALIFORNIA - THE RESOURCES AGENCY GRAY DAVIS, Governor

CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(831) 427-4863

January 23, 2001

Bruce Buel, General Manager
Los Osos Community Services District
2122 9th St.
Los Osos, CA 93402

Subject: *Draft EIR for the Los Osos Wastewater Facilities Project*

Dear Mr. Buel:

Thank you for the opportunity to comment on the above referenced document, and for your continuing efforts to coordinate the Los Osos Wastewater project with the Commission staff and other involved regulatory agencies.

In general, the document effectively identifies overall impacts posed to coastal resources by the project, and suggests appropriate mitigation measures intended to avoid and minimize most of these impacts. We are particularly encouraged by the proposal to coordinate the development of a Habitat Conservation Plan for the area, which will be an important component to addressing the cumulative impacts posed to sensitive habitats by the buildout facilitated by the Wastewater Treatment Project. However, the particular details of this proposition, and many of the other project impacts and mitigation measures, require further analysis and discussion. Similarly, while the document provides a thorough assessment of project alternatives, it does not adequately articulate why certain alternatives, especially for the treatment plant site, are not being pursued. Finally, we appreciate the intention to size the facility to accommodate the level of development allowable under the Estero Plan, and recognize the challenge of achieving this objective given the current status of the Estero Plan Update. Given the ongoing discussions regarding the overall buildout that should be allowed within the area, perhaps there is a way to phase the project in a manner that can respond to future changes to the Area Plan that may affect buildout levels. These and other comments are discussed in more detail below.

I. Biological Resources

A. Direct Impacts

1. Impacts to Terrestrial Habitats

In order to mitigate direct impacts to sensitive terrestrial habitats, the DEIR proposes to purchase and protect the 80 acre Broderson site, with exception for the construction and maintenance of leach lines for treated wastewater disposal, which will periodically impact approximately 8 acres of the site[1]. The long-term protection of the habitat on this site will certainly be a significant contribution to the conservation of dune scrub and maritime chaparral habitats unique to the Los Osos area. Nevertheless, additional information is needed to establish that this mitigation will effectively offset the direct impacts of the project.

[1] Please clarify whether this estimate includes the construction/maintenance road associated with the leachfield.

First, while the DEIR does a good job of identifying the different types of habitats that will be directly impacted, it does not identify the *quantity* of each particular habitat type expected to be impacted. To ensure that the impacts to each habitat type is effectively offset, these figures should be provided, and compared to the habitat types and quantities that will be protected at the Broderson site. Please include a more in-depth analysis of the biological impacts posed by the disposal facilities proposed on the Powell site as part of this analysis. 18-1

Second, to determine the adequacy of the proposed mitigation, a qualitative assessment of the habitats impacted versus the habitats to be preserved is needed. This should include a more detailed evaluation of whether the mitigation will effectively prevent the direct impacts of the project from significantly disturbing sensitive habitats, or jeopardizing their biological continuance. At a minimum, the size and location of the mitigation areas should be shown to provide equal or greater biologic productivity than the area of impact, and should be evaluated for its ability to protect and enhance the long-term viability of each habitat type impacted by the project. 18-2

With respect to the mitigation measures for direct impacts proposed on pages 285-290, we have the following questions/comments:

- Mitigation BIO-1 proposes to assess and minimize the impacts of constructing the collection system on undeveloped lots, which may support wetlands or other sensitive habitats, with pre-construction surveys. Where the collection system has the potential to impact significant habitats such as wetlands, these impacts should be identified ahead of time, and alternative alignments that would avoid such impacts should be pursued. Where the impacts can not be avoided, mitigation measures should be identified. 18-3
- Mitigations BIO-2 and BIO-11 call for the project to avoid Monarch butterfly roosting habitats where feasible. It does not, but should, identify how unavoidable impacts will be mitigated. 18-4
- Part C of Mitigation BIO-4, as well as Mitigations BIO-10 and BIO-14 for the Morro Bay Kangaroo Rat, propose to compensate for unavoidable losses of coastal scrub habitat through the acquisition if additional habitat. In addition to the criteria established by these mitigation measures, the area to be acquired should be potentially impacted by development to qualify as mitigation (i.e., land that is currently protected or in public ownership should not be used for mitigation). Part D of measure BIO-4 identifies restoration requirements for the mitigation, including maintenance and monitoring. This should be supplemented with specific performance standards that will be used to ensure the success of the mitigation. 18-5
- Mitigation BIO-5 identifies means of minimizing disturbance to sensitive terrestrial habitats. This should include limiting construction ingress and egress routes to the minimum necessary, and aligning them along the most disturbed areas possible. Similarly, staging areas for construction supplies and equipment should be located outside of sensitive habitat areas to the greatest degree feasible. 18-6

2. Potential Impacts to Wetlands and Riparian Habitats

Page 274 of the DEIR recognizes that implementation of the wastewater treatment project will alter groundwater flow, and thereby may alter the saltwater/freshwater characteristics of surrounding wetland habitats. While the DEIR states that the location and extent of these alterations can not be predicted, it also asserts no net loss of either freshwater or saltwater wetlands are expected. On what basis can this be assumed? Please consider incorporating a mitigation measure that would provide for monitoring of these impacts where they are most likely to occur. If adverse impacts to wetland habitats are observed, changes in the timing, amount, and location of treated effluent disposal that would minimize such impacts should be pursued. 18-7

Similarly, page 283 of the DEIR acknowledges that treated effluent disposal, and associated changes to the groundwater flow, may impact water levels in Los Osos creek. It appears that the design of the disposal system has appropriately taken this into consideration, by disposing treated wastewater east of the Los Osos fault in an amount that is roughly equivalent to the amount of discharge by existing septic systems in this area. Nevertheless, given the complexities of the groundwater regime, and the significant resources that are dependent upon adequate water flow in Los Osos creek, a mitigation measure to monitor this situation should be considered. 18-8

B. Indirect and Cumulative Impacts

As previously noted, we are encouraged by the proposal to address the projects indirect and cumulative impacts through a comprehensive Habitat Conservation Plan (HCP) that will be coordinated with the Estero Area Plan Update and involved agencies. The outline of this mitigation provided on page 290 of the DEIR represents a good start at defining the different components and objectives of this Plan. A great deal of additional work will be required to develop the details of this plan, and analyze its ability to effectively address the cumulative impacts of the buildout facilitated by the project. 18-9

The fact that the HCP is in its infancy raises significant issues with respect to the timing of the project. We recognize that the CSD, as the lead agency, is responsible for determining the level of detail that needs to be provided by this mitigation measure in order to comply with CEQA. If the specific details of the HCP and analysis of its effectiveness will not be provided by the EIR, in as much as the HCP is proposed as part of the project's mitigation it will be important to develop this information as part of the Coastal Development Permit application.

Alternatively, if the development and refinement of the HCP and its incorporation into the Estero Area Plan can not be achieved within the timeframe for project implementation established by the Regional Water Quality Control Board, phasing of the project should be considered. For example, the first phase of the project could be designed to accept wastewater from existing development only. A second phase that would accept wastewater from new development within the Urban Services Line (USL) could be timed to occur after the HCP has been completed and incorporated into the Estero Area Plan. Finally, a third phase would provide service to those areas between the USL and the Urban Reserve Line (e.g., in the proposed collection areas outside the USL in Bayview Heights and surrounding the Monarch Grove subdivision) only after

those areas were incorporated within the USL via LCP Amendment. Such a phasing scheme would also be appropriate to address constraints regarding the region's water supply constraints, as further addressed below.

Whether or not a phasing component is incorporated into the project, we request that the final EIR discuss the timing of the HCP in relationship to project implementation.

II. Project Capacity, Buildout and Water Supply

It is clear that substantial effort has been made to size the project in a manner that will accommodate the buildout allowed by the Estero Area Plan, as required by LCP Policies for Public Works. In addition, the sizing of the project has also accounted for the reduction in buildout that has and will be realized through the acquisition of potentially developable areas for conservation purposes. As recognized by the DEIR, the Estero Area Plan Update currently in progress may further impact the buildout of the area. Yet it is not clear how the designed capacity of the project will respond to the changes in the buildout that will occur through the Update. 18-10

The Commission staff recognizes the challenge of determining the appropriate capacity of the project at this stage in the update process, particularly in light of the timeframe within which the project must be implemented. Nevertheless, we strongly encourage the CSD to consider means of adjusting the ultimate capacity of the project so that it will conform to the buildout that may occur under the *Updated* Estero Plan. This would not only prevent the project from inducing growth that would otherwise be inconsistent with LCP standards, but may also reduce project costs.

A closely related factor is water supply, as this is one of the most limiting factors in determining the appropriate buildout of the area. While the project and associated conservation program will benefit groundwater resources, it remains unclear whether there will be an adequate supply to support the level of buildout accommodated by the Estero Area Plan. As stated on page 143 of the DEIR, future water demand will greatly exceed supplies, even with the proposed conservation measures.

Recognizing that the Estero Area Plan Update is the appropriate mechanism to balance buildout levels with available water supplies, page 142 of the DEIR states that information regarding groundwater resources generated by the Wastewater Facilities project and the CSD's forthcoming Water Management Plan will help shape the Update. While the Commission staff is strongly in support of this effort, we are concerned that until the safe yield of the groundwater basin is determined, it will be difficult to determine acceptable levels of buildout and thus, the appropriate capacity of the wastewater treatment facilities.

Again, developing the wastewater project in phases may help resolve this situation. While the phasing program suggested above applies primarily to the timing of hookups to the system, there could be a parallel phasing program related to the capacity of the plant. For example, the treatment plant could be constructed to initially serve existing development, and expanded at a later date to accommodate a level of buildout determined to be commensurate with available 18-11

water supplies. Please evaluate the technical feasibility of such a phasing program. If it is not feasible to construct the treatment system in phases, please consider alternative means of staging the capacity of the plant.

III. Alternatives

The Commission staff appreciates the thorough analysis of project alternatives provided by the DEIR. We note that the least environmentally damaging location for the treatment plant location (the Andre site) is not being pursued based on agricultural resource protection concerns and the project objective of providing centrally located park and recreation amenities. Nevertheless, LCP standards for public utilities facilities require such projects to be located outside sensitive resource areas wherever feasible. Because this will be an important issue related to the coastal development permit required for the project, we recommend that the final EIR provide additional reasoning regarding the selection of the Tri-W site, and the consistency of this decision with applicable LCP provisions (especially section 23.08.288 of the CZLUO). 18-12

Also, please evaluate whether there are less environmentally damaging locations for disposal of treated wastewater on the east-side of the Los Osos fault (i.e., alternatives to the Powell site).

IV. Other Comments

p.52: Where will the treatment facilities for harvested water be located? If somewhere other than the proposed treatment plant, please analyze the impacts of this facility. In the instance that the preferred option of supplementing the drinking water supply with the harvested water is determined to be infeasible, how will this water be disposed of? 18-13

p. 88: If disposal of bio-solids in a landfill is not feasible, additional environmental review and permitting will likely be required to allow for the establishment of bio-solids recycling facility. It therefore may be advisable to resolve this issue as soon as possible, and include the recycling facility within the current project if it will be needed.

p. 125: Storm water, drainage, and erosion control plans, as well as the required geotechnical investigations, should accompany the Coastal Development Permit application for the project. Particular attention should be given to areas where major vegetation or land disturbance is necessary, such as the areas where significant stands of eucalyptus may need to be removed. 18-14

p. 154: Minimizing the extent of impervious surfacing associated with the project should be pursued as an additional measure to mitigate drainage, erosion, and water quality impacts. 18-15

The Commission staff appreciates the opportunity to submit these comments, and hope that they will assist in resolving the important coastal resource issues associated with the project. If you have any questions, or would like to discuss these matters further, please contact staff analyst Steve Monowitz at (831) 427-4863.

Sincerely,

Charles Lester
District Manager
Central Coast District Office

Cc: Mike Wulkan, San Luis Obispo County Department of Planning and Building
Sorrel Marks, Central Coast Regional Water Quality Control Board
Ron Popowski, U.S. Fish and Wildlife Service
Deb Hillyard, California Department of Fish and Game
Marla Morrissey, Morro Estuary Greenbelt Alliance

Letter 18
January 23, 2001
Charles Lester, Regional Manager
California Coastal Commission

18-1 The comment recommends quantifying the types of habitats that will be directly impacted by the various components of the wastewater system.

Response: The following table quantifies the impacts to the various affected habitats:

Habitat (acres)	Broderson	Tri-W	Total
Coastal Sage Scrub	–	7.5	7.5
Heather Goldenbush Coastal Scrub	4.48	–	4.48
California Sagebrush Black Sage Scrub	0.086	–	0.086
Dune Lupine Scrub	0.3	–	0.3
Annual Grassland	0.072	–	0.072
Windrow	0.21	2.50	2.71
Ruderal Grassland/Veldt Grassland	0.094	2.30	2.394
Coast Live Oak Forest	1.21	–	1.21
Other	0.45	0.40	0.85
Total:	6.90	11.0	17.90

18-2 Commenter requests a qualitative assessment of the habitats impacted versus those preserved.

Response: The following table compares the habitat impacted with the habitat preserved:

Comparison of Impacted and Preserved Habitats	
Impacted Habitat	**Mitigation**
Broderson ~ high quality coastal scrub habitat, although, according to Jones and Stokes, not in the best part of the snail habitat.	Broderson ~ high quality coastal scrub habitat with the highest density of observed shoulderband snails (there is more veldt grass in the northern edge of this site, but the proposed mitigation is to remove that.
Tri-W ~ low (mostly) to medium quality coastal scrub habitat with little evidence of snail occupation. The site has lupine and other scrub, but is dominated by veldt grass.	Same as above
Powell	Powell is no longer part of the project
Collection ~ very small areas of low quality habitat adjacent to roadways and residences	Same as above
Tri-W ~ eucalyptus with the potential to be raptor and/or Monarch butterfly habitat.	Broderson ~ roughly equivalent amount of eucalyptus. However, this may be eliminated if the reviewing agencies deem it appropriate to improve habitat for species that are listed as endangered, such as the shoulderband snail.

18-3 The comment requests that impacts to wetlands from collection system construction be identified and mitigation prepared.

Response: A reconnaissance level analysis revealed no wetlands that would be impacted by any components of the wastewater facility. However, the precise location of all pipelines has not been determined, as this is part of the final design of the project. When the design is complete, the project proponent can determine with certainty that no wetland resources will be impacted.

18-4 Commenter requests how unavoidable impacts to Monarch butterfly roosts can be avoided.

Response: The Broderson site contains approximately four acres of eucalyptus grove, similar to that which will be lost at the Tri-W site. Unless this eucalyptus is removed to improve snail habitat, it could remain as a permanent mitigation for butterflies.

18-5 Commenter suggests that the land to be acquired for mitigation of impacts to Kangaroo rat habitat should not be currently protected or in public ownership. Further, the commenter requests that performance standards be set forth to ensure success of the maintenance mitigation.

Response: The land proposed for acquisition of Kangaroo rat habitat is at the Broderson site, which is next to the Palisades property that was previously identified as important habitat for the animal. The Broderson land is not currently protected or owned by a public agency.

The Broderson site will be restored and maintained as suitable habitat for Kangaroo rat and the several other species that occupy the same type of habitat. The standard is straightforward in that the land must be capable of supporting the species. This would require, for example, the continual management of veldt grass and other invasive species.

18-6 Commenter requests means of minimizing disturbance to terrestrial habitats be identified.

Response: The principal concern will be with the development of the leach field site at Broderson. The following measures will help minimize the damage to the sites:

Pre-construction surveys to find the lowest quality habitat for access, construction and staging. After the project engineer has determined the design requirements, the proponent will work with CDFG and USFWS to identify the least damaging areas and methodologies for carrying out the components of the projects within the parameters of the design.
The construction staging will be accomplished in a way to utilize land that will later be disturbed for the project. For example, in the construction of the leach fields, phasing will be utilized so that staging can take place over an area that will be used in a later phase for leach lines.

18-7 Commenter requests the development of a monitoring program to ascertain the impacts to fresh and salt water wetlands from any modifications to the groundwater regime after the wastewater project is developed.

Response: Monitoring wells will be established on both sides of the inferred fault trace in order to review the modifications to groudwater. In addition, the areas of fresh and salt water wetlands that may be effected will be monitored. The design of the leachfields is such that the volume of water leached can be modified and adjusted in any of the system leachfield

components. This will allow the adjustment to correct any adverse effects. Predicting those effects with any degree of accuracy beyond what was stated in the EIR is unlikely. The real evidence of impact, as correctly implied by the comment, can only be determined through observation.

18-8 The comment raises concerns regarding impacts to Los Osos Creek associated with altered groundwater flows that will result from implementation of the effluent disposal strategy outlined in the Draft EIR.

Response: The commenter points out that the proposed disposal strategy will re-introduce treated effluent on the east side of the inferred trace of the Los Osos fault of an amount roughly equal to the flows associated with existing septic leach fields. This is being done in part to maintain existing flows toward Los Osos Creek, as described on page 140 of the DEIR under Impact H-2. The project description includes the installation of 30 monitoring wells which will be used, in part, to monitor groundwater quality, quantity and its movement through the basin.

18-9 Commenter notes that the development of the HCP for the secondary impacts of the project is nascent and that the information necessary for implementation should be developed by the time of the application for the Coastal Development Permit. Commenter suggests that if the HCP will not be ready by this time, then perhaps the project can be phased in order to serve a portion of the community at a time.

Response: Comments regarding the HCP are noted. It is the intention of the District to complete the preparation of the HCP by the time of the application for the CDP. Project phasing has not been addressed in the Project Report. This suggestion is noted for the benefit of the decision makers.

18-10 The comment raises concerns about how the wastewater facilities project will respond to potential changes that may occur to the community buildout population associated with the pending update of the Estero Area Plan.

Response: The Los Osos Community Services is pursuing completion of the wastewater facilities project to comply with Time Schedule Order No. 00-131 issued by the Regional Water Quality Control Board. The time schedule order requires the LOCSD to certify CEQA documents for the project on or before March 1, 2001. Absent the time schedule order, the sizing of the wastewater facilities project and completion of the Final EIR could await completion of the Estero Area Plan update which is currently under way. However, the project must move forward and, accordingly, the project has been sized to serve buildout of the Prohibition Area (see Figure 3-2 in the DEIR) in accordance with the Estero Area Plan that is current law. It should also be noted that, although there is flexibility in the capacity of the wastewater treatment plant to accommodate expected flows at buildout, the plant cannot readily be expanded to accommodate increased flows that may be associated with a substantially larger buildout population than expected by the Estero Area Plan.

The authors of the Draft EIR could speculate about the buildout population that may be accommodated by the updated Area Plan. However, such an exercise would appear to conflict with the intent of Sections 15144 and 15145 of the CEQA Guidelines regarding forecasting and speculation. However, according to staff of the County Planning Department (see Letter No. 14), the yet-to-be-published next draft of the Estero Area Plan will include a revised population estimate of 21,400 persons within the Los Osos urban reserve line and that the collected area would accommodate a buildout population of about 19,000 persons, compared with 17,963 as estimated by the Draft EIR. More recent information contained in the Project Report prepared by Montgomery Watson Engineers suggests that the buildout population accommodated by the

project is slightly higher, around 18,428.

The wastewater treatment plant is expected to accommodate 1.3 million gallons per day dry weather flow to 1.6 million gallons per day wet weather flow. The dry weather flow associated with the additional 572 residents accommodated by the County population estimate is about 40,000 gallons per day (assuming 69 gallons per day per person dry weather flow), which is an increase of about three percent and well within the capacity of the treatment plant.

With regard to the safe yield of the groundwater basin, groundwater modeling is currently under way by Cleath and Associates for the Water Management Plan to help answer the question of safe yield. Final results of these efforts will be included in the Draft Water Management Plan which is expected at the end of February, 2001. Until that analysis is complete, any conclusions about the long-term water supplies for Los Osos would be premature. However, there is evidence of overdraft conditions on the east side of town as the salinity of well water would indicate. Thus, with or without the project, this issue will need to be addressed.

18-11 The comment suggests completing the wastewater facilities project in phases as a means of ensuring consistency with projected service area population.

Response: According to the project engineers, Montgomery Watson, it is not feasible or economical to construct the extended aeration plant, collection and disposal system in phases.

18-12 The comment notes that the DEIR concludes that the environmentally superior site (Andre) is not being pursued by the CSD.

Response: The comment is noted. The DEIR concludes that the Andre property would be the least environmentally damaging location for the treatment site of the sites evaluated. It should also be noted that no project has been approved by the CSD and no findings have been made regarding the location of the treatment plant. Should the CSD decide to pursue the Tri-W site their decision will be based on findings supported by evidence in the record regarding the environmental impacts.

With regard to disposal sites other than the Powell property, the CSD has decided to relocate the disposal leach fields from the Powell property to the El Moro road right-of-way and the parking lot for the Los Osos Middle School. While there is little if any biological habitat associated with this new location, the area appears to be rich in archaeological resources that may be unearthed during construction. Mitigation measure C-1 addresses this potential impact.

18-13 The comment questions where the treatment facilities for recovered water will be located and where recovered waster would be disposed of in the event blending with drinking water proves infeasible.

Response: The project description contained in the Draft EIR contemplated treating the recovered water by either ion exchange or by blending the water with deep-aquifer water to achieve safe drinking water standards. Since the Draft EIR was circulated for public review, the CSD has held discussions with the Department of Health Services regarding the best method to treat the recovered water to meet these standards. The Department of Health Services has recommended that the recovered water be blended with deep aquifer water to meet safe drinking water standards.
If ion exchange is contemplated in the future, it would be accommodated at the treatment plant facility.

18-14 The comment recommends including the geotechnical report, grading and drainage plans, and erosion control plans in the Coastal Development Permit application.

Response: The aforementioned components will be included with the Coastal Development Permt application.

18-15 The comment states that minimizing the extent of impervious surfaces associated with the project should be pursued as an added measure to minimize grading, erosion and water quality impacts.

Response: The comment is noted.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

JAN 9 2001

In reply refer to:
151422SWR01PR117:AJS

Diane Edwards
State Water Resources Control Board
P.O. Box 944212
Sacramento, California 94244-2120

Dear Ms. Edwards:

The National Marine Fisheries Service (NMFS) reviewed your informal consultation request and the Environmental Impact Report (EIR) for the proposed Los Osos Wastewater Facilities Project, San Luis Obispo County. NMFS understands the State Water Resources Control Board is the designated non-federal representative assisting the Environmental Protection Agency for determining whether formal consultation is required. Nevertheless, the proposed action includes constructing a wastewater facility near Los Osos Creek, where the South-Central California Coast Evolutionarily Significant Unit of federally threatened steelhead (*Oncorhynchus mykiss*) and its critical habitat are known to be present.

After reviewing the EIR, NMFS determined the proposed action is not likely to adversely affect steelhead or critical habitat. The proposed action is not expected to overlap with Los Osos Creek and appears to contain sufficient preventive measures to avoid offsite impacts. 19-1

This concludes section 7 consultation for this proposed action. Consultation must be reinitiated where discretionary federal agency involvement or control over the action has been retained (or is authorized by law) and: (1) if new information becomes available revealing effects of the action on listed species in a manner or to an extent not previously considered, (2) if project plans change, (3) if the agency action is subsequently modified in a manner that causes an effect to listed species that was not considered, or (4) if a new species or critical habitat is designated that may be affected by this action. Please call Anthony Spina at (562) 980-4045 if you have a question concerning this letter or if you require additional information.

Sincerely,

RECEIVED
JAN 16 2001
Div...

Rebecca Lent, Ph. D.
Regional Administrator

Letter 19
Rebecca Lent, Ph.D., Regional Administrator
US Department of Commerce
National Marine Fisheries Service
January 30, 2001

19-1 The letter states that the National Marine Fisheries Service has no comments regarding the Draft EIR. No response is necessary.

Comment 20
November 16, 200
January 4, 2001
Al Barrow

Comment: Mr. Barrow objected to the type of treatment process being pursued by the Los Osos CSD and raised concerns regarding the disposal of bio-solids generated by the extended aeration treatment process.

Response: The comments relating to the type of treatment system proposed do not raise significant environmental issues addressed by the Draft EIR. The issue of bio-solids disposal is addressed by Impact PS-9 on page 232 of the Draft EIR, and by Mitigation PS-3 on page 233.

Comment 21: Mr. Green represents property owners to the west and south of the treatment plant site where a tentative subdivision map has been approved for residential development. Mr. Green stated that he was not in opposition to the wastewater facilities project, but would prefer that the treatment plant septage receiving and handling access be taken from Palisades Drive rather than from the northerly extension of Ravenna Avenue.

Response: Section 6.6 of the Draft EIR provides an analysis of potential traffic impacts associated with the project. As shown by Table 6.6-3 on page 191, trips associated with the Ravenna Avenue access to the treatment plant site will amount to about 4-5 per day, including septage handling trucks and Los Osos CSD personnel. The number of trips is considered insignificant from a traffic and safety standpoint. Moreover, other trips associated with the residences, such as solid waste and recycling trucks and school busses would generate comparable traffic impacts in terms of vehicle size and the number of vehicle trips.

Part II

Findings of Fact, Statement of Overriding Consideration & Mitigation Monitoring Program

Prepared In Accordance With the California Environmental Quality Act (CEQA)

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I. The Final Environmental Impact Report

The Board of Directors of the Los Osos Community Services District hereby certifies the Final Environmental Impact Report (State Clearinghouse Number 9911103) for the Los Osos Wastewater Facilities Project which consists of the Draft EIR, the responses to comments on the Draft EIR, a list of persons and agencies commenting on the Draft EIR, the Mitigation Monitoring Program, these findings of fact, the Staff Reports and any associated attachments (collectively referred to as the Final EIR), and finds that it has been completed in compliance with the California Environmental Quality Act (Public Resources Code Section 21000, et seq) (CEQA), and that the Board of Directors has received, reviewed and considered the information contained in the Final EIR, all hearings and submissions of testimony from officials of the Los Osos CSD the public and other agencies and organizations. The Board further finds that the Final EIR reflects the Lead Agency's independent judgement and analyses.

Having received, reviewed and considered the foregoing information, as well as any and all information in the record, the Board of Directors hereby makes these Findings of Fact pursuant to, and in accordance with, Section 21081 of the Public Resources Code, as follows:

II. Project Description

The following summary description is excerpted from Chapter 3 of the Final EIR for the Los Osos Wastewater Facilities Project, which is incorporated herein by this reference.

Components

The Project consists of a comprehensive wastewater management program for the community of Los Osos with the following components:

A. A Septic System Maintenance and Management Program (SSMMP);
B. A wastewater collection system;
C. A wastewater treatment facility;
D. Wastewater disposal facilities and harvesting and monitoring wells;
E. Wastewater sludge handling facilities at the wastewater treatment plant to enable the hauling of treated to a disposal or recycling facility;
F. Appurtenant structures and on-site amenities;
G. Construction activities;
H. A program for the mitigation of direct impacts to habitat for endangered species;

Description

A. Septic System Maintenance and Management Program (SSMMP). A Septic System Maintenance and Management Program is proposed which would affect all properties within the General Plan urban reserve line that lie outside the RWQCB Prohibition Area, as illustrated by (see Figure 3-2 of the Final EIR), in addition to the neighborhoods of Bayview Heights and the Martin Tract, which are within the Prohibition Area but outside the wastewater collection area. Within the SSMMP, each of the 1,051 remaining septic tanks and leach fields would remain in place and would be maintained by the Los Osos Community Services District. On a regular schedule (about once every five years) each septic tank would be pumped of septage and the septage would be transported to the wastewater treatment facility. Substandard septic systems would need to be upgraded to current standards by individual property owners. The program would include initial inspections of septic tanks

to determine their efficacy and age, as well as ongoing routine inspections and septage hauling and disposal.

B. Collection System. The collection system consists of the installation of about 204,000 feet of sewer pipe. Within the collection area (the RWQCB Prohibition Area) all of the septic tanks would be abandoned and all sewage would be collected through a series of gravity and pressurized (pumped) sewer lines which would convey waste to a treatment plant. The collection system would also include control telemetry to monitor and manage collection operations.

The proposed collection system would serve a buildout population of 17,963 within the Collection/RWQCB Prohibition Zone (4,774 connections), or an area roughly 87 percent of the community. Collection system components include main laterals, piping connections to the property line, pumps and effluent filters. Preliminary estimates are that about 22% of the individual connections would occur at the rear of a property and that about 600 connections will require an onsite pump.

The collection system will be a conventional gravity system consisting of three major components:

- Connection lines at each property to convey flow from the dwellings to the sewer main in the street;
- Sewer mains to convey to flow to the treatment plant;
- Pump stations to lift the flow over hills and high areas.

In addition to the gravity and pressurized sewer lines, a series of up to 11 pump stations would be needed. Pump stations would be located on vacant lots purchased by the LOCSD or within public rights-of-way. These stations will generally be required in low-lying areas and where sewer depths approach 11 feet in depth. The stations will use electrically driven submersible pumps set in precast concrete vaults with two pumps per station. The concrete vaults will be sited within lightly traveled public right of ways.

Solids from all septic systems outside the collection system area and within the SSMMP will be periodically pumped and transported by truck to the septage receiving and treatment facility incorporated into the treatment plant (see below). Septage will be pumped from every maintained septic tank at least once every five years. Assuming 1,051 septic tanks and 250 working days per year, this amounts to an average of about 210 septic tanks per year, or about 4,000 gallons per week (2-3 tanker truck loads). The septage receiving station, consisting of a truck drive-through, discharge area and underground vaults, would be enclosed within the Wastewater Treatment Facility and would be fully odor scrubbed.

C. Wastewater Treatment Facility. The treatment facility would consist of a Hybrid Extended Aeration Wastewater Treatment Plant which relies primarily on natural systems to treat collected wastewater. The preferred configuration is considered a hybrid, because it will be constructed almost entirely underground and will be fully odor scrubbed. The Facility will be designed to treat the collected wastewater to achieve water quality standards established by the Regional Water Quality Control Board, primarily as they relate to the removal of excess nitrate from the effluent stream. The treated wastewater will also undergo filtration and final disinfection to permit safe, approved disposal and/or reuse.

The Treatment Facility will be designed with a capacity to treat an average daily dry weather flow (ADWF) of approximately 1.365 million gallons per day (mgd). Implementation of a

water conservation program is expected to conserve 150,000 gallons per day, making the adjusted average dry weather flow about 1.2 mgd which is intended to serve a buildout population of 17,283 residents within the Collection/Prohibition Zone. Septage pumped periodically from the septic tanks within the service area of the SSMMP will be received and treated at the Wastewater Facility site.

The preferred location for the Treatment Facility is an 11 acre parcel owned by Tr-W Inc. located at the northwest corner of Los Osos Valley Road and Palisades, across the street from the Los Osos Community Center and adjacent to the community library. The Wastewater Treatment Facility is expected to occupy about 5-6 acres of the site, with the remainder devoted to landscaped open space. The site is currently vacant.

A portion of the microorganisms removed in the sedimentation basins are recycled to the preanoxic basins in order to provide the mass of 'activated' biomass needed to treat the organics in the flow. The remainder of the microorganisms is completely removed from the flow and becomes 'biosolids'. The biosolids are then thickened and dewatered, which produces a product that is readily handled. The extended aeration process produces biosolids that are stabilized and therefore non-putrescible. It is estimated that the treatment plant will generate approximately 1,400 pounds per day (dry weight basis) of biosolids, which will be hauled to a Class I or II landfill.

The entire treatment plant will be covered and odor scrubbed. The buildings and enclosure structures of the treatment plant will be held under negative air pressure, meaning that clean outside air will be drawn into the air spaces above the treatment processes. This approach prevents the 'leakage' of unscrubbed air to the outside.

D. Effluent Disposal. At buildout of the Prohibition Area, wet weather flows through the treatment system could reach as high as 1.7 million gallons per day at buildout of the community. However, during the dry season (most of the year) the flow will be lower, around 1.365 mgd. Implementation of a water conservation program is expected to reduce water consumption by about 150,000 gallons per day which will reduce the amount of water entering the collection system. Therefore, between 1.2 - 1.7 mgd of treated wastewater will need to be disposed of. The preferred disposal method is to percolate the highly treated and disinfected wastewater into the groundwater by way of sub-surface leach fields.

The preferred disposal strategy addresses these factors through a combination of recycling and sub-surface disposal. During dry weather up to 200,000 gallons per day of treated wastewater will be recycled by irrigating play fields and landscaping within the community. Among the sites being considered are the four public schools (Bayview Elementary, Monarch Grove Elementary, Sunnyside Elementary and Los Osos Middle School) and the Sea Pines Golf Course. The balance of the highly treated and disinfected wastewater (about 950,000 gallons per day during dry weather) will be pumped to sub-surface leach fields where it will percolate into the shallow aquifer. Also during the dry season, leach field use will be rotated to maximize the long-term life of the system and to ensure that the sub-surface soils do not become saturated.

During the rainy season, treated wastewater passing through the treatment process could reach as high as 1.7 mgd for short periods (60 days or less) and require disposal. During wet weather when surface irrigation is unavailable, all of the treated wastewater will be disposed of exclusively through the sub-surface leach fields. Leach fields will be located in portions of the community where sufficient depth to groundwater (30 feet or more) exists to accept the treated wastewater without resulting in the saturation of surface soils. The areas

tentatively chosen are located primarily within street rights-of-way and on other lands the Every five to ten years the disposal leach fields will require maintenance in which the field would be completely exposed and rehabilitated.

Groundwater modeling indicates that the area west of the inferred trace of Strand B of the Los Osos fault has the capacity to accept about 950,000 gallons per day of treated effluent, once individual septic leach fields are no longer in use. The primary disposal site is a 40 acre portion of an 80 acre parcel located south of Broderson Avenue (the Broderson site) adjacent to a developed residential neighborhood. Leach fields would be constructed in linear arrays parallel with Highland Drive on an eight-acre portion of the property located toward the southerly property boundary (up-slope). Preliminary sub-surface geotechnical investigations suggest that the Broderson site can accommodate up to 800,000 gallons per day of treated effluent. Other locations proposed for disposal on the west side of the fault are:

- Vista de Oro property on the east side of Pecho Valley Road south of Monarch.
- The Los Osos Valley Road right-of-way between Broderson Avenue and Doris Avenue, and the Pine Avenue right-of-way from LOVR north.
- A portion of Monarch Grove Elementary School (backup)

To prevent the mounded groundwater from surfacing downslope of the Broderson site, a series of four harvesting wells (and one alternate) will be employed. It is estimated that 400,000 gallons per day will need to be harvested. A series of up to 30 monitoring wells will also be required to monitor the sub-surface groundwater mounding and to monitor groundwater quality.

The preferred option for the disposal of recovered water is to undergo additional nitrogen reduction through either blending with water from the deep aquifer, or through additional treatment which may include ion exchange or some other denitrification process to meet drinking water standards. The denitrified and disinfected water will then be used to augment the water supplies of Cal Cities Water Company and the Los Osos CSD.

The area east of the inferred fault trace is more limited in its capacity to accept treated wastewater for disposal. This is due to the generally shallower depth to groundwater and the prevalence of perched clays which restrict percolation. Areas on the east side of the fault considered for disposal include:

- A portion of the Pismo Avenue right-of-way between 7th and 14th Streets
- A portion of the Santa Maria Avenue right-of-way between 13th Street and 17th Street.
- Los Osos Middle School (stand-by only)
- A portion of the Santa Paula Avenue right-of-way between South Bay Boulevard and 15th Street
- A four acre portion of the 30 acre Powell property located east of the Middle School at the end of El Moro.

E. Wastewater Bio-Solids Disposal. An extended aeration treatment plant serving the Prohibition Area would produce approximately 1,400 pounds of bio-solids per day and non-toxic chemicals (40 lbs.). Once treated to satisfy federal and state requirements, treated sludge would be removed from the Wastewater Treatment facility about three times per week and hauled (initially) to a Class I or Class II landfill. To be disposed of in a landfill, bio-solids must meet the pollutant concentrations specified by Title 40 Section 503.23 of the Code of Federal Regulations, which also prescribes landfill management practices to be followed for

sludge handling. A more complete discussion of bio-solids disposal and management regulations is provided in Chapter 6.2: Hydrogeology and Water Resources.

F. Wastewater Facility Appurtenant Structures.

The Los Osos Wastewater Facility treatment plant site is a multi-use facility intended to benefit the entire Los Osos/Baywood Park community by providing a state of the art wastewater treatment plant in a parklike setting.

The treatment facility consists of two major components, the principal treatment areas, which are buried beneath the park; and a cluster of buildings that include final treatment and processing, lab facilities, visitor and operations space and maintenance facilities. The buildings are clustered low on the site set into the natural grade so that only a portion of the roofs are visible from Los Osos Valley Road. Approximately three-quarters of the treatment facility will be located below grade, thereby minimizing visual impacts, and creating additional area for recreational uses. Vehicular access to the treatment facility by employees visitors and the septage and bio-solids trucks will be directly from the northerly extension of Ravenna Avenue. The bio-filter/odor scrubber is located between the underground portion of the treatment facility, separating the more active park and play fields from uses on top of the treatment facility structure.

Open Space and Landscaping. Constructing the treatment plant underground provides an opportunity for most of the site to be landscaped or otherwise improved to provide an open space and recreation amenity for the community. A preliminary design is illustrated by Figure 3-8 of the Final EIR which incorporates a large grass area suitable for youth soccer or other types of active recreation. The site will also incorporate a system of pedestrian/bicycle trails and visitor parking.

Appurtenant Structures and Offsite Improvements. The cluster of buildings include the LOCSD offices, visitor/reception and information area (4,000 square feet), and public meeting hall for the CSD. This building is located near the County Library site and the proposed parking lot to serve the park and public uses in the vicinity. A covered walkway/arbor directly connects the CSD offices with the treatment facility.

In addition, a stormwater retention basin is provided in the northwest corner of the site which is designed to accept runoff expected from a 50-year storm. The retention system also provides for up to 18 hours of emergency storage in the event of a major failure of the treatment plant.

Full street frontage improvements will be installed along Los Osos Valley Road (curb, gutter, sidewalk, Class I bicycle path, and parking) and a two-thirds street construction of Ravenna Avenue north of Los Osos Valley Road along the property frontage to provide direct access to the treatment plant site.

G. Construction Activities. Construction of the project is expected to take about 16-24 months. Construction of the collection system will involve the installation of collection pipes within easements and public rights-of-way using trenching techniques. Because of the predominance of sandy soils in the Los Osos area, a given trench will be limited to a maximum of 1,000 feet open at any given time. Trenching will require de-watering in shallow groundwater areas as well as stabilizing measures. In general, construction activities will have as many as 6 pipe runs excavated at a time to avoid disrupting traffic. The collection system will also involve the installation of submersible pump stations which will involve excavation and construction of underground vaults.

Construction of the treatment plant and the recreation amenities will involve grading, excavation and building construction. Due to the shallow groundwater associated with the treatment plant site, it may need to be de-watered during construction activities.

Lastly, individual property owners will be responsible for the de-commissioning their septic tanks, the installation of on-site collection laterals and for the replacement of plumbing fixtures with water conserving fixtures. Septic tank de-commissioning involves pumping the tank out, removing the top of the tank and backfilling the tank with sand.

H. Mitigation of Biological Impacts. Construction the various components of the Wastewater Facilities Project will result in the permanent loss of habitat for special status plant and animal species. The species of most concern is the federally endangered Morro Shoulderband Dune Snail whose habitat includes portions of the proposed treatment plant site, and may occupy undeveloped lots throughout the community.

Impacts to federally listed plant or animal species are governed by the federal Endangered Species Act and enforced by the United State Fish and Wildlife Service (USFWS). Recognizing that any permanent loss of habitat for an endangered species will be considered a significant and irreversible environmental impact, the Los Osos CSD has made a mitigation proposal to the USFWS which is summarized in Section VII of these findings.

III. The Record

The California Code of Regulations, Title 14, Section 15091 (b) requires that the Los Osos CSD Board of Director's (Board) findings be supported by substantial evidence in the record. Accordingly, the Board's record consists of the following, which are located at the Los Osos Community Services District Offices, 2122 9th Street, Los Osos, CA:

A. Documentary and oral evidence, testimony, and staff comments and responses received and reviewed by the Board during public hearings on the project.

B. Crawford Multari & Clark Associates (2001) *Draft and Final Environmental Impact Report for the Los Osos Wastewater Facilities Project.*

C. Bertrando and Bertrando Research Consultants (2000),*Cultural Resource Inventory of the Resource Park site.*

D. Brown and Caldwell (1983), *Phase I Water Quality Management Study Vol. 1 and II.*

E. California Department of Water Resources (1989), *Geohydrology and Management of Los Osos Valley Ground Water Basin San Luis Obispo County.*

F. Engineering Development Associates (1998), *Preliminary Engineering Evaluation, Los Osos/Baywood Park Community Drainage Project.*

G. Fugro West, Inc. (1997), *Final Supplemental Environmental Impact Report for the CSA 9 Wastewater Treatment Facilities.*

H. Metcalf and Eddy (1996), *Hydrogeologic Evaluation of the Proposed Broderson Site.*

I. Metcalf and Eddy (1996), *Final Los Osos Water Reclamation Project, Technical Memoranda.*

J. Morro Group (1987), *Final Environmental Impact Report for the County Service Area No. 9 Wastewater Treatment Facilities. Volumes I and II.* August. Los Osos, California. Prepared for County of San Luis Obispo, Office of Environmental Coordinator. San Luis Obispo, California.

K. Oswald Engineering Associates, Inc. (2000), *The Resource Park Wastewater Facilities Project Draft Project Report.*

L. San Luis Obispo County Planning and Building Department (1987), *Addendum Environmental Impact Report, County Service Area No. 9 Wastewater Treatment Facilities.* Prepared for the County of San Luis Obispo by The Morro Group.

M. San Luis Obispo County Planning and Building Department (1989), *Final Supplemental Environmental Impact Report, County Service Area No. 9 Wastewater Treatment Facilities.* Prepared for the County of San Luis Obispo by The Morro Group.

N. State Water Resources Control Board (1998), *Policy for Implementing the State Revolving Fund for Construction of Wastewater Treatment Facilities.*

O. U.S Geological Survey (1988), *Hydrogeology and Water Resources of the Los Osos Valley Ground-Water Basin, San Luis Obispo County, California.*

P. URS Corporation (2000), *Baseline Report of the Los Osos Valley Groundwater Basin, Los Osos, California.*

Q. Wallace, John. L and Associates (2000) *Urban Water Management Plan.*

R. Staff reports prepared for the Wastewater Facilities Project and presented to the Board of Directors.

S. Montgomery Watson Engineers, Inc., (2001) *Draft Project Report for the Los Osos Wastewater Facilities Project*

T. Water quality data compiled since 1983 by the Regional Water Quality Control Board documenting nitrate concentrations in the Los Osos groundwater basin.

U. Matters of common knowledge to the Board which it considers, such as:

- The County General Plan, including land use maps and elements thereof;
- The text of the Land Use Element and Coastal Zone Land Use Ordinance;
- The California Environmental Quality Act (CEQA) and the State CEQA Guidelines implementing the Act;
- The Los Osos CSD guidelines for environmental review and compliance with CEQA;
- Other formally adopted policies of the Board of Directors and County of San Luis Obispo;

IV. Certification of the Final Environmental Impact Report for the Los Osos Wastewater Facilities Project

The Board of Directors of the Los Osos Community Services District makes the following findings with respect to the February, 2001 Final Environmental Impact Report for the Los Osos Wastewater Facilities Project:

A. The Board of Directors has reviewed and considered the following documents:

1. Crawford Multari & Clark Associates, February 2001 *Final Environmental Impact Report for the Los Osos Wastewater Facilities Project.*

2. Fugro West, Inc. (1997), *Final Supplemental Environmental Impact Report for the CSA 9 Wastewater Treatment Facilities.*

3. Morro Group (1987), *Final Environmental Impact Report for the County Service Area No. 9 Wastewater Treatment Facilities. Volumes I and II.* August. Los Osos, California. Prepared for County of San Luis Obispo, Office of Environmental Coordinator. San Luis Obispo, California.

4. Oswald Engineering Associates, Inc. (2000), *The Resource Park Wastewater Facilities Project Draft Project Report.*

5. Montgomery Watson Engineers, Inc., (2001) *Project Report for the Los Osos Wastewater Facilities Project.*

6. San Luis Obispo County Planning and Building Department (1987), *Addendum Environmental Impact Report, County Service Area No. 9 Wastewater Treatment Facilities.* Prepared for the County of San Luis Obispo by The Morro Group.

7. San Luis Obispo County Planning and Building Department (1989), *Final Supplemental Environmental Impact Report, County Service Area No. 9 Wastewater Treatment Facilities.* Prepared for the County of San Luis Obispo by The Morro Group.

B. The Board of Directors finds and certifies that the February 2001 *Draft Environmental Impact Report for the Los Osos Wastewater Facilities Project* has been prepared and circulated as required by the California Environmental Quality Act (CEQA), the State CEQA Guidelines and the rules governing environmental review of the Los Osos Community Services District.

C. The Board of Directors finds and certifies that the *Final Environmental Impact Report for the Los Osos Wastewater Facilities Project,* which is incorporated herein by this reference has been prepared and completed in compliance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines and the rules governing environmental review of the Los Osos Community Services District.

D. The Board of Directors finds and certifies that the February 2001 *Final Environmental Impact Report for the Los Osos Wastewater Facilities Project* and all related public comments and responses have been presented to the Board of Directors.

E. The Board of Directors has considered the information contained in the February 2001 *Final Environmental Impact Report for the Los Osos Wastewater Facilities Project,* the public comments and responses previously submitted, and the public comments and information presented at the public hearings.

F. All information was considered by the Board of Directors before taking an action on the project.

G. The Board of Directors finds and certifies that the February 2001 *Final Environmental Impact Report for the Los Osos Wastewater Facilities Project* reflects the independent judgement and analysis of the Board acting as lead agency for the project.

H. The Board of Directors hereby finds and determines that implementation of the Los Osos Wastewater Facilities Project may have a significant adverse effect on the environment.

I. The Board of Directors hereby finds with respect to the adverse environmental impacts detailed in the Final EIR:

1. That, based on information set forth in the Final EIR, the Findings of Fact, the list of mitigation measures included in the mitigation monitoring program (Section XI.), the Board of Directors finds and determines that changes or alterations have been required in or incorporated into the project which avoid or substantially lessen the adverse environmental effects identified in the Final EIR for:

Geology	Hyrdogeology
Drainage	Cultural resources
Consistency with adopted plans	Traffic and circulation
Operational air quality	Noise
Public health and services	Visual resources
Biological resources	

2. That, based on information set forth in the Final EIR and in the Findings of Fact, the adverse environmental effects related to construction related air quality impacts associated with the Los Osos Wastewater Facilities Project are significant effects which cannot be entirely mitigated or avoided if the project is approved and implemented;

3. That no additional adverse impacts will have a significant effect or result in substantial or potentially substantial adverse changes in the environment as a result of the Los Osos Wastewater Facilities Project.

K. The Board of Directors hereby finds and determines that:

1. All significant effects (except construction related air quality impacts that can be feasibly avoided have been eliminated or substantially lessened as determined through the findings set forth in Section VII.;

2. Potential impacts to resources of archaeological and/or cultural significance may be present on the Powell property disposal site shown on Figure 3-7 of the Final EIR. In addition, the site is known to contain habitat for special status plant and animal species. As a result, the Board finds and determines that the disposal site will be relocated from the Powell property to the easterly-most portion of the El Moro right-of-way and the parking lot for the Los Osos Middle School. The Powell property shall not be used as a disposal site.

3. Based on the Final EIR and the Findings of Fact and other documents in the record, specific economic, social and other considerations make infeasible other project alternatives identified in the Final EIR;

4. Based on the Final EIR and the Findings of Fact, and other documents in the record, the remaining unavoidable significant environmental effects of the Los Osos Wastewater Facilities Project are outweighed and overridden by the benefits of the project as described in the Statement of Overriding Considerations.

5. Should the final design of the Los Osos Wastewater Project have the potential to result in adverse environmental impacts that are not anticipated or addressed by the February, 2001 Final EIR, subsequent environmental review shall be required in accordance with CEQA Guidelines Section 15162(a).

V. Statement of Overriding Consideration

The Final EIR has identified and discussed significant effects which will occur as a result of the proposed Wastewater Facilities Project. With the implementation of the mitigation measures identified in the Final EIR, these effects can be mitigated to a level of insignificance except for construction related air quality impacts.

Having reduced the effects of the proposed project by adopting the other mitigation measures and a program to monitor mitigation measures for certain project-related impacts, and having balanced the benefits of the project against the project's unavoidable adverse impacts, the Board of Directors of the Los Osos Community Services District hereby determines that the benefits of the proposed project outweigh these potential unavoidable adverse impacts based on the following overriding considerations:

The objectives for the project, as stated by the Los Osos Community Services District Board of Directors, are as follows:

1. Collect, treat and dispose of wastewater within the Regional Water Quality Control Board Prohibition Zone and manage septic systems outside the collection area so as to improve basin groundwater quality, protect public health, and minimize degradation of the natural environment related to the management of wastewater.

2. Protect Morro Bay and the Morro Bay Estuary by cleansing basin groundwater and storm water crossing wastewater project sites.

3. Provide wastewater collection, treatment and disposal capacity for existing and future land uses within the District's Wastewater Collection Area in accordance with the Estero Area Plan.

4. End the building moratorium so that the community of Los Osos may continue to evolve in accordance with the community's vision for the future and the Estero Area Plan.

5. Construct and operate groundwater harvesting improvements aimed at achieving a sustainable water supply for full community buildout without importing water from outside sources.

6. Minimize the project's economic impact on property owners and customers by selecting technologies and facilities with low capital cost and high cost effectiveness.

7. Minimize adverse societal impacts by selecting appropriate technologies that minimize energy use and sludge production.

8. Minimize disruption to the community and risk to construction workers by selecting low impact construction technologies and scheduling.

9. Provide for the mitigation of habitat loss on project sites and small undeveloped lots within the Prohibition Zone by facilitating the preservation and management of suitable replacement habitat.

10. Provide sufficient redundancy to satisfy routine maintenance needs and meet unexpected emergency conditions.

11. Provide for initial disposal of treated wastewater so as to maximize cost effective recycling on open space and initiate cleansing of portions of the upper aquifer.

12. Implement a water conservation program to minimize consumption of this valuable resource.

13. Design the collection system to facilitate future connection of development concentrations outside the Prohibition Zone but within the Los Osos Community Services District.

14. Enhance Los Osos' "Sense of Community" by providing the opportunity for aesthetically pleasing multi-use facilities that include amenities such as trails, bikeways and open space.

The objectives articulate the shared vision of the community for the Wastewater Facilities Project and were arrived at through many months of analyzing alternatives and involving the public at key decision points. The preferred configuration of project components, and the preferred treatment plant site, were chosen to achieve each of these stated objectives. Of particular importance are objectives 6., 7. and 14. which speak to the issues of cost, both economic and social, and the sense of community achieved through the provision of an aesthetically pleasing open space/park amenity centrally located to serve the community. These stated objectives underscore the community's desire to balance compliance with the requirements of the Regional Water Quality Control Board with other community goals, such as protecting the environment, providing a sustainable water supply for the community, making the project affordable to all income groups and providing much-needed open space.

To meet the objectives stated by the CSD, a number of sites and alternative technologies were considered as discussed in the Final EIR. Sifting through the various alternatives was aided by a computer program sanctioned by the State Water Resources Control Board which assigns a weighting scheme to each key decision-making criteria which may then be scored and ranked quantitatively for comparison. The criteria and sub-criteria used in the comparison process are illustrated by Figure 1-1 on page 4 of the Final EIR. After weighing the criteria identified in Figure 1-1, the CSD Board concluded that a hybrid (covered and odor scrubbed) extended aeration treatment plant on a site centrally located within the community would be best suited to meet the discharge requirements of the Regional Water Quality Control Board and the other objectives stated by the CSD Board. An in-town site was chosen over other locations because:

- It results in the lowest cost for the collection system by centrally locating the treatment facility within the area served; and,

- It enables the treatment plant site to provide open space centrally located and accessible to the citizen of Los Osos;

While the February, 2001 Final EIR assesses the potential environmental consequences of the Wastewater Facilities Project, other aspects of the project, the *Draft Project Report* prepared by Montgomery Watson Engineers, which is incorporated herein by reference and available at the CSD offices, provides a comprehensive comparison of each alternative considered by the Board for collection, treatment, disposal and for treatment sites by considering cost and other advantages and disadvantages. Based on the Final EIR, the *Draft Project Report* and other evidence in the record, the Board of Directors has concluded that the benefits of the preferred project include:

- *It provides a cost effective wastewater management solution.*

Ultimately, property owners will be responsible for paying for the project. Its is estimated that approximately 33% of the community's residents are low income residents. Only a cost-effective solution will successfully pass an assessment district vote scheduled for the spring of 2001. The preferred project components provide the community with a cost-effective solution that meets the RWQCB requirements.

- *It improves local groundwater quality.*

According to the Regional Water Quality Control Board, the community's existing septic system is contributing to high nitrate levels in the groundwater. Once implemented, the project will eliminate the use of the majority of septic tanks, limiting further contamination of the groundwater. Over time, its is expected that rainwater and other natural processes will reduce nitrate levels in the upper aquifer.

- *It creates a community amenity.*

As currently envisioned, the wastewater treatment facility will be constructed and landscaped to maximize active and passive recreational space in the center of the community. Not only will this provide aesthetic benefits but it will also provide park space for local schools and community groups near the existing community center.

- *Maintains local control of the community's water resources.*

Currently, the community has no way to centrally collect its wastewater effluent. As part of the project, a central collection and treatment system will allow the community to holistically manage its effluent and make it available as a resource to the community in the form of recycled water for irrigation and other uses.

- *It promotes sustainable use of local groundwater resources.*

Currently the community draws water from the lower aquifer for potable and non-potable uses. As part of the project, recycled water will be available to supplement the community's water supply, reduce its dependence on groundwater supplies and minimize the need to import water supplies.

- *It reduces seawater intrusion.*

The lower aquifer is currently in a state of overdraft and is experiencing seawater intrusion. The project will provide the community with opportunities for water conservation and water recycling that will decrease its need for water from the lower aquifer.

- *The project protects the Morro Bay estuary.*

According to the RWQCB, septic tanks are a source of nitrate and bacterial contamination to the Bay. As part of this project, the majority of septic tanks will be abandoned and this source of contamination will be eliminated.

- *It returns decision about growth and development to local officials.*

By implementing the project, the building moratorium imposed on the community in 1988 will be removed by the RWQCB. Although some members of the community view the moratorium as a benefit, it has prevented the community from achieving the goals and objectives outlined in the Estero Area Plan which governs land use for the community of Los Osos. The process of local land use control may resume when the project is implemented and the moratorium is lifted.

Together, the benefits stated above outweigh the significant and unavoidable adverse impacts associated with the project.

VI. Potential Environmental Effects Which Area Not Significant

The Board of Directors has concluded that the following effects are not considered significant. Four categories of impacts are identified:

> Class I. Class I impacts are significant and unavoidable. To approve a project resulting in Class I impacts, the CEQA Guidelines require decision makers to make findings of overriding consideration that "... *specific legal, technological, economic, social, or other considerations make infeasible the mitigation measures or alternatives identified in the EIR...*".
>
> Class II. Class II impacts are significant but can be mitigated to a level of insignificance by measures identified in this EIR and the project description. When approving a project with Class II impacts, the decision-makers must make findings that changes or alternatives to the project have been incorporated that reduce the impacts to a less than significant level.
>
> Class III. Class III impacts are adverse but not significant.
>
> Class IV. Beneficial impacts.

Geology

Impact GEO-4:	**Periodic maintenance of the collection system could result in a temporary increase in the potential for erosion. These impacts are considered potentially adverse but less than significant (Class III). Refer to the February 2001 Final EIR page 118.**
Mitigation:	None.
Findings:	Insignificant
Supportive Evidence:	Maintenance of the collection system will generally take place through access holes within the street right-of-way. Periodic maintenance is not expected to be of a duration or magnitude which would necessitate mitigation.
Impact GEO-10:	**Manufactured slopes proposed for the project site are less than 2:1 and are unlikely to slide. Impacts are less than significant (Class III). Refer to the February 2001 Final EIR page 120.**
Mitigation:	None.
Findings:	Insignificant
Supportive Evidence:	Manufactured slopes associated with the landscaping and recreation amenities will be less than 2:1 to enable active recreation.
Impact GEO-14:	**Excavation of the leach field trenches on the Broderson site could increase the potential for slope instability. These impacts are considered adverse bu not significant (Class III). Refer to the February 2001 Final EIR page 120.**
Mitigation:	None.
Findings:	Insignificant

Supportive Evidence: Slopes on the upper (southerly) Broderson disposal site range from 10 - 12 percent and are more gently sloping to the north near Highland Drive. Excavation of the shallow trenches for leach fields could increase slope instability somewhat but will not be significant.

Hydrogeology

Impact H-1: **Construction of the collection system may require dewatering of trenches. Impacts to water quality stemming from such activities are considered adverse but not significant (Class III) because of mitigation incorporated into the project description. Refer to the February 2001 Final EIR page 140.**

Mitigation: None.

Findings: Insignificant

Supportive Evidence: Installation of pipes in areas where groundwater is near the surface may require dewatering (or removal of water). Such water , which may be high in nitrogen, suspended solids and other pollutants, must be disposed of in accordance with the standards of the Regional Water Quality Control Board. Water removed from trenches during construction will be re-introduced in previously excavated trenches before the trench is closed back up. This process will be repeated as the trenching moves through the community so the water removed by de-water is re-introduced continuously.

Impact H-3: **Operation of the wastewater system is designed to improve groundwater quality over time. These impacts are considered beneficial (Class IV). Refer to the February 2001 Final EIR page 141.**

Mitigation: None.

Findings: Beneficial

Supportive Evidence: The RWQCB has determined that the continued use of individual septic tanks throughout the community has contributed to the degredation of water quality in the shallow aquifer. The treatment plant is part of a larger system which aims to improve the quality of water entering the shallow aquifer. High nitrate levels in the shallow aquifer have been attributed to the continuing use of individual septic tanks. The collection and treatment system will collect most of the effluent contained in these tanks for later treatment and reintroduction. Reintroduced water will be of a much higher quality than is currently disposed of in the tanks. Over time, the reintroduction of the treated water will improve the overall quality of water in the shallow aquifer.

Impact H-4: **Operation of the wastewater system is expected to have a beneficial impact on groundwater supplies and sea water intrusion due to an overall reduction in the amount of water pumped from the deep**

aquifer. This impact is considered a beneficial impact (Class IV). Refer to the February 2001 Final EIR page 141.

Mitigation: None.

Findings: Beneficial

Supportive Evidence: At present, groundwater from the shallow aquifer does not meet safe drinking water standards and is thus unavailable for domestic use unless treated. As stated above, the Wastewater Facilities Project will collect and treat wastewater within the collection area and, over time, the shallow aquifer will be cleansed. To avoid mounding of treated wastewater re-introduced to the shallow aquifer at the Broderson site, the wastewater project will employ a series of wells downslope to harvest about 300,000 gallons per day. This water will be further treated and/or blended to meet drinking water standards and re-introduced into the drinking water supply.

Using this highly treated and disinfected water from the shallow aquifer allows a comparable reduction in the amount of groundwater extracted from the deep aquifer, which in turn has a number of beneficial effects. First and foremost, almost all of the domestic water consumed in Los Osos is derived from the deep aquifer. Treated water from the shallow aquifer can be considered a supplemental supply which allows a reduction in the exclusive reliance on the deep aquifer.

Another potential benefit relates to sea water intrusion. According to the project groundwater geologist (Cleath and Associates), deteriorating water quality due to sea water intrusion has been documented at S&T Mutual Water Company well No. 4 (790 milligrams per liter chloride in September, 1999) and at the nearby Southern California Water Company (SCWC) Pecho Road Well. The sea water is intruding into the middle zone of the deep aquifer, where static water levels in the vicinity of the S&T Mutual well field are below sea level during portions of the year. There appears to be no sea water intrusion in shallow aquifer wells S&T No. 1 and SCWC Skyline well.

The cause of sea water intrusion is pumping by water purveyors from the deep aquifer. However, although the wastewater project will result in additional recharge to the deep aquifer, that alone may not be enough to stem the intrusion. Some level of reduction in pumping from the deep aquifer would also likely be needed. If the reduction in pumping from the deep aquifer afforded by the wastewater facilities project is applied to deep aquifer wells in the vicinity of the areas currently impacted by sea water intrusion, the intrusion may be controlled.

Impact H-6: **The introduction of 800,000 gallons per day of treated wastewater on the Broderson site could cause sub-surface "mounding" of the groundwater. Over time, this mounding is expected to migrate downslope toward the Bay where it may surface as the depth to**

groundwater diminishes. This impact adverse but mitigated by measures incorporated into the project description (Class III). Refer to the February 2001 Final EIR page 143.

Mitigation: None.

Findings: Beneficial

Supportive Evidence: Modeling conducted by the project geohydrologists (Cleath & Associates, Appendix C) suggests that, to prevent the mounded groundwater from surfacing downslope of the Broderson site, a series of four harvesting wells will need to be employed between Sea Pines Golf Course and the Community Center on Palisades Drive. Each well will be designed with a capacity of 200 gallons per minute (ave. 100 gpm). Each well would be perforated only in the upper ground water layer to harvest the surplus sub-surface flow. It is estimated that 400,000 gallons per day will need to be harvested. A series of up to 30 monitoring wells will also be required to monitor the sub-surface groundwater mounding and to monitor groundwater quality.

The harvested water will be returned to the wastewater treatment plant where it will undergo additional filtration, disinfection and nitrate removal to meet the requirements of the State Department of Health Services. Following disinfection, the water will be blended with existing drinking water supplies for domestic consumption.

Drainage

Impact WR-1: **Construction of the collection system may require dewatering of trenches. Impacts to water quality stemming from such activities are considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 151.**

Mitigation: None.

Findings: Insignificant

Supportive Evidence: Installation of pipes in areas where groundwater is near the surface usually requires dewatering (or removal of water). Such water, which may be high in suspended solids and other pollutants, must be disposed of in accordance with the standards of the Regional Water Quality Control Board. Water removed from trenches during construction will be re-introduced in previously excavated trenches before the trench is closed back up. This process will be repeated as the trenching moves through the community so the water removed by de-watering is re-introduced continuously.

In addition, discussions with staff of the Regional water Quality Control Board indicate that excess water from trenching operations may fall under the category of a Low Threat Discharge in which up to 100,000 gallons per day may be discharged directly to the ocean on temporary basis.

Impact WR-3:	**Construction of the treatment plant will most likely require dewatering of some excavated areas. Disposal of this water may adversely impact the quality of the receiving water. These impacts are considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 152.**
Mitigation:	None.
Findings:	Insignificant
Supportive Evidence:	Due to the presence of shallow groundwater in portions of the site, dewatering may be required. Disposal of pumped water would be subject to approval by the RWQCB through discharge requirements, an individual permit or NPDES permit. Discussions with the Regional Water Quality Control Board Staff indicate that the disposal of water from de-watering activities would fall under the category of a Low Threat Discharge in which up to 100,000 gallons per day may be directly discharged to the ocean on a temporary basis.

Consistency With Adopted Plans and Policies

Findings:	Certain aspects of the project could be considered inconsistent with Coastal Act and Local Coastal Program policies that favor protection of habitats for special status plant and animal species. Potential lack of consistency with these policies and standards is considered less than significant.
Supportive Evidence:	Consistency with relevant Coastal Act and LCP policies is provided on page 172 et seq. of the Final EIR.

Traffic

Impact TR-4:	**Operation of the proposed wastewater treatment system is expected to generate minimal additional traffic. The operation includes hauling bio-solids to a Class I or Class II landfill three times per week and collection of septage from the 1,051 septic tanks participating in the SSMMP. Impacts to surrounding street systems are considered less than significant (Class III). Refer to the February 2001 Final EIR page 191.**
Mitigation:	None.
Findings:	Insignificant
Supportive Evidence:	Traffic associated with the ongoing operation of the treatment plant, disposal and collection system would be generated by employees, maintenance vehicle trips, and truck trips associated with the disposal of septage, the maintenance of remaining septic tanks and the disposal of wastewater associated with the ion exchange system. These trips are summarize in Table 6.6-3.

Table 6.6-3: Trip generation

Activity	PM Peak Hour Trip Generation Rate[1]	Quantity	Total PM Peak Hour Trips[2]
LOCSD Offices	11 trips/1000 sq.ft.	4.0	44.0
Septage Disposal	1.0/day		1.0
Septic Tank Maintenance	2.0/day		2.0
Park	0.22 trips/acre	7.0	1.54
TOTAL:			49.5/PM Peak Hour

1. Institute of Traffic Engineers Vol. 1
2. Assumes trips associated with septage disposal and septic tank maintenance occur during the PM peak hour each day.

Table 6.6-3 suggests that total peak hour vehicle trips associated with the project will increase PM peak hour traffic on Los Osos Valley Road in the vicinity of the project site by about 6%. However, when compared with the total PM peak hour capacity for Los Osos Valley Road (1,600 trips) the contribution of this project falls to about 3%, which is not expected to reduce the level of service of surrounding street segments to LOS "D" or below. It should also be noted that the net change in truck traffic in the community will likely be reduced as a result of fewer septic tank maintenance truck trips once the collection and treatment system are in place.

With regard to intersection operations, the project is being designed with its primary (public) vehicle access from Palisades Drive, which forma an un-signalized intersection with Los Osos Valley Road about one-quarter mile west of Ninth Street. According to the County Engineering Department, although projected future traffic volumes at the intersection are not expected to meet warrants for a traffic signal, the nature of the uses served by the intersection (a park, library, church and community center) have generated interest in providing a signal for safety purposes. The County has included a signal at this intersection its capital improvement program for the Los Osos area and is collecting an impact fee from new development to pay for it. At present, the County has not decided whether a traffic signal would be required with the wastewater project. However the project will be required to pay the fee at the time of Coastal Development Permit approval.

Impact TR-5: **Trucks carrying chemicals utilized in the treatment process and sludge being removed from the treatment plant could use roadways adjacent to residential areas. Although these materials are not classified as 'hazardous', in the unlikely event of an accidental release, these materials could be spilled onto local roadways creating a temporary hazard to motorists and pedestrians. This impact is considered adverse but less than significant (Class III) impact. Refer to the February 2001 Final EIR page 192.**

Mitigation: None.

Findings:	Insignificant
Supportive Evidence:	Trucks will carry chemicals used for treating wastewater to the treatment plant about 1 to 3 times per month. Such chemicals (alum, polymer and methanol) are not considered hazardous, as they are neither volatile nor flammable. Additionally, approximately 3 trips per week are anticipated for the hauling of sludge to the landfill. Produced sludge would comply with federal and state quality requirements, and would not present a health threat.
Impact TR-6:	**Operation of the treatment plant will increase the demand for parking associated with employees and visitors. These impacts are considered less than significant (Class III). Refer to the February 2001 Final EIR page 192.**
Mitigation:	None.
Findings:	Insignificant
Supportive Evidence:	The project description indicates that parking will be provided for the treatment plant and recreation facilities in accordance with County standards
Impact TR-7:	**Street frontage improvements along the treatment plant's Los Osos Valley Road and Ravenna Avenue rights-of-way will have a beneficial traffic impact (Class IV). Refer to the February 2001 Final EIR page 192.**
Mitigation:	None.
Findings:	Beneficial
Supportive Evidence:	The project description includes full frontage improvements along the treatment plant's Los Osos Valley Road and Ravenna Avenue rights-of-way. The street improvements also include a Class I bike lane along Los Osos Valley Road and through the treatment plant site itself.

Air Quality

Impact AQ-3:	**Mobile source emissions associated with treatment plant operation will increase but are not expected to exceed thresholds of significance established by the APCD. These impacts are considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 206.**
Mitigation:	None.
Findings:	Insignificant

Supportive Evidence: Table 6.7-8 compares the estimated emissions from mobile sources with APCD adopted thresholds of significance. The assumptions used in the model are summarized in Appendix E of the Final EIR: Emissions Calculations. The model predicts emissions from motor vehicles by assigning an emission factor (or factors) to the average daily vehicle trips associated with a particular land use. In this case, the trip characteristics associated with the day-to-day operation of the Wastewater Facility was used to quantify mobile source emissions.

Table 6.7-8: Estimated Emissions From Mobile Sources
(Pounds Per Day)

Pollutant	Estimated Project Emissions[1]	SLO APCD Threshold
Reactive Organic Gases	0.47 pounds per day	25 pounds per day
Oxides of Nitrogen	0.91 pounds per day	25 pounds per day
Particulate Matter (PM_{10})	0.03 pounds per day	25 pounds per day
Carbon Monoxide	3.54 pounds per day	550 pounds per day

1. Source: URBEMIS7. Refer to Appendix E for calculations.

Table 6.7-8 shows that emissions associated with mobile sources are adverse but not significant, Class III.

Traffic-congested intersections have the potential to cause high concentrations of carbon monoxide, known as CO "hot spots." Such "hot spots" are defined as locations where the ambient CO concentrations exceed the State or Federal ambient air quality standards [20 ppm (State) or 35 ppm (Federal) 1-hour, or 9 ppm (both) for 8 hours]. Sensitive receptors (schools, hospitals, parks, homes) could be adversely affected if these standards were exceeded. However, given the generally low volumes of traffic at intersections within the community and low ambient CO concentrations, the addition of traffic associated with the project is not expected to produce hotspots exceeding the State standard. Therefore, a hotspot analysis was not conducted.

Noise

Impact N-2: **Operation of the collection system will involve the use of pumps, which would be located underground and would not generate noise at significant levels. These impacts are considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 222.**

Mitigation: None.

Findings: Insignificant

Supportive Evidence: Approximately 11 pump stations would be located throughout the community as shown in Figure 3-3 of the Final EIR. The pumps will be installed in underground vaults within the roadway, and will range from 2 to 10 hP and powered by electric motors. Because the pump stations will be installed in underground vaults sealed from the ambient noise environment, noise impacts are not expected to be significant.

Impact N-4: **Because the treatment plant will be constructed underground, operation of the treatment plant is not expected to increase ambient noise levels above County standards. These impacts are considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 223.**

Mitigation: None.

Findings: Insignificant

Supportive Evidence: Noise sources associated with plant operation include the following:

- Aerators (total of 70 hP, but will be underground)
- Vehicle Traffic (Staff Vehicles and Septage Trucks)
- Miscellaneous pumps

The 1997 FSEIR prepared for the CSA 9 system, which was an above-ground conventional system, assumed plant noise generation similar to that at the Morro Bay treatment plant. In general, conventional systems utilize mechanical aeration and other components which contribute to higher overall noise levels. Measured daytime noise was approximately 52 dBA at 100 feet from the plant, 2 dBA above acceptable stationary noise levels.

The noise generating components of the Hybrid Extended Aeration Wastewater Treatment Plant will be constructed almost entirely underground. The treatment components installed above ground will be housed in the operations building. For these reasons, operation of the treatment plant is not expected to generate noise in excess of county standards. Aspirating aerators, such as the type slated for the proposed system, pull air through a vortex to mix with water below. There is usually a low hum associated with operation, but significant noise is more likely if anything is worn or loose inside the aerator. A site visit by the CSD Board to a similar underground system operating in the community of Pacifica, California revealed that an underground plant produces virtually no exterior noise.

In addition to noise generated by plant operations, the plant is expected to generate approximately 10 vehicle trips per day which will increase ambient noise levels in the vicinity. Existing average daily traffic on nearby roadways is shown in Table 6.8-5 below.

Table 6.8-5: Project Area - Existing Roadway Traffic Levels and Project Impact

Roadway Segment	Project ADT	Existing ADT	Percent Increase	Relative Increase in dBA
Los Osos Valley Rd., west of Pine Ave.	10	5,300	0.1	N/A
Los Osos Valley Rd., west of Ninth St. (a)	10	8,300	0.1	N/A
Los Osos Valley Rd., west of South Bay Blvd.	10	13,400	0.07	N/A

N/A = Not audible
Source: *Draft Estero Area Plan EIR*. 1999.

According to Figure 3-2 in the *Noise Element Technical Reference Document* (1992), traffic levels on surrounding streets would have to increase approximately 60 percent to create the usually audible 3-dBA increase in noise. Increased traffic associated with the project will not be sufficient to create adverse noise levels.

Impact N-6: **Noise generated by operation of the harvesting wells will increase ambient noise levels but not above County standards. These impacts are considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 225.**

Mitigation: None.

Findings: Insignificant

Supportive Evidence: The harvesting wells will be constructed in underground vaults and sealed from the ambient noise environment. No exterior noise is expected.

Public Health and Safety

Impact PS-2: **Construction activities may result in additional calls for emergency personnel and may require specialized safety and rescue training and equipment. This impact is considered adverse but not significant (class III). Refer to the February 2001 Final EIR page 230.**

Mitigation: None.

Findings: Insignificant

Supportive Evidence: The Occupation Safety and Health Administration (CAL-OSHA) establishes specific safety and rescue requirements for construction activities which must be followed. Some of the specialized

equipment would not be used beyond the life of the wastewater construction operations.

Impact PS-4: **Pump stations will be equipped with emergency generator facilities to ensure operation during power outages. Each pump station will include an underground diesel storage tank which could release fuel to the pump enclosure in the event of upset. These impacts are considered adverse but less than significant (Class III). Refer to the February 2001 Final EIR page 230.**

Mitigation: None.

Findings: Insignificant

Supportive Evidence: The thirteen underground pump stations will be equipped with emergency electrical generators to provide for continued operation in the event of a power outage. The generators would utilize diesel fuel stored underground on the pump station site. Fuel storage would be in concrete-mounted storage tanks located adjacent to each generator in the underground pump vault. The storage tanks would include secondary containment and would be alarmed for leak detection. Storage of diesel fuel is common to industrial uses such as gas stations and fueling depots, and is not considered a significant public safety risk. Due to the fact that the proposed facilities include secondary containment and leak detection, potential impacts are considered less than significant.

Impact PS-7: **Operation of the collection, treatment and disposal system will increase the demand for electrical power. This impact is considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 231.**

Mitigation: None.

Findings: Insignificant

Supportive Evidence: The Hybrid Extended Aeration treatment system and associated pumps for the operation of the collection and disposal system will increase the demand for electricity. Total electrical demand is expected to be about 2.1 million kilowatt hours per year. Although the demand for electricity is expected to increase as a result of the project, it is not expected to increase beyond anticipated levels for the community as a whole. The project will be new and constructed to current energy efficiency standards which will minimize electrical demand.

Impact PS-8: **A malfunction of the treatment process could adversely affect water quality in a portion of the supply serving Los Osos. This impact is considered adverse but not significant because of measures incorporated into the project description (Class III). Refer to the February 2001 Final EIR page 232.**

Mitigation: None.

Findings: Insignificant

Supportive Evidence: The project description (Chapter 3) indicates that the Wastewater Facilities Project will incorporate harvesting wells to help ensure that wastewater re-introduced on the Broderson site does not surface downslope. Preliminary groundwater modeling indicates that 400,000 gpd must be pumped out of the groundwater to guard against surfacing. The water will be pumped back to the wastewater treatment plant and filtered and treated for nitrate reduction to cleanse the water to drinking water standards. The treated water will then be blended with existing water supplies in accordance with state and federal drinking water standards and distributed for consumption.

In the event of a malfunction in the nitrogen reduction process, water containing higher levels of pollutants could be re-introduced into the drinking water supply. However, the nitrate removal process, as with the treatment process itself, will contain parallel and redundant treatment systems. In the unlikely event that both systems malfunction, a number of safety features built into the system will protect the water supply. First, there is excess capacity built into the pipe system that conveys pumped groundwater to the treatment plant. Second, the harvesting wells are used to pump down the groundwater level so that the surfacing of mounded groundwater does not occur downslope of the Broderson disposal site. When the wells are fully operational and the mounding has reached the harvesting wells (about eight years after the system is operational) the groundwater level will be 20- 30 feet below the surface. If the harvesting wells were turned off, it would take about 14 days for the groundwater to surface, providing ample time to repair one or more of the ion exchange systems. It should be noted that this represents an absolute worse case in which both redundant systems fail and repairs require more than 24 hours to accomplish.

Visual Resources

Impact AES-1: **Temporary construction activities related to the collection and disposal systems will involve the use and storage of construction equipment which will adversely affect the visual quality of construction areas throughout the community. These impacts are considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 242.**

Mitigation: Mitigation AES-1: Construction staging Area. For all aspects of the project, construction staging areas shall be located away from sensitive viewing areas to the extent feasible. Before construction activities begin, an area for construction equipment storage away from direct views of sensitive viewing corridors (e.g. residences and major roads in the project area) shall be designated.

Findings:	Insignificant
Supportive Evidence:	This is not considered a significant impact and will be assisted by Mitigation Measure AES-1.
Impact AES-2:	**Construction of the disposal leach field on the Broderson property will result in temporary visual impacts associated with vegetation removal. This impact is considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 242.**
Mitigation:	None.
Findings:	Insignificant
Supportive Evidence:	Treated wastewater will be pumped to subsurface leach fields where it will percolate into the shallow aquifer. The preferred site for the leach fields is known as the Broderson site, which is located in the foothills south of the community and south of Highland Drive as shown in Figure 3-5 of Final EIR. The Broderson site is characterized by a relatively undisturbed 80-acre site that slopes upward to the south from Highland Drive. The site contains good examples of several types of plant communities including a dense area of Morro manzanita toward the southern end of the property; more importantly, the site is considered critical habitat for the morro shoulderband dune snail. The surrounding area contains residential development to the north and west and privately owned undisturbed land that lies to the east and south. The subsurface leach fields will occupy approximately eight acres which will be re-vegetated once the leach fields are installed. The remaining undisturbed area will be set aside to preserve important plant communities and snail habitat. Construction of the subsurface leach fields will require the removal of portions of the existing vegetation over approximately 8-acres of area. Although, a site plan has not yet been prepared for the disposal site, it is likely that the leach field will be located at the southern end of the northerly 40-acres. The leach fields will be underground and not be visible from the surrounding areas once installed. Until the re-vegetation of the disturbed area matures, the area will be visible but not from a prominent vantage.

Biological Resources

Impact BIO-3:	**Operation of the collection system is not expected to result in adverse impacts to area biota. There is no impact. Refer to the February 2001 Final EIR page 274.**
Mitigation:	None.
Findings:	Insignificant

Supportive Evidence:	Operation of the collection system is not expected to result in adverse impacts to area biota. There is no impact.
Impact BIO-9:	**Suffrutescent wallflower and Dune almond. Suffrutescent wallflower is considered a plant of limited distribution by CNPS (List 4). The dune almond is considered a plant of limited distribution and is on List 4 on the CNPS Inventory. Both of these plants occur in the Morro Shores site, however, neither will be impacted by the proposed project. Refer to the February 2001 Final EIR page 275.**
Mitigation:	None.
Findings:	Insignificant
Supportive Evidence:	Suffrutescent wallflower is considered a plant of limited distribution by CNPS (List 4). The dune almond is considered a plant of limited distribution and is on List 4 on the CNPS Inventory. Both of these plants occur in the Morro Shores site, however, neither will be impacted by the proposed treatment plant.
Impact BIO-10:	**Splitting Yarn Lichen. The splitting yarn lichen is a species of concern to USFWS. This lichen is present in the Morro Shores site, but is not expected within the boundaries of the Tri-W site. Regardless, there are sufficient numbers of this species and habitat for this species in the Broderson site to compensate for any losses. Refer to the February 2001 Final EIR page 275.**
Mitigation:	None.
Findings:	Insignificant
Supportive Evidence:	The splitting yarn lichen is a species of concern to USFWS. This lichen is present in the Morro Shores site, but is not expected within the boundaries of the Tri-W site. Regardless, there are sufficient numbers of this species and habitat for this species in the Broderson site to compensate for any losses.
Impact BIO-11:	**Operation of the treatment system will not result in long-term adverse impacts to biological resources. Impacts are less than significant (Class III). Refer to the February 2001 Final EIR page 275.**
Mitigation:	None.
Findings:	Insignificant
Supportive Evidence:	Operation of the treatment system will not result in long-term adverse impacts to biological resources.
Impact BIO-18:	**Disturbance of Suffrutescent Wallflower and Dune Almond. Suffrutescent wallflower is considered a plant of limited**

distribution by CNPS (List 4). The dune almond is considered a plant of limited distribution and is on List 4 on the CNPS Inventory. Both of these plants occur in the Broderson site. Impact to these plants is not considered significant due to their distribution in the area (Class III). Refer to the February 2001 Final EIR page 282.

Mitigation: None.

Findings: Insignificant

Supportive Evidence: Suffrutescent wallflower is considered a plant of limited distribution by CNPS (List 4). The dune almond is considered a plant of limited distribution and is on List 4 on the CNPS Inventory. Both of these plants occur in the Broderson site. Impact to these plants is not considered significant due to their documented distribution in the area.

VII. Potential Significant Effects Which Have Been Mitigated to A Level of Insignificance

The Board of Directors of the Los Osos CSD has concluded that the mitigation measures identified in the Mitigation Monitoring Program (Section XI.) will result in substantial mitigation of the following effects and that these effects are not considered significant or they have been mitigated to a level of insignificance.

Geology

Impact GEO-1: **Construction of the collection system (including the collection pipes and up to 11 pump stations) will involve trenching within road rights-of-way and easements at 200-foot increments. Such disturbance will temporarily increase the potential for erosion and reduce the stability of the soil. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 118.**

Mitigation:

Mitigation GEO-1: An NPDES Construction Activity Storm Water Permit shall be obtained prior to the onset of construction activities. Appropriate BMPs, as established in the project NPDES Construction Storm Water Permit, shall be employed during project construction, which may include, but are not limited to, temporary sand bagging; construction of berms; installation of geofabric, and revegetation of areas by hydroseeding and mulching; and the use of trench stabilizing and de-watering. The NPDES permit shall apply to all proposed facilities, and shall address 50 to 100-year precipitation events to the extent feasible. The Pollution Prevention Plan portion of the NPDES permit shall be reviewed and approved by the County Engineering Department and the RWQCB.

Mitigation GEO-2: Project implementation shall include a long-term Erosion Control Plan. The plan shall include the treatment plant site, the collection system, and the disposal sites. The Erosion Control Plan shall identify erosion control practices to be implemented throughout the construction and operation of these facilities. These measures may include, but are not limited to, recompaction of soils; revegetation of disturbed areas; utilization of soil binding; or other methods for reducing short-term and long-term erosion. The Plan shall be reviewed by the County Office of Planning and Building, and shall be included in contractor bid and contract documents.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The requirements of the NPDES and the elements described for the required long term erosion control plan will avoid potential erosion impacts associated with construction of the collection system within rod rights-of-way.

Impact GEO-2: **The collection system will require the installation of up to 11 pump stations in sub-surface vaults. Excavation and construction of the pump/lift stations will increase the potential for erosion and soil instability. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 118.**

Mitigation: GEO-1, GEO-2 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: As many as eleven pump stations will be required. Each station will be constructed in a concrete vault approximately 6 feet wide by 8 feet long. The remainder of the stations will require pumps between 30 and 85 horsepower in concrete vaults approximately 8 feet wide by 12 feet long. The depth of all the pump stations will generally be less than approximately fifteen feet. The concrete vaults will be sited within lightly traveled public right of ways and fitted with traffic rated access hatches which will allow maintenance of the pumps and station structure. Soils associated with excavation sites are poorly consolidated and potentially unstable. Compliance with the discharge requirements of an NPDES permit and adherence to the measures described in the erosion control plan will reduce these potential impacts to less than significant.

Impact GEO-3: **The collection system infrastructure (pipes, pump stations, etc.) could be damaged or ruptured as a result of a seismic event due to ground shaking or liquefaction. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 118.**

Mitigation: Mitigation GEO-6: Implementation of CDMG Liquefaction Mitigation. Where determined necessary by geotechnical investigations, design of system components shall incorporate recommendations contained in the CDMG publication "Guidelines for Evaluating and Mitigating Seismic Hazards in California." Mitigation cited in this publication include recompaction of liquefiable soils and use of reinforced shallow foundations.

Mitigation GEO-7: Prior to construction, a complete grading and drainage plan shall be submitted to the LOCSD and County Department of Planning and Building for review and approval. Such grading and drainage plan shall address the requirements

of the geotechnical investigation described in Measure GEO-5.

Mitigation GEO-8: Rehabilitation of disposal leach fields shall be rotated so that no more than one field is under re-construction at a time.

Mitigation GEO-9: In addition to the long-term erosion control plan cited in Measure GEO-2, above, plans for the Broderson disposal site shall designate access routes for review and approval by the LOCSD which intrude minimally into the landscape. Plans shall include prompt re-vegetation of disturbed areas.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Portions of the collection system may be isolated due to fault rupture, where the system crosses potentially active strands of the Los Osos Fault. Liquefiable soils in the area may also have similar effects. Mitigation specified below, including design for isolation and quick repair of damaged portions, and compliance with relevant sections of the Uniform Building Code, will reduce these potential impacts to a less than significant level.

Impact GEO-5: **The construction of the Hybrid Extended Aeration system will require the excavation of about 193,600 cubic yards of soil material. Sandy soils associated with the treatment plant site are potentially unstable and will require stabilization to enable construction. Impacts associated with soil instability are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 119.**

Mitigation: Mitigation GEO-1: An NPDES Construction Activity Storm Water Permit shall be obtained prior to the onset of construction activities. Appropriate BMPs, as established in the project NPDES Construction Storm Water Permit, shall be employed during project construction, which may include, but are not limited to, temporary sand bagging; construction of berms; installation of geofabric, and revegetation of areas by hydroseeding and mulching; and the use of trench stabilizing and de-watering. The NPDES permit shall apply to all proposed facilities, and shall address 50 to 100-year precipitation events to the extent feasible. The Pollution Prevention Plan portion of the NPDES permit shall be reviewed and approved by the County Engineering Department and the RWQCB.

Mitigation GEO-2: Project implementation shall include a long-term Erosion Control Plan. The plan shall include the treatment plant site, the collection system, and the disposal sites. The Erosion Control Plan shall identify erosion control practices to be implemented throughout the construction and operation of these facilities. These measures may include, but are not limited to, recompaction of soils; revegetation of disturbed areas; utilization of soil binding; or other methods for reducing short-term and long-term erosion. The Plan shall be reviewed by the County Office of Planning and Building, and shall be included in contractor bid and contract documents.

Mitigation GEO-7: Prior to construction, a complete grading and drainage plan shall be submitted to the LOCSD and County Department of Planning and Building for review and approval. Such grading and drainage plan shall address the requirements of the geotechnical investigation described in Measure GEO-5.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The treatment plant will be constructed underground on about five acres of the Tri-W site. The area to be excavated is about 4 acres and about 30 feet deep. The walls of the excavated area will require grading and stabilization to enable construction of the treatment plant. The excess dirt excavated from the site will be exported to a point of disposal.

Final grading and drainage plans for the project have not been prepared. However, the mitigation measures described above require adherence to the requirements of an NPDES permit, long term erosion control plan and complete grading and drainage plans which will be prepared for the final project design to address these issues.

Impact GEO-6: **Grading of the treatment plant site to accommodate the treatment plant, water feature(s) and landscaping will result in soil disturbance and a temporary increase in erosion potential. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 119.**

Mitigation: GEO-1, GEO-2, GEO-7 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The treatment plant will be constructed underground on about five acres of the Tri-W site. The area to be excavated is about 4 acres and about 30 feet deep. The walls of the excavated area will require grading and stabilization to enable construction of the treatment plant. The excess dirt excavated from the site will be exported to a point of disposal.

Final grading and drainage plans for the project have not been prepared. However, the mitigation measures described above require adherence to the requirements of an NPDES permit, long term erosion control plan and complete grading and drainage plans which will be prepared for the final project design to address these issues.

Impact GEO-7: **The treatment plant site is located in proximity to the inferred trace of Strand B of the Los Osos Fault. The exact location of the fault is unknown, and therefore a precise determination of its potential to produce surface rupture is likewise unknown. However, should the trace of the fault coincide with the treatment plant, a seismic event associated with the fault could damage facilities associated with the treatment plant. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 119.**

Mitigation: Mitigation GEO-5: Prior to construction, a geotechnical investigation shall be carried out as part of final facility design. This geotechnical investigation shall include analysis of the proposed treatment plant site, the disposal system, and the collection system, where determined necessary by the LOCSD and governing regulatory agencies. The geotechnical investigation shall address the following issues:

- Design of facility foundations and walls such that potential impact associated with fault rupture onsite would be reduced to the extent feasible. Design measures for rapid repair of facilities shall be identified as necessary.

- The investigation shall determine onsite ground water levels, and identify soil layers that could be subject to liquefaction during a seismic event. Specific measures, such as excavation/recompaction of foundation areas, long-term dewatering, or utilization of foundation piles, should be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for settlement or lurching associated with seismic events. Specific measures, such as excavation/recompaction, shall be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for disruption of collection associated with fault rupture. Design measures for

isolation and rapid repair of facilities shall be identified, where necessary.

- The County Engineering Department shall review and approve the scope and findings of the geotechnical investigation, and shall review final project design to ensure incorporation of recommended measures.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The treatment plant site parallels the inferred trace of Strand B of the Los Osos Fault, which was discussed in detail in the 1989 Final Supplemental EIR for the CSA 9 Wastewater Treatment Facilities, SCH 89030816 and incorporated by reference. This portion of the fault, if it does exist, is not considered active, and due to the nature of the local soils, previous environmental analysis cited a low potential for ground rupture. All facilities associated with the plant will be designed and installed in accordance with the UBC standards for Seismic Zone 4, and will include mechanisms for isolation of damaged areas and rapid recovery as described in the mitigation measures listed below. The plant is also designed with 6 hours of emergency storage capacity and potential for onsite emergency retention in the event it is isolated.

Impact GEO-8: **A seismic event associated with any of the potentially faults described in "Setting", above, could adversely impact the treatment plant and its function. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 120.**

Mitigation:

Mitigation GEO-3: All proposed facilities shall be designed and constructed in accordance with UBC Seismic Zone 4 regulations.

Mitigation GEO-4: Prior to finalization of project design, the LOCSD shall consult with the California Division of Mines and Geology CDMG to determine the Design Basis Earthquake for system components.

Mitigation GEO-5: Prior to construction, a geotechnical investigation shall be carried out as part of final facility design. This geotechnical investigation shall include analysis of the proposed treatment plant site, the disposal system, and the collection system, where determined necessary by the LOCSD and governing regulatory agencies. The geotechnical investigation shall address the following issues:

- Design of facility foundations and walls such that potential impact associated with fault rupture onsite would be reduced to

the extent feasible. Design measures for rapid repair of facilities shall be identified as necessary.

- The investigation shall determine onsite ground water levels, and identify soil layers that could be subject to liquefaction during a seismic event. Specific measures, such as excavation/recompaction of foundation areas, long-term dewatering, or utilization of foundation piles, should be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for settlement or lurching associated with seismic events. Specific measures, such as excavation/recompaction, shall be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for disruption of collection associated with fault rupture. Design measures for isolation and rapid repair of facilities shall be identified, where necessary.

- The County Engineering Department shall review and approve the scope and findings of the geotechnical investigation, and shall review final project design to ensure incorporation of recommended measures.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The treatment plant will be designed to satisfy federal, state and local standards for construction in Seismic Zone 4 as required by the UBC, and will incorporate emergency treatment capacity in the event the treatment process is interrupted. Seismic impacts associated with a substantial earthquake event cannot be completely mitigated;. however, all feasible measures are being incorporated into the design and operation of the project.

Impact GEO-9: **Soils associated with the treatment plant site consist of unconsolidated sands which may pose a significant risk of liquefaction. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 120.**

Mitigation: Mitigation GEO-7: Prior to construction, a complete grading and drainage plan shall be submitted to the LOCSD and County Department of Planning and Building for review and approval. Such grading and drainage plan shall address the requirements of the geotechnical investigation described in Measure GEO-5.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The occurrence of liquefaction of soils at the project site could result in failure of the structural integrity of the Treatment Plant, which in turn could result in the release of large quantities of treated effluent. A recent geophysical survey and geological analysis of a groundwater anomaly just east of the treatment facility site concludes that liquefaction susceptibility is increased due to the presence of a buried fluvial channel (Mann 1998). Mitigation suggested by the California Division of Mines and Geology in their publication "Mitigating the Impacts of Liquefaction" will be incorporated into the treatment plant project design and all components of the system will be designed to comply with UBC standards.

Impact GEO-11: **Construction of the disposal leach fields will result in the temporary disturbance of soils and potential erosion at the Broderson site and various street rights-of-way within the community. These impacts will be temporary but are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 121.**

Mitigation: Mitigation GEO-2: Project implementation shall include a long-term Erosion Control Plan. The plan shall include the treatment plant site, the collection system, and the disposal sites. The Erosion Control Plan shall identify erosion control practices to be implemented throughout the construction and operation of these facilities. These measures may include, but are not limited to, recompaction of soils; revegetation of disturbed areas; utilization of soil binding; or other methods for reducing short-term and long-term erosion. The Plan shall be reviewed by the County Office of Planning and Building, and shall be included in contractor bid and contract documents.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Construction of the disposal leach fields on the Broderson site will take place over a period of approximately 6 months and will entail removal of vegetation over an 8-acre portion of the site for equipment access and leach field placement. The Broderson site exhibits slopes of over 10 percent at the upper (southerly) elevations where the leach field would be constructed, and sandy soils which may be subject to erosion or landsliding once disturbed. The leach fields will be installed in shallow (3 feet or less) trenches arranged parallel to the slope and dug using conventional trenching

machinery. Compliance with an erosion control plan that identifies strategies for minimizing erosion caused by leach field construction will reduce these impacts to a less than significant level.

Impact GEO-12: **The Los Osos area is within Seismic Zone 4 as defined by the UBC. A seismic event associated with one or more of the active faults affecting the region could result in ground shaking that could damage the leach fields. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 121.**

Mitigation:

Mitigation GEO-3: All proposed facilities shall be designed and constructed in accordance with UBC Seismic Zone 4 regulations.

Mitigation GEO-4: Prior to finalization of project design, the LOCSD shall consult with the California Division of Mines and Geology CDMG to determine the Design Basis Earthquake for system components.

Mitigation GEO-5: Prior to construction, a geotechnical investigation shall be carried out as part of final facility design. This geotechnical investigation shall include analysis of the proposed treatment plant site, the disposal system, and the collection system, where determined necessary by the LOCSD and governing regulatory agencies. The geotechnical investigation shall address the following issues:

- Design of facility foundations and walls such that potential impact associated with fault rupture onsite would be reduced to the extent feasible. Design measures for rapid repair of facilities shall be identified as necessary.

- The investigation shall determine onsite ground water levels, and identify soil layers that could be subject to liquefaction during a seismic event. Specific measures, such as excavation/recompaction of foundation areas, long-term dewatering, or utilization of foundation piles, should be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for settlement or lurching associated with seismic events. Specific measures, such as excavation/recompaction, shall be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for disruption of collection associated with fault rupture. Design measures for isolation and rapid repair of facilities shall be identified, where necessary.

- The County Engineering Department shall review and approve the scope and findings of the geotechnical investigation, and shall review final project design to ensure incorporation of recommended measures.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Similar potential impacts to the disposal system could occur as those described under Impact GEO-3, above, for the collection system. Again, adherence to the requirements of the Uniform Building Code and the inclusion of storage in the system will reduce these impacts to a less than significant level.

Impact GEO-13: **The disposal leach fields would release treated wastewater into potentially liquefiable zones which may increase the potential for liquefaction over existing conditions. These impacts are considered significant unless mitigated. Refer to the February 2001 Final EIR page 122.**

Mitigation:

Mitigation GEO-8: Rehabilitation of disposal leach fields shall be rotated so that no more than one field is under re-construction at a time.

Mitigation GEO-9: In addition to the long-term erosion control plan cited in Measure GEO-2, plans for the Broderson disposal site shall designate access routes for review and approval by the LOCSD which intrude minimally into the landscape. Plans shall include prompt re-vegetation of disturbed areas.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: As described in Chapter 6.1, page 115, Geologic Hazards, liquefaction can occur where poorly consolidated surface material overlies shallow groundwater. When energy is introduced into this system, such as during a seismic event, the soils temporarily lose cohesion as the soils become saturated. The introduction of additional water into the sub-surface environment associated with the disposal system has the potential to increase the potential for liquefaction.

A preliminary liquefaction analysis of the treatment plant site and the various disposal sites prepared by CFS Geotechnical Consultants, Inc. (Appendix B of the Final EIR) concludes that liquefaction potential on the various sites would generally be no different than present conditions once the septic systems cease operation and the disposal leach fields are installed. Table 6.1-1 on pages 1123 and 124 of the Final EIR provides a summary of the liquefaction potential for each disposal site. Based on this analysis, the potential for

liquefaction at these sites is no greater with the project than under existing conditions.

Impact GEO-15: **The disposal system will consist of a series of sub-surface leach fields which will periodically (about every 10 years) require maintenance and rehabilitation. Impacts associated with these activities will be temporary and comparable to those associated with leach field construction. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 124.**

Mitigation: Mitigation GEO-9: In addition to the long-term erosion control plan cited in Measure GEO-2, plans for the Broderson disposal site shall designate access routes for review and approval by the LOCSD which intrude minimally into the landscape. Plans shall include prompt re-vegetation of disturbed areas.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Sub-surface leach fields require periodic maintenance and about once every ten years require complete excavation and rehabilitation. Impacts associated with rehabilitation are comparable to those associated with construction since a comparable effort is required. Adherence to an erosion control plan as described in Mitigation GEO-2 will reduce these impacts to a less than significant level. It should be noted that a schedule that rotates the timing of rehabilitation will be employed to minimize potential impacts.

Hydrogeology

Impact H-2: **Operating a centralized wastewater collection system will allow the use of septic system leach fields to be eliminated over a large portion of the collection area. Eliminating this source of groundwater re-charge in favor of subsurface leach fields in specified locations will alter the replenishment characteristics of the groundwater basin and will alter groundwater levels over much of the community. This impact is considered significant and adverse unless mitigated (Class II). Refer to the February 2001 Final EIR page 140.**

Mitigation: Mitigation H-3: The Los Osos Community Services District shall prepare and implement a comprehensive water management plan for the Los Osos groundwater basin. The purpose of the plan is to identify management strategies aimed at achieving a sustainable water supply to serve buildout of the community in accordance with the Estero Area Plan, as it may be amended from time to time.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The URS Baseline Study concludes that septic system effluent constitutes the largest single source of re-charge to the basin. Once the use of septic systems throughout the collection area are largely supplanted by the wastewater collection system, the re-introduction of groundwater will be accomplished by the disposal strategies outlined above. Specifically, under buildout conditions about 950,000 gallons per day will be returned to the west side of the fault through surface recycling (dry weather) and through sub-surface leach fields in various locations; about 450,000 gpd will be similarly disposed of on the east side of the fault. The primary replenishment site, however, is the Broderson property where up to 800,000 gallons per day will be re-introduced. This location was chosen because it offers the most favorable combination of depth to groundwater and depth to the clay aquitard to accommodate a large amount of treated wastewater.

Predicting with accuracy the net effect on groundwater levels of eliminating septic tanks and returning the treated wastewater at the disposal sites is difficult at best. However, current modeling results suggest that so long as at least 230,000 gpd of treated wastewater is disposed of east of the fault, groundwater levels and seawater intrusion are expected to remain stable.

A related issue is the effect of sub-surface disposal east of the fault on water levels in Los Osos Creek. At present, most of the wastewater returned to the basin from septic systems east of the fault flows toward Morro Bay. However, a sizeable portion flows east toward Los Osos Creek due primarily to the pronounced "mound" of groundwater that has been mapped in the vicinity of Pismo Avenue and 14th Street (see Figure 6.2-2: Groundwater Elevations in the Final EIR). Generally, the higher groundwater causes areas east of 15th Street to flow toward the Creek where the freshwater helps support riparian and wetland vegetation in that area. The Wastewater Facilities Project proposes to eliminate septic system replenishment in favor of sub-surface leach fields in selected locations (see Figure 3-7 of the Final EIR). The disposal locations were chosen in part to help ensure that existing problems related to shallow groundwater and ponding are not worsened. The quantity of treated wastewater reintroduced to the basin is expected to maintain balance between the east and west sides of the fault.

Note that the Powell disposal site located at the east end of El Moro Avenue is estimated to have a disposal capacity of about 175,000 gallons per day. Assuming 300 gallons per day of wastewater per single family residence, this is roughly equivalent to 583 dwelling units which is slightly less than the number of units east of 15th Street and south of El Moro Avenue. This suggests that disposal in the vicinity of the Powell property will more or less maintain existing

subsurface flows toward Los Osos Creek, albeit in a more concentrated area.

Impact H-5: **The cumulative long-term demand for water in the Los Osos area will increase as a result of the installation of a community-wide wastewater treatment system and the removal of the building moratorium enacted by the RWQCB. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 142.**

Mitigation:

Mitigation H-1: NPDES Permit. The LOCSD will obtain and comply with an NPDES permit from the RWQCB and will develop an SWPPP for the project, which will include, among other requirements, the identification of Best Management Practices (BMPs) to be used for erosion control, actions for control of potential fuel or drill tailing release, and requirements for disposal (i.e., location, quality) of water from dewatering activities.

Mitigation H-3: The Los Osos Community Services District shall prepare and implement a comprehensive water management plan for the Los Osos groundwater basin. The purpose of the plan is to identify management strategies aimed at achieving a sustainable water supply to serve buildout of the community in accordance with the Estero Area Plan, as it may be amended from time to time.

Findings: Beneficial

Supportive Evidence: One of the anticipated outcomes of the Wastewater Facilities Project is the eventual removal of the building moratorium which has been in effect in Los Osos since 1988. Once the moratorium is lifted, the community is expected to continue to develop in accordance with the Estero Area Plan portion of the San Luis Obispo County General Plan and Local Coastal Program.

Current land use designations are estimated to accommodate a population holding capacity of 20,590 at buildout, after adjustments are made for properties conserved and/or used by the project (see Table 3-5). Assuming the present (November, 2000) population is 14,606, buildout will accommodate an additional 5,984 persons. If per capita consumption is currently 0.15 acre-feet per person per year, the additional demand associated with this future population is estimated to be: 0.15 AF/P/Y X 5,984 = 901 AFY. Assuming the water conservation program saves 204 acre-feet per year at buildout, the net additional demand is about 697 acre feet per year.

As stated above, there appears to be no definitive understanding of the safe yield of the Los Osos basin so the effect of this additional development on groundwater supplies is unknown. However, the Los Osos CSD is currently preparing a comprehensive Water

Management Plan which will address the long-term management of groundwater resources for the community, including appropriate strategies for the management of pumping from the upper and lower aquifers to provide for future demand. In addition, a water conservation program will be implemented, as required by the State Revolving Fund. This program is estimated to save as much as 180,000 gallons of water per day.

Lastly, the Estero Area Plan is currently undergoing a comprehensive revision. A draft Environmental Impact Report has been prepared on the preferred Plan alternative, but work on the draft plan and the EIR have been suspended to incorporate revisions recommended by the California Coastal Commission. Among the recommendations of the Coastal Commission is a requirement that land use in the Los Osos area be related to the service capacities for wastewater and water supply. Information regarding groundwater resources and wastewater capacity derived from the Wastewater Facilities Project will help shape the Area Plan update accordingly.

Drainage

Impact WR-2: **Construction activities at the treatment plant site will increase the potential for erosion, which could adversely affect the quality of stormwater entering the site as well as waters downstream. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 152.**

Mitigation:

Mitigation WR-1: Grading, Drainage and Erosion Control Plan. Construction plans for the Tri-W site shall include a complete grading and drainage plan incorporating the recommendations of a geotechnical engineering evaluation (see Mitigation GEO-5). Measures to be considered for the mitigation of potential drainage, erosion, seepage and water quality impacts include, but are not limited to:

- The incorporation of an on-site runoff collection system which includes energy dissipation, berms, temporary settling basins, and/or a silt/hydrocarbon separator for the collection and removal of hazardous materials and sediments.
- The incorporation of an on-site drainage system to collect runoff from all impervious onsite services, including parking spaces, roads and buildings.
- Surface runoff should be collected by curbs, gutters and drainage swales and conveyed to an appropriate point of disposal. Discharges of greater than five feet per second should be released through an energy dissipater or outlet.
- The incorporation of sub-surface drains to intercept seepage and convey it to an acceptable point of disposal.
- Watering the site at least twice per day during construction, or more frequently if determined necessary by the LOCSD.

- Re-vegetating portions of the site exclusive of paved areas as soon as reasonable following grading.
- Incorporating rain gutters and downspouts for buildings.
- Grading surfaces adjacent to buildings so that runoff is conveyed away from foundations and onto paved surfaces or underground collection pipes.

Mitigation WR-2: NPDES Permit. The LOCSD will obtain and comply with an NPDES permit from the RWQCB and will develop an SWPP for the project, which will include, among other requirements, the identification of Best Management Practices (BMPs) to be used for erosion control, actions for control of potential fuel or drill tailing release, and requirements for disposal (i.e., location, quality) of water from dewatering activities.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Construction of the treatment plant will require excavation of a four acre area for the treatment plant and grading over much of the site. Disturbance of soils and vegetation associated with construction will increase the potential for erosion. Adherence to the erosion control plan identified in Mitigation Measure WR-1 and the NPDES permit requirements identified in Measure WR-2 will reduce these impacts to a less than significant level.

Impact WR-4: **Constructing a treatment plant and park on the Tri-W site will alter the volume and velocity of runoff leaving the site and will alter existing drainage patterns. The increase in surface runoff could adversely affect downstream drainage courses. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 152.**

Mitigation: WR-1, WR-2 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Construction of the treatment plant will significantly alter the drainage onsite. Included in the design of the project is parking, buildings, concrete walkways and other impermeable surfaces which will increase runoff (see Figure 3-8 of the Final EIR). The increase in impermeable surfaces will increase the amount and velocity of runoff generated on the site and entering surrounding drainage systems, which in turn could accelerate erosion and could contribute to localized flooding.

Included in the project description is a retention basin located at the northerly boundary of the site where runoff would be collected and

meted out to the existing downstream drainage consistent with historic flows from the site. The retention basin is being sized to accommodate runoff from the project site after development and is system is expected to fully mitigate potential drainage impacts.

Impact WR-5: **Heavy metals and other hazardous materials washed from on-site parking could enter the surface flow during a rainstorm, adversely affecting water quality downstream. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 152.**

Mitigation: WR-2 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: When a site is developed with facilities for automobiles, or lies downstream of an area in which the primary source of runoff is from streets, the potential exists for pollution of storm water runoff. The sources of pollution are the hydrocarbons used by automobiles and hydrocarbons in asphaltic pavement materials. The primary concern in this case is the potential to increase pollutants entering surface and sub-surface flows which eventually enter Morro Bay and the Sweet Springs Preserve. According to a publication by the Metropolitan Washington Council of Governments entitled "Controlling Urban Runoff", storm water sampled in the study area contained between 2 and 10 milligrams of pollutants per liter. The pollutant load generated at the project site will likely be less than these samples because the test sites used in the study were from highly urbanized areas with a higher potential for hydrocarbon pollution.

Impact WR-6: **Construction of the disposal leach field on the Broderson property will involve soil and vegetative disturbance which will alter on-site drainage and may increase the potential for erosion. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 153.**

Mitigation: WR-2 (see above)

Mitigation WR-3: Revegetation Plan. A comprehensive revegetation plan will be developed for the Broderson and Powell sites, which at a minimum, will include re-planting of exposed surfaces with native vegetation.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The construction of the leach field will temporarily create site conditions which may adversely affect runoff. Mitigation identified below, including the acquisition of an NPDES permit, and

development of a revegetation plan, would reduce impacts to a less than significant level.

Impact WR-7: **Construction of the disposal leach fields in street rights-of-way will increase the potential for erosion and runoff into surface water bodies. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 154.**

Mitigation: WR-2 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Adherence to the erosion control plan identified in Mitigation Measure WR-1 and the NPDES permit requirements identified in Measure WR-2 will reduce these impacts to a less than significant level.

Impact WR-8: **Periodic renovation of the sub-surface leach fields will require excavation activities which have the potential to result in short-term runoff impacts similar to those associated with construction. This is considered a significant adverse impact unless mitigated (Class II). Refer to the February 2001 Final EIR page 154.**

Mitigation: WR-2 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Adherence to the erosion control plan identified in Mitigation Measure WR-1 and the NPDES permit requirements identified in Measure WR-2 will reduce these impacts to a less than significant level.

Cultural Resources

Impact C-1: **Construction of the collection system could result in disturbance of previously unknown archaeological resources. This impact is significant, but mitigable (Class II). Refer to the February 2001 Final EIR page 161.**

Mitigation: Mitigation C-1 Undiscovered Resources. All cultural resources discovered during construction must be avoided in order to eliminate any potential impacts. All work in the vicinity of the suspected resource will stop and the proper authorities will be notified. Prior to restart of work, a qualified archaeologist will determine the significance of the resource. Suggested measures for mitigation shall be adhered to. If the resource is suspected to contain human remains, the

County Coroner and an approved Native American consultant shall be contacted to determine the nature and significance of the find.

Mitigation C-2 Archeological Monitoring. If a resource is discovered and an area is deemed potentially sensitive, archaeological monitoring will be required. The monitoring shall be conducted by a qualified archaeologist recognized as such by the County of San Luis Obispo with sufficient experience with local archaeological resources to make accurate determinations if cultural resources are exposed.

In addition, in all areas determined to be sensitive because of prehistoric remains, a Native American monitor should be present as well. The presence of Native American monitoring will assist in identification of archaeological resources, should they be encountered. More importantly, the Native American monitor will act as a representative of the local tribe (Obispeño or Northern Chumash) in the event that human remains or traditional cultural properties are encountered. If such remains are found, they would assist in the decision making process and would act as a consultant on issues related to state and local applications of the Native American Graves Protection and Repatriation Act (NAGPRA) and the American Indian Religious Freedom Act (AIRFA).

Finally, if significant resources are discovered, efforts will be made by local law enforcement as well as designated monitors to prevent looting of the sites by non-professionals.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The Los Osos area has a relatively high concentration of archaeological resources. During construction, it is expected that previously undiscovered resources may be encountered. Mitigation described above in Measures C-1 and C-2 provide for the monitoring of construction activities and establish the procedures for assessing the significance of previously undiscovered resources that may be unearthed during these activities.

Impact C-2: **Development of the Tri-W Site will not result in disturbance or destruction of nearby archaeological resources. There is no impact. Refer to the February 2001 Final EIR page 161.**

Mitigation: C-1, C-2 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Because of the relatively high density of archaeological sites in the Los Osos area, mitigation is included in the project to address the unforeseen discovery of resources. Mitigation described above in Measures C-1 and C-2 provide for the monitoring of construction activities and establish the procedures for assessing the significance of previously undiscovered resources that may be unearthed during these activities.

Impact C-3: **Portions of the Broderson site may contain previously undiscovered archaeological resources. Refer to the February 2001 Final EIR page 162.**

Mitigation: C-1, C-2 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The Broderson disposal site contains no previously documented archaeological resources. However, because of the relatively high density of archaeological sites in the Los Osos area, mitigation is included in the project to address the unforeseen discovery of resources. Mitigation described above in Measures C-1 and C-2 provide for the monitoring of construction activities and establish the procedures for assessing the significance of previously undiscovered resources that may be unearthed during these activities.

Traffic

Impact TR-2: **Installation of the collection and disposal systems will result in temporary lane closures and the disruption of local circulation. These impacts to circulation are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 190.**

Mitigation:

Mitigation TR-1: Construction Traffic Mitigation Plan. The LOCSD shall prepare a construction traffic mitigation plan which identifies the location of equipment and trenches to be used; sequencing/phasing of installation; the location of materials and equipment staging areas; and proposed detour routes. The plan shall also provide for adequate emergency access, and routing of construction-related vehicles to minimize impacts to sensitive land uses. The plan shall also provide for the scheduling of construction related traffic so that it does not create safety hazards to school children and other pedestrians.

Mitigation TR-2: Public Notice of Construction. The public shall be notified of potential obstructions and

alternative access provisions. This notification may be accomplished by posting signs near the construction area at least one week in advance of the commencement of construction. In addition, information signs shall be posted on Los Osos Valley Road, with a phone number to call for questions. Phone inquiries shall be answered by a live public relations official, and not a pre-recorded message. Alternative access provisions and parking will be provided where necessary, with guide signs to inform the public. There will also be alternative pedestrian facilities provided to avoid obstruction to pedestrian circulation.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The traffic capacities of streets and intersections serving the community will be reduced during the period of construction activities. Access to residences and commercial areas may be temporarily blocked, and circulation patterns may be altered. These impacts will be short-term and restricted to a 300-400 foot portion of the street system at any one time. The project description limits the length of open trench to a 200 feet (0.03 miles) at any given time. Managing the construction zones to allow for traffic access, as required by Mitigation TR-1 and TR-2 will reduce these impacts to a less than significant level.

Impact TR-3: **Construction traffic associated with the treatment facility at the Tri-W site could adversely impact the safety of local streets used by school children and other nearby residents that travel Los Osos Valley Road. This impact would be short-term and temporary, lasting for approximately 2 years. These impacts are considered significant unless mitigated. Refer to the February 2001 Final EIR page 191.**

Mitigation: TR-1, TR-2

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Construction traffic has the highest likelihood of becoming a hazard for pedestrians and school children between the hours of 8:00 a.m. - 8:30 a.m. and between 2:30 p.m. 3:30 p.m. immediately after school is dismissed. Most construction related trips will occur as workers arrive at work in the morning and when they leave at the end of a typical work day (5:00 p.m.). In other words, workers would likely arrive before school starts and leave after school dismisses. However, material deliveries and other truck trips associated with construction of the site could occur throughout the day and in some cases could coincide with arrival and departure times for schools.

Managing the construction zones to allow for traffic access, as required by Mitigation TR-1 and TR-2 will reduce these impacts to a less than significant level.

Air Quality

Impact AQ-2: **Dust generated by construction activities may be exceed thresholds of significance adopted by the APCD for respirable particulate matter. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 206.**

Mitigation:

Mitigation AQ-1. Equipment Emission Control Measures. The applicant shall fully implement CBACT for the highest emitting piece of diesel-fired heavy equipment used to construct each major component of the proposed project. It is expected that tandem scrapers or tracked tractors would be the highest emitters. CBACT includes:

- Fuel injection timing shall be retarded 1.5 to 2.0 degrees from the manufacturer's recommendation;
- High pressure fuel injectors shall be installed in all engines;
- Reformulated diesel fuel shall be used on the project site;
- Ceramic coating of the combustion chamber;
- Installation of catalytic converters;

In addition, Caterpillar pre-chamber, diesel-fired engines (or equivalent low NO_x engine design) shall be used in heavy equipment used to construct the project to further reduce NO_x emissions. These requirements shall be noted on the grading plan and listed in the contractor and subcontractor contracts. If implementation of such measures is not feasible within the time-frame mandated for the proposed project, other vehicle fleets would be considered as alternatives, subject to APCD approval. At a minimum, if the above CBACT or an equivalent are not considered for mitigation, all heavy duty equipment operation onsite should have the timing retarded 4 degrees.

Mitigation AQ-2. Dust/PM10 Control Measures. Dust generated by construction activities shall be kept to a minimum by full implementation of the following measures:

- During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems are to be used to prevent dust from leaving the site and to create a crust after each day's activities cease;
- During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the morning and after work is completed for the day and whenever wind exceeds 15 miles per hour;

- Stockpiled earth material shall be sprayed as needed to minimize dust generation;
- During construction, the amount of disturbed area shall be minimized, and onsite vehicle speeds should be reduced to 15 mph or less;
- Exposed ground areas that are planned to be reworked at dates more than one month after initial grading should be sown with a fast-germinating native grass seed and watered until vegetation is established;
- After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will not occur;
- Grading and scraping operations shall be suspended when wind speeds exceed 20 mph (one hour average);
- All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Construction activities will managed in accordance with the mitigation measures described above. Impacts associated with dust will be reduced to a level of insignificance.

Impact AQ-4: **Operation of the treatment facility may result in periodic odors that would adversely affect surrounding neighborhoods. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 208.**

Mitigation: Mitigation AQ-3. Odor Performance Standard. Neighbors of the Tri-W site shall be informed that odor nuisance complaints are to be directed to the APCD for documentation. Any odor complaints received by the County Engineering Department or plant staff shall be forwarded within one day of receipt to the APCD. The APCD will contact plant staff following each odor nuisance complaint to determine the nature and cause of the odor sources. The Los Osos Community Services District shall utilize a threshold of three nuisance complaints per year as a performance guideline with respect to odor generation. Should nuisance complaints exceed this number, the District shall assess odor levels at the treatment plant site. The assessment shall include the following:

- Utilization of a scentometer to assess odor concentration with respect to the BAAQMD dilution to threshold ratio (D/T ratio). This ratio indicates the number of equal volume dilutions to the point at which 50% of the population below the age of 45 first detects the odor. Regulation 7 adopted by the BAAQMD restricts the release of odorous substances to 4 D/T at the property line. If the D/T ratio exceeds the 4 D/T ratio threshold established by the BAAQMD, the district shall provide a letter report to the APCD summarizing the nature and cause of the odor source, the frequency at which this source has caused complaints in the past, the frequency at which this source is anticipated to occur, and a course of action to reduce onsite odor generation. Measures may include, but are not limited to, the following:

  Upstream addition of ferrous chloride to the influent stream to reduce septic conditions;
  Establishment of additional "negative air" containment areas;
  Additional treatment component enclosure, and;
  Installation of air flow baffles to improve odor dissipation.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The Tri-W site where the treatment facility will be located is bordered to the south by single family residences and on the east by the library and community center/county park. Prevailing winds are generally on-shore during the day (from the west) and would be expected to carry odors downwind (to the east) and elsewhere should odors emanate from the plant.

Odors generated at wastewater treatment facilities are typically associated with specific components of the treatment train that deal with organic solids or provide the opportunity for septic conditions. Sources of odor commonly generated at wastewater treatment plant facilities include hydrogen sulfide gas and ammonia which are by-products of the treatment process. The proposed project would employ an Extended Aeration plant constructed underground where it would be sealed and fully odor scrubbed.

However, under adverse circumstances, accidents or malfunctions can occur which, if left uncorrected, could result in adverse odors being emitted. During light wind conditions when the dissipation of odors generated onsite is reduced, the potential exists for increased odor concentrations to occur. These concentrated odors can then be transported, without breaking up, offsite to adjacent land uses. Prevailing wind conditions within the Los Osos area are characterized by wind speeds of 2 to 8 mph, with prevailing winds associated with eastward onshore flow from the Pacific Ocean. Under these prevailing conditions, windspeed is anticipated to be adequate such that odors generated onsite are reduced to adequate concentrations.

With regard to wind conditions that could contribute to concentrated movement of odors, it should be noted that light wind conditions of less than 1 mph have a 19 percent occurrence frequency. This is equivalent to 69 days per year. Under these light wind conditions, wind direction is variable, with a small prevailing frequency occurrence of 31 percent (of light wind days) from the south. However, light winds from both the east and west occur at a frequency of 29 percent. Therefore, concentrated movement of air under light wind conditions would have a basically equal potential to affect sensitive receptors located to the east, west and north of the subject property.

Complaints associated with other conventional treatment plants in San Luis Obispo County have been compiled by the APCD. Primary factors associated with nuisance complaints appear to be geographic location of the plant with respect to sensitive receptors, prevailing wind conditions, and treatment procedures. Review of 1994 to 1996 nuisance complaints for treatment plants within San Luis Obispo County indicate that the APCD has received complaints for only the City of San Luis Obispo Water Reclamation Plant and the California Men's Colony, neither of which are extended aeration plants or fully odor scrubbed. The City of San Luis Obispo Water Reclamation Plant is located upwind and adjacent to residential areas along South Higuera Street. It should be noted that this plant utilizes secondary biological treatment processes that differ from those proposed with the Hybrid Extended Aeration system, and is located adjacent to residential land uses.

Review of the APCD file for the City of San Luis Obispo Water Reclamation Plant indicate eleven complaints were received by the APCD in 1994 (all from one resident), three were received in 1995, and eight were received in 1996. Review of files indicate that these complaints are generally associated with periodic procedures or conditions, rather than long-term operation.

Given the design of the system, and the proximity of residences, in the event of a malfunction in the odor scrubbing system odor levels could potentially reach levels that would prompt a nuisance complaint. Based upon the number of complaints associated with the City of San Luis Obispo Treatment Plant, and given the proximity of the Tri-W site to existing sensitive receptors, it is anticipated that the number of complaints received would average about one per year. Therefore, under the BAAQMP threshold previously discussed, this impact is considered adverse but not significant because of mitigation incorporated into the design of the project.

Noise

Impact N-1: **Construction of the collection and disposal systems will generate temporary noise levels in excess of applicable standards. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 221.**

Mitigation:

Mitigation N-1: Construction will be limited to the hours of 7 a.m. to 6 p.m. on weekdays, and 8 a.m. to 5 p.m. on weekends.

Mitigation N-2: The construction contractor shall agree to the following upon hire:

- Equipment shall be fitted with mufflers, in good operating condition and fitted with factory standard silencing features;
- A hauling route and staging plan shall be submitted to the LOCSD which is designed to minimize noise impacts with sensitive land uses;
- When available and proper for the task, contractor shall use electric versus diesel equipment;
- Portable noise barriers shall be employed where necessary to minimize noise impacts;

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Construction of the collection and leach field disposal systems will involve approximately 18 months of excavation and piping in various portions of the community. Typical equipment used for these operations and their associated noise levels are listed in Table 6.8-3 below. To portray the worst-case scenario, simultaneous operation of equipment is assumed.

Table 6.8-3: Collection System Construction Equipment and Associated Noise Levels

Equipment	Noise Levels (at 50 feet from source in dBA)	Average dBA	Ambient Noise Level	Amount in Excess of 10 dBA Threshold
Backhoe	72-95	83.5		
Pipelayer/drill	82-95	90		
Roller	73-75	73.5		
Loader	72-85	78.5		
Total Noise (Simultaneous operation)		91.4	55	26.4

Source: EPA. 1971. *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances.* NTID 300-1

In the 1997 FSEIR, which is incorporated herein by reference and available for review at the Los Osos CSD offices, the ambient noise level throughout the community was assumed to be 55 dBA. As mentioned under "Significance Thresholds" above, noise exceeding ambient levels by more than 10 dBA would be considered a short-term adverse impact. Noise generated by equipment used for the installation of the collection system would exceed thresholds by 26.4

dBA, thereby posing a short-term adverse impact to sensitive receptors in the community.

Installation is expected to take place in 200 foot increments. Impacts to individual receptors will therefore be minimized as the construction moves through the community. The short term nature of these impacts, combined with the mitigation measures described above, the impacts are considered less than significant.

Impact N-3: **Construction of the treatment plant will generate temporary, short-term impacts on surrounding noise-sensitive uses. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 222.**

Mitigation: N-1, N-2 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Construction crews will require approximately 12-18 months of continuous operation to complete the treatment plant. Construction plans for the plant have not yet been drafted. It is assumed, however, that equipment used for construction will be as follows: two tracked tractors (Caterpillar D8), two scrapers (Caterpillar 623E), one motor grader (Caterpillar 140G), one excavator (Caterpillar 245), and two wheeled loaders (Caterpillar 988B) would be used during site preparation. During construction, it is assumed that two cranes and one wheeled loader (Caterpillar 966B) would be used. To provide a worst-care scenario, operation of all equipment simultaneously is assumed.

Except near roadways, ambient noise levels are assumed to be 55 dBA Ldn. Site preparation would result in greater short-term impacts than treatment plant construction. Table 6.8-4 shows the expected noise levels caused by site preparation and construction activities."

Table 6.8-4. Treatment Plant Construction Noise Levels (dBA Ldn)

Distance from Site (feet)	Treatment Plant (Site Prep)	Treatment Plant (Construction)
100	82.1	75.6
200	76.2	69.7
400	70.2	64.1
600	66.9	61.2
800	64.6	59.5
1,000	62.9	58.3
1,200	61.6	57.6

Note: Noise more than 10 dB greater than ambient levels shown in italics.
Source: Fugro West, Inc. FSEIR, 1997

Noise-sensitive uses within 600 feet of the site would experience short-term noise levels that exceed County standards. Near the treatment site, this includes a portion of the sensitive uses listed in

Table 6.8-2, above. It should be noted that although residences to the south of Los Osos Valley Road are within 600 ft., they are impacted by roadway noise.

Impact N-5: **Construction of the disposal leachfields within street rights-of-way and on the Broderson property will temporarily subject nearby residences to noise levels in excess of County Standards. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 225.**

Mitigation: N-1, N-2 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Installation of the leach fields will involve similar construction equipment and associated noise as that associated with the collection system. In addition, four harvesting wells will be needed to ensure that groundwater mounding does not surface downslope of the Broderson disposal site. Each well will be constructed in an underground vault similar to the collection pump stations and would result in similar noise impacts. Mitigation measures identified in Measures N-1 and N-2 will reduce these impacts to a less than significant level.

Public Health and Safety

Impact PS-1: **Construction activities could accidently break main water supply lines, creating a localized loss of water for fire fighting. This impact is significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 229.**

Mitigation: Mitigation PS-4 The Los Osos CSD shall mitigate the potential temporary loss of water for fire fighting that may occur as a result of construction activities by either 1) acquiring a water tender, to the satisfaction of the Fire Chief, or 2) through some other equivalent means as determined by the Fire Chief and the CSD Board.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Provision of temporary fire fighting capability will reduce this potential impact to a less than significant level.

Impact PS-3: **A break or malfunction in the collection system could result in the accidental release of untreated effluent. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 230.**

Mitigation: Mitigation PS-1 Hazardous Materials Management Plan. A Hazardous Materials Management Plan shall be developed and submitted to the County of San Luis Obispo Health Department for approval. The plan shall identify hazardous materials utilized onsite and their characteristics; storage, handling and training procedures; and spill contingency procedures. Additionally, the Plan should address fuel storage at the pump station sites.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: As discussed in Chapter 6.1 of the Final EIR, Geology, the collection system would be designed for rapid repair and isolation of damaged sections. Operation of the collection and treatment system will require preparation of an Emergency Response Plan identifying manpower and equipment needed for efficient response to release onsite. The plan is required to address the following topics.

- Hazardous materials handling, storage and application.
- Hazardous material spill response.
- Emergency release of untreated influent from the collection system or treatment facilities.
- Emergency failure of treatment facilities, resulting in a release of untreated or primary treated effluent.

Together, these measures will reduce potential impacts to a elss than significant level.

Impact PS-5: **Chemicals utilized within the proposed treatment process would be limited to agents utilized for bio-solids thickening, and to ensure adequate removal of nitrogen. Agent utilized (alum, polymer and methanol) are liquids with low human contact risks. This is considered to be potentially significant, but mitigable (Class II). Refer to the February 2001 Final EIR page 230.**

Mitigation: PS-1 (see above)

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Storage and handling procedures would conform to appropriate state regulations and would subject to a Hazardous Materials Management Plan. Storage onsite for these materials would utilize above ground storage tanks (ASTs), and secondary containment would be provided through utilization of a wall or containment berm surrounding the tank area. These agents would be added to the treatment train through direct feed mechanisms controlled by the plant's SCADA (System Control and Data Analysis) system.

Therefore, potential health risks associated with these agents is considered less than significant.

As discussed in Mitigation PS-1, operation of the treatment plant would require preparation and submittal of a Hazardous Waste Management Plan to the County Health Department for review and approval. This plan would identify material characteristics, storage volumes, handling procedures, and spill response. Project implementation would also include preparation of an Emergency Response Plan identifying manpower and equipment for efficient response to agent release onsite. The County Hazardous Materials Response Team is equipped to handle such a release. Therefore, potential public safety associated with storage and use of treatment agents onsite will be reduced to less than significant .

Impact PS-6: **Operation of the collection, treatment and disposal system will increase the demand for electrical power. This impact is considered adverse but not significant (Class III). Refer to the February 2001 Final EIR page 231.**

Mitigation: Mitigation PS-2 Best Available Technology. Project implementation shall be designed to conform with energy efficiency requirements outlined in Title 24 of the California Code. To the extent feasible, design of the proposed project should incorporate best available technology for energy efficiency . Additionally San Luis Obispo County APCD recommends the following measures be implemented to further reduce or offset long term emissions:

- Provide an on-site lunch room with refrigeration and food preparation (i.e., microwave) appliances to reduce daily trips to and from the treatment facility;
- Use of double paned windows in office area where interior heating/air conditioning will occur;
- Use of energy efficient interior lighting where applicable.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Effluent generated by the treatment plant would conform with effluent quality requirements established by the RWQCB in Order No. 83-12. These requirements include limitations for biological oxygen demand (BOD), suspended solids, turbidity, total nitrogen, coliform bacteria, dissolved oxygen, and chlorine residual, and are listed in Section 3.0 of the Final EIR, "Project Description."

The quality of effluent water resulting from the proposed treatment process would comply with requirements established by the RWQCB so long as the system is operated and maintained in accordance with accepted practice. Effluent discharged to the disposal leach fields, or

potential release onsite or from disposal transmission lines, would not pose a health risk to the public.

The project will be designed to minimize the risk of upset or malfunction by incorporating redundancy in the treatment process and by incorporating on-site storage to allow time for the plant operators to repair interruptions to service. The project would be designed with parallel treatment trains in accordance with CCR Title 22 (see Figure 3-4 of the Final EIR). In this configuration, two parallel and identical treatment trains would be provided. This dual system provides redundancy for the entire treatment process. In addition, the project will be designed with approximately six hours of emergency storage at the treatment plant.

Project implementation would also include an Emergency Response Plan identifying humanpower and equipment for efficient response in the event of accidental releases of effluent.

Impact PS-9: **Disposal of bio-solids in a Class I or Class II landfill could adversely impact landfill capacity. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 232.**

Mitigation:

Mitigation PS-3 Prior to operation of the wastewater treatment system, the Los Osos CSD shall either 1) secure a contract for bio-solids disposal with a land disposal or recycling facility or 2) construct a bio-solids recycling facility that satisfies Title 40, Section 503 of the Code of Federal Regulations.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Approximately 1,640 pounds of brown sludge (bio-solids) would be produced by the wastewater treatment plant per day. Once treated to satisfy federal and state requirements, treated bio-solids would be removed from the Wastewater Treatment facility about three times per week and hauled to a Class I or Class II landfill. To be disposed of in a landfill, bio-solids must meet the pollutant concentrations specified by Title 40 Section 503.23 of the Code of Federal Regulations, which also prescribes landfill management practices to be followed for bio-solids handling. The bio-solids would be classified as Class B and be fully oxidized and stable. The moisture content would be approximately 25%.

Nearby landfills include Cold Canyon and Chicago Grade. According to a Site Engineer at Cold Canyon, although the recent

expansion includes a lined disposal section, they have not historically accepted bio-solids. Their staff was uncertain regarding future policies for bio-solids and whether they would accept ongoing bio-solids disposal from the proposed wastewater system. It should be noted that capacity exists to accept the bio-solids associated with the project, and San Luis Obispo County received tentative approval for bio-solids disposal for the County proposed project. If Cold Canyon decides to accept the bio-solids, it would be required to meet restrictive standards and would be fairly costly (upwards of $88/ton).

It should be noted that the project will not start producing bio-solids for disposal until 2003. In the intervening time, the LOCSD will have the option of either securing permission to dispose of bio-solids at one of the landfills or constructing a bio-solids recycling facility. Regardless Mitigation Measure PS-3 requires the CSD to either contract for land disposal or to construct a recycling facility proper to start-up of the treatment plant.

Visual Resources

Impact AES-3: **Construction activities associated with the treatment plant would result in temporary, short-term impacts on views from Los Osos Valley Road as well as nearby land uses. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 243.**

Mitigation: Mitigation AES-1: Construction staging Area. For all aspects of the project, construction staging areas shall be located away from sensitive viewing areas to the extent feasible. Before construction activities begin, an area for construction equipment storage away from direct views of sensitive viewing corridors (e.g. residences and major roads in the project area) shall be designated.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: This is not considered a significant impact and will be assisted by Mitigation Measure AES-1.

Impact AES-4: **Construction of the treatment facility and park would permanently alter the visual character of views from Los Osos Valley Road and Palisades Drive, and to a lesser degree from Skyline Drive and Ramona Avenue. The quality of the views from Los Osos Valley Road are considered vivid and in tact. In addition, the quality of the views from the surrounding residences will also be altered.**

These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 243.

Mitigation:

Mitigation AES-2: Conformance With County Development Standards. The final design and construction plans for the park and treatment plant site shall be consistent with relevant visual resource protection policies and standards of the San Luis Obispo County General Plan, Estero Area Plan, Coastal Zone Framework for Planning, and the Agriculture and Open Space Element.

Mitigation AES-3: Landscaping Plan. A final landscaping plan shall be prepared for the entire project site and approved by the County prior to building permit issuance for the Tri-W site. Said landscaping plan shall emphasize native plant materials and shall include sufficient planting to screen views of the project from nearby roads and residential developments. The goal for the landscaping plan shall be to visually integrate the project into the community by creating a park-like setting, while preserving and enhancing existing views.

Mitigation AES-4: Revegetation Plan. A revegetation plan shall be prepared to the satisfaction of the US Fish and Wildlife, California Department of Fish and Game and San Luis Obispo County for the 8-acre portion of the Broderson site that will be disturbed by the installation of the disposal leach fields. The plan shall be prepared by a qualified landscape architect and/or botanist and shall, to the extent feasible, restore the site to its condition prior to disturbance.

Findings:

The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence:

Construction and operation of the proposed treatment facility would involve the removal of native vegetation (see Section 6-11 of the Final EIR: Biological Resources) which would permanently alter views of Morro Bay from neighboring homes and from Los Osos Valley Road. However, views from surrounding properties and from Los Osos Valley Road will be maintained due to the underground construction of the treatment plant and the incorporation of the treatment plant design into the slope of the site. Views from Los Osos Valley Road will be over the project to the Bay beyond. The scale and character of buildings associated with the project will be consistent with the form and character of surrounding development.

Impact AES-5:	**Security lighting for the proposed wastewater treatment facility would have the potential to adversely impact nearby residential uses. Refer to the February 2001 Final EIR page 243.**
Mitigation:	Mitigation AES-5 Lighting Plan. A final lighting plan shall be prepared for the treatment facility. The lighting plan shall meet County design standards. This shall include proper shielding, proper orientation and applicable height standards.
Findings:	The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.
Supportive Evidence:	Adherence to a lighting plan that demonstrates compliance with County standards will fully mitigate this impact.

Biological Resources

Impact BIO-2:	**Construction of the collection system will largely take place in existing road rights-of way, and is not likely to impact sensitive plants or animals. Impacts are less than significant (Class III). Where construction will impact sensitive biota, such as in undeveloped lots, pre-construction surveys will take place to minimize impacts. This impact is significant, but mitigable (Class II). Refer to the February 2001 Final EIR page 274.**
Mitigation:	Mitigation BIO-1. Where construction will necessitate disturbance in undeveloped lots, wetlands and other potentially sensitive areas, a pre-construction survey will be conducted to assess and minimize any potential impacts.
Findings:	The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.
Supportive Evidence:	Where construction will impact sensitive biota, such as in undeveloped lots, pre-construction surveys will take place to minimize impacts. The survey would identify significant biological resources and recommend strategies for minimizing or avoiding impacts to these resources. Such strategies may include, but is not limited to, avoiding the areas where resources are present, re-vegetating disturbed areas, and other measures as identified by Mitigation Measure BIO-7.
Impact BIO-5:	**Potential Loss of Wintering Monarch Butterfly Roost Sites. Monarch butterflies use eucalyptus trees as winter roost sites.**

Although this species is not listed, the removal of roosting sites is considered to be a significant, but mitigable impact (Class II). Refer to the February 2001 Final EIR page 274.

Mitigation:

Mitigation BIO-2. Loss of Wintering Monarch Butterfly Roost Sites. The project proponent shall avoid habitat where feasible. A qualified monarch butterfly specialist will conduct preconstruction surveys for the monarch butterfly during the months of October to February. Potential roost sites that could be affected during construction will be fenced.

Mitigation BIO-11. Avoid the Loss of Wintering Monarch Butterfly Roost Sites. The project proponent shall avoid habitat. A qualified monarch butterfly specialist will conduct preconstruction surveys for the monarch butterfly within 0.5 miles of the proposed access road and groundwater injection sites. Potential roost sites that could be affected during construction will be fenced.

Findings:

The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence:

Development of the treatment plant would result in disturbance and removal of Windrow habitat (Eucalyptus groves) located within the central and western portions of the project site. Monarch butterfly typically uses Windrow habitat for overwintering purposes. Monarch butterfly has been documented by the NDDB and other existing literature, as using Windrow habitats in the vicinity of the project site. Eucalyptus groves located within the planned location of the treatment plant are scattered, but are considered suitable overwintering habitat for this species and disturbance of disturbance of these habitats located at the site will result in adverse impacts. However, the mitigation measures described above will reduce these impacts to a less than significant level.

Impact BIO-6

Morro Blue Butterfly. The proposed project will not impact areas of suitable habitat for the butterfly (namely dune lupine scrub).

Mitigation:

Dune lupine was found on the treatment plant site during field surveys. As a result, the following mitigation is recommended.

Mitigation BIO-12. Avoid or Compensate for Loss of Morro Bay blue Butterfly Habitat. Where feasible, the project proponent will avoid Morro Bay blue butterfly habitat. Surveys for Morro Bay blue butterfly presence will be conducted by a qualified wildlife biologist in late April or early May. If the habitat is likely to be disturbed during construction, fencing will be placed around areas of suitable habitat. Where avoidance is not

feasible, the project proponent, will compensate for the loss of potential Morro Bay blue butterfly habitat by setting aside an area of equal or better quality than the habitat to be impacted (see Mitigation BIO-4). The project proponent will ensure that the compensation area is not adversely affected by human disturbance, vandalism, off-road vehicle use, or pesticide application. Selection of a specific compensation site will be made by mutual agreement between the project proponent, the California Department of Fish and Game, the United State Fish and Wildlife Service, and the agency or entity responsible for managing the compensation site.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Since the Morro Blue Butterfly's host plant, the Dune Lupine, occurs as a dominant throughout a large portion of the site, portions of the site provide suitable habitat for the species. Within the site, suitable Morro Blue Butterfly habitat is associated with Dune Lupine Scrub. Measures described above will reduce this impact to a less than significant level.

Impact BIO-7: **Potential Loss of or Disturbance to Raptors. Eucalyptus stands, in the absence of other tall trees, are used by raptors for nesting purposes. Raptors such as the white-tailed kite, sharp-shinned hawk, Cooper's hawk, and potentially the golden eagle may utilize eucalyptus as nesting habitat. In addition, species such as the red-shouldered hawk and the red-tailed hawk may utilize these groves for nesting habitat. The groves may also be potential wintering habitat for species such as the prairie falcon and sharp-shinned hawk (Class II). Refer to the February 2001 Final EIR page 275.**

Mitigation: Mitigation BIO-13. Avoid Loss of Nesting Raptor Habitat. The project proponent will conduct a preconstruction survey for nesting raptors. Depending on the timing of construction, the project proponent will conduct a preconstruction survey during spring or early summer (April to early July) to determine whether nesting raptors or species protected by State and/or Federal law are present on or within the project area. Winter surveys are also recommended. If the survey results indicate that nesting raptors or protected species are present on or within the project area, the nest tree or area will be fenced or otherwise demarcated and a 500-foot no-disturbance buffer will be established until the nesting activity is completed and the young have fledged. The distance and placement of the buffer area will be

determined in consultation with the CDFG. Only after nesting activities have ceased will construction be allowed to continue. Nesting habitat will be marked and avoided during construction and operation activities of the proposed project.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Eucalyptus stands, in the absence of other tall trees, are used by raptors for nesting purposes. Raptors such as the white-tailed kite, sharp-shinned hawk, Cooper's hawk, and potentially the golden eagle may utilize eucalyptus as nesting habitat. In addition, species such as the red-shouldered hawk and the red-tailed hawk may utilize these groves for nesting habitat. The groves may also be potential wintering habitat for species such as the prairie falcon and sharp-shinned hawk. Measures outlined above will reduce potential impacts to a less than significant level.

Impact BIO-14: **Potential Destruction of Wintering Monarch Butterfly Roost Sites. Monarch butterflies use eucalyptus trees as winter roost sites. Although this species is not listed, the removal of roosting sites is considered to be a significant impact. The construction of the proposed access road and the use of the proposed access road may create noise disturbance that could affect the roosting sites of the monarch butterfly. Construction and operation of the proposed disposal sites may cause loss of habitat and increase the noise disturbance to the monarch butterfly roosting sites as well (Class II). Refer to the February 2001 Final EIR page 281.**

Mitigation:

Mitigation BIO-2. Loss of Wintering Monarch Butterfly Roost Sites. The project proponent shall avoid habitat where feasible. A qualified monarch butterfly specialist will conduct preconstruction surveys for the monarch butterfly during the months of October to February. Potential roost sites that could be affected during construction will be fenced.

Mitigation BIO-5 Minimize Disturbance of Coastal Scrub, Chaparral, and Coast Live Oak Woodland Habitats Located Around the Perimeter of the Leach Field Sites During Construction. Minimize, to the extent feasible, the amount of disturbance of land beyond the actual area of development. This can be accomplished by identifying minimum activity area required, and establishing a physical construction limit beyond which equipment and storage of material would not extend.

- Clearly identify and mark the perimeter of the proposed leachfield construction zone prior to and during construction onsite with highly visible temporary fencing.

- Restrict the use of all heavy equipment and vehicles to areas located inside of the identified construction zone throughout the duration of construction.
- Clearly identify and mark the proposed access route to the construction zone of the leachfield, and limit all construction traffic to areas located within the identified access route.

- Leave areas of undisturbed habitat between portions of the leachfield, rather than clearing a single, contiguous area.

Mitigation BIO-7 Restore Sensitive Habitats Disturbed During the Construction Phase of the Leach Fields. Following completion of construction of the proposed leach fields, revegetate all areas located within or around the area that previously contained native vegetation and that were disturbed during construction.

- Revegetate only with appropriate indigenous native vegetation. At a minimum, the structure and composition of habitats restored should reflect pre-project site conditions or better.
- All exotics that escape cultivation should be removed on a regular basis.
- All plantings should be grown from native parent stock collected onsite, and will be propagated by a native plant nursery specialist. In addition, the health and maintenance of all replacement vegetation should be monitored for a sufficient duration and frequency to ensure successful establishment of the vegetation.

Mitigation BIO-8 Control Introduction of Invasive Exotic Plants. To control introduction of invasive exotic plants on site, implement the following measures during construction and incorporate into the design guidelines of the proposed leach fields, as appropriate.

- Use only clean fill material (free of weed seeds) within the construction zone of the proposed project.

- Thoroughly clean all construction equipment prior to being moved onto and used at the site.

- Prohibit planting or seeding of disturbed areas with nonnative plant species;

- Control the establishment of invasive exotic weeds in all disturbed areas.

Mitigation BIO-9 Avoid or Minimize Disturbance of Special-Status Plants Located Within and Adjacent to the Perimeter of the Project Site Construction Zone. Implement the following measures prior to and during construction to avoid or minimize unnecessary disturbance of special-status plants occupying the vicinity of the project site.

- Retain a qualified botanist to conduct focused surveys for special-status plant species during the appropriate flowering periods for the various species that are known to occur or have potential to occur within the construction zone of the project site, based on the presence of suitable habitat.

- Clearly map and identify each individual or groups of special-status plants observed during the focused survey with highly visible flagging. Morro Manzanita located in the southern portion of the Broderson site should be marked with highly visible flagging and completely avoided.

- Provide instruction to construction personnel on avoiding unnecessary disturbance of areas marked with flagging and identify the locations of all groups of special-status plants.

- Transplant Individual Special-Status Plants Located With the Construction Zone of the Leach Fields. Individual special-status plants that are identified as occurring within the proposed construction zone should be identified. If it is determined that avoidance or disturbance of the identified plants is not feasible, implement transplanting operations for the identified species. It should be noted that the success of transplanting is highly dependent on the specific taxon. Transplanting of some species currently occupying the site may not be as successful as for others, or may fail entirely. Therefore, prior to implementing these operations, previous case studies should be researched to determine which plants are expected to have reasonable opportunities for survival following transplantation, and determine which techniques have been successful previously. If transplanting is then determined to be a viable option for some identified special-status plants, implement the following measures:

  1.Avoid disturbance of the root system of each plant during transplanting.
  2.A plant should only be moved to a habitat that contains site conditions similar to the location previously occupied by each plant.
  3. Closely monitor the success of transplanted species.

Mitigation BIO-11. Avoid the Loss of Wintering Monarch Butterfly Roost Sites. The project proponent shall avoid habitat. A qualified monarch butterfly specialist will conduct

preconstruction surveys for the monarch butterfly within 0.5 miles of the proposed access road and groundwater injection sites. Potential roost sites that could be affected during construction will be fenced.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: The leach fields will be situated immediately south of the easternmost windrows located on the Broderson site. The main location of the leach fields will avoid the windrows, however approximately one and one half acres of the windrow in the center of the site will be removed. Mitigation measures dealing with construction timing will reduce the impact to roosting species in the trees to a less than significant level. Furthermore, as part of the restoration plan for the Broderson site, it may be recommended that the windrows be removed altogether in order to increase the habitat for endangered species. Future management of the site will determine the outcome of these competing interests.

The construction of the proposed access road and the use of the proposed access road may create noise disturbance that could affect the roosting sites of the monarch butterfly. Construction and operation of the proposed disposal sites may cause loss of habitat and increase the noise disturbance to the monarch butterfly roosting sites as well. However, the measures described above will reduce these impacts to a less than significant level.

Impact BIO-15: **Potential Disturbance to the Morro Bay Blue Butterfly. The Morro bay blue butterfly is a federal species of concern. This species is found in coastal sage scrub habitats. Implementation of the proposed project will result in the removal and/or destruction of coastal sage scrub acreage in the Broderson site and the Tri-W site (Class II). Refer to the February 2001 Final EIR page 281.**

Mitigation:

Mitigation BIO-5 Minimize Disturbance of Coastal Scrub, Chaparral, and Coast Live Oak Woodland Habitats Located Around the Perimeter of the Leach Field Sites During Construction. Minimize, to the extent feasible, the amount of disturbance of land beyond the actual area of development. This can be accomplished by identifying minimum activity area required, and establishing a physical construction limit beyond which equipment and storage of material would not extend.

Mitigation BIO-7 Restore Sensitive Habitats Disturbed During the Construction Phase of the Leach Fields. Following completion of construction of the proposed leach fields, revegetate all areas located

within or around the area that previously contained native vegetation and that were disturbed during construction.

- Revegetate only with appropriate indigenous native vegetation. At a minimum, the structure and composition of habitats restored should reflect pre-project site conditions or better.
- All exotics that escape cultivation should be removed on a regular basis.
- All plantings should be grown from native parent stock collected onsite, and will be propagated by a native plant nursery specialist. In addition, the health and maintenance of all replacement vegetation should be monitored for a sufficient duration and frequency to ensure successful establishment of the vegetation.

Mitigation BIO-8 Control Introduction of Invasive Exotic Plants. To control introduction of invasive exotic plants on site, implement the following measures during construction and incorporate into the design guidelines of the proposed leach fields, as appropriate.

- Use only clean fill material (free of weed seeds) within the construction zone of the proposed project.

- Thoroughly clean all construction equipment prior to being moved onto and used at the site.

- Prohibit planting or seeding of disturbed areas with nonnative plant species;

- Control the establishment of invasive exotic weeds in all disturbed areas.

Mitigation BIO-9 Avoid or Minimize Disturbance of Special-Status Plants Located Within and Adjacent to the Perimeter of the Project Site Construction Zone. Implement the following measures prior to and during construction to avoid or minimize unnecessary disturbance of special-status plants occupying the vicinity of the project site.

- Retain a qualified botanist to conduct focused surveys for special-status plant species during the appropriate flowering periods for the various species that are known to occur or have potential to occur within the construction zone of the project site, based on the presence of suitable habitat.

- Clearly map and identify each individual or groups of special-status plants observed during the focused survey with highly visible flagging. Morro Manzanita located in the southern

portion of the Broderson site should be marked with highly visible flagging and completely avoided.

- Provide instruction to construction personnel on avoiding unnecessary disturbance of areas marked with flagging and identify the locations of all groups of special-status plants.

- Transplant Individual Special-Status Plants Located With the Construction Zone of the Leach Fields. Individual special-status plants that are identified as occurring within the proposed construction zone should be identified. If it is determined that avoidance or disturbance of the identified plants is not feasible, implement transplanting operations for the identified species. It should be noted that the success of transplanting is highly dependent on the specific taxon. Transplanting of some species currently occupying the site may not be as successful as for others, or may fail entirely. Therefore, prior to implementing these operations, previous case studies should be researched to determine which plants are expected to have reasonable opportunities for survival following transplantation, and determine which techniques have been successful previously. If transplanting is then determined to be a viable option for some identified special-status plants, implement the following measures:

  1. Avoid disturbance of the root system of each plant during transplanting.
  2. A plant should only be moved to a habitat that contains site conditions similar to the location previously occupied by each plant.
  3. Closely monitor the success of transplanted species.

Mitigation BIO-12. Avoid or Compensate for Loss of Morro Bay blue Butterfly Habitat. Where feasible, the project proponent will avoid Morro Bay blue butterfly habitat. Surveys for Morro Bay blue butterfly presence will be conducted by a qualified wildlife biologist in late April or early May. If the habitat is likely to be disturbed during construction, fencing will be placed around areas of suitable habitat. Where avoidance is not feasible, the project proponent, will compensate for the loss of potential Morro Bay blue butterfly habitat by setting aside an area of equal or better quality than the habitat to be impacted (see Mitigation BIO-4). The project proponent will ensure that the compensation area is not adversely affected by human disturbance, vandalism, off-road vehicle use, or pesticide application. Selection of a specific compensation site will be made by mutual agreement between the project proponent,

the California Department of Fish and Game, the United State Fish and Wildlife Service, and the agency or entity responsible for managing the compensation site.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Project implementation would result in the permanent loss of habitat considered suitable for the Morro Blue Butterfly. Since the Morro Blue Butterfly's host plant, the Dune Lupine, occurs as a dominant throughout a large portion of the site, portions of the site provide suitable habitat for the species. Within the site, suitable Morro Blue Butterfly habitat is associated with Dune Lupine Scrub. Measures described above will reduce this impact to a less than significant level.

Impact BIO-16: **Potential Loss or Disturbance to Raptors. Eucalyptus stands, in the absence of other tall trees, are used by raptors for nesting purposes. Raptors such as the white-tailed kite, sharp-shinned hawk, Cooper's hawk, and potentially the golden eagle may utilize eucalyptus as nesting habitat. In addition, species such as the red-shouldered hawk and the red-tailed hawk may utilize these groves for nesting habitat. The groves may also be potential wintering habitat for species such as the prairie falcon and sharp-shinned hawk (Class II). Refer to the February 2001 Final EIR page 281.**

Mitigation: Mitigation BIO-3. Loss of Raptor Habitat. The project proponent will conduct a preconstruction survey for nesting raptors. Depending on the timing of construction, the project proponent will conduct a preconstruction survey during spring or early summer (April to early July) to determine whether nesting raptors or species protected by State and/or Federal law are present on or within the project area. Winter surveys are also recommended and should be done by a qualified wildlife biologist. If the survey results indicate that nesting raptors or protected species are present on or within the project area, the nest tree or area will be fenced or otherwise demarcated and a 500-foot no-disturbance buffer will be established until the nesting activity is completed and the young have fledged. The distance and placement of the buffer area will be determined in consultation with the CDFG. Only after nesting activities have ceased will construction be allowed to continue. All potentially suitable nesting trees will be removed prior to the breeding season.

Mitigation BIO-5 Minimize Disturbance of Coastal Scrub, Chaparral, and Coast Live Oak Woodland Habitats Located Around the Perimeter of the Leach Field Sites During Construction. Minimize, to the extent feasible, the amount of disturbance of land beyond the actual area of development. This can be accomplished by identifying minimum activity area required, and establishing a physical construction limit beyond which equipment and storage of material would not extend.

Mitigation BIO-7 Restore Sensitive Habitats Disturbed During the Construction Phase of the Leach Fields. Following completion of construction of the proposed leach fields, revegetate all areas located within or around the area that previously contained native vegetation and that were disturbed during construction.

- Revegetate only with appropriate indigenous native vegetation. At a minimum, the structure and composition of habitats restored should reflect pre-project site conditions or better.
- All exotics that escape cultivation should be removed on a regular basis.
- All plantings should be grown from native parent stock collected onsite, and will be propagated by a native plant nursery specialist. In addition, the health and maintenance of all replacement vegetation should be monitored for a sufficient duration and frequency to ensure successful establishment of the vegetation.

Mitigation BIO-8 Control Introduction of Invasive Exotic Plants. To control introduction of invasive exotic plants on site, implement the following measures during construction and incorporate into the design guidelines of the proposed leach fields, as appropriate.

- Use only clean fill material (free of weed seeds) within the construction zone of the proposed project.

- Thoroughly clean all construction equipment prior to being moved onto and used at the site.

- Prohibit planting or seeding of disturbed areas with nonnative plant species;

- Control the establishment of invasive exotic weeds in all disturbed areas.

Mitigation BIO-9 Avoid or Minimize Disturbance of Special-Status Plants Located Within and Adjacent to the

Perimeter of the Project Site Construction Zone. Implement the following measures prior to and during construction to avoid or minimize unnecessary disturbance of special-status plants occupying the vicinity of the project site.

- Retain a qualified botanist to conduct focused surveys for special-status plant species during the appropriate flowering periods for the various species that are known to occur or have potential to occur within the construction zone of the project site, based on the presence of suitable habitat.

- Clearly map and identify each individual or groups of special-status plants observed during the focused survey with highly visible flagging. Morro Manzanita located in the southern portion of the Broderson site should be marked with highly visible flagging and completely avoided.

- Provide instruction to construction personnel on avoiding unnecessary disturbance of areas marked with flagging and identify the locations of all groups of special-status plants.

- Transplant Individual Special-Status Plants Located With the Construction Zone of the Leach Fields. Individual special-status plants that are identified as occurring within the proposed construction zone should be identified. If it is determined that avoidance or disturbance of the identified plants is not feasible, implement transplanting operations for the identified species. It should be noted that the success of transplanting is highly dependent on the specific taxon. Transplanting of some species currently occupying the site may not be as successful as for others, or may fail entirely. Therefore, prior to implementing these operations, previous case studies should be researched to determine which plants are expected to have reasonable opportunities for survival following transplantation, and determine which techniques have been successful previously. If transplanting is then determined to be a viable option for some identified special-status plants, implement the following measures:

  1.Avoid disturbance of the root system of each plant during transplanting.
  2.A plant should only be moved to a habitat that contains site conditions similar to the location previously occupied by each plant.
  3. Closely monitor the success of transplanted species.

Mitigation BIO-13. Avoid Loss of Nesting Raptor Habitat. The project proponent will conduct a preconstruction survey for nesting raptors. Depending on the timing of construction, the project proponent will conduct a preconstruction survey during spring or

early summer (April to early July) to determine whether nesting raptors or species protected by State and/or Federal law are present on or within the project area. Winter surveys are also recommended. If the survey results indicate that nesting raptors or protected species are present on or within the project area, the nest tree or area will be fenced or otherwise demarcated and a 500-foot no-disturbance buffer will be established until the nesting activity is completed and the young have fledged. The distance and placement of the buffer area will be determined in consultation with the CDFG. Only after nesting activities have ceased will construction be allowed to continue. Nesting habitat will be marked and avoided during construction and operation activities of the proposed project.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Raptors such as the white-tailed kite, sharp-shinned hawk, Cooper's hawk, and potentially the golden eagle may utilize eucalyptus as nesting habitat. In addition, species such as the red-shouldered hawk and the red-tailed hawk may utilize these groves for nesting habitat. The groves may also be potential wintering habitat for species such as the prairie falcon and sharp-shinned hawk. Pre-construction surveys may demonstrate the need for construction timing mitigation.

Impact BIO-19: **Destruction of proposed critical habitat for the Morro shoulderband dune snail. The development of four acres of leach field on the Powell property will result in the degradation or loss of habitat in this area. This is a significant, unmitigable impact (Class I). Refer to the February 2001 Final EIR page 282.**

Mitigation: The LOCSD proposes to eliminate the use of the Powell property as a disposal leach field site. No impacts will occur and no mitigation is required.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Until 1998, the portion of the Powell property proposed for leach fields was mostly dune lupin in a disturbed condition from prior cultivation. In late 1998, the 30 acre parcel was planted in peas. The soil type, however, remains largely as it was, and will support the re-colonization of the dune lupine habitat. Mitigation for the site includes purchase of additional habitat and restoration activities. Because of its sensitivity for

biological and archaeological resources, the LOCSD has eliminated the Powell property from consideration as a disposal leach field site.

Impact BIO-20: **Potential Destruction of Morro Bay Kangaroo Rat Habitat. The Morro Bay kangaroo rat is a federally and state listed endangered species. Though the Morro Bay kangaroo rat has not been seen in the project area during previous site visits, there is potential for this species to occur. This is a significant, unmitigable impact (Class I). Refer to the February 2001 Final EIR page 282.**

Mitigation: The LOCSD proposes to eliminate the use of the Powell property as a disposal leach field site. No impacts will occur and no mitigation is required.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: Until 1998, the portion of the Powell property proposed for leach fields was mostly dune lupin in a disturbed condition from prior cultivation. In late 1998, the 30 acre parcel was planted in peas. The soil type, however, remains largely as it was, and will support the re-colonization of the dune lupine habitat. Because of its sensitivity for biological and archaeological resources, the LOCSD has eliminated the Powell property from consideration as a disposal leach field site.

Impact BIO-21: **Long-term operation of leach fields could result in the disturbance of Coastal Scrub habitats from increased groundwater elevations. However, ground water modeling conducted by Metcalf and Eddy (1996) indicate that operation of the disposal system would not significantly affect ground water levels within the root zone below the site. However, plants growing directly above the leach lines may encounter higher soil moisture content. Therefore, this impact is considered significant but mitigable (Class II). Refer to the February 2001 Final EIR page 282.**

Mitigation: Mitigation BIO-9 Avoid or Minimize Disturbance of Special-Status Plants Located Within and Adjacent to the Perimeter of the Project Site Construction Zone. Implement the following measures prior to and during construction to avoid or minimize unnecessary disturbance of special-status plants occupying the vicinity of the project site.

- Retain a qualified botanist to conduct focused surveys for special-status plant species during the appropriate flowering periods for the various species that are known to occur or have potential to occur within the construction zone of the project site, based on the presence of suitable habitat.

- Clearly map and identify each individual or groups of special-status plants observed during the focused survey with highly visible flagging. Morro Manzanita located in the southern

portion of the Broderson site should be marked with highly visible flagging and completely avoided.

- Provide instruction to construction personnel on avoiding unnecessary disturbance of areas marked with flagging and identify the locations of all groups of special-status plants.

- Transplant Individual Special-Status Plants Located With the Construction Zone of the Leach Fields. Individual special-status plants that are identified as occurring within the proposed construction zone should be identified. If it is determined that avoidance or disturbance of the identified plants is not feasible, implement transplanting operations for the identified species. It should be noted that the success of transplanting is highly dependent on the specific taxon. Transplanting of some species currently occupying the site may not be as successful as for others, or may fail entirely. Therefore, prior to implementing these operations, previous case studies should be researched to determine which plants are expected to have reasonable opportunities for survival following transplantation, and determine which techniques have been successful previously. If transplanting is then determined to be a viable option for some identified special-status plants, implement the following measures:

  1. Avoid disturbance of the root system of each plant during transplanting.
  2. A plant should only be moved to a habitat that contains site conditions similar to the location previously occupied by each plant.
  3. Closely monitor the success of transplanted species.

Findings: The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

Supportive Evidence: As indicated in the *1987 Final Program EIR*, which is incorporated herein by reference and available for review at the Los Osos CSD offices, development of the disposal system is expected to result in an increase in groundwater elevations within the immediate area, due to groundwater recharge associated with operation of the effluent disposal system. Increased soil moisture in areas located in the immediate vicinity and downslope may stimulate growth of root-rotting fungi, particularly if moisture is present during the summer (Morro Group, 1987). Species subject to fungal root-rot infections may die out downslope from the rapid infiltration ponds, and growth of other species may be stimulated due to the presence of moisture. Therefore, species composition of Coastal Scrub communities located in the immediate vicinity and downslope of the leach fields could be altered over time. Ground water modeling conducted by Metcalf and Eddy (1996) indicate that ground water levels within the root zone immediately downslope of the disposal area would not be altered.

The leach lines will be buried five to six feet below ground surface. Plants growing immediately above the leach field may encounter higher moisture content in the soils as their roots find deeper ground. For this reason, the restoration of the land above the leach fields is not considered adequate mitigation, and additional habitat preservation is included in the project description to mitigate this potential loss of habitat. Therefore, potential impacts are considered significant, but mitigable (Class II).

A related issue is the effect of sub-surface disposal east of the fault on water levels in Los Osos Creek. At present, most of the wastewater returned to the basin from septic systems east of the fault flows toward Morro Bay. However, a sizeable portion flows east toward Los Osos Creek due primarily to the pronounced "mound" of groundwater that has been mapped in the vicinity of Pismo Avenue and 14th Street (see Figure 6.2-2: Groundwater Elevations). Generally, the higher groundwater causes areas east of 15th Street to flow toward the Creek where the freshwater helps support riparian and wetland vegetation in that area. The Wastewater Facilities Project proposes to eliminate septic system replenishment in favor of sub-surface leach fields in selected locations (see Figure 3-7). The disposal locations were chosen in part to help ensure that existing problems related to shallow groundwater and ponding are not worsened. The quantity of treated wastewater reintroduced to the basin is expected to maintain balance between the east and west sides of the fault.

Note that the Powell disposal site located at the east end of El Moro Avenue is estimated to have a disposal capacity of about 175,000 gallons per day. Assuming 300 gallons per day of wastewater per single family residence, this is roughly equivalent to 583 dwelling units which is slightly less than the number of units east of 15th Street and south of El Moro Avenue. This suggests that disposal in the vicinity of the Powell property will more or less maintain existing subsurface flows toward Los Osos Creek, albeit in a more concentrated area.

VIII. Significant Unavoidable Environmental Effects Which Cannot Be Mitigated to a Level of Insignificance

The Board of Directors has determined that certain environmental effects cannot be feasibly or objectively mitigated to a level of insignificance although the Final EIR contains mitigation measures to be imposed which will provide a substantial mitigation of these effects. Consequently, in accordance with Section 15093 of the State CEQA Guidelines, a Statement of Overriding Considerations has been prepared (see Section V.) to substantiate the Board's decision to accept these unavoidable adverse environmental impacts because of the benefits afforded by the project. The mitigation measures referred to below are contained in the Mitigation Monitoring Program (Section XI.).

Air Quality

Impact AQ-1: **Construction activities associated with the treatment plant, collection and disposal facilities will generate emissions which may exceed thresholds of significance adopted by the SLO APCD. These impacts are considered adverse and unavoidable (Class I). Refer to the February 2001 Final EIR page 204.**

Mitigation: Mitigation AQ-1. Equipment Emission Control Measures. The applicant shall fully implement CBACT for the highest emitting piece of diesel-fired heavy equipment used to construct each major component of the proposed project. It is expected that tandem scrapers or tracked tractors would be the highest emitters. CBACT includes:

- Fuel injection timing shall be retarded 1.5 to 2.0 degrees from the manufacturer's recommendation;
- High pressure fuel injectors shall be installed in all engines;
- Reformulated diesel fuel shall be used on the project site;
- Ceramic coating of the combustion chamber;
- Installation of catalytic converters;

In addition, Caterpillar pre-chamber, diesel-fired engines (or equivalent low NO_x engine design) shall be used in heavy equipment used to construct the project to further reduce NO_x emissions. These requirements shall be noted on the grading plan and listed in the contractor and subcontractor contracts. If implementation of such measures is not feasible within the time-frame mandated for the proposed project, other vehicle fleets would be considered as alternatives, subject to APCD approval. At a minimum, if the above CBACT or an equivalent are not considered for mitigation, all heavy duty equipment operation onsite should have the timing retarded 4 degrees.

Mitigation AQ-2. Dust/PM10 Control Measures. Dust generated by construction activities shall be kept to a minimum by full implementation of the following measures:

- During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems are to be

used to prevent dust from leaving the site and to create a crust after each day's activities cease;

- During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the morning and after work is completed for the day and whenever wind exceeds 15 miles per hour;
- Stockpiled earth material shall be sprayed as needed to minimize dust generation;
- During construction, the amount of disturbed area shall be minimized, and onsite vehicle speeds should be reduced to 15 mph or less;
- Exposed ground areas that are planned to be reworked at dates more than one month after initial grading should be sown with a fast-germinating native grass seed and watered until vegetation is established;
- After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will not occur;
- Grading and scraping operations shall be suspended when wind speeds exceed 20 mph (one hour average);
- All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

Findings: Changes or alterations have been, or can be incorporated into the project which avoid or substantially lessen the significant environmental effects as identified in the 2001 Final EIR for the Wastewater Facilities Project. All feasible mitigation measures that can be applied to the project have been included. Residual significant impacts remain. The Board of Directors has determined that these significant residual impacts are outweighed by the benefits of the proposed project.

Supportive Evidence: Construction would generally consist of site preparation, grading and excavation, and the installation of collection and disposal facilities and structures. Construction-related emissions include particulates generated by soil disturbance, and combustion emissions from the operation of large earth-moving vehicles during grading and excavating operations. The rate of particulate generation depends on the type of soil, the moisture content, wind speed, activity level and silt content. Particulate generation typically occurs at a rate of about 0.6 tons per acre per quarter year of construction activity. Construction activities can exceed PM10 standards on a short term basis. Therefore, construction activities can hinder progress toward the attainment of the state 24-hour PM10 standard. In addition, airborne dust can pose substantial nuisance to neighboring properties.

Emissions associated with construction equipment and vehicles would be short-term and consist of fugitive dust and exhaust emissions.

Construction of the Wastewater Treatment Facility

Site preparation emissions are much greater due to the larger size of the internal combustion engines in construction machinery, the number of emission sources present, and the amount of dust generated. Heavy equipment assumed to be used for site preparation and treatment facility construction include two tracked tractors (Caterpillar D8), two elevating scrapers (Caterpillar 623E), one tandem scraper (Caterpillar 637E), one excavator (Caterpillar 245), one motor grader (Caterpillar 140G), and two wheeled loaders (Caterpillar 966E). Construction emissions are estimated using emission factors from EPA documents *Compilation of Air Pollutant Emission Factors (AP-42)* (1995) and *Nonroad Engine and Vehicle Emission Study* (1991). The emission estimate assumes excavation of a 4 acre area, 30 feet deep to accommodate the treatment plant, and grading of the site for landscaping and water features.

Table 6.7-4: Tri-W Construction Emissions Estimate

Source	ROG		NOx		PM10	
	Pounds/day	Tons/ quarter	Pounds/ day	Tons/ quarter	Pounds/ day	Tons/ quarter
Heavy equipment	16.0	0.5	237.7	7.7	15.9	0.5
Worker Vehicles	1.26	0.0	1.78	0.0	1.1	0.1
Materials Deliveries	3.57	0.1	31.9	0.1	3.0	0.1
Total	20.8	0.6	271.3	7.8	20.0	0.7
Threshold	**185**	**2.5**	**185**	**2.5**	**NA**	**2.5**

Collection System and Pump Station Construction

Construction of the collection system will involve trenching within public rights-of-way and easements to install 204,000 feet of collection pipe that will convey septic tank effluent to the Treatment Plant site. No more than 200 feet of open trench will be allowed at any given time. Trenches will be 2-3 feet wide and will vary in depth between 4-20 feet.

Although the collection system is designed to take advantage of gravity flow wherever possible, a series of 11 pump stations will be needed to serve areas where gravity flow is infeasible. About three of the pump stations will consist of small pumps (10 horsepower or less) and will require a concrete vault approximately 6 feet wide by 8 feet long. The remainder of the stations will require pumps between 30 and 85 horsepower in concrete vaults approximately 8 feet wide by 12 feet long. The depth of all the pump stations will generally be less than approximately fifteen feet. Pump stations will involve the excavation of about 800 cubic feet of material.

Table 6.7-5: Collection and Pump Station Construction Emissions Estimate

Source	ROG		NO_x		PM_{10}	
	Pounds/day	Tons/ quarter	Pounds/ day	Tons/ quarter	Pounds/ day	Tons/ quarter
Heavy equipment	9.6	0.37	106.2	4.15	5.4	0.21
Total	9.6	0.37	106.2	4.15	5.4	0.21
Threshold	**185**	**2.5**	**185**	**2.5**	**NA**	**2.5**

Disposal Facilities Construction

The preferred disposal system strategy will consist of trenching and installing subsurface leach fields and distribution pipe for surface recycling (spraying) during dry weather. Leach fields would be constructed in linear arrays parallel with Highland Avenue on an eight-acre portion of the Broderson site, and in various street rights-of-way on either side of the inferred trace of the Los Osos Fault. The linear arrays will require the use of heavy equipment including a grader and backhoe. The leach fields are expected to take 12 months to construct, with the equipment operating eight hours per day. Table 6.7-6 provides an estimate of disposal facilities emissions. Emissions associated with construction workers is assumed to be negligible.

Table 6.7-6: Disposal Facilities Construction Emissions Estimate

Source	ROG		NOx		PM10	
	Pounds/day	Tons/ quarter	Pounds/ day	Tons/ quarter	Pounds/ day	Tons/ quarter
Heavy equipment	1.4	0.02	23.5	0.23	0.7	0.01
Total	1.4	0.02	23.5	0.23	0.7	0.01
Threshold	**185**	**2.5**	**185**	**2.5**	**NA**	**2.5**

Table 6.7-7: Summary of Construction Emissions – All Sources

Source	ROG		NOx		PM10	
	Pounds/day	Tons/ quarter	Pounds/ day	Tons/ quarter	Pounds/ day	Tons/ quarter
Treatment Plant	20.8	0.60	271.3	7.80	20.0	0.70
Collection/Pump Stations	9.6	0.37	106.2	4.15	5.4	0.21
Disposal Facilities	1.4	0.02	23.5	.23	0.7	0.01
Total	31.8	0.99	401.0	12.18	26.1	.92
Threshold	**185**	**2.5**	**185**	**2.5**	**NA**	**2.5**

Construction emissions would exceed the APCD's significance thresholds for NO_x and PM_{10} and are considered a significant impact to regional air quality. Combustion emissions generated by construction would degrade local air quality and contribute to exceedances of the nitrogen dioxide (NO_2) 1-hour state air quality standard. This impact cannot be mitigated to a level of less than significant; therefore, it is considered Class I, significant and unavoidable.

Biological Resources

Impact BIO-4: **Development of the Tri-W site with a treatment plant will result in the permanent loss of coastal scrub habitat for the Morro shoulderband snail (Class II). Refer to the February 2001 Final EIR page 274.**

Impact BIO-8: **Development of the Tri-W site with a treatment plant will result in the destruction of potential Morro Bay Kangaroo rat habitat. The Morro Bay kangaroo rat is a federally and state listed endangered species. The Morro Bay kangaroo rat has not been seen observed on the Morro Shores or Broderson sites previously. Recent surveys (June 2000) did not find tracks or sign. Dr. Michael O'Farrell has determined that additional surveys using trapping protocol at Morro Shores and Broderson would not be fruitful (Class II). Refer to the February 2001 Final EIR page 275.**

Mitigation of Direct Impacts:

LOCSD's mitigation proposal for the direct impacts associated with development of the wastewater treatment site (Tri-W) is to purchase the single largest remaining privately held undeveloped parcel within the Los Osos greenbelt (Broderson), which totals 80 acres, use 10% of this land for a buried and restored wastewater disposal leachfield, and to donate the entire parcel to a resource agency or organization for long term stewardship and protection.

The direct impacts from the project are the permanent loss of eleven acres at the Tri-W site, eight acres at the Broderson disposal site, and a small amount scattered around the community. The quality of the habitat at each of these sites varies considerably, as well as its viability.

- The Tri-W site is located in the center of the developed area of Los Osos. While it is part of a large block of undeveloped land containing coastal scrub habitat, it has been considerably degraded by veldt grass, erosion and human activities. In addition, most agencies have acknowledged that this land would be developed with urban land uses in accordance with the Estero Area Plan. In fact, the USFWS removed this area from its Draft Recovery Plan.

- The Broderson site is part of the Los Osos greenbelt and contains coastal sage scrub, maritime chaparral, and eucalyptus-dominated windrows. Approximately 40 acres of this site is dominated by Morro manzanita. Approximately eight acres of this site would be used for leachfield and access road. The leachfield should be at least 400 feet behind the homes on the north of the site, but could be placed farther up the hill to the south. **The Broderson site has been relocated farther south and is no longer within the critical habitat area of the snail.**

- The remaining impacts will be the result of installing the collection system and some of the leachfields. By and large these impacts will be to very low quality habitat in the developed portions of the community. For example, collection lines will traverse the fronts of empty lots, some of which have a residuum of habitat, though

severely degraded. These parcels eventually will be developed, mostly with single family homes.

- The Powell property east of the middle school is **no longer proposed** as a leachfield site. The proposal had been to use up to four acres of land. Because of the sensitivity of this site for biological and archaeological resources, and because the site is under agreement for purchase as a conservation property, efforts were made to find a suitable replacement site for the leachfields in this area. The leachfields will be located in a road right of way nearby El Moro Avenue). The Powell property had excellent habitat qualities and is within the critical habitat area of the shoulderband snail.

As mentioned above, the mitigation for the direct impacts of the project listed above is to protect in perpetuity the remaining seventy-plus acres of greenbelt at the Broderson site, **including all of the critical habitat for the snail.**

The LOCSD proposes as mitigation to re-locate the disposal leachfields farther up the hill (to the south) on the Broderson site, within the area dominated by manzanita, which does not appear to support snails. Doing so would eliminate most of the impacts (a roadway up to the leachfields would be required)[1] to the coastal sage scrub which is suitable habitat for the Morro Shoulderband Dune Snail and would be consistent with the USF&WS critical habitat designation. This designation defines critical habitat for the snail as providing the primary biological needs of foraging, sheltering, reproduction, and dispersal. As stated in the designation, *"These areas we are proposing to designate as critical habitat provide these primary constituent elements, which are: sand or sandy soils needed for reproduction; a slope not greater than 10 percent to facilitate movement of individuals; and the presence of native coastal dune scrub vegetation. This vegetation is typically, but not exclusively, represented by mock heather, buckwheat, eriastrum, chamisso lupine, dudleya, and in more inland locations, California sagebrush, coyote brush, and black sage. Some of the habitat in the critical habitat untis could be improved through habitat rehabilitation or improved management (e.g. removal of nonnative species)."* [66 FR 9236] The designation goes on to say that special management considerations for protection of the snail in this unit of critical habitat are not in place. With the development of the wastewater facility, the protection and management of this area is possible.

Under this approach, the eight acres of manzanita removed for construction of the leachfield would be mitigated at a ratio of approximately five-to-one by the permanent preservation of the remaining 75 acres of the Broderson property, 40 acre of which is coastal live oak woodland/manzanita habitat.

[1]The end of Broderson Street turns into an unpaved trail leading south up the hillside. It is currently gullied and provides considerable sediment to the properties down gradient. The leachfields offer an opportunity to develop a controlled access to the LOCSD site and eliminate the drainage problem in the area.

The loss of habitat at the Tri-W site would be mitigated by the thirty-plus acres of undisturbed snail habitat remaining at Broderson (assuming a worst case for the remaining habitat). The Broderson habitat is of considerably higher quality and is part of the designated critical habitat for the endangered Morro shoulderband snail [66 FR 9233]. The district proposes to protect and restore this critical habitat, and donate the land to an appropriate resource conservation agency or organization. Some of the area on Broderson is infested with veldt grass and the district proposes to remove this invasive species. The mitigation ratio for this proposal would be approximately three-to-one.

There is no established ratio for mitigation of habitat loss in this area. No agency or organization has undertaken a study of what appropriate mitigation for loss of habitat would be. The district's proposal, as modified, would not only protect a large area of critical habitat, it would meet or exceed the ratios requested by the Department of Fish and Game.

Note that the area recommended for relocation of the disposal leachfields could be situated at the boundary of the coastal scrub and manzanita. No snails were found by Jones & Stokes Associates during a study of the Broderson site in the area recommended for the leachfields. It was postulated that the slope was too great for there movement. Roth also noted a lack of snails as you moved beyond 300 feet from the north boundary of the site [1997, pers. comm.] Furthermore, the manzanita is relatively sparse here as one habitat transitions into the other. Using this "middle ground" may provide the best protection for the snails and the manzanita.

The final location of the leachfields on Broderson will be refined with the assistance of the resource agencies to maximize the conservation potential of the remaining acreage of the site. The discussion in the EIR is sufficient to allow this flexibility, and no impact will occur that has not been contemplated.

In addition to the land proposed for acquisition to satisfy mitigation, the district is proposing to spend $10,000 per year **(indexed to an inflation multiplier)** in perpetuity for the management of the property, even though it will eventually be owned by a different party. Furthermore, the district has proposed to improve the habitat qualities of the Broderson site by removing exotics and trash within the property.

In either event, the LOCSD has committed to purchase 70 plus acres of greenbelt, both as mitigation for direct impacts of the project, and as part of a comprehensive protection strategy for all the important natural resources of the Los Osos greenbelt ecosystem.

Mitigation:

Mitigation BIO-4 Mitigate for Loss of Coastal Scrub Habitat. Agency Consultation/Permitting. Project implementation would result in direct or indirect disturbance or potential take of several federal and state listed species. Project implementation would require authorization for this disturbance or potential take

from both the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG). Authorization requirements are outlined below:

A. USFWS. Authorization for take by USFWS would require formal consultation with USFWS pursuant to section 7 of the Endangered Species Act.

B. CDFG. Authorization for take by CDFG would require a Memorandum of Understanding (MOU) and Management Authorization (MA) pursuant to Section 2050 et seq. of the California Fish and Game Code. Development of a MOU/MA would be based upon the Section 7 USFWS consultation discussed above.

C. Acquire Additional Habitat. As part of the consultation efforts described above, the District will acquire additional habitat sufficient to compensate for the loss of habitat of the Morro shoulderband snail, Morro Bay kangaroo rat, Morro Bay blue butterfly, and other species dependent upon the coastal scrub habitat due to the direct impacts of the project. The land acquired should have the following qualities:

- The preferred site for mitigation is the northerly Broderson parcels, subject to the eight acres of leach fields. This habitat mitigation is for all direct impacts except from any leach fields constructed on the east side of the inferred fault.

- The land should be habitat in or contiguous to the proposed critical habitat area as designated by the USFWS. Ideal land that meets this criteria is located around the community of Los Osos in the area studied for the greenbelt program by the Land Conservancy.

- Any disturbed portion of the land should be capable of restoration to a native habitat. This would mean that the soils have not been removed or fill placed on the site that are unsuitable for the native plantings (other than small amounts). The land should be free of structures or debris, or capable of being cleared of any structures.

- The land should have primarily aeolian sand deposits; be in a stabilized condition (not mobile); have an open canopy; be of the appropriate aspect and other meteorological conditions.

- The land should be granted to an appropriate agency or conservation organization in perpetuity with deeded guarantees of non-development or transfer (unless to another like organization). The protection of the land may allow for some passive public activities, such as hiking, scientific investigation, and low-impact education.

D. Restoration. After securing the land, the District should restore the land so that it functions as suitable habitat for many of the local species of plants and wildlife described in this EIR whose existence is endangered or of concern. One of the benefits of this mitigation approach is that a single program will mitigate the impacts to all or most of the species described in the setting section. Restoration of the land should include the following:

- Removal of invasive exotic plant species. This may mean removal of all plants by grading, or a program of hand labor, depending upon the condition of the land. If the amount of invasives is relatively small, the work should leave as much of the existing native vegetation intact.

- Removal of structures or debris.

- Regrading of any unnatural mounds, holes or berms previously created on the site.

- A planting program of a mixture of indigenous plant species that serve to restore the site and serve multiple species' needs, especially the Morro shoulderband snail, Morro Bay blue butterfly, Black legless lizard, and potential future re-introduction of the Morro Bay Kangaroo Rat. This will include Dune Lupine for the Morro Bay blue butterfly. The final planting program should be developed in consultation with CNPS, CDFG and USFWS.

- An ongoing maintenance and observation program.

Mitigation BIO-6 Relocate Sensitive Species. Qualified biologists should remove as many Morro shoulderband snails as practicable from any area of proposed disturbance. These should be relocated nearby to suitable habitat.

Mitigation BIO-10. Avoid or Compensate for Loss of Morro Bay Kangaroo Rat Habitat. Due to the limited and localized distribution of the Morro Bay kangaroo rat, the project proponent will make every effort to avoid the loss of suitable Morro Bay kangaroo rat habitat. Preconstruction surveys will be conducted by a qualified wildlife biologist. These surveys may include a combination of techniques. The project proponent will work with CDFG and USFWS to determine the best means of surveying for the kangaroo rat. The project proponent will compensate for loss of habitat in an area within the limited range of the Morro bay kangaroo rat and of equal or better quality than the habitat that will be impacted (see Mitigation BIO-4). The project proponent shall ensure that the site is not adversely affected by human disturbance, domestic animal disturbance, or the use of substances toxic to the Morro Bay kangaroo rat.

Mitigation BIO-14. Avoid or Compensate for Loss of Morro Bay Kangaroo Rat Habitat. Due to the limited and localized distribution of the Morro Bay kangaroo rat, the project proponent will make every effort to avoid the loss of suitable Morro Bay kangaroo rat habitat. Preconstruction surveys will be conducted by a qualified wildlife biologist. The project proponent will work with CDFG and USFWS to determine the best method of survey for this species. Where avoidance is not feasible, the project proponent will compensate for loss of habitat in an area within the limited range of the Morro bay kangaroo rat and of equal or better quality than the habitat that will be impacted. (See Mitigation BIO-4) The project proponent shall ensure that the site is not adversely affected by human disturbance, domestic animal disturbance, or the use of substances toxic to the Morro Bay kangaroo rat. Selection of a compensation site will be made by mutual agreement of the project proponent, CDFG, USFWS, and the entity or agency responsible for managing the compensation site.

Mitigation BIO-15 Compensate for loss of habitat at the Powell or Eto leach field site. The proponent shall acquire land between one to two as much taken for the designed area of the leach fields. The approach to this mitigation will be the same as described in BIO-4.

Mitigation BIO-16 The LOCSD, in conjunction with the California Department of Fish and Game (CDFG), the US Fish and Wildlife Service (USFWS), San Luis Obispo County and the California Coastal Commission shall prepare and execute an implementing agreement for a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP) for the long-term preservation of habitat remaining within Los Osos, including habitat remaining on individual vacant lots. The HCP/NCCP shall identify the habitat resources and the quality of those resources on the remaining vacant properties within the community. The range of potential conservation programs to be considered in the HCP/NCCP shall include, but not be limited to the following:

- The identification of policies and programs to be incorporated into the Estero Area Plan aimed at the long-term preservation of sensitive biological resources in the Los Osos area; such policies and programs may include:

  - Transfer of development credits
  - Clustering
  - Avoidance of sensitive resources in site design
  - Changes in density and land use

– Incorporation of open space into the design of new development

- Programs aimed at facilitating coordination among agencies and organizations involved in management and conservation/preservation of sensitive resources, including USF&WS, CDFG, California Coastal Commission, San Luis Obispo County, the LOCSD, MEGA, NEP, Land Conservancy of San Luis Obispo County, and others;

- The creation of a landbank program to facilitate the purchase of properties with high quality habitat within the Greenbelt, to be repaid over time from fees on new building permits;

- Programs for the acquisition of properties within the Greenbelt with significant habitat resources;

Findings: Changes or alterations have been, or can be incorporated into the project which avoid or substantially lessen the significant environmental effects as identified in the 2001 Final EIR for the Wastewater Facilities Project. All feasible mitigation measures that can be applied to the project have been included. Residual significant impacts remain. The Board of Directors has determined that these significant residual impacts are outweighed by the benefits of the proposed project.

Supportive Evidence: Shells and live snails have been documented at this site. Approximately 11 acres of land with poor to moderate quality habitat will be used for the development of the treatment plant. Mitigation for this loss is recommended to take place offsite as described above in Mitigation Of Direct Impacts, within the area proposed as critical habitat for the snail. However, development of this site will result in a net decrease in the acreage of suitable habitat for the snail. Impacts are therefore significant, and unavoidable, even after application of recommended mitigation measures.

The Morro Bay kangaroo rat is a federally and state listed endangered species. The Morro Bay kangaroo rat has not been observed on the Morro Shores site previously. Recent surveys (June 2000) did not find tracks or sign. Dr. Michael O'Farrell has determined that additional surveys using trapping protocol at Morro Shores and Broderson would not be fruitful. Mitigation for the loss of this site will take place within offsite areas containing suitable habitat. However, the development of this site would result in a net loss in acres of suitable habitat for the kangaroo rat. Impacts are therefore significant and unavoidable.

Impact BIO-12: **Construction of the leach fields on the Broderson disposal site will result in disturbance of vegetation considered sensitive by CDFG. Impacts are significant but mitigable (Class II). Refer to the February 2001 Final EIR page 280.**

Mitigation: See Mitigation of Direct Impacts, above.

BIO-4 (see above)

Mitigation BIO-8 Control Introduction of Invasive Exotic Plants. To control introduction of invasive exotic plants on site, implement the following measures during construction and incorporate into the design guidelines of the proposed leach fields, as appropriate.

- Use only clean fill material (free of weed seeds) within the construction zone of the proposed project.

- Thoroughly clean all construction equipment prior to being moved onto and used at the site.

- Prohibit planting or seeding of disturbed areas with nonnative plant species;

- Control the establishment of invasive exotic weeds in all disturbed areas.

Mitigation BIO-9 Avoid or Minimize Disturbance of Special-Status Plants Located Within and Adjacent to the Perimeter of the Project Site Construction Zone. Implement the following measures prior to and during construction to avoid or minimize unnecessary disturbance of special-status plants occupying the vicinity of the project site.

- Retain a qualified botanist to conduct focused surveys for special-status plant species during the appropriate flowering periods for the various species that are known to occur or have potential to occur within the construction zone of the project site, based on the presence of suitable habitat.

- Clearly map and identify each individual or groups of special- status plants observed during the focused survey with highly visible flagging. Morro Manzanita located in the southern portion of the Broderson site should be marked with highly visible flagging and completely avoided.

- Provide instruction to construction personnel on avoiding unnecessary disturbance of areas marked with flagging and identify the locations of all groups of special-status plants.

- Transplant Individual Special-Status Plants Located With the Construction Zone of the Leach Fields. Individual special-status plants that are identified as occurring within the proposed construction zone should be identified. If it is determined that avoidance or disturbance of the identified plants is not feasible, implement transplanting operations for the identified species. It should be noted that the success of transplanting is highly dependent on the specific taxon. Transplanting of some species currently occupying the site may not be as successful as for others, or may fail entirely. Therefore, prior to implementing these operations, previous

case studies should be researched to determine which plants are expected to have reasonable opportunities for survival following transplantation, and determine which techniques have been successful previously. If transplanting is then determined to be a viable option for some identified special-status plants, implement the following measures:

1. Avoid disturbance of the root system of each plant during transplanting.
2. A plant should only be moved to a habitat that contains site conditions similar to the location previously occupied by each plant.
3. Closely monitor the success of transplanted species.

Findings: Changes or alterations have been, or can be incorporated into the project which avoid or substantially lessen the significant environmental effects as identified in the 2001 Final EIR for the Wastewater Facilities Project.

Supportive Evidence: Installation of the leach fields will require the complete removal of existing vegetation over the leach line area. Therefore, development within the southern portion of the Broderson site will result in the direct removal of Coastal Scrub habitats, Coast Live Oak Woodland habitats, and Chaparral habitats. Disturbed habitats would primarily consist of **Coast Live Oak Woodland habitat**. Development leach fields would also result in the direct removal of individual Coast Live Oak trees, located primarily along the southern portion of the northerly 40 acres. Because Coastal Scrub, Coast Live Oak Woodlands, and Chaparral communities located at the project site are considered sensitive habitats by CDFG, direct impacts to these habitats resulting from project implementation would be considered adverse and significant.

Activities associated with the construction phase of the proposed leach fields could result in the disturbance of sensitive habitats located adjacent to the perimeter of the facilities. Although construction activities are temporary, impacts to sensitive habitats including Heather Goldenbush Coastal Scrub, Morro Manzanita Chaparral, and Coast Live Oak Woodland habitats could be long-term. Disturbance of these habitats could result in long-term changes in species composition through further introduction of invasive exotic plant species such as Veldt Grass. Remaining individual Coast Live Oaks that occur along the southern fringes of the proposed location of the rapid infiltration ponds could be impacted by direct or indirect disturbance during construction activities. As indicated in the *1987 Final Program EIR*, construction-related activities occurring around the perimeter of the proposed site could result in adverse impacts due to damage of the canopies or roots of existing plants and disruption of the soil-surface in the surrounding area. Pygmy Coast Live Oak, and Morro Manzanita are subject to various parasites if their root systems are damaged. These indirect impacts are also adverse and significant.

As described above under Mitigation of Direct Impacts, the LOCSD proposes to mitigate for the direct project impacts, including the loss of coastal oak woodland and manzanita resulting from the re-location of the

disposal leach fields, by purchasing the 80-acre Broderson property, by locating the 8-acre disposal leach fields in the coastal oak woodland and manzanita and by permanently preserving the remaining 72 acres. About 40 acres of the 72 acres preserved consists of coastal oak woodland and manzanita which would provide an in-kind mitigation ratio of about 5 acres preserved for every acre lost, which exceeds the in-kind mitigation ratio of 3:1 recommended by the Department of Fish and Game.

Impact BIO-13: **Construction of the disposal leach fields on the Broderson property could result in the destruction of critical habitat for the Morro shoulderband dune snail. The development of eight acres of leach field will result in the degradation or loss of habitat in this area. This is a significant, but mitigable impact (Class II). Refer to the February 2001 Final EIR page 280.**

Mitigation: See Mitigation of Direct Impacts, above.

Mitigation BIO-5 Minimize Disturbance of Coastal Scrub, Chaparral, and Coast Live Oak Woodland Habitats Located Around the Perimeter of the Leach Field Sites During Construction. Minimize, to the extent feasible, the amount of disturbance of land beyond the actual area of development. This can be accomplished by identifying minimum activity area required, and establishing a physical construction limit beyond which equipment and storage of material would not extend.

- Clearly identify and mark the perimeter of the proposed leachfield construction zone prior to and during construction onsite with highly visible temporary fencing.
- Restrict the use of all heavy equipment and vehicles to areas located inside of the identified construction zone throughout the duration of construction.
- Clearly identify and mark the proposed access route to the construction zone of the leachfield, and limit all construction traffic to areas located within the identified access route.
- Leave areas of undisturbed habitat between portions of the leachfield, rather than clearing a single, contiguous area.

Mitigation BIO-6 Relocate Sensitive Species. Qualified biologists should remove as many Morro shoulderband snails as practicable from any area of proposed disturbance. These should be relocated nearby to suitable habitat.

Mitigation BIO-7 Restore Sensitive Habitats Disturbed During the Construction Phase of the Leach Fields. Following completion of construction of the proposed leach fields, revegetate all areas located within or around

the area that previously contained native vegetation and that were disturbed during construction.

- Revegetate only with appropriate indigenous native vegetation. At a minimum, the structure and composition of habitats restored should reflect pre-project site conditions or better.
- All exotics that escape cultivation should be removed on a regular basis.
- All plantings should be grown from native parent stock collected onsite, and will be propagated by a native plant nursery specialist. In addition, the health and maintenance of all replacement vegetation should be monitored for a sufficient duration and frequency to ensure successful establishment of the vegetation.

Mitigation BIO-8 Control Introduction of Invasive Exotic Plants. To control introduction of invasive exotic plants on site, implement the following measures during construction and incorporate into the design guidelines of the proposed leach fields, as appropriate.

- Use only clean fill material (free of weed seeds) within the construction zone of the proposed project.

- Thoroughly clean all construction equipment prior to being moved onto and used at the site.

- Prohibit planting or seeding of disturbed areas with nonnative plant species;

- Control the establishment of invasive exotic weeds in all disturbed areas.

Mitigation BIO-9 Avoid or Minimize Disturbance of Special-Status Plants Located Within and Adjacent to the Perimeter of the Project Site Construction Zone. Implement the following measures prior to and during construction to avoid or minimize unnecessary disturbance of special-status plants occupying the vicinity of the project site.

- Retain a qualified botanist to conduct focused surveys for special-status plant species during the appropriate flowering periods for the various species that are known to occur or have potential to occur within the construction zone of the project site, based on the presence of suitable habitat.

- Clearly map and identify each individual or groups of special- status plants observed during the focused survey with highly visible flagging. Morro Manzanita located in the southern portion of the Broderson site should be marked with highly visible flagging and completely avoided.

- Provide instruction to construction personnel on avoiding unnecessary disturbance of areas marked with flagging and identify the locations of all groups of special-status plants.

- Transplant Individual Special-Status Plants Located With the Construction Zone of the Leach Fields. Individual special-status plants that are identified as occurring within the proposed construction zone should be identified. If it is determined that avoidance or disturbance of the identified plants is not feasible, implement transplanting operations for the identified species. It should be noted that the success of transplanting is highly dependent on the specific taxon. Transplanting of some species currently occupying the site may not be as successful as for others, or may fail entirely. Therefore, prior to implementing these operations, previous case studies should be researched to determine which plants are expected to have reasonable opportunities for survival following transplantation, and determine which techniques have been successful previously. If transplanting is then determined to be a viable option for some identified special-status plants, implement the following measures:

    1. Avoid disturbance of the root system of each plant during transplanting.
    2. A plant should only be moved to a habitat that contains site conditions similar to the location previously occupied by each plant.
    3. Closely monitor the success of transplanted species.

Findings: Changes or alterations have been, or can be incorporated into the project which avoid or substantially lessen the significant environmental effects as identified in the 2001 Final EIR for the Wastewater Facilities Project. All feasible mitigation measures that can be applied to the project have been included. Residual significant impacts remain. The Board of Directors has determined that these significant residual impacts are outweighed by the benefits of the proposed project.

Supportive Evidence: Development of the leach fields as previously proposed would result in a permanent loss of habitat considered suitable for the Morro Shoulderband Dune Snail. Although the Morro Shoulderband Dune Snail has not been documented as occurring in the vicinity of the site, Coastal Scrub habitats located at the site may be considered suitable for this species due to the presence of its host plant, Heather Goldenbush. Within the leach fields site, this plant species occurs as a dominant within Heather Goldenbush Coastal Scrub, the habitat type primarily affected by development of the leach fields. Disturbance of any portion of this habitat type at the site will result in a reduction in the amount of potential habitat currently available to the Morro Shoulderband Dune Snail, both at the site and within the region. A reduction in habitat potentially used by this special-status species would therefore be considered a significant and unavoidable impact.

However, as described above under Mitigation of Direct Impacts, the LOCSD proposes to re-locate the disposal leach fields to the south on the

Broderson property out of the critical habitat for the dune snail, thus minimizing impacts to its habitat.

Impact BIO-17: **Construction of disposal leach fields on the Broderson property will not result in the destruction of potential Morro Bay Kangaroo Rat Habitat. The Morro Bay kangaroo rat is a federally and state listed endangered species. Though the Morro Bay kangaroo rat has not been seen in the project area during previous site visits, there is potential for this species to occur (Class II). Refer to the February 2001 Final EIR page 281.**

Mitigation: See Mitigation of Direct Impacts, above.

Mitigation BIO-4 Mitigate for Loss of Coastal Scrub Habitat. Agency Consultation/Permitting. Project implementation would result in direct or indirect disturbance or potential take of several federal and state listed species. Project implementation would require authorization for this disturbance or potential take from both the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG). Authorization requirements are outlined below:

A. USFWS. Authorization for take by USFWS would require formal consultation with USFWS pursuant to section 7 of the Endangered Species Act.

B. CDFG. Authorization for take by CDFG would require a Memorandum of Understanding (MOU) and Management Authorization (MA) pursuant to Section 2050 et seq. of the California Fish and Game Code. Development of a MOU/MA would be based upon the Section 7 USFWS consultation discussed above.

C. Acquire Additional Habitat. As part of the consultation efforts described above, the District will acquire additional habitat sufficient to compensate for the loss of habitat of the Morro shoulderband snail, Morro Bay kangaroo rat, Morro Bay blue butterfly, and other species dependent upon the coastal scrub habitat due to the direct impacts of the project. The land acquired should have the following qualities:

- The preferred site for mitigation is the northerly Broderson parcels, subject to the eight acres of leach fields. This habitat mitigation is for all direct impacts except from any leach fields constructed on the east side of the inferred fault.

- The land should be habitat in or contiguous to the proposed critical habitat area as designated by the USFWS. Ideal land that meets this criteria is located around the community of Los Osos in the area studied for the greenbelt program by the Land Conservancy.

- Any disturbed portion of the land should be capable of restoration to a native habitat. This would mean that the soils have not been removed or fill placed on the site that are unsuitable for the native plantings (other than small amounts). The land should be free of structures or debris, or capable of being cleared of any structures.

- The land should have primarily aeolian sand deposits; be in a stabilized condition (not mobile); have an open canopy; be of the appropriate aspect and other meteorological conditions.

- The land should be granted to an appropriate agency or conservation organization in perpetuity with deeded guarantees of non-development or transfer (unless to another like organization). The protection of the land may allow for some passive public activities, such as hiking, scientific investigation, and low-impact education.

D. Restoration. After securing the land, the District should restore the land so that it functions as suitable habitat for many of the local species of plants and wildlife described in this EIR whose existence is endangered or of concern. One of the benefits of this mitigation approach is that a single program will mitigate the impacts to all or most of the species described in the setting section. Restoration of the land should include the following:

- Removal of invasive exotic plant species. This may mean removal of all plants by grading, or a program of hand labor, depending upon the condition of the land. If the amount of invasives is relatively small, the work should leave as much of the existing native vegetation intact.

- Removal of structures or debris.

- Regrading of any unnatural mounds, holes or berms previously created on the site.

- A planting program of a mixture of indigenous plant species that serve to restore the site and serve multiple species' needs, especially the Morro shoulderband snail, Morro Bay blue butterfly, Black legless lizard, and potential future re-introduction of the Morro Bay Kangaroo Rat. This will include Dune Lupine for the Morro Bay blue butterfly. The final planting program should be developed in consultation with CNPS, CDFG and USFWS.

- An ongoing maintenance and observation program.

Mitigation BIO-5 Minimize Disturbance of Coastal Scrub, Chaparral, and Coast Live Oak Woodland Habitats Located Around the Perimeter of the

Leach Field Sites During Construction. Minimize, to the extent feasible, the amount of disturbance of land beyond the actual area of development. This can be accomplished by identifying minimum activity area required, and establishing a physical construction limit beyond which equipment and storage of material would not extend.

- Clearly identify and mark the perimeter of the proposed leachfield construction zone prior to and during construction onsite with highly visible temporary fencing.

- Restrict the use of all heavy equipment and vehicles to areas located inside of the identified construction zone throughout the duration of construction.

- Clearly identify and mark the proposed access route to the construction zone of the leachfield, and limit all construction traffic to areas located within the identified access route.

- Leave areas of undisturbed habitat between portions of the leachfield, rather than clearing a single, contiguous area.

Mitigation BIO-7 Restore Sensitive Habitats Disturbed During the Construction Phase of the Leach Fields. Following completion of construction of the proposed leach fields, revegetate all areas located within or around the area that previously contained native vegetation and that were disturbed during construction.

- Revegetate only with appropriate indigenous native vegetation. At a minimum, the structure and composition of habitats restored should reflect pre-project site conditions or better.
- All exotics that escape cultivation should be removed on a regular basis.
- All plantings should be grown from native parent stock collected onsite, and will be propagated by a native plant nursery specialist. In addition, the health and maintenance of all replacement vegetation should be monitored for a sufficient duration and frequency to ensure successful establishment of the vegetation.

Mitigation BIO-8 Control Introduction of Invasive Exotic Plants. To control introduction of invasive exotic plants on site, implement the following measures during construction and incorporate into the design guidelines of the proposed leach fields, as appropriate.

- Use only clean fill material (free of weed seeds) within the construction zone of the proposed project.

- Thoroughly clean all construction equipment prior to being moved onto and used at the site.

- Prohibit planting or seeding of disturbed areas with nonnative plant species;

- Control the establishment of invasive exotic weeds in all disturbed areas.

Mitigation BIO-9 Avoid or Minimize Disturbance of Special-Status Plants Located Within and Adjacent to the Perimeter of the Project Site Construction Zone. Implement the following measures prior to and during construction to avoid or minimize unnecessary disturbance of special-status plants occupying the vicinity of the project site.

- Retain a qualified botanist to conduct focused surveys for special-status plant species during the appropriate flowering periods for the various species that are known to occur or have potential to occur within the construction zone of the project site, based on the presence of suitable habitat.

- Clearly map and identify each individual or groups of special-status plants observed during the focused survey with highly visible flagging. Morro Manzanita located in the southern portion of the Broderson site should be marked with highly visible flagging and completely avoided.

- Provide instruction to construction personnel on avoiding unnecessary disturbance of areas marked with flagging and identify the locations of all groups of special-status plants.

- Transplant Individual Special-Status Plants Located With the Construction Zone of the Leach Fields. Individual special-status plants that are identified as occurring within the proposed construction zone should be identified. If it is determined that avoidance or disturbance of the identified plants is not feasible, implement transplanting operations for the identified species. It should be noted that the success of transplanting is highly dependent on the specific taxon. Transplanting of some species currently occupying the site may not be as successful as for others, or may fail entirely. Therefore, prior to implementing these operations, previous case studies should be researched to determine which plants are expected to have reasonable opportunities for survival following transplantation, and determine which techniques have been successful previously. If transplanting is then determined to be a viable option for some identified special-status plants, implement the following measures:

1.Avoid disturbance of the root system of each plant during transplanting.
2.A plant should only be moved to a habitat that contains site conditions similar to the location previously occupied by each plant.
3. Closely monitor the success of transplanted species.

Mitigation BIO-10. Avoid or Compensate for Loss of Morro Bay Kangaroo Rat Habitat. Due to the limited and localized distribution of the Morro Bay kangaroo rat, the project proponent will make every effort to avoid the loss of suitable Morro Bay kangaroo rat habitat. Preconstruction surveys will be conducted by a qualified wildlife biologist. These surveys may include a combination of techniques. The project proponent will work with CDFG and USFWS to determine the best means of surveying for the kangaroo rat. The project proponent will compensate for loss of habitat in an area within the limited range of the Morro bay kangaroo rat and of equal or better quality than the habitat that will be impacted (see Mitigation BIO-4). The project proponent shall ensure that the site is not adversely affected by human disturbance, domestic animal disturbance, or the use of substances toxic to the Morro Bay kangaroo rat.

Mitigation BIO-14. Avoid or Compensate for Loss of Morro Bay Kangaroo Rat Habitat. Due to the limited and localized distribution of the Morro Bay kangaroo rat, the project proponent will make every effort to avoid the loss of suitable Morro Bay kangaroo rat habitat. Preconstruction surveys will be conducted by a qualified wildlife biologist. The project proponent will work with CDFG and USFWS to determine the best method of survey for this species. Where avoidance is not feasible, the project proponent will compensate for loss of habitat in an area within the limited range of the Morro bay kangaroo rat and of equal or better quality than the habitat that will be impacted. (See Mitigation BIO-4) The project proponent shall ensure that the site is not adversely affected by human disturbance, domestic animal disturbance, or the use of substances toxic to the Morro Bay kangaroo rat. Selection of a compensation site will be made by mutual agreement of the project proponent, CDFG, USFWS, and the entity or agency responsible for managing the compensation site.

Findings: Changes or alterations have been, or can be incorporated into the project which avoid or substantially lessen the significant environmental effects as identified in the 2001 Final EIR for the Wastewater Facilities Project.

Supportive Evidence: Development of the leach fields would result in the permanent loss of suitable Morro Bay Kangaroo Rat habitat. Although individuals of this subspecies were captured in areas located directly east of the project site during surveys conducted in 1984 through 1986, no Morro Bay Kangaroo Rats were captured at the site during surveys conducted by Gambs in 1986. Gambs (1986) indicated that although habitat conditions present in the area located west of Broderson Avenue may be more favorable to other small mammals, such as pocket mice, brush mice, and Dusky-footed Woodrat rather than Morro Bay Kangaroo Rat, these findings do not necessarily preclude its occurrence from the site. Due to the close proximity of the leach fields site to USWFS designated - Morro Bay Kangaroo Rat Essential Habitat, located directly to the east, previous documented occurrences of this subspecies within adjacent areas, and the presence of habitat considered suitable for this subspecies, portions of the leach fields site are expected to provide suitable habitat for Morro Bay Kangaroo Rat. This suitable habit primarily consists of Coastal Scrub and open Chaparral communities. Therefore, disturbance or loss of existing Coastal Scrub and portions of Chaparral habitats that contain an open canopy is expected to result in significant adverse impacts (Class I) to suitable habitat for Morro Bay Kangaroo Rat.

However, as described above under Mitigation of Direct Impacts, the LOCSD proposes to re-locate the disposal leach fields to the south on the Broderson property out of the critical habitat for the kangaroo rat, thus minimizing impacts to its habitat.

IX. Cumulative and Growth Inducing Impacts

Cumulative Impacts

State CEQA Guidelines Section 15355 defines cumulative impacts as

> *"two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts".* Further, *"the cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time".*

The Guidelines require the discussion of cumulative impacts to reflect the severity of the impacts and their likelihood of occurrence. However, the discussion need not be as detailed as the analysis of impacts associated with the project, and should be guided by the rule of reason.

Cumulative impacts associated with construction and operation of the Wastewater Facilities Project are discussed in the topical analysis sections provided in Section 6 of the Final EIR.

Findings:

- Cumulative air quality impacts associated with construction and operation of the treatment facility. These impacts are considered unavoidable and adverse.
- Cumulative loss of biological resources, including habitat for special status plant and animal species. These impacts are considered significant and adverse and mitigated to a level of insignificance by the proposal outlined in Section VII of these findings.
- Cumulative secondary impacts associated with the continued development of the community of Los Osos in accordance with the Estero Area Plan. These impacts include increased traffic; water demand; wastewater generation; demand for police and fire protection; impacts to schools and other public services; increase noise; and the potential loss or destruction of cultural resources. Implementing the policies and programs of the Estero Area Plan are expected to reduce these impacts to a less than significant level.

Growth-Inducing Impacts

Section 15126(g) of the State CEQA Guidelines requires that an EIR assess a project's potential to induce additional economic or population growth or the construction of additional infrastructure or housing beyond that anticipated for the project itself. The Guidelines state that a project will have a significant growth-inducing impact if:

- It directly or indirectly fosters economic or population growth or additional housing; or,
- It removes obstacles to growth; or,
- It taxes community services facilities; or,
- It encourages or facilitates other activities that cause significant environmental effects.

The Guidelines define a growth-inducing impact as:

> *"the way in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are [public works] projects which would remove obstacles to population growth. Growth is not assumed to be necessarily beneficial, detrimental, or of little significance to the environment."*

Findings:

Construction and operation of the Wastewater Facilities Project will be growth inducing in that it will lead to the removal of the Cease and Desist Order from the RWQCB which will allow continued development in the community consistent with the Estero Area Plan. It should be noted that the project is designed to accommodate a year 2020 buildout population which is less than that accommodated by the Estero Area Plan (see Section 6.5, Consistency with Adopted Plans and Policies). In this sense the project is consistent with the Area Plan and will not foster additional growth beyond that planned for by applicable adopted plans and policies. Impacts associated with continued development of the community in accordance with the Estero Area Plan have been evaluated by a certified Final Environmental Impact Report. No additional growth-inducing impacts beyond those anticipated by the Estero Area Plan are expected.

The environmental review guidelines for State Revolving Fund projects requires an EIR to address the extent to which a project could encourage or accommodate growth directly or indirectly in the following areas:

- Economy (e.g., building facilities that will create favorable conditions to attract business); and

- Population - (e.g., increasing capacity to allow faster population growth such as increasing the supply of water available for population growth by replacing the use of existing water supplies with the use of reclaimed wastewater).

The building moratorium affecting Los Osos has been in place for almost 13 years. Moreover, new businesses wishing to relocate to Los Osos have been limited by the wastewater limitations associated with existing septic systems. Thus, to the extent that new development contributes to economic development, the Wastewater Facilities Project will have a beneficial impact by removing these limitations. The economic development objectives of the Estero Area Plan that call for a greater balance between employment and housing can only be accomplished if the moratorium is removed.

A number of factors will serve to minimize the project's growth inducing impacts. First, the treatment plant, collection and disposal systems have been designed to accommodate a smaller buildout population than current land use plans would allow. This is due, in part, to the Wastewater Project itself which will use 51 acres designated for urban development (11 acres at Tri-W, 40 acres on Broderson). The amount of developable land within the community will also diminish over time as a result of the ongoing efforts by conservation organizations and federal and state agencies to purchase and conserve the resources on the remaining vacant land. Expanding the treatment plant capacity would require additional environmental review and could only be accomplished with considerable additional expense to the community.

X. Findings Regarding Alternatives to the Proposed Project

Alternative I – No Project/No Action

Description: The No Project/No Action Alternative is required by Section 15126.6(e) of the State CEQA Guidelines. In this case, the No Project/No Action alternative refers to the potential environmental consequences of not implementing a Wastewater Facilities Project for Los Osos to alleviate nitrate contamination of groundwater.

Finding: Implementation of the No Project/No Action Alternative would result in the continued discharge of septic system effluent to ground water within the Los Osos area, thereby continuing the degradation of groundwater quality. Since the community derives all of its domestic water supply from groundwater resources, continued degradation is considered a significant unavoidable impact associated with the No Project/No Action Alternative. Additionally, the No Project/No Action Alternative would not achieve the basic objectives of the proposed project and would result in non-compliance with the RWQCB Cease and Desist Order No. 83-13. The LOCSD is legally bound by provisions of the California Water Code to comply with Orders issued by the RWQCB. Therefore, noncompliance is considered a significant unavoidable adverse impact associated with the No Project/No Action alternative. Lastly, the No Project alternative would not fulfill a fundamental objective of the wastewater Facilities Project which is to achieve and maintain a sustainable water supply for the community.

Implementation of the No Project/No Action Alternative would result in the proposed treatment plant not being constructed on the Tri-W site (or any other site). Therefore, significant impacts related to the permanent loss of habitat for endangered species; construction noise and air quality impacts; impacts to visual resources, and cultural resources would not occur.

The No Project Alternative is not feasible in that it fails to meet the fundamental objectives of the project as set forth in the Final EIR.

Collection System Alternative

Collection Alternative I – STEP/STEG Collection System

Description: With a STEP/STEG collection system, liquid effluent from individual septic systems within the Collection Area (see Figure 3-2 of the Final EIR) would be collected utilizing either a Septic Tank Effluent Pumping (STEP) and/or Septic Tank Effluent Gravity (STEG) system, in which liquid effluent is either pumped or gravity fed into small diameter pipes and conveyed to the treatment plant for treatment. The existing septic tank infrastructure currently in place would be retained (except those septic tanks installed prior to the establishment of the County septic tank standards and requirements) to be used as the primary collector and the primary reactor for the anaerobic breakdown of sewage solids. Septic tank solids would be collected directly from individual septic tanks on a regular basis and hauled to the treatment plant for treatment and disposal.

A STEP/STEG collection system would be designed in two ways. Most of the area would be served with small diameter septic tank effluent gravity (or STEG) sewers. This type of sewer uses a septic tank at each home, so only septic tank effluent is conveyed to the sewer main, relatively free of grit, grease, and other

matter that may be troublesome to transport. The septic tank removes about 90% of the grease, 70%-90% of the suspended solids, and 50%-80% of the particulate biochemical oxygen demand (BOD). The partially treated domestic sewage then flows to a pump vault within the septic tank where a submersible pump conveys the effluent to the collection system or flows by gravity from the septic tank into the collection system mains, which in turn convey the effluent to the Wastewater Treatment Facility. The mains have comparatively small diameters (as small as three inches) and are more shallowly buried than conventional sewers because they can be placed on flatter slopes.

Where gravity flow is not effective, pump stations will be used similar to conventional sewerage practice. As an alternative to the use of mainline pump stations, some areas may be served by septic tank effluent pump (STEP) pressure sewers. As with STEG, STEP systems also use shallowly buried, small diameter PVC pipelines.

This alternative offers certain environmental advantages over a conventional gravity system because it may be installed using trenchless technology that minimizes construction related impacts. However, it also requires each septic tank within the collection area to remain in place and to provide partial treatment of wastewater.

Findings: The STEP/STEG and hybrid collection systems offer certain environmental advantages when compared with a conventional gravity system.

Geology. STEP/STEG has the potential to be installed using trenchless technology which reduces construction related impacts associated with the excavation of open trenches. Trenchless installation has a lower potential for impacts associated with erosion and does not require trench stabilization or de-watering.

Cultural Resources. A STEP/STEG system can be installed at a shallower depth using a drill instead of a trench. The smaller pipe and shallower installation depth would be expected to result in less disturbance to cultural resources than a conventional trench.

Traffic. Trenchless installation would generate slightly less construction traffic and would be less disruptive to traffic patterns in the community. However, once installed, each of the 7,000 septic systems would require periodic maintenance which would generate truck trips to and from the treatment plant site.

Noise, Air Quality and Biological Resources. The less disruptive nature of trenchless STEP/STEG installation would generate less noise, require fewer internal combustion engines and would disrupt biological resources slightly less than installation of a conventional system.

Additional supportive evidence is provided on pages 3-1 to 3-15 of the Project Report which is incorporated herein by reference and available for review at the Los Osos CSD offices.
This alternative was rejected because:

- It would result in recurring cost to property owners for the maintenance and continued use of existing septic tanks;
- It would result in significant increase in septage hauling;
- Relatively space hydraulic capacity in the collection system which means that remaining septic tanks must be nearly water tight;
- Maintaining the existing septic tanks would limit use of private property where the tank and leach field occur;
- STEP/STEG has considerably higher life-cycle costs;

Wastewater Treatment Alternatives

Wastewater Treatment Alternative I – Extended Aeration (above ground and without odor scrubbing)

Description: Extended aeration is the preferred method of wastewater treatment as determined by the Los Osos Community Services District. As described in Chapter 3 of the FEIR, extended aeration treatment systems have been in use in America and elsewhere for many years and have a demonstrated track record of removing nitrates from wastewater to meet the water quality standards established for Los Osos by the RWQCB. The preferred configuration of the extended aeration proposed for Los Osos is considered a "hybrid" because it would be constructed underground and would fully odor scrubbed. A more conventional extended aeration system, however, incorporates neither of these features if they are located away from sensitive receptors such as those associated with more urban setting. Accordingly, a conventional system results in greater nuisance impacts associated with noise and odors and would be more visible.

Findings: This alternative was rejected because it would result in greater nuisance impacts to surrounding properties relating to noise, odors, and visual impacts.

Wastewater Treatment Alternative II – Sequencing Batch Reactor (SBR)

Description: A Sequencing Batch Reactor (SBR) system is a common type of secondary treatment in which wastewater is passed through bacteria suspended in a mixture of activated sludge to remove constituent pollutants.

Findings: An SBR system would fulfill the primary goal of the project which is to treat wastewater generated within the SWRCB Prohibition Zone and satisfy discharge requirements of the Regional Board. However, an SBR alternative was rejected because of:

- Higher cost compared with extended aeration;
- Greater potential for odor impacts;

Activated Ponds

Description: Activated pond treatment systems rely on natural biochemical processes to treat collected wastewater. Pond systems treat wastewater aerobically using solar energy via algae growth, aerated mechanically to provide the needed oxygen for treatment. A by-product of this system is the production of bio-solids in the form of algal material.

Findings: The Activated Ponds treatment technology was eliminated from further consideration because:

- A lack of sufficient data which demonstrates their ability to remove nitrogen to achieve the standards established by the RWQCB.

- Pond systems are land intensive when compared with conventional systems. For this reason, pond systems would not reduce potential impacts associated with the loss of habitat for special status plant and animal species, when compared with the preferred project, or the loss of productive agricultural lands. Likewise, the land intensive nature of pond systems would have a greater likelihood to disturb archaeological resources and would result in greater air quality impacts from construction grading.

- Pond systems are more expensive to construct, primarily because of land costs.

Alternative Wastewater Treatment Locations

CEQA requires the consideration of alternative locations for a project when they provide an opportunity to avoid or lessen one or more significant environmental. The other factors relating to feasibility must also be weighed for these sites (whether it meets overall project objectives, economically feasible, etc.). In addition, the ownership or control of the alternative site is another factor in determining feasibility.

In order to meet the project objectives, the entire RWQCB Prohibition Area must be served. Therefore, the collection system location will be the same for all alternatives and alternative sites are available. The discussion of alternative locations will necessarily focus on sites for the treatment plant and for disposal.

Alternative treatment plant sites are shown on Figure 5-3 of the Final EIR (page 78).

Alternative Treatment Site I – Holland

Description: The Holland site consists of 19.4 acres located north of Los Osos Valley Road, south of the Sea Pines Golf Course and west of Pecho Road (location map). The site is vacant and currently used as a driving range for the nearby Sea Pines golf course. No significant stands of vegetation or other physical characteristics are present. The site slopes gently north to south and is rectangular in shape. Surrounding land uses include single family residences to the west and north, the golf course to the south and vacant land designated for residential development to the east. Monarch Grove Elementary school is 0.1 miles to the east along Los Osos Valley Road.

Findings: The Holland site also is not affected by the Los Osos fault and affords comparable consistency with adopted plans and policies. The site does provide some degraded habitat for the Morro Shoulderband Dune snail, but the lowest quality habitat among the sites containing such resources. In addition, the Holland site is located adjacent to residential neighborhoods where the potential for odor and noise impacts is greatest. An elementary school is located about 100 meters to the east. Overall, the Holland site affords a slight environmental advantage to the project site with regard to protecting sensitive biological resources. However, when weighed against other impacts related to noise, odors and potential safety concerns with the nearby school, the advantage is not as clear. This site was rejected because:

- Higher collection system costs;
- Lack of community acceptance;
- Insufficient land area to meet the open space objectives of the project;

Alternative Treatment Site II – Morro Shores Southwest

Description: The Morro Shores Southwest site consists of an 11 acre portion of the 55 acre Morro Shores property located west of Palisades Drive and north of Los Osos Valley Road adjacent to the Morro Shores mobile home park (location map). The site is vacant and consists of gently sloping terrain with coastal scrub vegetation and several large eucalyptus trees. Surrounding land uses include vacant land to the east (the Tri-W site) along with the County library and community center, single family residential to the south and west.

Findings: This site is most comparable to the project site with regard to biological resources (slightly lower quality habitat), nuisance impacts related to noise and odors, and consistency with applicable plans. The site is further from the inferred Los Osos fault and affords comparable views to the ocean from Los Osos Valley Road. This site was rejected because it offers no significant environmental advantage to the project site.

Alternative Treatment Site III – Pismo

Description: The Pismo site consists of an 11 acre parcel located east of South Bay Boulevard and immediately south and east of the Los Osos Middle School. The site is relatively flat and contains chaparral, oak woodland and coastal scrub vegetation communities. This was the preferred location for a conventional treatment system discussed in the 1997 Final Supplemental Environmental Impact Report (Fugro West, Inc.).

Findings: The Pismo site contains high quality habitat for the Morro Shoulderband Dune snail as well as a number of other special status species. The loss of this high quality habitat would conflict with Coastal Act policies that favor protection of these resources when a feasible alternative exists. In addition, the site contains two known archaeological sites. This site is, however, more removed from surrounding sensitive land uses and would offer fewer potential impacts relating to odors and noise. The site is located adjacent to the Los Osos Middle School play field which is a heavily-used recreation amenity; comparable traffic related impacts would be expected. This site was rejected because development of the site would result in greater impacts than that of the project site.

Alternative Treatment Site IV – Andre

Description: The Andre property consists of two contiguous properties totaling 32 acres located at the north east corner of Los Osos Valley Road and Clark Valley Road, immediately east of the Los Osos Memorial Park cemetery (location map). The site is currently largely vacant; a single family residence is located about one-half mile from Los Osos Valley Road.

The Andre site is uncultivated agricultural land considered Locally Productive by the State Important Farmlands Mapping Program. The site slopes gently downward to the north away from Los Osos Valley Road; the northerly property boundary adjoins Warden Lake, a locally significant wetland. High voltage

transmission lines cross the west side of the site from south to north emanating from Diablo Canyon Nuclear Power Plant.

Findings: The Andre site offers the least environmental constraints of the alternatives. It provides no habitat for special status plants or animals and contains no known archaeological resources. The size of the site (32 acres) provides sufficient separation from surrounding land uses which include a cemetery and agricultural lands. The Andre property does contain agricultural soils of Local Importance; a portion of this soil would be permanently lost to production if a wastewater treatment plant were constructed there. Likewise, it would not meet other objectives of the wastewater project which aim to provide parks and recreation amenities accessible to the community. Crossing Los Osos Creek with the collection and disposal pipes, however, could result in temporary impacts to riparian resources. However, the pipes could be hung from the existing bridge, not trenched, thereby minimizing impacts. Soils at the Andre site, although considered productive for agricultural, are more stable than the dune sands underlying the other sites which may minimize construction costs. However, this site was rejected because:

- Higher operating and construction costs resulting from pumping the effluent to the site from the collected area and back to disposal sites;
- The site does not provide an opportunity to achieve one of the fundamental objectives for the project which is to provide useable open space accessible to the community;

Resource Park

Description: Resource Park is the name given to about 66 vacant acres bounded by Los Osos Valley Road on the south, Skyline Drive to the west, Palisades Drive on the east and Ramona Avenue to the north, and west of the County Park, the Community Center, and the County library. Resource Park consists of two contiguous properties: the 55 acre Morro Shores property and the 11 acre Tri-W site.

The Resource Park site was chosen as the only feasible site within the community of sufficient size to accommodate development of an activated pond wastewater treatment system. The type of system originally considered for the site was an activated pond system. However, it is large enough to support development of an SBR or an EA plant.

Findings: The Resource Park site has been eliminated from further consideration because the treatment technology that required this site (activated ponds) was eliminated from further consideration because of insufficient data to demonstrate nitrogen removal to the levels required by the RWQCB.

Turri Road

Description: The Turri Road is located on the south side of Turri Road about one mile east of South Bay Boulevard and consists of a ten acre portion of a 84 acre site formerly used as a landfill and gravel pit. The level area most capable of supporting a wastewater treatment plant is composed of prime agricultural soils; the entire 84 acres is encumbered by a Land Conservation Act contract. The upper (southerly) portion of the site contains an abandoned landfill formerly operated by San Luis Obispo County. The RWQCB has determined that petrochemicals leaching from

the landfill are polluting surface and subsurface water bodies. As a result, remediation efforts have been undertaken to correct the problem.

This site was also considered in previous environmental documents. The site is currently undeveloped and vegetated with annual grasses. Two unnamed drainage courses tributary to Los Osos Creek run adjacent to the site; one such drainage divides the site nearly in two in a north-south direction. Surrounding land uses consist primarily of grazing and open space.

Findings: The Turri Road site was eliminated from further consideration because:

- It is encumbered by an active Land Conservation Act contract;
- It lies within a flood plain for an unnamed creek;
- Potential liability and cost issues associated with the existing landfill on the site;
- Shallow groundwater would make sub-surface construction difficult and expensive;

Eto

Description: The Eto site consists of 43.3 acres located east of South Bay Boulevard and south of Los Osos Middle School. The site is relatively flat and contains chaparral, oak woodland and coastal scrub vegetation communities. Surrounding land uses include open space and grazing to the east, single family residences on large lots to the south and west, and Los Osos Creek to the east.

Findings: The Eto property was eliminated from further consideration because:

- It offers no environmental advantages when compared to the preferred project site with regard to environmental resources such as habitat for sensitive plant and animal species;
- Construction and operation traffic would be conveyed through an existing residential neighborhood;
- The site is not centrally located resulting in higher costs for collection and disposal systems;
- The site contains productive agricultural land;
- The site would not provide an opportunity to provide park/open space amenities centrally located to serve the community.

Disposal Alternatives

Surface Disposal

Description: Surface disposal to the Bay or open ocean offers certain environmental advantages to the leach field/surface recycling option, but raises many more concerns. Impact resulting to construction would be less due to fewer trenches and lengths of pipe being installed. However, disposal of wastewater into the ocean does not readily recycle the water supply and can be considered an out of basin transfer that would worsen the overdraft condition in the Paso Robles formation if no supplemental source of water were provided. Coastal Act policies favor water management strategies that maintain a sustainable supply of groundwater.

Findings: Surface disposal was rejected because:

- It conflicts with Coastal Act policies that favor maintaining a sustainable water supply;
- It does not meet one of the main stated objectives of the project which is to provide a sustainable water supply;
- Introducing treated wastewater into the Bay or ocean could raise nitrogen levels, resulting in algae blooms that rob the water of dissolved oxygen and potentially harming marine life.

Use of Existing Leach Fields

Description: Under this alternative, existing private septic leach fields would be used as disposal leach fields for the wastewater system.

Findings: The use of existing septic leach fields was rejected because:

- Uncertainty regarding the capacity of existing leach fields.
- Using individual leach fields would limit the use of properties.
- Replacement and periodic maintenance of existing septic leach fields.
- Impacts associated with connecting to individual existing leach fields.
- Impacts associated with installation of the distribution system.
- Higher costs.

Other Disposal Options

Other disposal options investigated by the LOCSD include infiltration basins, injection wells and aquifer storage and harvesting wells. (see Hydrologic Investigation of the Broderson Site, Cleath, June, 2000, Appendix C of the Final EIR). As discussed in Chapter 5 of the Final EIR, each of these alternatives was rejected because they were found to be infeasible.

Bio-Solids Recycling Site Alternatives

Description: One option for the disposal of bio-solids is recycling.

Findings: A key consideration in the location of bio-solids recycling is the separation of the facility from nearby sensitive receptors to odors. Thus, the Woods Humane Society and Low properties were eliminated from further consideration because of their proximity to sensitive receptors to the east and west.

Environmentally Superior Alternative

CEQA requires that an EIR identify the environmentally superior alternative from among the range of alternatives considered. Based on the analysis provided above and in the topical sections of the Final EIR, the environmentally superior alternatives are as summarized in Table 8-4.

Table 8-4
Ranking of Alternatives
(Environmentally Superior Alternatives in Bold)

Project Component	Alternative
Collection	**STEP/STEG**
	STEP/STEG Hybrid
	Gravity (proposed)
Treatment	**Extended Aeration Hybrid (proposed)**
	Extended Aeration
	Sequencing Batch Reactor
Treatment Sites	**Andre**
	Holland
	Morro Shores Southwest
	Tri-W (proposed)
	Pismo
Disposal	**Subsurface Leach Fields (proposed)**
Bio-solids	**Hauling**

XI. Mitigation Monitoring And Reporting Program

Section 21081.6 of the Public Resources Code requires that when a public agency is making findings required by State CEQA Guidelines Section 15091(a)(1), codified as Section 21081(a) of the Public Resources Code, the public agency shall adopt a reporting or monitoring program for the changes to the proposed project which it has adopted or made a condition of approval, in order to mitigate or avoid significant effects on the environment.

The Board of Directors hereby finds and accepts that the Mitigation Monitoring Program for the Los Osos Wastewater Facilities Project which follows, meets the requirements of Section 21081.6 of the Public Resources Code by providing for the implementation and monitoring of mitigation measures intended to mitigate potential environmental effects.

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Geology				
Mitigation GEO-1: An NPDES Construction Activity Storm Water Permit shall be obtained prior to the onset of construction activities. Appropriate BMPs, as established in the project NPDES Construction Storm Water Permit, shall be employed during project construction, which may include, but are not limited to, temporary sand bagging; construction of berms; installation of geofabric, and revegetation of areas by hydroseeding and mulching; and the use of trench stabilizing and de-watering. The NPDES permit shall apply to all proposed facilities, and shall address 50 to 100-year precipitation events to the extent feasible. The Pollution Prevention Plan portion of the NPDES permit shall be reviewed and approved by the County Engineering Department and the RWQCB.	Confirm that the GCASWP has been obtained	Prior to Construction	LOCSD	A GCASWP is required for all projects over 5 acres in size and will be required for building permit approval
Mitigation GEO-2: Project implementation shall include a long-term Erosion Control Plan. The plan shall include the treatment plant site, the collection system, and the disposal sites. The Erosion Control Plan shall identify erosion control practices to be implemented throughout the construction and operation of these facilities. These measures may include, but are not limited to, recompaction of soils; revegetation of disturbed areas; utilization of soil binding; or other methods for reducing short-term and long-term erosion. The Plan shall be reviewed by the County Department of Planning and Building, and shall be included in contractor bid and contract documents.	Develop long term erosion control plan; Have plan reviewed by County Department of Planning and Building; Include plan in contractor bid documents and project contract	Prior to Construction / Contractor Bidding Phase	LOCSD	The erosion plan must be reviewed by the County Department of Planning and Building and included in contract documents. The responsible party should document these actions once completed.
Mitigation GEO-3: All proposed facilities shall be designed and constructed in accordance with UBC Seismic Zone 4 regulations.	Check plans to ensure compliance with UBC	Plan Check	LOCSD / County Department of Planning and Building	The project is required to meet the UBC
Mitigation GEO-4: Prior to finalization of project design, the LOCSD shall consult with the California Division of Mines and Geology (CDMG) to determine the Design Basis Earthquake for system components.	Consult with CDMG regarding Design Basis Earthquake	Prior to completion of 50% construction documents	LOCSD	Early determination of the Design Basis Earthquake will prevent inaccuracy in plans
Mitigation GEO-5: Prior to construction, a geotechnical investigation shall be carried out as part of final facility design. This geotechnical investigation shall include analysis of the proposed treatment plant site, the disposal system, and the collection system, where determined necessary by the LOCSD and governing regulatory agencies. The geotechnical investigation shall address the following issues: ▸ Design of facility foundations and walls such that potential impact associated with fault rupture onsite would be reduced to the extent feasible. Design measures for rapid repair of facilities shall be identified as necessary. ▸ The investigation shall determine onsite ground water levels, and identify soil layers that could be subject to liquefaction during a seismic event. Specific measures, such as excavation/recompaction of foundation areas, long-term dewatering, or utilization of foundation piles, should be identified as necessary to reduce potential impacts to a less than significant level. ▸ The investigation shall identify the potential for settlement or lurching associated with seismic events. Specific measures, such as excavation/recompaction, shall be identified as necessary to reduce potential impacts to a less than significant level. ▸ The investigation shall identify the potential for disruption of collection associated with fault rupture. Design measures for isolation and rapid repair of facilities shall be identified, where necessary. ▸ The County Engineering Department shall review and approve the scope and findings of the geotechnical investigation, and shall review final project design to ensure incorporation of recommended measures.	Document that geotechnical review has been completed and includes all items listed; Have geotechnical study reviewed by County Engineering staff	Prior to starting conceptual drawings	LOCSD	Ground water levels and geologic structure of the treatment and disposal sites have already been determined. Other items, including seismic potential and specific analysis of structural requirements remain to be determined

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation GEO-6: Implementation of CDMG Liquefaction Mitigation. Where determined necessary by geotechnical investigations, design of system components shall incorporate recommendations contained in the CDMG publication "Guidelines for Evaluating and Mitigating Seismic Hazards in California." Mitigation cited in this publication include recompaction of liquefiable soils and use of reinforced shallow foundations.	Verify implementation of CDMG mitigation where applicable	Plan Check / 50% Construction Documents	LOCSD	None
Mitigation GEO-7: Prior to construction, a complete grading and drainage plan shall be submitted to the LOCSD and County Department of Planning and Building for review and approval. Such grading and drainage plan shall address the requirements of the geotechnical investigation described in Measure GEO-5, above.	Prepare and submit project grading and drainage plans to the County Department of Planning and Building	Prior to Construction	LOCSD	Submittal of grading and drainage plans will be required for final building permit approval
Mitigation GEO-8: Rehabilitation of disposal leach fields shall be rotated so that no more than one field is under re-construction at a time.	Document through standard operating procedures (SOP) that rehabilitation will take place in the specified manner	Prior to Operation of Leach Field Systems	LOCSD	SOP will be developed as part of facilities management
Mitigation GEO-9: In addition to the long-term erosion control plan cited in Measure GEO-2, above, plans for the Broderson disposal site shall designate access routes for review and approval by the LOCSD which intrude minimally into the landscape. Plans shall include prompt re-vegetation of disturbed areas.	Check plans for inclusion of items identified	Plan Check/50% Construction Documents	LOCSD	
Hydrogeology				

Mitigation Measures		Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation H-1:	NPDES Permit. The LOCSD will obtain and comply with an NPDES permit from the RWQCB and will develop an SWPPP for the project, which will include, among other requirements, the identification of Best Management Practices (BMPs) to be used for erosion control, actions for control of potential fuel or drill tailing release, and requirements for disposal (i.e., location, quality) of water from dewatering activities.	Verify obtainment of NPDES permit; Review construction activities every three months (at least twice during the typical wet season) for compliance with permit provisions	Prior to Construction (obtain permit) and during construction activities	LOCSD	Obtainment of the NPDES permit will be required by the County prior to issuance of building permits. Periodic review of construction activities for stormwater control will ensure compliance. Review should be concentrated before, during and after rain events to assess the adequacy of protection measures.
Mitigation H-2	Revetation Plan. A comprehensive re-vegetation plan will be developed for the Broderson site which, at a minimum will include re-planting of exposed surfaces with native vegetation.	Verify the inclusion of re-vegetation plans in 100% construction documents	Prior to Construction/100% Construction Documents Review	LOCSD	None
Mitigation H-3:	The Los Osos Community Services District shall prepare and implement a comprehensive water management plan for the Los Osos groundwater basin. The purpose of the plan is to identify management strategies aimed at achieving a sustainable water supply to serve buildout of the community in accordance with the Estero Area Plan, as it may be amended from time to time.	Verify development and adoption of a management plan	Prior to operation of the wastewater facilities project	LOCSD	Development of a comprehensive management plan is a requirement of State Revolving Fund loans and is expected to reduce overall demand for water.
Drainage					

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation WR-1: Grading, Drainage and Erosion Control Plan. Construction plans for the Tri-W site shall include a complete grading and drainage plan incorporating the recommendations of a geotechnical engineering evaluation (see Mitigation GEO-5). Measures to be considered for the mitigation of potential drainage, erosion, seepage and water quality impacts include, but are not limited to: A. The incorporation of an on-site runoff collection system which includes energy dissipation, berms, temporary settling basins, and/or a silt/hydrocarbon separator for the collection and removal of hazardous materials and sediments. B. The incorporation of an on-site drainage system to collect runoff from all impervious onsite services, including parking spaces, roads and buildings. C. Surface runoff should be collected by curbs, gutters and drainage swales and conveyed to an appropriate point of disposal. Discharges of greater than five feet per second should be released through an energy dissipater or outlet. D. The incorporation of sub-surface drains to intercept seepage and convey it to an acceptable point of disposal. E. Watering the site at least twice per day during construction, or more frequently if determined necessary by the LOCSD. F. Re-vegetating portions of the site exclusive of paved areas as soon as reasonable following grading. G. Incorporating rain gutters and downspouts for buildings. H. Grading surfaces adjacent to buildings so that runoff is conveyed away from foundations and onto paved surfaces or underground collection pipes.	Verify development of grading, drainage, and erosion control plans and the incorporation of listed items	Plan Check/50% Construction Documents	LOCSD	Inclusion of grading, drainage and erosion control plans will be required by the County prior to issuance of building permits
Mitigation WR-2: NPDES Permit. The LOCSD will obtain and comply with an NPDES permit from the RWQCB and will develop an SWPP for the project, which will include, among other requirements, the identification of Best Management Practices (BMPs) to be used for erosion control, actions for control of potential fuel or drill tailing release, and requirements for disposal (i.e., location, quality) of water from dewatering activities.	Refer to H-1	Refer to H-1	Refer to H-1	Refer to H-1
Mitigation WR-3: Revegetation Plan. A comprehensive revegetation plan will be developed for the Broderson and Powell sites, which at a minimum, will include re-planting of exposed surfaces with native vegetation.	Verify the inclusion of re-vegetation plans in 100% construction documents	Prior to Construction/100% Construction Documents Review	LOCSD	None
Cultural Resources				

Mitigation Measures		Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation C-1	Undiscovered Resources. All cultural resources discovered during construction must be avoided in order to eliminate any potential impacts. All work in the vicinity of the suspected resource will stop and the proper authorities will be notified. Prior to restart of work, a qualified archaeologist will determine the significance of the resource. Suggested measures for mitigation shall be adhered to. If the resource is suspected to contain human remains, the County Coroner and an approved Native American consultant shall be contacted to determine the nature and significance of the find.	Document any previously undocumented resources in accordance with the identified protocol	Throughout Construction	LOCSD	Discovery of resources during construction is guided by County and State regulations. This mitigation outlines correct procedure; monitoring is only required if and when such discoveries occur.
Mitigation C-2	Archeological Monitoring. If a resource is discovered and an area is deemed potentially sensitive, archaeological monitoring will be required. The monitoring shall be conducted by a qualified archaeologist recognized as such by the County of San Luis Obispo with sufficient experience with local archaeological resources to make accurate determinations if cultural resources are exposed. In addition, in all areas determined to be sensitive because of prehistoric remains, a Native American monitor should be present as well. The presence of Native American monitoring will assist in identification of archaeological resources, should they be encountered. More importantly, the Native American monitor will act as a representative of the local tribe (Obispeño or Northern Chumash) in the event that human remains or traditional cultural properties are encountered. If such remains are found, they would assist in the decision making process and would act as a consultant on issues related to state and local applications of the Native American Graves Protection and Repatriation Act (NAGPRA) and the American Indian Religious Freedom Act (AIRFA). Finally, if significant resources are discovered, efforts will be made by local law enforcement as well as designated monitors to prevent looting of the sites by non-professionals.	Known Sensitive Areas: provide monitoring during grading, drilling and excavation; provide documentation of monitoring Areas Suspected to be Sensitive: provide Phase I survey of site by qualified archaeologist as defined at by mitigation measures C-2; document findings Areas Where Resources are Discovered: provide monitoring during grading, drilling and excavation; document monitoring If Human Remains are Suspected: provide Phase I and II surveys; provide monitoring by an archaeologist and Native American monitor during grading, drilling and excavation; document monitoring If Human Remains or Significant Resources are Found: stop work and initiate consultation with appropriate agencies; document findings Monitoring is considered complete when proper documentation and agency compliance is attained. If no resources are encountered, the responsible party shall document that finding	During Construction	LOCSD/Contractor for Previously Unknown Sensitive Resources Discovered During Construction	The project is subject to federal regulations regarding cultural resources. Strict adherence to the provisions of those regulations is essential for CEQA compliance.
Traffic					

Mitigation Measures		Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation TR-1:	Construction Traffic Mitigation Plan. The LOCSD shall prepare a construction traffic mitigation plan which identifies the location of equipment and trenches to be used; sequencing/phasing of installation; the location of materials and equipment staging areas; and proposed detour routes. The plan shall also provide for adequate emergency access, and routing of construction-related vehicles to minimize impacts to sensitive land uses. The plan shall also provide for the scheduling of construction related traffic so that it does not create safety hazards to school children and other pedestrians.	Verify preparation and submittal of traffic mitigation plan; field verify implementation of management plan weekly during construction	Prior to Construction (plan) and during construction (field verification).	LOCSD	A traffic plan will be required prior to issuance of County Building permits
Mitigation TR-2:	Public Notice of Construction. The public shall be notified of potential obstructions and alternative access provisions. This notification may be accomplished by posting signs near the construction area at least one week in advance of the commencement of construction. In addition, information signs shall be posted on Los Osos Valley Road, with a phone number to call for questions. Phone inquiries shall be answered by a live public relations official, and not a pre-recorded message. Alternative access provisions and parking will be provided where necessary, with guide signs to inform the public. There will also be alternative pedestrian facilities provided to avoid obstruction to pedestrian circulation.	Include noticing as part of contractor requirements or part of LOCSD procedure during construction. Verify noticing monthly during phases of construction. Provide documentation at the end of the project.	Throughout Construction	LOCSD	Memos and print announcements filed with LOCSD and/or photo records are considered sufficient documentation
Air Quality					

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation AQ-1.Equipment Emission Control Measures. The applicant shall fully implement CBACT for the highest emitting piece of diesel-fired heavy equipment used to construct each major component of the proposed project. It is expected that tandem scrapers or tracked tractors would be the highest emitters. CBACT includes: Fuel injection timing shall be retarded 1.5 to 2.0 degrees from the manufacturer's recommendation; High pressure fuel injectors shall be installed in all engines; Reformulated diesel fuel shall be used on the project site; Ceramic coating of the combustion chamber; Installation of catalytic converters; In addition, Caterpillar pre-chamber, diesel-fired engines (or equivalent low NO_x engine design) shall be used in heavy equipment used to construct the project to further reduce NO_x emissions. These requirements shall be noted on the grading plan and listed in the contractor and subcontractor contracts. If implementation of such measures is not feasible within the time-frame mandated for the proposed project, other vehicle fleets would be considered as alternatives, subject to APCD approval. At a minimum, if the above CBACT or an equivalent are not considered for mitigation, all heavy duty equipment operation onsite should have the timing retarded 4 degrees.	Verify that measures are included in contract documents and field check compliance	Contract Documents and Beginning of Equipment Use	LOCSD	None
Mitigation AQ-2.Dust/PM10 Control Measures. Dust generated by construction activities shall be kept to a minimum by full implementation of the following measures: During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems are to be used to prevent dust from leaving the site and to create a crust after each day's activities cease; During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the morning and after work is completed for the day and whenever wind exceeds 15 miles per hour; Stockpiled earth material shall be sprayed as needed to minimize dust generation; During construction, the amount of disturbed area shall be minimized, and onsite vehicle speeds should be reduced to 15 mph or less; Exposed ground areas that are planned to be reworked at dates more than one month after initial grading should be sown with a fast-germinating native grass seed and watered until vegetation is established; After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will not occur; Grading and scraping operations shall be suspended when wind speeds exceed 20 mph (one hour average); All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading unless seeding or soil binders are used.	Verify incorporation of identified measures in contract documents; perform one field check at each site (treatment and disposal) early in grading operations; cease grading during high winds	Contract Document Review/Beginning of Construction at Each Site	LOCSD	None

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation AQ-3.Odor Performance Standard. Neighbors of the Tri-W site shall be informed that odor nuisance complaints are to be directed to the APCD for documentation. Any odor complaints received by the County Engineering Department or plant staff shall be forwarded within one day of receipt to the APCD. The APCD will contact plant staff following each odor nuisance complaint to determine the nature and cause of the odor sources. The Los Osos Community Services District shall utilize a threshold of three nuisance complaints per year as a performance guideline with respect to odor generation. Should nuisance complaints exceed this number, the District shall assess odor levels at the treatment plant site. The assessment shall include the following: Utilization of a scentometer to assess odor concentration with respect to the BAAQMD dilution to threshold ratio (D/T ratio). This ratio indicates the number of equal volume dilutions to the point at which 50% of the population below the age of 45 first detects the odor. Regulation 7 adopted by the BAAQMD restricts the release of odorous substances to 4 D/T at the property line. If the D/T ratio exceeds the 4 D/T ratio threshold established by the BAAQMD, the district shall provide a letter report to the APCD summarizing the nature and cause of the odor source, the frequency at which this source has caused complaints in the past, the frequency at which this source is anticipated to occur, and a course of action to reduce onsite odor generation. Measures may include, but are not limited to, the following: Upstream addition of ferrous chloride to the influent stream to reduce septic conditions; Establishment of additional "negative air" containment areas; Additional treatment component enclosure, and; Installation of air flow baffles to improve odor dissipation.	Verify inclusion of "Odor Performance Standard" protocol in Standard Operating Procedures (SOP) for plant	Prior to Operation	LOCSD	The SOP for the plant will be developed prior to operation
Mitigation AQ-4 Activity management techniques. The following additional measures related to construction emissions shall be implemented: A comprehensive construction activity management plan designed to minimize the amount of large construction equipment operating during any given time period; Construction trips should be scheduled during non-peak hours to reduce peak hour emissions; The length of the construction work day period should be limited, if necessary; Construction activities should be phased if appropriate.	Verify inclusion of "activity management techniques" in contract documents; field verify implementation of management plan during construction	Prior to Construction (plan), during construction (verification)	LOCSD	None
Noise				

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation N-1: Construction will be limited to the hours of 7 a.m. to 6 p.m. on weekdays, and 8 a.m. to 5 p.m. on weekends.	Verify inclusion of limitation in contract documents	Construction Bid Documents	LOCSD	None
Mitigation N-2: The construction contractor shall agree to the following upon hire: • Equipment shall be fitted with mufflers, in good operating condition and fitted with factory standard silencing features; • A hauling route and staging plan shall be submitted to the LOCSD which is designed to minimize noise impacts with sensitive land uses; • When available and proper for the task, contractor shall use electric versus diesel equipment; • Portable noise barriers shall be employed where necessary to minimize noise impacts;	Verify inclusion of conditions in contract documents	Construction Bid Documents	LOCSD	None
Mitigation N-4: Design of the treatment plant shall incorporate housing for pumps, aerators and other accessories generating noise in excess of 50 dB Leq.	Verify presence of housing (where necessary) on plans	100% Construction Documents	LOCSD	None
Mitigation N-5: Operation and maintenance plans for the treatment facility will ensure that all pumps and aerators are kept in proper working order.	Include condition in SOP for plant	Prior to Operation	LOCSD	The SOP for the plant will be developed prior to operation
Public Health, Safety and Services				
Mitigation PS-1 Hazardous Materials Management Plan. A Hazardous Materials Management Plan shall be developed and submitted to the County of San Luis Obispo Health Department for approval. The plan shall identify hazardous materials utilized onsite and their characteristics; storage, handling and training procedures; and spill contingency procedures. Additionally, the Plan should address fuel storage at the pump station sites.	Verify submittal of plans for containment and spill prevention to the County Health Department for both construction and operational phases	Prior to Construction (Spill Prevention and Response) / Prior to Operation (HMMP)	LOCSD	None
Mitigation PS-2 Best Available Technology. Project implementation shall be designed to conform with energy efficiency requirements outlined in Title 24 of the California Code. To the extent feasible, design of the proposed project should incorporate best available technology for energy efficiency . Additionally San Luis Obispo County APCD recommends the following measures be implemented to further reduce or offset long term emissions: • Provide an on-site lunch room with refrigeration and food preparation (i.e., microwave) appliances to reduce daily trips to and from the treatment facility; • Use of double paned windows in office area where interior heating/air conditioning will occur; • Use of energy efficient interior lighting where applicable.	Verify compliance with Title 24 and APCD recommendations in 100% construction documents	100% Construction Documents	LOCSD	None
Mitigation PS-3 Prior to the operation of the wastewater treatment system, the Los Osos CSD shall either 1) secure a contract for bio-solids disposal with a land disposal or recycling facility or 2) construct a bio-solids recycling facility that satisfies Title 40, Section 503 of the Code of Federal Regulations.	Verify construction or contract	Prior to Operation of Treatment Facility	LOCSD	None
Mitigation PS-4 The Los Osos CSD shall mitigate the potential temporary loss of water for fire fighting that may occur as a result of construction activities by either 1) acquiring a water tender, to the satisfaction of the Fire Chief, or 2) through some other equivalent means as determined by the Fire Chief and the CSD Board.	Verify mitigation of water loss and concurrence of Fire Chief	Prior to Construction	LOCSD	The strategy used to mitigate loss of water must be documented, along with the approval of the Fire Chief

Mitigation Measures		Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation PS-5	All contractors shall comply with relevant provisions of CAL-OSHA CAC Title 8 regarding the provision of safety and rescue equipment, to the satisfaction of the Fire Chief.	Document Fire Chief approval; include condition in contract documents	Prior to Construction / Contract Documents	Contractor / LOCSD	The contractor will be responsible for compliance and documentation of approval from the Fire Chief; LOCSD will be responsible for inclusion of the condition in the contract documents.
Visual Resources					
Mitigation AES-1:	Construction Staging Area. For all aspects of the project, construction staging areas shall be located away from sensitive viewing areas to the extent feasible. Before construction activities begin, an area for construction equipment storage away from direct views of sensitive viewing corridors (e.g. residences and major roads in the project area) shall be designated.	Include condition in contract documents; verify staging location on 100% construction documents	Contract Documents / Plan Check	LOCSD/Contractor	LOCSD is responsible for inclusion of the condition in the contract documents; the contractor is responsible for location of staging areas
Mitigation AES-2:	Conformance With County Development Standards. The final design and construction plans for the park and treatment plant site shall be consistent with relevant visual resource protection policies and standards of the San Luis Obispo County General Plan, Estero Area Plan, Coastal Zone Framework for Planning, and the Agriculture and Open Space Element.	Review construction documents for compliance with applicable development standards	Coastal development permit application plan submittal	LOCSD	None
Mitigation AES-3:	Landscaping Plan. A final landscaping plan shall be prepared for the entire project site and approved by the County prior to building permit issuance for the Tri-W site. Said landscaping plan shall emphasize native plant materials and shall include sufficient planting to screen views of the project from nearby roads and residential developments. The goal for the landscaping plan shall be to visually integrate the project into the community by creating a park-like setting, while preserving and enhancing existing views.	Review construction documents for complete landscaping plan and verify submittal to and approval of County Planning and Building staff	Coastal development permit application plan submittal	LOCSD	None
Mitigation AES-4:	Revegetation Plan. A revegetation plan shall be prepared to the satisfaction of the US Fish and Wildlife, California Department of Fish and Game and San Luis Obispo County for the 8-acre portion of the Broderson site that will be disturbed by the installation of the disposal leach fields. The plan shall be prepared by a qualified landscape architect and/or botanist and shall, to the extent feasible, restore the site to its condition prior to disturbance.	Review construction documents for a complete revegetation plan; verify approval by USFWS, CDFG, and County	Coastal development permit application plan submittal	LOCSD	Early consultation with the listed agencies will improve planning efficiency
Mitigation AES-5:	Lighting Plan. A final lighting plan shall be prepared for the treatment facility. The lighting plan shall meet County design standards. This shall include proper shielding, proper orientation and applicable height standards.	Review construction documents for inclusion of lighting plan; verify consistency with County design standards	Coastal development permit application plan submittal	LOCSD	None
Biological Resources					
Mitigation BIO-1.	Where construction will necessitate disturbance in undeveloped lots, wetlands and other potentially sensitive areas, a pre-construction survey will be conducted to assess and minimize any potential impacts.	Prior to onset of work in any area where these resources may be present (i.e., wetlands, eucalyptus, coastal scrub) provide and document a pre-construction survey by a qualified biologist	As needed prior to beginning of construction	LOCSD	Location of areas where these resources may be present has been documented in the EIR

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation BIO-2. Loss of Wintering Monarch Butterfly Roost Sites. The project proponent shall avoid habitat where feasible. A qualified monarch butterfly specialist will conduct preconstruction surveys for the monarch butterfly during the months of October to February. Potential roost sites that could be affected during construction will be fenced.	Eucalyptus stands of more than 1 or 2 trees shall be surveyed for Monarch butterfly during the specified time by a qualified biologist; documentation of these surveys and any action taken will be kept in the project file	As needed prior to construction	LOCSD	None
Mitigation BIO-3. Loss of Raptor Habitat. The project proponent will conduct a preconstruction survey for nesting raptors. Depending on the timing of construction, the project proponent will conduct a preconstruction survey during spring or early summer (April to early July) to determine whether nesting raptors or species protected by State and/or Federal law are present on or within the project area. Winter surveys are also recommended and should be done by a qualified wildlife biologist. If the survey results indicate that nesting raptors or protected species are present on or within the project area, the nest tree or area will be fenced or otherwise demarcated and a 500-foot no-disturbance buffer will be established until the nesting activity is completed and the young have fledged. The distance and placement of the buffer area will be determined in consultation with the CDFG. Only after nesting activities have ceased will construction be allowed to continue. All potentially suitable nesting trees will be removed prior to the breeding season.	Where tall trees are present, a raptor survey will be performed and documented by a qualified biologist; documentation of any activity taken (including fencing of inhabited areas) shall be documented and monitored by a qualified biologist	As needed prior to construction	LOCSD	None

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation BIO-4 Mitigate for Loss of Coastal Scrub Habitat. Agency Consultation/Permitting. Project implementation would result in direct or indirect disturbance or potential take of several federal and state listed species. Project implementation would require authorization for this disturbance or potential take from both the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG). Authorization requirements are outlined below:	Obtain biological opinion from USFWS in accordance with Section 7 of Endangered Species Act;	Prior to construction		
A. USFWS. Authorization for take by USFWS would require formal consultation with USFWS pursuant to section 7 of the Endangered Species Act.				
B. CDFG. Authorization for take by CDFG would require a Memorandum of Understanding (MOU) and Management Authorization (MA) pursuant to Section 2050 et seq. of the California Fish and Game Code. Development of a MOU/MA would be based upon the Section 7 USFWS consultation discussed above.	Obtain authorization for take from CDFG through MOU;	Prior to construction		
C. Acquire Additional Habitat. As part of the consultation efforts described above, the District will acquire additional habitat sufficient to compensate for the loss of habitat of the Morro shoulderband snail, Morro Bay kangaroo rat, Morro Bay blue butterfly, and other species dependent upon the coastal scrub habitat due to the direct impacts of the project. The land acquired should have the following qualities: ▸ The land should be a parcel or group of parcels containing approximately 40 acres. The preferred site for mitigation is the northerly Broderson parcels. ▸ The land should be habitat in or contiguous to the proposed critical habitat area as designated by the USFWS. Ideal land that meets this criteria is located around the community of Los Osos in the area studied for the greenbelt program by the Land Conservancy. ▸ Any disturbed portion of the land should be capable of restoration to a native habitat. This would mean that the soils have not been removed or fill placed on the site that are unsuitable for the native plantings (other than small amounts). The land should be free of structures or debris, or capable of being cleared of any structures. ▸ The land should have primarily aeolian sand deposits; be in a stabilized condition (not mobile); have an open canopy; be of the appropriate aspect and other meteorological conditions. ▸ The land should be granted to an appropriate agency or conservation organization in perpetuity with deeded guarantees of non-development or transfer (unless to another like organization). The protection of the land may allow for some passive public activities, such as hiking, scientific investigation, and low-impact education.	Verify purchase (deed or execution of contract for sale) of suitable mitigation land;	Prior to construction		

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
D. Restoration. After securing the land, the District should restore the land so that it functions as suitable habitat for many of the local species of plants and wildlife described in this EIR whose existence is endangered or of concern. One of the benefits of this mitigation approach is that a single program will mitigate the impacts to all or most of the species described in the setting section. Restoration of the land should include the following: ▸ Removal of invasive exotic plant species. This may mean removal of all plants by grading, or a program of hand labor, depending upon the condition of the land. If the amount of invasives is relatively small, the work should leave as much of the existing native vegetation intact. ▸ Removal of structures or debris. ▸ Regrading of any unnatural mounds, holes or berms previously created on the site. ▸ A planting program of a mixture of indigenous plant species that serve to restore the site and serve multiple species' needs, especially the Morro shoulderband snail, Morro Bay blue butterfly, Black legless lizard, and potential future re-introduction of the Morro Bay Kangaroo Rat. This will include Dune Lupine for the Morro Bay blue butterfly. The final planting program should be developed in consultation with CNPS, CDFG and USFWS. ▸ An ongoing maintenance and observation program.	Prepare restoration plan; implement plan	Prior to construction (plan), implementation (during and after construction)	LOCSD	
Mitigation BIO-5 Minimize Disturbance of Coastal Scrub, Chaparral, and Coast Live Oak Woodland Habitats Located Around the Perimeter of the Leach Field Sites During Construction. Minimize, to the extent feasible, the amount of disturbance of land beyond the actual area of development. This can be accomplished by identifying minimum activity area required, and establishing a physical construction limit beyond which equipment and storage of material would not extend. ▸ Clearly identify and mark the perimeter of the proposed leachfield construction zone prior to and during construction onsite with highly visible temporary fencing. ▸ Restrict the use of all heavy equipment and vehicles to areas located inside of the identified construction zone throughout the duration of construction. ▸ Clearly identify and mark the proposed access route to the construction zone of the leachfield, and limit all construction traffic to areas located within the identified access route. ▸ Leave areas of undisturbed habitat between portions of the leachfield, rather than clearing a single, contiguous area.	Verify that minimum activity area and limits of physical activity are identified on construction documents; field verify that routes and zones are marked and respected at least every three months during construction	100% Construction Documents / During Construction	LOCSD	Periodic inspection of construction activities will ensure compliance with mitigation goals
Mitigation BIO-6 Relocate Sensitive Species. Qualified biologists should remove as many Morro shoulderband snails as practicable from any area of proposed disturbance. These should be relocated nearby to suitable habitat.	Provide removal and relocation of shoulderband snail immediately (within 1 day) prior to construction. Provide additional removal is work is suspended for a period of time and then resumes. Document all relocation and removal work in accordance with UWFWS guidelines.	Immediately Prior to Construction and if Construction is Suspended and then Resumes	LOCSD	Protocol for relocation is governed by the USFWS.

Mitigation Measures		Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation BIO-7	Restore Sensitive Habitats Disturbed During the Construction Phase of the Leach Fields. Following completion of construction of the proposed leach fields, revegetate all areas located within or around the area that previously contained native vegetation and that were disturbed during construction. ▸ Revegetate only with appropriate indigenous native vegetation. At a minimum, the structure and composition of habitats restored should reflect pre-project site conditions or better. ▸ All exotics that escape cultivation should be removed on a regular basis. ▸ All plantings should be grown from native parent stock collected onsite, and will be propagated by a native plant nursery specialist. In addition, the health and maintenance of all replacement vegetation should be monitored for a sufficient duration and frequency to ensure successful establishment of the vegetation.	Verify presence of revegetation plan on construction documents; include conditions for native plant selection in contract documents; document revegetation efforts. Retain a qualified botanist to monitor yearly for a period of at least five years or until vegetation is established and shows signs of reproducing.	Construction Documents/Contract Documents/Immediately after Revegetation/Ongoing for Five Years or Until Vegetation is Established and Reproducing	LOCSD	Establishment of the vegetation shall be considered complete when it has achieved 80% coverage and shows signs of reproduction. Other criteria specified by the botanist shall be considered in the determination of establishment.
Mitigation BIO-8	Control Introduction of Invasive Exotic Plants. To control introduction of invasive exotic plants on site, implement the following measures during construction and incorporate into the design guidelines of the proposed leach fields, as appropriate. ▸ Use only clean fill material (free of weed seeds) within the construction zone of the proposed project. ▸ Thoroughly clean all construction equipment prior to being moved onto and used at the site. ▸ Prohibit planting or seeding of disturbed areas with nonnative plant species; ▸ Control the establishment of invasive exotic weeds in all disturbed areas.	Verify that identified conditions are incorporated into the contract documents; conduct and document surveys for presence of invasive exotic weeds concurrently with revegetation surveys	Contract Documents/Ongoing Concurrent with Revegetation Surveys above	LOCSD	Lists of invasive exotic weeds are available from the California Native Plant Society and other similar sources

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation BIO-9 Avoid or Minimize Disturbance of Special-Status Plants Located Within and Adjacent to the Perimeter of the Project Site Construction Zone. Implement the following measures prior to and during construction to avoid or minimize unnecessary disturbance of special-status plants occupying the vicinity of the project site. ▸ Retain a qualified botanist to conduct focused surveys for special-status plant species during the appropriate flowering periods for the various species that are known to occur or have potential to occur within the construction zone of the project site, based on the presence of suitable habitat. ▸ Clearly map and identify each individual or groups of special- status plants observed during the focused survey with highly visible flagging. Morro Manzanita located in the southern portion of the Broderson site should be marked with highly visible flagging and completely avoided. ▸ Provide instruction to construction personnel on avoiding unnecessary disturbance of areas marked with flagging and identify the locations of all groups of special-status plants. ▸ Transplant Individual Special-Status Plants Located With the Construction Zone of the Leach Fields. Individual special-status plants that are identified as occurring within the proposed construction zone should be identified. If it is determined that avoidance or disturbance of the identified plants is not feasible, implement transplanting operations for the identified species. It should be noted that the success of transplanting is highly dependent on the specific taxon. Transplanting of some species currently occupying the site may not be as successful as for others, or may fail entirely. Therefore, prior to implementing these operations, previous case studies should be researched to determine which plants are expected to have reasonable opportunities for survival following transplantation, and determine which techniques have been successful previously. If transplanting is then determined to be a viable option for some identified special-status plants, implement the following measures: 1.Avoid disturbance of the root system of each plant during transplanting. 2.A plant should only be moved to a habitat that contains site conditions similar to the location previously occupied by each plant. 3. Closely monitor the success of transplanted species.	Verify botanical surveys, identify sensitive plants, and instruct personnel. Document transplant of species and conduct success evaluations concurrent with revegetation surveys outlined in BIO-8, above. Success will be defined as reproduction of at least 3:1, among other criteria suggested by the botanist.	Prior to Construction (survey)/Ongoing for Five Years or Until Success Criteria is met (monitoring)	LOCSD	Guidelines for the translocation of sensitive plants will be provided by the USFWS and or CDFG as part of agency consultation and project approval
Mitigation BIO-10. Avoid or Compensate for Loss of Morro Bay Kangaroo Rat Habitat. Due to the limited and localized distribution of the Morro Bay kangaroo rat, the project proponent will make every effort to avoid the loss of suitable Morro Bay kangaroo rat habitat. Preconstruction surveys will be conducted by a qualified wildlife biologist. These surveys may include a combination of techniques. The project proponent will work with CDFG and USFWS to determine the best means of surveying for the kangaroo rat. The project proponent will compensate for loss of habitat in an area within the limited range of the Morro bay kangaroo rat and of equal or better quality than the habitat that will be impacted (see Mitigation BIO-4). The project proponent shall ensure that the site is not adversely affected by human disturbance, domestic animal disturbance, or the use of substances toxic to the Morro Bay kangaroo rat.	Conduct pre-construction survey by qualified biologist; verify avoidance of habitat where feasible; mitigate for potentia loss of habitat in accorance with Mitigation BIO-4, as described above.	Prior to construction	LOCSD	
Mitigation BIO-11. Avoid the Loss of Wintering Monarch Butterfly Roost Sites. The project proponent shall avoid habitat. A qualified monarch butterfly specialist will conduct preconstruction surveys for the monarch butterfly within 0.5 miles of the proposed access road and groundwater injection sites. Potential roost sites that could be affected during construction will be fenced.	Verify that pre-construction surveys have taken place and that fences are erected and respected (concurrent with other barrier inspections at least once every three months throughout construction)	Prior to Construction/Ongoing throughout Construction at least once every three months	LOCSD	None

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation BIO-12. Avoid or Compensate for Loss of Morro Bay blue Butterfly Habitat. Where feasible, the project proponent will avoid Morro Bay blue butterfly habitat. Surveys for Morro Bay blue butterfly presence will be conducted by a qualified wildlife biologist in late April or early May. If the habitat is likely to be disturbed during construction, fencing will be placed around areas of suitable habitat. Where avoidance is not feasible, the project proponent, will compensate for the loss of potential Morro Bay blue butterfly habitat by setting aside an area of equal or better quality than the habitat to be impacted (see Mitigation BIO-4). The project proponent will ensure that the compensation area is not adversely affected by human disturbance, vandalism, off-road vehicle use, or pesticide application. Selection of a specific compensation site will be made by mutual agreement between the project proponent, the California Department of Fish and Game, the United State Fish and Wildlife Service, and the agency or entity responsible for managing the compensation site.	Verify preparation of field survey as described; incorporate mitigation in construction documents	Prior to Construction	LOCSD	
Mitigation BIO-13. Avoid Loss of Nesting Raptor Habitat. The project proponent will conduct a preconstruction survey for nesting raptors. Depending on the timing of construction, the project proponent will conduct a preconstruction survey during spring or early summer (April to early July) to determine whether nesting raptors or species protected by State and/or Federal law are present on or within the project area. Winter surveys are also recommended. If the survey results indicate that nesting raptors or protected species are present on or within the project area, the nest tree or area will be fenced or otherwise demarcated and a 500-foot no-disturbance buffer will be established until the nesting activity is completed and the young have fledged. The distance and placement of the buffer area will be determined in consultation with the CDFG. Only after nesting activities have ceased will construction be allowed to continue. Nesting habitat will be marked and avoided during construction and operation activities of the proposed project.	Refer to Mitigation BIO-4	See BIO-4, above	LOCSD	
Mitigation BIO-14. Avoid or Compensate for Loss of Morro Bay Kangaroo Rat Habitat. Due to the limited and localized distribution of the Morro Bay kangaroo rat, the project proponent will make every effort to avoid the loss of suitable Morro Bay kangaroo rat habitat. Preconstruction surveys will be conducted by a qualified wildlife biologist. The project proponent will work with CDFG and USFWS to determine the best method of survey for this species. Where avoidance is not feasible, the project proponent will compensate for loss of habitat in an area within the limited range of the Morro bay kangaroo rat and of equal or better quality than the habitat that will be impacted. (See Mitigation BIO-4) The project proponent shall ensure that the site is not adversely affected by human disturbance, domestic animal disturbance, or the use of substances toxic to the Morro Bay kangaroo rat. Selection of a compensation site will be made by mutual agreement of the project proponent, CDFG, USFWS, and the entity or agency responsible for managing the compensation site.	Document pre-construction surveys prepared by qualified biologist; confirm compensation site as needed in writing with USFWS and CDFG.	Prior to construction	LOCSD, USFWS and CDFG	
Mitigation BIO-15 Compensate for loss of habitat at the Powell or Eto leach field site. The proponent shall acquire land between one to two as much taken for the designed area of the leach fields. The approach to this mitigation will be the same as described in BIO-4.	(See Mitigation BIO-4, above)	(See Mitigation BIO-4, above)	LOCSD, USFWS, CDFG	

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation BIO-16 The LOCSD, in conjunction with the California Department of Fish and Game (CDFG), the US Fish and Wildlife Service (USF&WS), San Luis Obispo County and the California Coastal Commission shall prepare and implement a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP) for the long-term preservation of habitat remaining within the Los Osos Greenbelt, including habitat remaining on individual vacant lots. The HCP/NCCP shall identify the habitat resources and the quality of those resources on the remaining vacant properties within the Greenbelt. The range of potential conservation programs to be considered in the HCP/NCCP shall include, but not be limited to the following: ▸ The identification of policies and programs to be incorporated into the Estero Area Plan aimed at the long-term preservation of sensitive biological resources in the Los Osos area; such policies and programs may include: – Transfer of development credits – Clustering – Avoidance of sensitive resources in site design – Changes in density and land use – Incorporation of open space into the design of new development ▸ Programs aimed at facilitating coordination among agencies and organizations involved in management and conservation/preservation of sensitive resources, including USF&WS, CDFG, California Coastal Commission, San Luis Obispo County, the LOCSD, MEGA, NEP, Land Conservancy of San Luis Obispo County, and others; ▸ The creation of a landbank program to facilitate the purchase of properties with high quality habitat within the Greenbelt, to be repaid over time from fees on new building permits; ▸ Programs for the acquisition of properties within the Greenbelt with significant habitat resources;	Prepare HCP prior to Coastal Development Permit application. Implement HCP following approval by USFWS and CDFG	Prior to CDP application (HCP); Ongoing following approval (implementation);	LOCSD, USFWS, CDFG	