SECTION 1.0

EXECUTIVE SUMMARY

CHAPTER 1.0

EXECUTIVE SUMMARY

This document is the Draft Environmental Impact Report (Draft EIR) for the City of Hollister Domestic Wastewater System Improvements (DWSI) Project and the San Benito County Water District (SBCWD) Recycled Water Facility (RWF) Project. The proposed DWSI Project consists of improvements to the City of Hollister Domestic Wastewater Treatment Plant (DWTP) to increase the quality of effluent produced and to increase the treatment capacity of the plant. The proposed RWF Project would reduce the amount of water currently disposed of by percolation at the DWTP by developing disposal sprayfields and providing treated effluent as a recycled water supply for agricultural and urban irrigation. Taken together, these two projects are analyzed within this EIR as the "Proposed Project."

1.1 PROJECT BACKGROUND

The Proposed Project is part of a series of on-going efforts to manage water resources in the region. The SBCWD, the City of Hollister, San Benito County, and other local agencies cooperatively assess and manage surface water and groundwater supplies. The Groundwater Management Plan (GWMP) for the San Benito County Part of the Gilroy-Hollister Groundwater Basin is the principal plan for the management of groundwater in the region (SBCWD & WRASBC, 2004a). The GWMP identifies existing groundwater quantity and quality concerns and presents a range of alternative methods to address them. Groundwater issues addressed in the GWMP include the imbalance of areas of high and low groundwater, inadequate disposal of wastewater, and the accumulation of salts and nitrates in the basin. Several of the components included in the Proposed Project first emerged as management alternatives identified in the GWMP. These components consist of wastewater effluent recycling, groundwater treatment, salinity education, a water softener ordinance, and industrial salt control.

1.2 PROJECT OBJECTIVES

The Proposed Project has been planned in order to implement specific projects and programs identified in the GWMP in order to manage water resources in a manner consistent with regional goals. These goals include reducing salts entering the groundwater basin, and reducing the amount of water entering the groundwater basin. It is also the intent of the City to provide sufficient wastewater treatment and disposal capacity to serve planned population growth to 2023 as identified in the City of Hollister 2005 General Plan. Other key project objectives include making efficient use of existing public facilities, maximizing the use of recycled water, and avoiding or minimizing adverse environmental impacts.

1.3 DESCRIPTION OF THE PROPOSED PROJECT

The Proposed Project consists of improvements to the DWTP to increase the quality of effluent produced and to increase the treatment and disposal capacity of the plant. The Proposed Project would also change the way that treated effluent is disposed of. Currently, all of the treated effluent produced at the DWTP is disposed of by percolation beds located adjacent to the San Benito River. The Proposed Project would reduce the amount of water disposed of by percolation by developing disposal sprayfields and providing treated effluent as a recycled water supply for agricultural and urban irrigation. Because of high levels of salts and minerals in the treated DWTP effluent, agricultural and urban irrigation would initially be limited. To broaden the range of crops that could be irrigated with the treated effluent and to reduce the amount of salts and minerals entering the groundwater basin, a Salt Management Program is included in the Proposed Project. The Salt Management Program would utilize education programs and rigorous source control, including but not limited to, the elimination of on-site regenerating water softeners and a household water softener ordinance to reduce sources of salts and minerals entering the wastewater system. Reverse osmosis treatment or electro-dialysis reversal would be used to demineralize groundwater or treated effluent to achieve recycled water supply quality goals.

Many key elements of the Proposed Project are near-term actions for which extensive information is currently available. These project elements are fully evaluated in this EIR on a project specific level. Other project elements would be developed in the future, and therefore less information is currently available. These future project elements are considered in this EIR on a programmatic level., but aAdditional evaluation will be necessary at a later date when these elements have been further developed and additional information is available. Phasing of the overall project and the level of CEQA compliance is shown in Table 1-1.

Phase I includes the expansion of the DWTP to 4.0 MGD, including all ancillary project components including storage and interim disposal of treated effluent. Because the ultimate solution for wastewater effluent disposal has not been fully developed (see Phase II description below), the interim approach is to use sprayfields in combination with continued percolation at the DWTP and Industrial Wastewater Treatment Plant (IWTP). At this time, temporary sprayfields are proposed at the Hollister Municipal Airport. Other sprayfields may be added later, but these other sprayfield locations are not addressed in detail in this EIR. Effluent disposal would also occur at the San Juan Oaks Golf Club and at an agricultural demonstration site (where high-salinity effluent would be blended with higher-quality water). Phase I includes all infrastructure (e.g., pipelines, storage tanks) necessary to deliver effluent to the Hollister Municipal Airport and the San Juan Oaks Golf Club. In addition, Phase I also includes several elements of a Salt Management Program, including a water softener ordinance, an industrial salt control program, and a salinity education program. With the exception of the unidentified sprayfield locations, all elements of Phase I are fully evaluated in this EIR (i.e., no further CEQA evaluation is expected).

TABLE 1-1 PROJECT COMPONENTS AND PHASING

Phase I (2008-2013) Project Level Analysis	Phase II (2014-2023) Program Level Analysis
DWSI Project Treatment	
4.0 MGD ¹ Membrane Bioreactor Facility New Septage Receiving Station	5.0 MGD Membrane Bioreactor Facility
Storage	
1,500 AF ² Storage Reservoir	An additional 670 AF of seasonal storage capacity either at the existing DWTP site or at an undetermined off-site location.
Disposal	
Disposal sprayfields at the Hollister Municipal Alrport Additional disposal sprayfields in the project area*	Additional disposal sprayfields (only as necessary to dispose of treated wastewater that cannot be recycled due to quality or market conditions - more likely phasing out of disposal sprayfields due to development and transition of recycled water use to high-value food crops).
Continued percolation at the DWTP with a maximum disposal quantity of 3,133 AF per year Storage and percolation of DWTP effluent at the	Reduced percolation at the DWTP with an approximate disposal quantity of 1,150 AF per year by 2023 Gradual elimination of storage and disposal at the
IWTP with a maximum of disposal quantity of 796 AF per year.	IWTP by the year 2023
Salt Management Program	
Salinity education program Industrial salt control in municipal wastewater Water softener ordinance	Demineralization and concentrate disposal
RWF Project	
Recycled water use at San Juan Oaks Golf Club	Other irrigation projects (e.g. Ridgemark Golf Courses).
Recycled water demonstration project (40 to 100 acres) in the Freitas Road Area* Recycled water for existing irrigated areas*	Deliver recycled water (700 mg/L TDS ³) to San Juan Valley, Freitas Road and Wright Road and/or Buena Vista Road areas for agricultural use.
otes; Million gallons per day; Acre-feet, Total dissolve As specific sites have not been selected for developm EIR on a program level.	d solids (measure of salinity). ent, these components of Phase I are analyzed within this

Source: AES, 2006.

Phase II represents a transition from effluent disposal using sprayfields to the full use of recycled water for crop irrigation. Key elements of Phase II are the installation of demineralization facilities to remove salt (including associated disposal facilities for concentrated brine) and a new recycled water distribution system to convey recycled water to various sites. Because key elements (such as the type and location of the demineralization facilities) are not known in detail, most of the Phase II project is evaluated at a broad

level in this EIR and additional detailed evaluation is anticipated in the future. Based on the known extent and anticipated timing of the Phase II project elements, it is anticipated that effluent disposal will transition from the Phase I approach (sprayfield disposal of high-salinity effluent) to the Phase II approach (full recycled water system with lower salinity) approximately 8 years after project initiation (roughly 2014).

1.4 SCOPE AND ORGANIZATION OF THE EIR

This EIR focuses on identified significant or potentially significant impacts and on issues of interest or concern to the community. A Notice of Preparation (NOP) notifying the public and public agencies of the City's intent to prepare this EIR was issued on February 1, 2006 for a 30-day circulation period. Responses to the NOP have been used to determine the appropriate "scope" of the EIR (i.e., the topics to be analyzed and the level of analysis required). The NOP is included in this EIR in its entirety as Appendix A. Comment letters responding to the NOP are included in Appendix B. Based on the comments received on the NOP, and the analysis contained in the Initial Study prepared for the Proposed Project (Appendix C), the following environmental issues were identified as having the potential for significant effects to the environment and are analyzed in detail in this EIR:

- Land Use and Planning
- Geology and Soils
- Hydrology and Water Quality
- Biological Resources
- Cultural Resources
- Hazardous Materials and Public Health & Safety
- Utilities and Service Systems
- · Air Quality
- · Traffic

This EIR evaluates the Proposed Project and discusses several alternatives, including the No Project Alternative, relative to these environmental factors. A discussion of the growth-inducing potential of the Proposed Project is presented as required by CEQA.

1.5 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1-2, located at the end of this section, summarizes the discussion of impacts and mitigation presented in Chapter 4.0 (Environmental Setting, Impacts, and Mitigation Measures). The table identifies environmental impacts, and mitigation measures to reduce impacts to levels that are less than significant. In some cases, multiple mitigation measures are required to reduce an impact's level of significance. The Level of Significance after Mitigation indicates the remaining level of significance after implementation of mitigation measures. Under CEQA, an impact that remains significant after implementation of mitigation is considered an "unavoidable adverse impact" of the proposed project and requires the

decision-making entity to make a statement of overriding considerations explaining project approval in light of such environmental effects.

1.6 SUMMARY OF ALTERNATIVES

This EIR evaluates a range of alternatives to the Proposed Project. Section 6.0 considers both treatment process alternatives and effluent disposal alternatives. Three alternative treatment processes capable of meeting permit requirements are identified: an Extended Aeration System, an Oxidation Ditch, and Sequencing Batch Reactor. Comparison of the wastewater treatment alternatives reveals that while each has a similar level of environmental impacts as the proposed MBR facility; each produces a lesser quality effluent. The proposed MBR facility is therefore identified as the environmentally superior treatment alternative. For effluent disposal, the most feasible alternatives for effluent disposal were determined to be sprayfields, recycled water use, and percolation, and together these methods form the proposed disposal strategy. Other feasible alternatives considered in this EIR consist of a surface discharge to the San Benito River and development of additional percolation beds. Both of these alternatives would increase impacts to hydrology, water quality and biological resources. As a result the proposed disposal strategy is identified as the environmentally superior effluent disposal alternative.

1.7 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

In some cases, impacts resulting from the Proposed Project are expected to be less than significant. In most other instances, the implementation of mitigation measures summarized in Table 1-1 and described in Chapter 4.0, Environmental Setting, Impacts, and Mitigation Measures, are expected to reduce residual impacts to levels that are less than significant. However, the Proposed Project would result in expansion of treatment capacity that would support growth anticipated under the City of Hollister General Plan and the San Benito County General Plan. The Hollister General Plan EIR identified significant and unavoidable impacts of this growth including the conversion of farmland, seismic impacts, traffic impacts, and impacts from population and job growth. The Proposed Project would also support additional growth beyond that anticipated under the Hollister General Plan by allowing for growth within the unincorporated service area. This could occur as the result of service connections for new homes or businesses located outside of the Hollister Planning Area, within the service area identified for the DWTP. Mitigation measures have been identified that would provide the City of Hollister and San Benito County with annual assessments of wastewater demands and would assist in the provision of wastewater treatment in the service area. These measures would ensure that the DWTP is not expanded beyond the capacity needed to serve planned growth in the service area. However, the proposed DWTP improvements would accommodate planned growth and the associated contribution to secondary environmental effects of such growth would be significant and unavoidable.

1.8 ISSUES OF INTEREST/CONTROVERSY

The NOP of the EIR for the Proposed Project solicited comments from the public and agencies. In addition, two scoping sessions were held on February 16, 2006 at the Veterans' Memorial Hall in the City of Hollister. Issues and questions raised in response to the NOP included the following:

 How was the acreage of sprayfields and irrigation areas required to dispose of DWTP effluent determined?

Information on the required acreage for sprayfield and irrigation areas is identified in Section 3.4.1, subsection Off-Site Disposal.

How are specific sprayfield and irrigation sites going to be identified?

Information on the criteria used to identify additional sprayfield and irrigation sites is provided in Section 3.4.1, subsection Off-Site Disposal.

• What is the likelihood of sprayfield vegetation dying and thereby not providing estimated disposal capacity? What would be done if the vegetation does die?

This issue is addressed in Section 3.4.1, subsection Irrigation Methods.

Will pumping stations be required along the sprayfield/irrigation pipelines?

The need for reservoirs and pump stations along pipelines is addressed in Section 3.4.1, subsections Hollister Municipal Airport, and Additional Storage Infrastructure.

 There has been some discussion by a number of agencies in the region of a pipeline to transport brine produced by demineralization of groundwater and/or wastewater. Is it possible to utilize such a pipeline to facilitate demineralization at the DWTP?

Discussion of an export pipeline is provided in Section 3.4.2 DWSI Project - Phase II, subsection Demineralization.

 Is it feasible to capture methane from the sludge produced by the DWTP and use it to produce electricity?

Discussion of the feasibility of methane capture as an energy source is provided in Section 6.2.2 Wastewater Treatment Alternatives, subsection Infeasible Alternatives.

Will the EIR address groundwater impacts?

Groundwater impacts are discussed in Section 4.3 Hydrology and Water Quality.

1.9 REQUIRED PERMITS AND APPROVALS

As part of implementation of the Proposed Project, several permits and approvals are currently anticipated to be necessary, as listed below:

CITY OF HOLLISTER

- Certification of this EIR for the DWSI Project under the requirements of the California Environmental Quality Act (CEQA), as amended.
- Adoption of a Mitigation Monitoring Plan for the DWSI Project that incorporates the mitigation measures identified in this document.

SAN BENITO COUNTY WATER DISTRICT

- Certification of this EIR for the RWF Project under the requirements of the California Environmental Quality Act (CEQA), as amended.
- Adoption of a Mitigation Monitoring Plan for the RWF Project that incorporates the mitigation measures identified in this document.

CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)

Encroachment Permit for pipeline construction under or within the right of way of State Route 156.

CALIFORNIA DIVISION OF SAFETY OF DAMS (DSOD)

Approval of the plans and specifications for the 1,500 AF storage reservoir.

REGIONAL WATER QUALITY CONTROL BOARD (RWQCB)

- General Construction Stormwater NPDES Permit.
- Waste Discharge Requirements (WDR) for effluent disposal.
- Reclamation Permit for sprayfields and landscape irrigation.
- Amended Operating Permit for the DWTP

MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT (MBUAPCD)

- Authority to Construct Permit (wastewater treatment plant).
- Permit to Operate (wastewater treatment plant).
- District Rule 216, Permit Requirements for Wastewater and Sewage Treatment Facilities.
- District Rule 1000, Permit Guidelines and Requirements for Sources Emitting Toxic Air Contaminants.

CALIFORNIA DEPARTMENT OF HEALTH SERVICES

Review of engineering report for reclaimed water use.

SAN BENITO COUNTY

 Certification of this EIR under the requirements of the California Environmental Quality Act (CEQA), as amended.

- Adoption of a Mitigation Monitoring Plan that incorporates the mitigation measures identified in this
 document.
- Encroachment Permit for pipeline construction along County roads.
- Grading Permits for construction of pipelines, sprayfields, and reservoirs.

U.S. ARMY CORPS OF ENGINEERS

 Section 404 Permit under the Federal Clean Water Act (potential impacts to waters of the U.S. and wetlands along pipeline routes).

CALIFORNIA DEPARTMENT OF FISH AND GAME (CDFG)

Streambed Alteration Agreement for pipelines that cross small drainages.

U.S. FISH AND WILDLIFE SERVICES

 Consultation under Section 7 of the Federal Endangered Species Act if a Section 404 permit is required.

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.1 LAND USE AND PLANNING			
1.1.1 The Proposed Project may be inconsistent with the programs and objectives identified in the Groundwater Management Plan.	LTS		LTS
The Proposed Project implements several programs that were identified in the GWMP. Components of the Proposed Project that are identified in the GWMP include wastewater effluent recycling, salinity education, a water softener ordinance, industrial salt control, and groundwater treatment and concentrate disposal. As a result, the Proposed Project is generally consistent with the GWMP. The only component that is not identified by the GWMP is the development of disposal sprzyfields during Phase I. Sprzyfields have been identified as an interim disposal method only until recycled water use is expanded. The use of sprzyfields would be reduced and eventually eliminated as improvements to the water quality of DWTP effluent allow for irrigation of more salt-sensitive crops. As a result the development of sprzyfields as a disposal method is not considered to conflict with the GWMP, as it would not limit the implementation of recycled water use.		None required.	
1.1.2 The Proposed Project may be inconsistent with objectives of the Hollister Urban Area Water and Wastewater Master Plan MOU.	LTS		LTS
The Proposed Project has the potential to conflict with sections 2.2.3 and 2.2.5 of the MOU for the Master Plan.		Ivone required	
Section 2.2.3 of the MOU states that recycled wastewater shall have a target TDS level of 500 mg/L and a not exceed to exceed level of 700 mg/L TDS as soon as practical but not later than by 2015. To achieve the target levels, demineralization of groundwater or DWTP effluent through reverse osmosis treatment or electro-dialysis reversal is identified as Phase II of the Salt Management Program. This process would be implemented prior to 2015. As a result, the Proposed Project would be consistent with this objective.			
Section 2.2.5 of the MOU states that the water conservation goals of the GWMP shall be used as the basis for all water and wastewater demand/flow projects. However, future wastewater flows utilized to estimate necessary treatment capacity are based on existing flows and			
Less than Significant = LTS Significant = Si	Significant and Unavoidable = SU	Bl = Benefical	NI = No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
stimuted growth rates. It can be assumed that the water conservation regram identified in the GWMP would reduce flows to the DWTP to ome degree. As a result, the assumptions for capacity design of the DWTP are likely somewhat conservative as actual flows may be less than estimated. The effect of additional water conservation measures is a otential extension of the date at which the DWTP would require econdary expansion to 5.0 MGD. This is considered to be a minor processistency.			
3 The Proposed Project may be inconsistent with objectives of the Water Quality Control Plan for the Central Coastal Basin.	LIS		LTS
he Basin Plan provides water quality objectives to serve as a water uality baseline for evaluating water quality management in the basin.		None required.	
The quality of effluent during Phase I would meet Basin Plan roundwater quality objectives for nitrogen and boron. However, while the MBR facility would reduce nitrates, levels of salt constituents in ffluent would remain near existing levels. While overall TDS levels in ffluent would equal the Basin Plan objective, particular salt constituents sodium, chloride, and sulfate – would approach or exceed Basin Plan bjectives. As a result, in the short term, the effluent quality produced by the Proposed Project would not facilitate attainment of the median roundwater objectives. However, because the Proposed Project would accilitate recycled water use by meeting Title 22 criteria, would reduce itrate levels, and would have elevated levels of salt constituents for only period of approximately seven years, conflicts with the Basin Plan are considered to be less than significant. In the long term, demineralization would significantly improve effluent quality by removing salt onstituents.			
4 Proposed project facilities may conflict with City and County General Plan designations.	LTS		LTS
The Proposed Project would be generally consistent with the City and County General Plan designations. Domestic Wastewater Treatment Plant (DWTP) improvements would require use of the existing DWTP and Industrial Wastewater Treatment Plant (IWTP) sites, which are		None required.	
ss than Significant = LTS Significant = SI	Significant and Unavoidable = SU		

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

MITIGATION MEASURES

LEVEL OF SIGNIFICANCE AFTER MITIGATION

located within an area of the City of Hollister designated as "Public", which specifically provides for the location of wastewater treatment plants. The western portion of the existing DWTP site is located within the San Benito County Agricultural Productive designation, which provides for uses that by their nature must be located in undeveloped areas.

The proposed use of recycled water for agricultural and landscape irrigation at San Juan Oaks, the Airport, the Freitas Road area and other locations in the City of Hollister and San Benito County, would not conflict with City and County General Plan designations because existing land uses would remain the same.

The probable location of the Phase II storage basin and evaporation ponds in an area designated by the County as agricultural is considered to be consistent with General Plan designations. Pipelines required for use of recycled wastewater would be located underground and would not result in a change of land use.

4.1.5 Proposed Project facilities may conflict with City and County General Plan Goals and Policies.

The Proposed Project would be generally consistent with policies, goals, and measures intended to ensure coordination with other existing and planned land uses. The off-site storage basin and evaporation ponds in Phase II of the project would most likely be developed on agricultural lands. Potential sites identified for the future storage basin and evaporation ponds may contain Grade I soils (as defined by the San Benito County General Plan). Several goals and policies of the San Benito General Plan emphasize the conservation of agricultural lands containing Grade 1 soils. According to Land Use Element Policy 3 of the San Benito General Plan, Grade 1 soils are to be given the highest level of protection for soil resources. However, because the site would be utilized by a public wastewater treatment district, the use would be exempt in accordance with the provisions of the policy. Consistent with San Benito County Agricultural land-use goals and policies, the storage basin and evaporation ponds would not conflict with adjacent agricultural operations, and would not require a substantial buffer to mitigate

LTS

LTS

None required

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
potential land use impacts.				
4.1.6 Land Use Compatibility Impacts. Potential conflicts with existing land uses related to construction of ancillary facilities at the existing City DWTP.	LTS			LTS
The Proposed Project includes construction of new buildings to support system improvements at the existing DWTP. These improvements will be implemented within the current boundaries of the existing wastewater treatment plant. The new facilities will be consistent with ongoing uses at the plant site. The improvements at the existing site are not expected to result in conflicts with existing land uses.			None required.	
4.1.7 Land Use Compatibility Impacts. Potential conflicts with existing land uses related to implementation of sprayfield projects.	LIS SI			1.78
The Proposed Project includes the potential future distribution and application of recycled water to urban and agricultural water markets, including sprayfield and irrigation projects on agricultural land, golf courses, and landscaped areas. Irrigation projects would be limited to landscaped areas and specific crops that would be compatible with existing uses. Recycled water would be used in accordance with requirements under Department of Health and Safety Requirements (Title 22). Through conformance with these adopted laws and regulations, impacts to existing agricultural resources resulting from the use of recycled wastewater would be minimized to the extent feasible. However, the elevated salinity levels in the irrigation water could lead to the accumulation of salts in the soil and potentially reduce the suitability of the land for production of certain crops.		None required. (a) To reduce impactive result of irrigation Mitigation Meason	s associated with reduced soil producti n with high salinity treated effluent, im- ine 4.2.5.	vity as a
4.1.8 Land Use Compatibility Impacts. Potential conflicts with existing land uses related to construction and operation of pipelines, an off-site storage basin, and off-site evaporation ponds.	LTS			LTS
The use of recycled water would require the installation of new pipelines to convey recycled water from the DWTP, and potentially a future		(a) To reduce impacts solids, implement	associated with dust from collection of Mitigation Measure 4.8.11.	f concentrate
Less than Significant = LTS Significant = SI	Significant and	Barbarotti - ew	BI = Beneficial	Ni = No limpact

1-12

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL	IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANO AFTER MITIGATION
storage basin to hold water during the reduced. The development of an off-site occur in a rural area, and would not p	storage basin would most likely		at evaporation po	ets associated with noise from the operation onds, implement Mitigation Measure 4.10.	4.
Impacts to adjacent users. The collection and trucking of salt conceponds could result in dust generation when disposal. This blowing dust caused by nuisance to down-wind sensitive receptour commercial areas. Additionally, the required for the export of concentrate, could adversely affect nearby receptors.	nen salts are collected for off-size the removal of salts could be a ors, such as residential housing, noise generated by truck truffic			impacts associate with truck traffic at ent Mitigation Measure 4.10.5.	vaporation
4.1.9 Proposed facilities may conver <u>Farmland</u> , and Farmland of St agricultural use.		SI			LTS
In Phase II, the development of a 6 evaporation ponds could be located w Farmland. Unique Farmland, or Farm resulting in the conversion of up to 445 a Farmland, or Farmland of Statewide Imp	ithin an area mapped as Prime iland of Statewide Importance, acres of Prime Farmland, Unique			facilities, including storage basins and e rime Farmland, <u>Unique Farmland</u> , or Fa	
1.1.10 Proposed project facilities may a contract.	conflict with a Williamson Act	LTS SI			LTS
DWTP improvements would take place of not subject to a Williamson Act cont projects may occur on locations pro- contracts. However, these projects wou use. The potential off-site storage basin located on a parcel protected under a Wil- the proposed use may be found to be con- contract, or the City of Hollister may Williamson Act by right of eminent do City purchases the parcel. Nevertheless statuary requirements in terminating	ract. Sprayfield and irrigation of tected under Williamson Act ld not result in a change of land and evaporation ponds could be lliamson Act contract. However, assistent with the Williamson Act remove the property from the omain without penalty when the s, although the City may follow		The siting of off-site for ponds, shall avoid pare	None required actilities, including storage basins and evan- cels under Williamson Act contracts	oration
Less than Significant = LTS	Significant = SI	Similared and	Unavoidable = SU	51 = Beneficial	NI = No Impact

LEVEL OF SIGNIFICANCE SIGNIFICANCE BEFORE MITIGATION MITIGATION MITIGATION LEVEL OF SIGNIFICANCE SIGNIFICANCE MITIGATION MITIGATION

termination is not reduced.

4.2 GEOLOGY AND SOILS

4.2.1 Construction and excavation activities would remove vegetative cover and would expose soils to the effects of wind, rain, and surface flow, increasing the potential for erosion.

Construction and excavation activities for new DWTP facilities would occur at the existing DWTP plant. During the development process, some soils would be exposed to natural elements and some extent of erosion would occur from wind and surface runoff from rain.

51

LTS

- (a) The City will be required to comply with the State's National Pollution Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit). The Central Coast Water Quality Control Board (CCRWQCB) requires that all construction sites have adequate control measures to prevent the discharge of sediment and other pollutants to streams or rivers. To comply with the permit, the City will file a Notice of Intent with the CCRWQCB and prepare a Storm Water Pollution Prevention Plan (SWPPP) prior to construction. A copy of the SWPPP must be current and remain on the project site. Control measures are required prior to and throughout the rainy season.
 - Temporary erosion control measures (such as silt fences, staked straw bales, and temporary revegetation) shall be employed for disturbed areas. No disturbed surfaces will be left without erosion control measures in place during the winter and spring months.
 - Sediment shall be retained on site by a system of sediment basins, traps, or other appropriate measures.
 - A spill prevention and countermeasure plan shall be developed that will identify proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on site. The plan will also require the proper storage, handling, use, and disposal of petroleum products.
 - Construction activities shall be scheduled to minimize land disturbance during peak runoff periods and to the immediate area required for construction. Soil conservation practices shall be completed during the fall or late winter to reduce erosion during spring runoff. Existing vegetation will be retained where possible.

TABLE 1-2 Summary of Impacts and Mitigation Measures

Summary of impacts and miligation measures						
ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION			
		To the extent feasible, grading activities shall be limited to the immediate area required for construction.				
		 Surface water ranoff shall be controlled by directing flowing water away from critical areas and by reducing runoff velocity. Diversion structures such as terraces, dikes, and ditches shall collect and direct runoff water around vulnerable areas to prepared drainage outlets. Surface roughening, berms, check dams, hay bales, or similar devices shall be used to reduce runoff velocity and erosion. 				
		 Sediment shall be contained when conditions are too extreme for treatment by nurface protection. Temporary sediment traps, filter fabric fences, inlet protectors, vegetative filters and buffers, or settling basins shall be used to detain runoff water long enough for sediment particles to settle out. Construction materials, including topsoil and chemicals, shall be stored, covered, and isolated to prevent runoff losses and contamination of groundwater. 				
		 Topsoil removed during construction shall be carefully stored and treated as an important resource. Berms shall be placed around topsoil stockpiles to prevent runoff during storm events. 				
		 Fuel and vehicle maintenance areas shall be established away from all drainage courses, and these areas shall be designed to control ranoff. 				
		 Disturbed areas will be re-vegetated after completion of construction activities. 				
		 All necessary permits and approvals shall be obtained. 				
4.2.2 Possible ground rupture and liquefaction from seismic events or expansive soils could occur at the proposed DWTP site, causing structural damage.			LTS			
The DWTP site does not lie in the immediate zone of any of the identified faults and therefore should not be susceptible to significant ground rupture. Essential DWTP facilities will be supported on columns or piles to ensure structural stability. Additionally, all structures would be designed with flexible pipe connections to minimize potential damage and differential sentement caused by a major earthquake. In the case of		None required				

Less than Significant = LTS

Significant = SI

an emergency, the MBR influent distribution structure would be designed

Significant and Unavoidable = SU

BI = Beneficial

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES		LEVEL OF SIGNIFICANCE AFTER MITIGATION
tn overflow to a sludge stabilization basin that would provide approximately 16 million gallons of emergency storage capacity.					
2.3 Possible ground rupture and liquefaction from seismic events or expansive soils could occur at the seasonal storage reservoir site, causing structural damage.	LTS				LTS
Structural damage hazards exist from earthquake events and potentially unutable soils at the seasonal storage reservoir site. The seasonal storage reservoir site does not lie in the immediate zone of any of the identified faults and therefore should not be susceptible to significant ground rupture. However, a seismic event along any of the faults identified within proximity to the project area could result in ground shaking at the seasonal storage reservoir site.			None required.		
Under the California Water Code, wastewater ponds less than 15 feet high (above grade) and which have a maximum capacity of 1,500 acrefeet or less are exempt from State jurisdiction. If the reservoir does exceed the classifications for exemption, the City would need to apply for and obtain Division of Safety of Dams (DSOD) approval of plans and specifications. DSOD would require the City to comply with certain requirements for design and construction of the reservoir, including preparation of intendation maps and employment of a civil engineer registered in California to supervise construction of the reservoirs for the protection of life and property. If the reservoir is exempt from State jurisdiction, construction of the reservoir will still need to comply with provisions of the California Water Code, which require ponds to be constructed and operated to standards adequate to protect life and property.					
4.2.4 Reuse of recycled water at sprayfield or irrigation sites on saturated soils would increase potential for erosion from surface flows of recycled water.	S1				1.15
The application of recycled water to sprayfields or irrigation sites that are saturated could lead to surface runoff. Erosion from surface runoff could lead to increased sediment loading to stormwater systems and surface		Requirements iss application of recl	laimed water would be subject to nued by the RWQCB, which aimed water to prevent off-site ru ne SBCWD shall implement mea	would restrict noff. The City of	
Less than Significant = LTS Significant = SI	Significant and	Unavoidable = Sti	BI = Beneficial	NI = N	là Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
waters.		the CCRWQCB, which could include but are not necessarily limited to the following measures:	
		 No reclaimed water shall be applied to irrigation areas during periods when soils are saturated. Irrigation schedules shall be defined by evapotranspiration rates of crops, available soil moisture, and rainfall. Soil moisture levels shall be monitored by the development of at least four monitoring locations at each sprayfield/irrigation site utilizing tensiometers, electrical resistance blocks, or other measuring devices. 	
		 Reclaimed water shall not be allowed to escape from the designated use area(s) as surface flow that would either pond and/or enter waters of the State Irrigation schedules and methods shall be utilized to avoid surface runoff from irrigation sites. Methods shall include the use buffers, berms, and ditches to control runoff. 	
		 Incidental discharge of recycled water to waters of the State shall be minimized through the use of buffers, berms, and disches to control runoff, not unreasonably affect present and unficipated beneficial uses of water and shall not reput in water quality less than that presented in water quality control plans or policies. 	
4.2.5 Accumulation of salt in sprayfield site soils from elevated salinity levels in recycled water could result in degradation of soil quality.	LTS SI		LTS
The quality of the soil at sprayfield and irrigation sites would not be degrated by elevated salimity levels in recycled water applied to the sites. Rainfull in the winter would dilute the salt concentration in the soil by the percolation of minfull downward past the crop root zone.		None required A sprayfield management plan shall be developed by the City of Hollister in cooperation with the San Benito County Water District. The sprayfield	
During Phase I, sprayfields would be utilized to dispose of treated effluent from the DWTP. Salt ions present in irrigation water such as sodium, chloride, sulfate, calcium and magnesium have the potential to accumulate in soils. Salt ions can accumulate over time as water is		management plan shall identify agricultural best management practices (BMPs) that ensure that sprayfields do not adversely impact structure and crop capability of soils. The sprayfield management plan shall be reviewed and updated annually. The plan shall include but not be limited to the following BMPs:	
applied. Through surface evaporation and the transpiration of plants, water is taken up leaving some of the salts behind to gradually build up in surface soils. Increased salt levels in the rootzone of soils can change the chemistry of the soil and lead to reduced plant growth. If		(a) Quantification of recycled water quality, including electrical conductivity (ECw), sodium adsorption ratio (SAR), and levels of sodium, chloride, boron, sulfate, calcium, magnesium, and bicarbonate	
Less than Significant = LTS Significant = SI	Significant and	Unavoidable = SU BI = Beneficial NI =	No Impact

ENVIRONMENTAL IMPACT	SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
ncontrolled, plants that are sensitive to salt cannot be productively		(HCO ₂). Sampling	e and quantification shall be conducted quarterly.	
grown on affected soils. This could change the affected soil's crop capability potentially impacting valuable agricultural land including Prime Farmland, Farmland of Statewide Importance, and Unique Farmland.			nd analysis shall be conducted for individual of determine the baseline rootzone salinity.	
		quality and base necessary to p	leaching fraction. Based on the recycled water line rootzone salinity, the leaching requirement taintain rootzone salinity shall be estimated establishing the maintenance rootzone salinity is on, et al., 1999.	
		recycled water quantum amendments necessitall be estimated	water or soil amendment requirements. Based on the radity and baseline rootzone salinity, water or soil assary to address sodium and/or bicarbonate levels. Application of gypsum or sulfunc acid shall be note increases in total salinity.	
		be conducted at le schedules, and at four monitoring utilizing tensioned devices. Soil san monthly basis for basis for subsequent	ement and monitoring. Soil moisture readings shall ast once every two days while establishing irrigation least once every week to monitor irrigation. At least locations shall be established in each sprayfield, ters, electrical resistance blocks, or other measuring upling and analysis shall be conducted on at least a the first year of operation and on at least a quarterly sent years. The irrigation schedule and leaching adjusted to maintain optimum plant growth and to salinity.	
		analysis and soil salinity shall be r	sament. Prior to sprayfield abandonment, the most sis results shall be compared to the baseline soil salinity requirements of likely future crops. Soil eturned to baseline conditions or conditions suitable rops through the use of reclamation leaching.	
6 The development of sprayfields sites could conflict with the extraction of mineral resources in the project area.	LTS			LTS
areas along the San Benito River have been identified as significant nurves of aggregate, and have been designated as mineral resource ones. The reuse of recycled water and construction and excavation			None required.	

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL SIGNIFICA AFTEI MITTIGAT
activities associated with developing pipelines to transport recycled water could be incompatible with mineral extraction. However, selection of specific sprayfield sites would be based on landowner interest and land uses. Also, the possibility could exist to reuse recycled water from the DWTP site for rehabilitation of mineral resource zones after extraction is completed.				
2.7 Construction and excavation activities for new pipelines and the Phase II development of an off-site storage basin and evaporation ponds would remove vegetative cover and would expose soils to the effects of wind, rain, and surface flow, increasing the potential for erosion, and could cause landslides at the bases of slopes.	Sī			LTS
During construction and excavation activities, surface soils would be exposed to natural elements from vegetation removal, and erosion could occur from wind and surface rimoff from rain. Possible landslide hazards also exist from slope failure associated with pipeline excavation activities at the bases of slopes of footbills.		MPDES General Associated with (b) Appropriate cor- slopes Develop slopes and those pipeline routes sl to map areas of plane shears, ar slopes greater the	gation Measure 4.2.1 to comply with Permit for Discharges of Storm W. Construction Activity. siderations shall be made to assessment of pipelines should be avoided in a greater than 30%. A geologic hazard enall be conducted by a certified engineeri instable slopes that have weak clay be ad adversely-orientated joints and/or bin 30%. Dipelines should be avoided in areas of instables should be avoided in areas of instables.	site specific case of week evaluation of ing geologist als, bedding- edding, and
		defined in the ge	ologic hazard evaluation.	Summe Studies
3 HYDROLOGY AND WATER QUALITY				
3.1 The implementation of the Proposed Project could alter the basin-wide salt balance.	LTS			LTS
The proposed MBR facility would improve the quality of effluent produced at the DWTP, thereby allowing for the disposal of effluent through sprayfields and irrigation projects.			None required.	
The Proposed Project would affect several salt loads associated with				
ess than Significant = LTS Significant = SI	Clasificate and	Unavoidable = SU	BI = Béneficial	NI = No Impact

October 2006

ENVIRONMENTAL IMPACT

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

MITIGATION MEASURES

LEVEL OF SIGNIFICANCE AFTER MITIGATION

evaporative concentration. During Phase I the appropried operation at the airport would create a new salt load. Salts in wastewater applied at the airport sprayfield would be concentrated through evaporation to levels that substantially exceed the objectives. This salt would be carried from the soil zone down to the water table by deep percolation of rainfall and applied irrigation water. However, the sum of the salt loads during Phase I would be slightly reduced compared to existing conditions because the effects of urbanization assumed to occur would offset the salt load created by the sprayfield.

In Phase II, the sum of the affected salt loads decreases to less than half of the existing sum. This decrease is the result of demineralization. In 2023, demineralization would remove approximately 4,800 tons per year of salt from municipal supply water (decreasing the TDS concentration of 8,840 AFY of groundwater by about 400 mg/L). The benefit is compounded when low-salimity water or wastewater replaces high-salimity groundwater for irrigation. The overall basinwide salt loading in Pluse II would be smaller than under existing conditions by approximately 10,000 tons per year.

From a basinwide perspective, the wastewater project and concurrent urban growth would have a less than significant impact on the basinwide salt balance during Phase I and a beneficial impact during Phase II.

The Proposed Project would redistribute DWTP effluent and change dispusal methods through the development of irrigation projects and sprintfields and the gradual reduction of percelution. This redistribution and changes in the disposal methods could alter the basin wide salt balance.

The magnitude of the increased salt load (up to approximately 3,800 tons/yr in Phase I) is not large relative to the total salt load, which has been estimated to be on the order of 45,000 tons/yr. More importantly, the impact would last for only about seven years, which is too short a period to have a significant impact on the basin wide salt budget. By 2015, demineralization of groundwater or DWTP effluent would decrease the averall salt load because of the physical removal of salt. As a result. Phase II would have a beneficial impact on the salt belance of

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
----------------------	--	---------------------	---

حنموة جثل

4.3.2 Disposal of treated effluent through sprayfields could change the groundwater quality near disposal areas.

The application of effluent in sprayfields and irrigation projects could change groundwater quality as water applied leaches through the soil into the underlying groundwater. Two sprayfield locations are identified for Phase I of the Proposed Project. San Juan Oaks Golf Club would utilize recycled water to blend with the Golf Club's existing irrigation water (CVP water and groundwater). Because there would be little change in irrigation water quality and quantity, impacts to groundwater quality near the San Juan Oaks Golf Club is expected to be less than significant.

The development of the airport sprayfield would result in a change in existing irrigation. The Proposed Project would result in a temporary increase in salinity of shallow groundwater beneath the airport sprayfield. This significance of this impact is judged in comparison to the non-degradation policy (Order 68-16) of the SWRCB. In particular, the potential increase in salinity of shallow groundwater beneath the airport sprayfield is considered less than significant because it will not unreasonably affect present and anticipated beneficial use of groundwater in the basin. The shallow aquifer that would be impacted by deep percolation beneath the sprayfield is not directly used by anyone, and future direct use of that water for potable or irrigation supply is unlikely. By the time shallow groundwater percolates down to deeper aquifers that are tapped for beneficial uses, peak concentrations are highly attenuated. Simulation results showed that salinity increases in Model Layer 3 would be gradual (over several decades) and small (on the order of 200 mg/l).

While this impact is generally considered to be less than significant, nearby water supply wells that happen to have shallow screened intervals or a relatively strong hydraulic connection to the sprayfield area via a localized permeable aguifer unit could be impacted. Construction information is not available for most wells, and local hydrogeologic variability is unknown, so this risk cannot be precisely verified. Given that deep groundwater quality near the airport is already marginal for irrigation and potable uses, any percolated salts beneath the sprayfield that enter a nearby well could noticeably impair the beneficial use of the

SI

LTS

(a) Install three shallow monitoring wells along the down-gradient boundaries of any area irrigated with Phase I recycled water. Areas with blended irrigation water are exempt from this requirement if the TDS concentration and annual irrigation rate meet the following criterion: (TDS) x (IRRIG/6) < 3000</p>

where, TDS = total dissolved solids concentration in the irrigation water (mg/L)

IRRIG = annual irrigation application rates (inches).

Monitor groundwater salinity in those wells and several nearby downgradient water supply wells at least semiannually until 2023. Monitoring shall be conducted for TDS, sodrum, chloride, sulfate.

- (b). Tabulate and interpret the data at least semiannually to determine the extent to which shallow and deep groundwater salinity is being impacted by the increase in irrigation water salinity. Interpretation of data shall project when increased salinity levels would affect existing uses of groundwater.
- (c) For the proposed Hollister Municipal Airport sprayfield, if the TDS, sodium, chloride, or sulfate concentrations in a nearby down-gradient water supply well are projected to increase to a point that it would adversely affect the existing uses of the water, and if the increase in can reasonably be attributed to Phase I recycled water operations based on the monitoring data, then the City of Hollister shall provide an alternative water supply to the well operator. The alternative supply shall have water quality characteristics no worse than the preproject well water. The alternative supply may consist of wellhead treatment.
- (d) For all other Sprayfields, if the TDS, sodium, chloride, or sulfate concentrations in a nearby down-gradient water supply well are projected to increase to a point that it would adversely affect the existing uses of the water, and if the increase in can reasonably be

ENVIRONMENTAL IMPACT BEFORE MITIGATION

MITIGATION MEASURES

LEVEL OF SIGNIFICANCE AFTER MITIGATION

well water. As a result impacts to wells located near sprayfields are considered to be potentially significant.

The significance threshold for increases in shallow groundwater salinity is a final concentration greater than 3,000 mg/L (the average concentration of deep percolation beneath a groundwater irrigated field).

Groundwater salinity modeling for Phase I shows that at San Juan Onles Golf Club, the salinity of shallow groundwater beneath the golf club is estimated to increase by 500 mg/L as compared to existing conditions, with maximum concentration of approximately 2,600 mg/L. At the Pacific Sod Farm, recycled water would replace groundwater, which would increase the shallow groundwater TDS concentration by 300 600 mg/L to 2,700 mg/L. The largest increase would occur at the two specyfields (Plint Hills and the Airport) where salinity would increase by 2,800 to 3,800 mg/L to an ending concentration of as much as 5,600 mg/L in the upper layer.

Phase II of the Proposed Project includes the implementation of deminoralization by 2015 to reduce TDS levels to a target of 500 mg/L. Groundwater salinity modeling for Phase I shows that at San Juan Oaks Colf Club and at areas in the San Juan Valley currently served by CVP water, the maximum increase in shallow groundwater salinity would be about 500 mg/L, with a final concentration of approximately 2,600 mg/L. At the Pacific Sod Farm, the change is the opposite of the change under Phase I. Instead of increasing from 900 to 1,300 mg/L, the irrigation supply would decrease to approximately 600 mg/L. The result is a decrease in shallow groundwater salinity of as much as 1,200 mg/L, with ending concentrations as low as 800 mg/L. Shallow groundwater salinity throughout the Freitas Road area would improve under Phase II because the TDS concentration of irrigation water would decrease from about 900 to 600 mg/L. Under Phase II, disposal of wastewater at the sprayfields would be largely or entirely eliminated.

At the two locations where the impact to shallow groundwater is significent (Flint Hills and the Airport), the impact would be significent only under Phase I conditions, assuming use of the sprayfields would be discontinued under Phase II. The impacts to shallow groundwater would only occur in Layer 1 at the Airport and only in Layers 1 and 2 at the

attributed to Phase I recycled water operations based on the monitoring data, then one or more of the following shall occur:

- Reduce or discontinue recycled water irrigation.
- Blend recycled water with CVP or groundwater to reduce salinity of irrigation water.

If the TDS, sodium, chloride, or sulfate concentrations in a nearby down-gradient water supply well increase to the point that existing uses of the water are adversely affected, and if the increase can reasonably be attributed to Phase I recycled water operations based on the monitoring data, then the City of Hollister and/or SBCWD shall provide an alternative water supply to the well operator. The alternative supply shall have water quality characteristics no worse than the pre-project well water. The alternative supply may consist of wellhead treatment.

TABLE 1-2 Summary of Impacts and Mitigation Measures

LEVEL OF LEVEL OF SIGNIFICANCE SIGNIFICANCE **ENVIRONMENTAL IMPACT** MITTIGATION MEASURES BEFORE AFTER MITIGATION MITIGATION Flint Hills. Layer 3 at each area would see only a clight rise in colinity. In each case the salinity of Layer 3 at the end of the 30 year period would be less than 1,500 mg/L. The increase in salinity in shallow groundwater would be limited to the spearfield sites and would not affect the surrounding areas. However, it is possible for saline water to reach surrounding wells because groundwater flows preferentially along relatively permeable pathways through aguifer materials that are heterogeneous at a local scale not simulated by the model. It should be noted that the area surrounding the Airport is primarily designated for urban development, which would be served by the manicipal water supply. As a result agricultural use of groundwater in the great is expected to be limited. However, on belance, the impact on shellow groundwater salinity during Phase I is considered cignificant and adversaand therefore mitigation is recommended. 4.3.3 Decreased percolation at the DWTP and IWTP could affect LTS LIS nearby groundwater quality. The proposed MBR process would improve the quality of effluent None required produced at the DWTP. This would allow for the disposal of effluent through sprayfields and irrigation projects, and would eventually reduce the amount of effluent disposed at the DWTP. This could affect the existing groundwater quality near the DWTP, by both changing the quality and quantity of effluent disposed. The initial quality of effluent during Phase I would meet Basin Plan groundwater quality objectives for nitrogen and boron. However, particular salt constituents - sodium, chloride, and sulfate - would approach or exceed Basin Plan objectives. While the salinity of wastewater percolated at the DWTP would be the same as under existing conditions, the volume of percolated wastewater would change. Percolation at the DWTP could increase slightly but would remain close to existing volumes throughout Phase I. During the first few years of Phase II. percolation of municipal effluent would be eliminated at the

l see	Hen	Significant	211-

IWTP and decreased to 38% of existing volumes at the DWTP. This decrease in percolation volume would be accompanied by a decrease in wastewater salinity and a change in percolation from the adjacent San

Benito River.

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

MITIGATION MEASURES

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The net effect of changed percolation operations during Phase II would be to decrease shallow groundwater salinity near the DWTP. The TDS concentration of wastewater was assumed to decrease from 1,250 to 600 mg/L between Phases I and II.

During Phase I, the impact on shallow groundwater salinity near the DWTP is less than significant because the increased effluent quality would improve and TDS concentrations would be to a level that is less than or equal to the typical concentration in shallow groundwater beneath downgradient agricultural fields. With implementation of demineralization in Phase II, effluent quality would improve significantly and the continued disposal at the DWTP would result in beneficial impacts to groundwater quality in the area. Percelation of the DWTP could increase slightly over existing volumes. However, as sprayfields are developed and as recycled under use increases percelation of efficient at the DWTP would substantially decrease.

During Phase I, the impact on shallow groundwater salinity near the DWTP is less than significant because the increase in TDS concentrations would be to a level that is less than or equal to the typical concentration in shallow groundwater beneath surrounding agricultural fields. With implementation of demineralization in Phase II, efficient quality would improve significantly and the continued disposal at the DWTP would result in beneficial impacts to groundwater quality in the area.

4.3.4 The Proposed Project would result in the discontinuation of domestic flow diversions to the IWTP for treatment, but would dispose of DWTP effluent at the IWTP.

Under the Proposed Project, the current diversion of approximately 820 AFY of untreated effluent to the IWTP would cease and up to 796 AFY of treated effluent from the DWTP would be conveyed to the IWTP Because the wastewater disposed at the IWTP would be treated at the proposed MBR facility, overall water quality conditions at the IWTP would improve. The Salt Management Program would reduce the concentration of salt constituents in the DWTP effluent. As a result, the current impact to shallow groundwater quality would be reduced with

LTS

LTS

None required.

Less than Significant = LTS

Significant = SI

Significant and Unavoidable = SU

B) = Beneficial

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
implementation of the Proposed Project.			
4.3.5 The Proposed Project may increase surface water baseline surfactant levels.	LTS		LTS
Municipal wastewater influent contains many types of contaminants including surfactants (known as methylene blue activated substances or MBAS). The overall treatment capabilities of the MBR treatment system indicase adequate reduction in both ionic and non-ionic surfactant levels from the wastewater stream.		Name required.	
4.3.6 The use of recycled water for sprayfield irrigation could impact surface water quality.	SI		LTS
Sprayfield irrigation may increase soil erosion, causing increased sedimentation of surface waters, and introduce an additional source of bacteria and TDS contamination to the area's surface waters. However, the Proposed Project includes upgrading the DWTP with a MBR treatment system which consistently achieve low coliform levels. Additionally, recycled water that will be used for irrigation purposes will be disinfected with chlorine in accordance with Title 22. The performance of the MBR upgrades in conjunction with the chlorination system is expected to operate in compliance with Title 22, and the generated effluent in compliance with the Basin Plan. Agricultural and stormwater runoff from sprayfield irrigation sites may contain high levels of TDS, potentially degrading surface water features in the area. Concentrated salts may then be introduced into surface water features if stormwater is allowed to pond or run off the site.		Implement Mitigation Measure 4.2.4 to comply with Waste Discharge Requirements issued by the RWQCB.	
13.7 During Phase II of the Proposed Project, adverse impacts to water quality could occur if concentrate produced through the demineralization process was to enter surface water through stormwater runoff or groundwater through percolation.	LTS	None required	LTS
If high salinity concentrate produced during the demineralization of wastewater or groundwater was to percolate into the soil during the			
Less than Significant = LTS Significant = SI	Significant and	Unavoidable = SU BI = Beneficial NI =	No Impaci

LEVEL OF SIGNIFICANCE ENVIRONMENTAL IMPACT BEFORE

MITIGATION MEASURES

LEVEL OF SIGNIFICANCE AFTER MITIGATION

evaporation process, adverse impacts could occur to water quality. However, evaporation facilities would be fined with an impermeable barrier that would prevent percolation of concentrate into the groundwater. Additionally, potential impacts to groundwater resulting from stormwater runoff would be avoided by allowing adequate freeboard in evaporation ponds to contain a 100-year storm event.

4.3.8 Implementation of the Proposed Project could lead to decreased shallow groundwater levels near the DWTP.

Currently, three-fourths of the all wastewater treated at the DWTP is disposed of by percolation ponds at the DWTP site, and the remainder is percolated in ponds at the IWTP. This percolation has resulted in the manufaing of groundwater under the percolation beds ponds. Overall wastewater percolation at the DWTP would decrease. Determined from simulations, beds with no percolation in the Proposed Project would result in water levels lower than existing conditions, and beds with higher percolation than existing conditions would result in higher water levels than existing conditions.

Under Phase I of the Proposed Project, wastewater percolation at the DWTP and IWTP would continue at current rates, which approximately equal the percolation capacity of the two facilities. In Phase II, percolation of municipal effluent at the IWTP would be discontinued, but that facility would continue to be used for percolation of camery wastewater and stormwater. Percolation at the DWTP would be ramped down over 3 years to approximately 38% of current percolation rates.

Simulated hydrographs for implementation of the Proposed Project under existing conditions show that Laver I groundwater elevations beneath the DWTP and IWTP would decline by 6-8 feet in most years. Deep groundwater levels near the DWTP east beds are up to 5 feet lower due to decreased percolation. Near the west beds, deep groundwater levels are higher during Phase II because of decreased groundwater pumping for irrigation in the nearby Freitas Road area. In all cases, the changes in water levels are small relative to fluctuations associated with droughts and wet periods. Also, the project tends to diminish the maximum high and low groundwater elevations relative to the no-project simulation. The lowering of shallow groundwater levels allows increased recharge

SI

MITIGATION

LTS

- (a). Construction Period Water Balance Plan. A water balance shall be completed to identify the phasing of construction activities at the DWTP. Phasing of construction shall identify the use of existing percolation beds and emergency storage basins as well as the proposed seasonal storage reservoir cells and the proposed use of percolation at the IWTP. The water balance shall incorporate the findings of the following studies:
 - (1) DWTP Hydrogeologic Study. A frydrogeologic study shall be completed for the proposed seasonal storage reservoir at the DWTP. The study shall analyze the potential for increased percolation rates to result in increased groundwater mounding and the potential risk for resurfacing of treated effluent within the San Benito River.

If the hydrogeologic study identifies a significant risk of the resurfacing of treated effluent within the San Benito River, appropriate safeguards shall be established to ensure that resurfacing does not occur. Appropriate safeguards may include:

- Constructing the proposed seasonal storage reservoir at the DWTP with a liner that reduces percolation to an acceptable level.
- Identification of additional disposal capacity. Reduction of percolation at the DWTP would require additional disposal capacity. Additional capacity could be provided by the development of sprayfields or recycled water projects.

The Construction Period Water Balance Plan shall identify adequate

Less than Significant = LTS

Significant = SI

Significant and Unevoidable = SU

BI = Beneficial

No Impact

LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	disposal capacity throughout the entire construction period. The plan shall be completed prior to the start of construction.	
	(h). A Comprehensive Effluent Disposal Plan shall be developed by the City of Hollister in cooperation with the San Benito County Water District and San Benito County. The plan shall be updated annually and shall include at a minimum the following provisions:	
	 Projected recycled water availability over the following 5-year period. 	
	(2) If CVP water is required for blending at specific sites, the expected quantity of CVP water available for blending with recycled water shall be estimated.	
	(3) Annual Operational Water Balance. An Operational Water Balance shall be identified for the first year and revised on an annual basis. The operational water balance shall identify adequate disposal capacity for the DWTP. Disposal limitations at the DWTP shall be based on the hydrogeologic study completed for the site. The plan shall identify areas with adequate disposal capacity in the event that CVP water is unavailable for blending with recycled water during critically dry years.	
	(4) The plan shall identify a system to notify recycled water users in the event of the inability to provide recycled water.	
	No new wastewater service connections shall be permitted unless udequate disposal capacity is identified to handle additional flows.	
144		BI
	None required	
	SIGNIFICANCE BEFORE MITIGATION	disposal capacity throughout the entire construction period. The plan shall be completed prior to the start of construction. (b). A Comprehensive Effluent Disposal Plan shall be developed by the City of Hollister in cooperation with the San Benito County Water District and San Benito County. The plan shall be updated annually and shall include at a minimum the following provisions: (1) Projected recycled water availability over the following 5-year period. (2) If CVP water is required for blending at specific sites, the expected quantity of CVP water available for blending with recycled water shall be estimated. (3) Annual Operational Water Balance. An Operational Water Balance shall be identified for the first year and revised on an annual basis. The operational water balance shall identify adequate disposal capacity for the DWTP. Disposal limitations at the DWTP shall be based on the hydrogeologic study completed for the site. The plan shall identify areas with adequate disposal capacity in the event that CVP water is unavailable for blending with recycled water during critically dry years. (4) The plan shall identify a system to notify recycled water users in the event of the inability to provide recycled water. No new wastewater service connections shall be permitted unless adequate disposal capacity is identified to handle additional flows.

LEVEL OF LEVEL OF SIGNIFICANCE SIGNIFICANCE MITIGATION MEASURES ENVIRONMENTAL IMPACT BEFORE **AFTER** MITIGATION MITIGATION project would equal existing amounts and eventually decrease, pecsfely SO JEIU Simulations show that water levels near IWTP would be about 1 foot lower in normal and wet periods and up to 3 feet lower during droughts under the Phase I east had scenario. The lower water levels have the beneficial effect of increasing San Benito River percolation by an amount similar in magnitude to the decrease in wastewater percolation. Note: The analysis of groundwater levels at the IWTP has been incorporated into Impact 4.3-8.1 4.3.10 The use of sprayfields and irrigation projects to dispose of LTS LTS recycled water in Phase II would reduce the amount of water disposed of through the percolation beds located at the DWTP. The decrease in water percolation as a disposal option would lower the existing groundwater mound under the DWTP. The Whittaker Plume is located adjacent to the DWTP. A decrease in the groundwater table surrounding the Whittaker Plume could alter the rate and direction of the plume. A simulated path of the Whittaker contamination plante shows that None required. eliminating percolation at either the west beds or the east beds of the DWTP has almost no effect on the rate or direction of plame movement. Similarly, decreases in groundwater pumping for irrigation in the Frents Road area have a negligible effect. A path was simulated of the Whittaker contamination plume over 30 years under existing conditions and with the Proposed Project. Additionally, the vectors of groundwater flow in Layer 1 at the end of Phase II, when annual DWTP percolation would equal 38% of its present volume were also simulated. The vectors are shorter than under existing conditions, but the pattern is essentially the same. Consequently, the

Less than Significant = LTS

Significant = SI

simulated with-project plume follows essentially the same path as the noproject plume but is slightly shorter. These results demonstrate that divergence of regional groundwater flow as it enters the San Juan Valley is the dominant force controlling groundwater flow in the vicinity of the

Significant and Unavoidable = SU

BI = Beneficial

NI = No Impact

plume

TABLE 1-2 Summary of Impacts and Mitigation Measures					
ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION		
The lack of change in plume direction is a neutral impact, and the decrease in plume length is considered a beneficial impact, as it would likely facilitate remediation and cleanup efforts.					
43.11 Phase I of the Proposed Project could cause higher groundwater levels near sprayfields.	SI		LTS		
Groundwater levels at the Plint Hills sprayfield would use 2 to 4 feet relative to existing conditions but would remain more than 100 feet below the cround surface.		(a) The following measures shall be implemented to avoid impacts from the Hollister Municipal Airport sprayfield.			
At the Airport sprayfield, Layer 1 groundwater levels would rise approximately 2 feet at the site and 0.5 in the surrounding area if the sprayfield was operated for 30 years. Carrently, the depth to		 Install three monitoring wells along the down-gradient boundaries of the Airport irrigation area. Monitor groundwater levels in those wells at least semiannually until irrigation of the Airport for DWTP effluent disposal purposes ceases. 			
groundwater at the Airport is approximately 50 feet below the ground surface. The simulated hydrograph shows a long term rise over the next 30 years associated with lingering recovery from historical overdraft. With sprayfield operation, the depth to water is projected to exceed 20 feet. Therefore the increase in groundwater levels would not affect the root zone of plants or future construction activities. However, because		(2) Tabulate and interpret the data at least semiannually to determine the extent to which shallow and deep groundwater levels are heing impacted by the increase in irrigation water. Interpretation of data shall project when increased levels would affect the surrounding area.			
groundwater levels are rising in the area mitigation has been identified below to avoid potential impacts associated with contribution to shallow groundwater from the proposed sprayfield. Additional sprayfields may be developed in the future. As the location of these sprayfields has not been determined, the significance of impacts		(3) If groundwater levels in the surrounding area are projected to increase to a point that it would adversely affect the area, and if the increase in levels can reasonably be attributed to irrigation operations based on the monitoring data, then the City shall increase pumping of the municipal supply well located at Fallon Road to off-set increases associated with the irrigation of the			

(b) The following measures shall be implemented to avoid impacts from the development of other sprayfields.

- (1) Analysis shall be completed to determine the groundwater elevations at proposed sprayfield locations. If this analysis reasonably concludes that sprayfield operation could increase groundwater elevations to a point that it would adversely affect the area the following measures shall be implemented.
 - (a) Install three monitoring wells along the down-gradient boundaries of the proposed irrigation area. Monitor groundwater levels in those wells at least semiannually until

Less than Significant = LTS

developed in the future.

condition under Phase II.

Significant = SI

uncertainty, impacts from sprayfields developed in the future are considered potentially significant. Programmatic mitigation measures

are also included to address impacts from sprayfields that may be

During Phase II, use of the sprayfields would be phased out as an

increasing percentage of wastewater is recycled for impution use. Water

levels beneath the sprayfields would gradually return to the existing

If no changes in land use or groundwater pumping occurred during Phase

L Layer 1 groundwater levels near the Airport sprayfield would rise a

meximum of approximately 0.5 foot at the end of the sixth year of

Significant and Unavoldable = SU

Airport.

Bt = Beneficial

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
operation (2013), which would be the year of maximum application of			irrigation for DWTP effluent disposal purposes ceases.	
wastewater. In the livelrographs for locations near the northern and southern ends of the airport, the maximum increase in Layer I during Phase I (years 1-8 of the simulation) was only 0.2 foot, which is imperceptible at the plot scale and much smaller than the effects of changes in land use and groundwater pumping.		(b)	Tabulate and interpret the data at least semiannually to determine the extent to which shallow and deep groundwater levels are being impacted by the increase in irrigation water. Interpretation of data shall project when increased levels would affect the surrounding area.	
The 0.2-foot increase in groundwater level is less than significant because it would not raise the water table to within 8 feet of the ground surface. The water table is shallowest at the north end of the airport, where a depth to water of 10.1 feet was measured in September 2006. The hydrograph for the north end of the airport further demonstrates that the impact is much smaller than water-level variations due to seasonal pumping cycles, land use changes and sequences of dry and wet years. However, because groundwater levels are rising in the area mitigation has been identified to avoid potential impacts associated with contribution to shallow groundwater from the proposed sprayfield.		(c)	If groundwater levels in the surrounding area is projected to increase to a point that it would adversely affect the area, and if the increase in levels can reasonably be attributed to irrigation operations based on the monitoring data, then irrigation shall be reduced or discontinued, and/or other measures taken to avoid the adverse impact.	
Additional sprayfields may be developed in the fisture. As the location of these sprayfields has not been determined, the significance of impucts from increasing groundwater elevations is unknown. Programmatic mitigation measures are also included to address impacts from sprayfields that may be developed in the future.				
4.3.12 The use of recycled water to irrigate areas currently using groundwater for irrigation would cause groundwater levels to increase near the abandoned irrigation wells.	L48 <u>SI</u>			LTS
In Phase I, the Pacific Sod Farm and agricultural demonstration project use the two locations where irrigation with groundwater would be replaced by irrigation with recycled water or a blend of groundwater and recycled water. In both cases, pumping at the local irrigation wells would decrease and water levels in deep aquifices would rice. However, simulations demonstrate that this rise would not propagate up to shallow aquifers to a degree that creates shallow groundwater problems. Therefore, the change has no adverse impact on soil drainage. The higher water levels in deep aquifer also slightly decrease pumping costs, which is a beneficial impact.		combination groundwater 2.800 AFY s numping (a). (a) Obtain g Juan Va expected	None required. Hollister and/or the SBCWD shall implement one or a of both of the following measures to avoid shallow impacts in the San Juan Valley. A total offset of at least hall be provided by either increasing municipal groundwater of decreasing CVP importation (h), proundwater for demineralization from new wells in the San lley Municipal groundwater pumping during Phase II is to increase by approximately 3,700 AFY between 2008 and and most of this water will be demineralized to make	

Leas than Significant = LTS

Significant = Si

Significant and Unavoidable = SU

BI = Baneficial

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITTIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITTIGATION
Replacing groundwater with recycled water as the source of irrigation supply in the Freitas Road area during Phase II of the Proposed Project would substantially shift the groundwater balance of the San Juan Valley. Current groundwater pumping in that area averages approximately 4,200 AFY, and by 2023 essentially all of it would be eliminated. Meanwhile, wastewater percolation at the nearby DWTP would decrease by 1,400 AFY, leaving a net gain of 2,800 AFY in the subbasin water balance. Water levels in shallow aguifers throughout most of the area between Mitchell Road and Prescott Road are projected to be higher by 2,5-7,5 feet under Phase II. It is anticipated that the depth to groundwater in a wet year is less than 8 feet in two areas where the project would raise the water table by 2,5 feet or more. This impact is significant because the project would raise the water table to less than 8 feet below the ground surface in certain locations in wet years.		wells shall be change in the 2023). Pumpi Valley shall off that replaces grantes necessary an amunal basis. (b) Offset CVP wa 2023. Farmers presently use Replacing CVI Proposed Projec CVP water rep	veling feasible. One or more new municipal developed in the San Juan Valley to provide subbasin groundwater balance (up to 2,800 and rates of municipal supply wells in the San Set the estimated recycled water use (from the boundwater use. Recycled water use and the poundwater use. Recycled water use and the poundwater use in the San Juan Valley by up to 2,800 in the San Juan Valley outside the Freitas Roabout 6,700 AFY of CVP water for im P water with recycled water would eliminate of seffect on the groundwater budget. The vollacement necessary to balance the subbasin lined on an annual basis.	no net AFY in an Juan DWTP) comping ined on AFY in ad area igation. ate the come of
4.3.13 DWTP construction activity could impact water quality.	SI			LTS
Construction and grading activities associated with the Proposed Project and demolition of the existing facility could increase crosson and sediment discharge. In addition, construction equipment and materials have the potential to leak, thereby discharging additional pollutants into stormwater. Pollutants potentially include particulate matter, sediment, oils and greases and construction supplies such as concrete, paints, and adhesives. Discharge of these pollutants could result in contamination of the San Benito River, causing an exceedance of water quality objectives.		NPDES Gener	tigation Measure 4.2.1 to comply with the al Permit for Discharges of Storm Water Construction Activity.	State's Runoff
4.3.14 The construction of the storage reservoir and upgraded DWTP could result in a discharge to the San Benito River and impact water quality in the event of a flood or seismic event.	SI			LTS
A senamic event could cause the failure of the seasonal storage reservoir causing tertiary treated recycled water to flow into the San Benito River.		(a). A study shall b adjacent to the I	e conducted to confirm the 100-year flood ele DWTP sate.	vatices
The potential for seismic failure is addressed under Impact 4.2.3.		the state of the state of the state of	ervoir and DWTP shall be designed with the ma	ximum.
The existing DWTP site, where the MBR facility would be constructed, is out of the 100-year floodplain. The proposed storage reservoir would		flood protectio	n feasible, with a minimum of 100-year ading adequate levee height and armoring.	event
Less than Significant = LTS Significant = SI	Significant and	Unavoidable = SU	Bi a Beneficial	N = No impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
be constructed out of the 100-year floodplain. Because all facilities would be constructed outside of the 100-year floodplain the potential for a flood event to inundate the reservoir is considered less than significant. However, due to the proximity to the floodplain, the base of the reservoir levers could be subject to scouring during a flood event. This could result in the subsequent failure of the levees and a potential discharge to the San Benito River.		loca avo area wou faci and	City of Hollister shall provide the construction contractor with the tions of flood control facilities on the project site that must be ided. The contractor shall in turn develop a construction staging a plan identifying staging areas for construction equipment that lid not interfere or reduce the integrity of existing flood control lities. The contractor shall supply the staging area plan to the City all subcontractors involved with the construction of the Proposed sect.	
4.3.15 Portions of the DWTP and seasonal storage reservoir would be constructed adjacent to the 100-year floodplain and may impede or redirect flood flows or impact surface water quality during a flood event.	LTS			LTS
Upgrades to the DWTP, including the seasonal storage reservoir, would occur at the existing treatment site. The existing DWTP berms are located above the 100-year flood elevation and therefore, development of project features are not expected to impact the existing floodplain. The Proposed Project would not result in the placement of structures that would impede or redirect flood flows.			None required.	
3.16 Development of stone columns to support the proposed MBR facilities may create a hydraulic connection between shallow groundwater layers resulting in the movement of impacted shallow groundwater to deeper layers.	LIS			LTS
Construction of the proposed MBR facility would utilize stone columns to provide adequate structural support. The stone columns would be constructed of dense, crushed stone designed to increase bearing capacity, reduce settlement, aid densification and mitigate the potential for liquefaction. The vertical stone columns would be constructed to a depth of approximately 50 feet below the existing grade (elevation 240-250 feet). Shallow groundwater exists at the proposed MBR facility site approximately 20 feet below the ground surface. The columns would intercept two layers of sandy soil that are separated by a layer of filty clay. The columns will provide a hydraulic connection between the upper and lower layers. However, a connection between these layers is already present as evidenced by elevated chloride and potassium levels in			Nune required.	
Less than Significant = LTS Significant = SI	Significant and	Unavoidable	= SU BI = Beneficial MI =	No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
the deeper layer. As a result, the stone columns are only expected to slightly increase an existing groundwater connection.			
3.167 Construction of the sprayfield and IWTP pipelines may lead to temporary erosion from construction activities.	SI		LTS
Construction and grading activities associated with the installation of distribution lines serving the sprayfields, San Juan Oaks Golf Club, and the IWTP could increase erosion and sediment discharge. In addition, construction equipment and materials have the potential to leak, thereby discharging additional pollutants into the stormwater. Discharge of these pollutants could result in contamination of surface waters, causing an exceedance of water quality objectives outlined in the Basin Plan.		Implement Mitigation Measure 4.2.1 to comply with the State's NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity.	
4 BIOLOGICAL RESOURCES			
4.1 Construction activities may temporarily impact the nesting habitat of protected bird species.	SI		LTS
The percolation beds at the DWTP are currently being used by a number of water birds and shorebirds, mostly migratory species. Raptors were observed in the eucalyptus trees near the property, and likely use the property as foraging grounds, while shorebirds and waterfowl were using both the unlined percolation beds and the cement-lined sedimentation basins. The construction at the site and the reconfiguration of the percolation beds may temporarily impact the bird species using the area as foraging or nesting habitat. Species known to occur at the DWTP include golden eagle, loggerhead shrike, northern harrier, Nuttall's woodpecker, and white-tailed kite. During breeding season, any of these bird species may nest within 100 feet of the DWTP property, particularly in the encalyptus trees and the willow riparian scrub. Construction activities near a nest can cause the adult birds to abandon the nest, causing the young to die.		(a) If feasible, conduct all tree and shrub removal and grading during the non-breeding season (generally between August 16 and February 28) for most special-status and non-special-status migratory birds and raptors. Table 4.4-2 contains the nesting periods for several of the birds that have the potential to occur either on the property or in the willow riparian scrub adjacent to the property.	
		(b) If construction activities are scheduled to occur during the breeding season for special-status and protected birds (generally between March 1 and August 15) and are within 100 feet of suitable nesting habitat for ground-nesting or shrub-nesting birds or within 500 feet of suitable nesting habitat for raptors, a qualified wildlife biologist (with knowledge of the species to be surveyed) shall be retained to conduct a species-specific nesting survey prior to the start of construction and within the appropriate habitat. Protected birds and raptors may nest in the grass (generally 6 inches or more), in the stands of eucalyptus trees, or in or under shrubs. The willow riparian scrub in particular may provide nesting habitat to multiple bird species.	
		(c). The nesting surveys should be conducted within 1 week prior to	

Less than Significant = LTS

Significant = SI

Significant and Unavoidable = SU

BI = Beneficial

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
----------------------	--	---------------------	---

imitiation of construction activities that will occur during the specified species' breeding period. If no active nests are detected during these surveys, then no additional mitigation is required.

- (d) If surveys indicate that special-status or non-special-status migratory bird or raptor nests are found in the vicinity of the construction area, a no-disturbance buffer shall be established around the site to avoid disturbance or destruction of the nest site until after the breeding season or after a qualified wildlife biologist determines that the young have fledged (usually late June to mid July). Table 4.4-2 contains generally acceptable buffer radii for several species with the potential to occur in the area. However, the size of the buffer will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. The appropriate size of these buffers shall be determined by the biologist in coordination with the California Department of Fish and Game (CDFG). Suitable buffer distances may vary between species.
- (e). If construction activities are scheduled to occur within an area that supports an active nest site or within an established no-disturbance buffer, construction will be delayed until after the breeding season or until the young have fledged (as determined by the biologist).

4.4.2 Construction activities within the riparian habitat of the San Benito River require a streambed alteration agreement and may affect habitat for various special-status species.

The willow riparian scrub surrounding the San Benito River north of the DWTP starts immediately on the northern side of the fence that surrounds the DWTP property. Construction within the riparian zone would be considered a significant impact and requires a streamhed alteration agreement (1600s permit). Special-status species that may occur in the willow riparian scrub along the San Benito River include the San Joaquin whipsnake, the western pond turtle, the California redlegged frog, the tricolored blackbird, the western yellow-billed cuckoo, and the white-tutled kite. The renovation of the DWTP, the installation of the pipeline to the IWTP, and the construction of the sprayfields has

SI LTS

The fence on the boundary of the DWTP property serves as the border between the riparian zone and the annual grassland habitat. Signs shall be posted on the fence explaining that the riparian zone is to be completely avoided. No equipment or any personnel shall enter the riparian zone, and no waste or fill produced by the construction activities shall be placed there. No construction activities or any groundbreaking activities shall take place in the riparian zone.

Less than Significant = LTS

Schillicant = St

Significant and Unavoidable = SU

BI = Beneficial

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
the potential to significantly impact the riparian zone.			
4.4.3 Construction of the seasonal storage reservoir may require the removal of a California black walnut.	SI		LTS
A California black walnut (Juglans hindsii) is located on the western border of the DWTP facility, within the construction area of the storage basin. This species is considered "rare, threatened, or endangered in California and elsewhere" by the California Native Plant Society (CNPS).		The California black walnut shall either be transplanted or replaced in suitable habitat within reasonable proximity to the DWTP. If replaced, a sapling shall be planted in a suitable location as determined by a certified arborist.	
4.4.4 The installation of the IWTP pipeline may require disturbance to the riparian habitat of the San Benito River or the existing hridge, which provides nesting habitat. Installation may impact species using these habitats.	SI		LTS
The pipeline routes following State Route 156 that cross over the San Bernto River would use pipes already installed into the existing bridge. A second pipeline river crossing would be necessary to transport recycled water to the IWTP. An existing pipe is located under the river channel hear the San Juan Road bridge which may be utilized if adequately sized. However, if this pipe is not adequately sized, an additional pipeline would have to either be hung from the bridge or placed under the channel.		(a) If the pipeline will be bing from the existing bridge structure, the following mitigation measures shall be necessary:	
		(1) The bridge shall be surveyed between March 1 and March 15, prior to the nesting season, and all inactive nests shall be removed.	
		(2) An appropriate bat survey for the bridge shall be developed in consultation with CDFG to determine whether the bridge is occupied by any special-status bat species. This survey shall also	
If the IWTP pipeline is hung from the San Juan Road Bridge spanning the San Benito River, the construction activities may impact the birds or		take place between March I and March 15.	
bats using the bridge as a nesting or roosting habitat. Construction activities near a nest can cause the adult birds to abandon the nest, causing the young to die.		(3) At a time when no bats or active nests are present in the bridge structure, exclusionary netting shall be installed to prevent these species from using the bridge prior to construction.	
The alternative option, to modify the existing pipeline or to directional drill and install a new pipe under the San Benito River, has the potential to impact the riparian habitat and the special-status species that utilize it. Special-status species that may occur in the willow riparian scrub along the San Benito River include San Joaquin whipsnake, western pond turtle, California red-legged frog, tricolored blackbird, western yellow-billed cuckoo, and white-tailed kite. The renovation of the DWTP, the installation of the pipeline to the IWTP, and the construction of the		(4) Regular surveys shall be done between when the exclusionary netting is put in place and the beginning of construction to ensure that no birds have managed to nest inside the exclusionary netting.	
		(5) If any active nests or bat roosts are found prior to construction, CDFG shall be consulted as to the appropriate measures to take to avoid impacting these species.	

Less than Significant = LTS

Significant = Si

Significant and Unavoidable - SU

BI = Beneficial

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
sprayfields have the potential to significantly impact the riparian zone.			(6) Construction shall take place as early as possible in the breeding season to reduce the possibility of hirds' nesting on the bridge prior to construction.	
		(b).	If the existing pipeline will be modified, or if a new pipeline will be installed under the San Benito River Channel, the following mitigation measures shall be necessary:	
			(1) To avoid impacting the willow riparian habitat along the San Benito River, as well as the special-status species potentially using this habitat, the riparian habitat shall be completely avoided during construction. Brightly colored construction fencing shall be installed at the border of the riparian habitat. Signs shall be posted on the fence explaining that the riparian zone is to be completely avoided. No equipment or any personnel shall enter the riparian zone, and no waste or fill produced by the construction activities shall be placed there. No construction activities or any groundbreaking activities shall take place in the riparian zone.	
1.4.5 Proposed pipeline routes cross jurisdictional waters of the U.S. Construction in jurisdictional waters could impair aquatic habitat.	51			LTS
The diversion of, fill of, release of sediment into, or release of recycled water into a water of the State or a water of the U.S. is considered a significant impact. In addition to the IWTP pipeline's crossing the San		(a):	If feasible, any pipeline that according to the current project plans will cross a jurisdictional dramage shall be re-routed to avoid the dramages.	
Benito River, the San Juan Oaks pipeline route crosses a creek north of the San Juan Oaks Golf Club. The placement of any pipelines (i.e. pipeline routes or smaller pipelines used to transport water from the main route to the sprayfields) over, through, or near jurisdictional waters may		(b)	If this is not feasible, the pipeline shall either be bored under the drainage or suspended over it in order to avoid impact. If the drainage is impacted during construction, CDPG shall be notified immediately.	
create a significant impact by altering the bank of the drainage up releasing sediment into the drainage. Either of these impacts can negatively affect the species using the drainages, particularly the anadromous fish that migrate up these drainages to spawn.		(c).	If it is not feasible for the pipeline to be drilled under the drainage or suspended over it, a streamhed alteration (1600's) agreement and a 404 permit shall be obtained. All permit conditions shall be implemented to ensure no net loss of wetlands or other jurisdictional waters.	
		(ď).	If it is not feasible to avoid a drainage then construction activities hall be confined to the dry, summer season in order to avoid adverse	

Significant = Si

Significant and Unavoidable = SU

Bl = Beneficial

NI = No Impact

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
----------------------	--	---------------------	---

impacts to water quality.

- (e) If any construction activities to install pipelines or sprayfields will occur close enough to a drainage that sediment or fill materials from the construction may enter the drainage, a SWPPP shall be necessary and the activities shall be conducted in accordance with Best Management Practices.
- (f) Riparian habitat shall be completely avoided during construction. Brightly-colored construction fencing shall be installed at the border of adjacent riparian habitat. Signs shall be posted on the fence explaining that the riparian zone is to be completely avoided. No equipment or any personnel shall enter the riparian zone, and no waste or fill produced by the construction activities shall be placed there. No construction activities or any groundbreaking activities shall take place in the riparian zone.

4.4.6 Construction of pipelines has the potential to harm special-status plant species in the annual grasslands along pipeline routes.

A significant amount of the project area is composed of grassland and pasture. These habitats have the potential to contain a number of special-status plant species, including: Congdon's tarplant, pink creamsacs, pinnacies buckwheat, round-leaved filaree, San Joaquin spearscale, and vernal harley. These species may be significantly impacted by construction activities (e.g. heavy equipment driving over the grassland; earthmoving) during the installation of the northwest, San Juan Oaks, and Airport pipeline routes.

SI

LTS

- (a) Where feasible when following a road or railroad line, the pipelines should avoid grassland or pasture habitat and minimize disturbance to native species by utilizing the side of the road that does not contain grassland or pasture.
- (b) If any construction activities must be conducted on potential habitat for a special-status species, a qualified botanist shall conduct a detailed species-specific survey prior to construction and during the identification period of the plant species in question (species that occur in grassland habitat are identified in Table 4.4-1). If no populations of special-status species are encountered in the construction area or within 20 feet of the construction area, no further mitigation is necessary.
- (c). If populations of a listed species are encountered, the City of Hollister and/or the SBCWD shall ensure that construction-related impacts are avoided or adequately mitigated by retaining a qualified botanist to develop and implement a Special-Status Plant Species Mitigation and Monitoring Plan. The Mitigation and Monitoring Plan shall be

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
----------------------	--	---------------------	---

prepared in consultation with the CDFG and shall be approved prior to any initial ground-disturbing activity or construction. This plan may include, but is not limited to, the following measures:

- (1) If feasible, t The project shall be redesigned to avoid direct and indirect impacts to the listed species.
- (2) The If the listed species occur within 50 feet of construction artivities, they shall be protected during construction by installing appropriate fencing around the special-status plant population, including a buffer of at least 20 feet.
- (3) If CDFG and local experts determine transplantation of the listed species is feasible, and the City of Hollister and/or the SBCWD elects to transplant the population. If this occurs, the botanist shall develop and implement a transplantation plan through coordination with the CDFG. Transplantation shall be used to supplement other mitigation measures or when avoiding the population is not feasible.

4.4.7 Construction activities necessary to install the pipelines may impact nesting birds.

Construction activities near a mest can cause the adult birds to ahandon the nest, causing the young to die. They can alternatively force the young to fledge too early, also resulting in death. It is therefore necessary to have a buffer region around all protected species' nests to ensure the successful fledging of the young. The loggerhead shrike is known to occur in the project area and may nest anywhere clumps of five or more mature trees occur. The white-tailed kite is also known to occur in the project area and may nest anywhere clumps of five or more mature trees of the following species occur: oak, willow, encalyptus, cottonwood, or other deciduous tree. The northern harrier, which was seen in various places in the project area by AES biologists, has the potential to nest in any grassland where the grass is more than 6 inches tall. The nest can be placed more than 100 feet from any road. The Nuttall's woodpecker, which was heard calling within the project area, has the potential to nest in any mature hardwood tree in relatively

(a) If feasible, conduct all tree and shrub removal, trenching, and grading

during the non-breeding season (see Table 4.4-2).

- (b) If construction activities are scheduled to occur within the buffer region (100 to 500 feet) of potential habitat for any of the species mentioned above, a qualified wildlife biologist (with knowledge of the species to be surveyed) shall be retained to conduct a species-specific nesting survey prior to the start of construction and within the appropriate habitat. The nesting surveys should be conducted within 1 week prior to initiation of construction activities that will occur during the breeding season. If no active nests are detected during these surveys, then no additional mitigation is required
- (c). If the survey determines that construction activities will be occurring in proximity to the buffer region of a protected bird species nest, a nodisturbance buffer shall be established around the site to avoid disturbance or destruction of the nest site until after the breeding

Significant = Si Significant and Unavoidable = SU El = Beneficial Less than Significant = LTS

Ni = No impact

LTS

SI

AES

TABLE 1-2
Summary of Impacts and Mitigation Measures

LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	season or after a qualified wildlife biologist determines that the young have fledged. Brightly colored fencing shall be erected around the buffer to prevent workers or equipment from entering the buffer area.	
	(d) If construction activities are scheduled to occur within an area that supports an active nest site or within an established no-disturbance buffer, construction shall be delayed until after the breeding season or until the young have fledged (as determined by the biologist).	
SI		LTS
	(a). A qualified biologist shall perform a pre-construction survey in accordance with the U.S. Fish and Wildlife Service (USFWS) kit fox survey protocol no more than 30 days prior to groundbreaking. This shall take place before the construction of the proposed pipelines to San Juan Oaks Golf Course and the Airport.	
	(b). If a den occupied by a single adult is discovered, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the biologist has determined that the den has been vacated.	
	(c) Workers shall be educated regarding the kit fox and shall be required to keep heavy equipment operating at safe speeds and check construction pipes and trenches for kit fox occupation during construction.	
SI		LTS
	implement Mitigation Measure 4.2.4 to comply with Waste Discharge Requirements issued by the RWQCB.	
	SIGNIFICANCE BEFORE MITIGATION	Significance Before Mingation season or after a qualified wildlife biologist determines that the young have fledged. Brightly colored fencing shall be erected around the buffer to prevent workers or equipment from entering the buffer area. (d) If construction activities are scheduled to occur within an area that supports an active nest site or within an established no-disturbance buffer, construction shall be delayed until after the breeding season or until the young have fledged (as determined by the biologist). S1 (a) A qualified biologist shall perform a pre-construction survey in accordance with the U.S. Fish and Wildlife Service (USFWS) kit fox survey protocol no more than 30 days prior to groundbreaking. Thus shall take place before the construction of the proposed pipelines to San Juan Oaks Golf Course and the Airport. (b) If a den occupied by a single adult is discovered, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the biologist has determined that the den has been vacated. (c) Workers shall be educated regarding the kit fox and shall be required to keep heavy equipment operating at safe speeds and check construction pipes and trenches for kit fox occupation during construction.

Significant = Si

Significant and Unavoidable = SU

6V = Beneficial

MI = No Impact

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.10 Elevated TDS levels in recycled water used on sprayfields that are developed in grassland and pasture habitats may have an adverse effect on special-status plant species occurring in or around the sprayfields.	SI		LTS
Sprayfields, including those proposed at the Hollister Municipal Airport, may be developed at locations where the existing habitat is composed of grassland and pasture. These habitats have the potential to contain a number of special-status plant species, including: Congdon's tarplant, pink creamsacs, pinnacles buckwheat, round-leaved filaree, San Joaquin spearscale, and vernal barley. High salt concentrations in recycled water can disrupt the normal functions of the roots in these plants and inhibit water and nutrient uptake.		(a) Any potential sprayfields in grassland habitat shall be surveyed for special-status plant species during the appropriate identification periods. If no special-status plant species are found within the sprayfield location, no further mitigation is necessary.	
		(b) If any special-status plants are found in a potential sprayfield site, one of the following mitigation measures shall be applied:	
		(1) If feasible, the water being used for the sprayfield shall be diluted to reduce the salinity to a concentration suitable for the special- status plant population. Local CDFG and USFWS offices shall be consulted to determine whether it is feasible to increase the water quality enough to not have a significant impact on the plant populations.	
		(2) If it is not feasible to use diluted water to irrigate the sprayfield, the project shall be redesigned to avoid direct and indirect impacts to the plant species. An appropriate buffer size shall be determined in consultation with CDFG, taking into account the size of the population, the species of plant being protected, and the topography of the area. No origation shall take place within this buffer.	
4.11 Construction of sprayfields may have an adverse impact on wetland habitats and special-status wetland species in the project area.	SI		LTS
The project site contains emergent wetlands, seasonal and perennial streams, forested wetlands, excavated wetlands, and artificial ponds.		(a). The City or its contractor shall maintain complete avoidance of the wetlands.	
These wetlands provide potential habitat for many different special-status species found in the area, including various fairy shrimp, the vernal pool tadpole shrimp, alkali milk vetch, hairless popcorn flower, saline clover, red-legged frog, and western spadefoot toad. Construction near or on wetlands, the deposition of sediment or fill in wetlands, or the take of any		(b). If construction within 100 feet of a wetland is necessary, a working buffer shall be put into place around the wetland. Brightly colored fencing shall be installed around the buffer to prevent workers, equipment, or fill from entering the buffer. Silt fencing shall also be used around the buffer to prevent silt or sediment from impacting the	
Less than Significant = LTS Significant = Si	Significant and	Unavoidable = SU B1 = Beneficial NI =	No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
special-status wetland species are considered significant impacts.			wetland.	
		(c).	If construction must take place within 100 feet of a wetland, the construction activities shall be limited to the dry season (June 1 to October 31) so as to avoid impacting wetland species.	
		(d).	The irrigation system shall avoid all wetlands with a 100-foot minimum buffer to ensure that no recycled water enters the wetlands as runoff or spray drift. The buffer shall be greater on slopes where there is a greater probability of the recycled water entering the wetland as runoff.	
4.4.12 Construction activities necessary to develop sprayfields may impact nesting birds.	SI			LTS
Construction activities near a nest can cause the adult birds to abandon the nest, or force the nestlings to fledge too early, causing the nestlings to die. It is therefore necessary to have a buffer region around all protected species' nests to ensure the successful fledging of the young. The loggerhead shrike is known to occur on the site and may nest anywhere clumps of five or more mature trees occur.		(a). Implement Mitigation Measure 4.4.8.	
4.4.13 Construction of sprayfields may damage American badger burrows or harm the American badger.	51			LTS
American badgers may exist in the grasslands and pastures within the project boundary. This species' burrows, if they occur, will likely be located in grasslands or pastures at least 100 feet from any road, railroad, or area that is frequently disturbed. Construction activities associated		(a).	A qualified biologist shall conduct a pre-construction survey in the construction area and in the 200-foot buffer region around the construction area. If no American badgers or dens are found, no further mitigation is necessary.	
with the sprayfields and pipelines extending from the main pipeline corridor to the sprayfields may impact this animal by damaging a den while a badger is in it or harassing badgers living in proximity to the construction activities.		no.	If occupied dens are found within 200 feet of planned construction activities, the dens shall be monitored to determine if they are occupied by a single adult badger or if they are natal dens.	
		(c).	If the den is not a natal den, the den may be destroyed when the adult has moved or is temporarily absent.	
		(d).	If the den is a natal den, a buffer zone of 200 feet shall be maintained around the den until a qualified biologist determines that the den has been vacated.	

Significant = SI

Significant and Unavoidable = SU

BI = Beneficial

M = No Impact

LEVEL OF SIGNIFICANCE SIGNIFICANCE ENVIRONMENTAL IMPACT BEFORE MITIGATION MITIGATION LEVEL OF SIGNIFICANCE SIGNIFICANCE MITIGATION MITIGATION MITIGATION

measures:

4.4.14 Construction activities in Western burrowing owl habitat may damage active burrows or harm the burrowing owls.

Western burrowing owls have been recorded in the area as recently as 2003. Ahandoned burrows large enough to be suitable for the owl were observed by AES biologists along the Airport and Freitas Road pipeline routes. Colonies of ground squirrels were observed in grasslands and pastures throughout the project site. Impacts to western burrowing owls are defined as disturbance within 160 feet of an occupied burrow during non-breeding season (September through January) or within 250 feet of an occupied burrow during nesting season, destruction of burrows or burrow entrances, or degradation of foraging habitat in the vicinity of occupied burrows.

SI

The second section of the second

- (a) A qualified biologist shall conduct a species-specific pre-construction survey no more than 30 days prior to the start of construction in accordance with CDFG's Staff Report on Burrowing Owl Mitigation (CDFG, 1995). If construction is delayed more than 30 days after the survey, another survey shall be performed no more than 30 days prior to the new groundbreaking date. The survey shall include the construction area and a 250-foot-wide buffer region around the construction area. If no active burrows or burrowing owls are discovered, no further mitigation is necessary. If active burrows are found, the City or its contractor shall implement the following
 - Occupied burrows shall not be disturbed during the breeding season (February 1 to August 31).
 - (2) When destruction of occupied burrows is unavoidable during the non-breeding season (September 1 to Junuary 31), unsuitable burrows shall be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a ratio of 2:1 on protected lands approved by CDFG. Newly created burrows will follow guidelines established by CDFG.
 - (3) If owls must be moved away from the project site during the non-breeding season, passive relocation techniques (e.g., installing one-way doors at burrow entrances) shall be used instead of trapping, as described in the CDFG guidelines. At least 1 week will be necessary to complete passive relocation and allow owls to acclimate to alternate burrows.
 - (4) If active burrowing owl burrows are found and the owls must be relocated, the City shall offset the loss of foraging and burrow habitat on the project site by acquiring and permanently protecting a minimum of 6.5 acres of foraging habitat per occupied burrow identified on the project site. The protected lands should be located adjacent to the occupied burrowing owl habitat on the project site or at another occupied site near the project site. The location of the protected lands will be

LTS

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES		LEVEL OF SIGNIFICANC AFTER MITIGATION
			determined in coordination with CDFG.		
4.4.15 San Joaquin Whipsnake.	SI				LTS
The San Joaquin whipsnake may occur in any of the grassland or pasture habitats in the vicinity of the San Benito River, where it is known to occur. The construction of pipelines for the sprayfields and the irrigation systems may significantly impact this species since earthmoving equipment has the potential to kill or injure this species.		(a)	A qualified biologist will conduct a pre-construction survey whipsnake habitat (any dry grassland or pasture habitat miles of the San Benito River channel) no more than 24 hor construction. If whipsnakes are found, a qualified biologist present during construction in the vicinity. The construction is resurveyed whenever there is a lapse in construction activities or more.	within 0.5 urs prior to st shall be a area will	
			If a San Joaquin whipsnake is encountered within the co- work area, construction activities must cease until the snake of the work area unassisted. Capture and relocation of a injured individuals may only be attempted by a qualified. The snake must then be translocated to a suitable habitat a construction area.	moves out rapped or biologist.	
4.16 Construction activities and elevated TDS levels in recycled water may impact the western/ northwestern pond turtle.	SI				LTS
The western/northwestern pond turtle is known to occur in the riparum zone of the San Benita River and in the northern part of the project mea		(a).	If feasible, no construction shall be done in riparian zones. Benito River or Tequisquito Slough.	of the San	
in Tequisquito Slough. The construction of pipelines for the sprayfields may significantly impact the western/northwestern pond turtle. Since the turtle is tolerant of brackish water, the recycled water should not significantly impact this species as long as the wetlands and ripurian habitats are avoided.			To avoid construction-related impacts on northwestern po- the City of Hollister and/or the SBCWD contractor wil qualified wildlife biologist to conduct a preconstruction storthwestern pond turtles no more than 48 hours before the construction. The wildlife biologist will look for adult ponduddition to nests containing pond turtle hatchlings and eggs.	l retain a survey for he start of	
		(c).	of a northwestern pond nartle is located in the construction stologist will move the turtle to a suitable equatic site, of construction area.	area, the utside the	
			If an active pond turtle nest containing either pond turtle hat eggs is found, the City of Hollister and/or the SBCWD w CDPG to determine and implement appropriate avoidance	ill consult	
Less than Significant = LTS Significant = SI	Significant and	lanus.	able = SU BI = Beneficial	-	No impact

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
			which may include a "no-disturbance" buffer around the next site until the hatchlings have moved to a nearby aquatic site.	
		(e).	No irrigation with recycled water shall occur within the riparian zone of the San Benito River or the Tequisquito Slough. Additionally, no recycled water shall be sprayed within 100 feet of any perennial wetlands in the project area.	

red-legged frog occurrence may significantly impact the frog. The California red-legged frog is known to occur in the project area near

the northern boundary and in the south, near the golf course. USFWS states that all suitable wetlands within one mile of a known California red-legged frog occurrence are considered potential habitat for the California red-legged frog and any construction or sprayfields within one mile of these wetlands is considered a significant impact unless it can be proven either that the red-legged frog does not occur in these wetlands or that the sprayfields will not have a significant impact on the California red-legged frog if the appropriate buffers are adopted. Since this species is considered threatened, additional mitigation is required beyond the mitigation already mentioned for wetland species.

- (a). If feasible, no construction activities shall occur within one mile of a known California red-legged frog occurrence
- (b). If the proposed construction and sprayfields are within one mile of a known California red-legged frog (CRF) occurrence, and suitable habitat may occur within one mile of the proposed construction and sprayfields, a focused habitat assessment shall be necessary prior to the beginning of construction. Once the habitat assessment has been completed, the appropriate assessment form shall be submitted with any supporting documentation to the appropriate USFWS office. If no suitable habitat is found within one mile of a known occurrence, no further mitigation is necessary.
- (c). Based on the information provided in the habitat assessment report, the FWS will provide guidance on how CRF issues shall be addressed. including whether protocol-level field surveys are necessary, when and where the field surveys shall be conducted, and whether incidental take authorization should be obtained through a Section 7 consultation or a Section 10 permit pursuant to the Endangered Species Act. The appropriate surveying time for CRF is January through September.
- (d). If protocol-level field surveys are deemed necessary for the site, a qualified biologist shall conduct a field survey for CRF according to USFWS protocols. The USFWS recommends a total of up to 8 surveys to determine the presence of CRF. Two-day surveys and four-night surveys are recommended during the breeding season; oneday and one-night surveys are recommended during the non-breeding season. Each survey must take place at least 11 days apart. The time

AES

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		Surveyors are guidelines pric and diseases. surveys are to (e-mail is app days of the id biologist shall	rat survey and the last survey must be at least six weeks, encouraged to implement USFWS decontamination or to surveying to prevent the spread of CRF parasites. If CRF are found during the surveys, no additional be conducted. The USFWS shall be notified in writing ropriate) of the presence of CRF within three working entification. Once the survey has been completed, the submit the survey results along with the biologist's to the USFWS.	
		sprayfields wi proposed spra USFWS requi modified accor- beginning of and/or San Be- and workers of	S determines that the construction and operation of Il have a less than significant impact on the CRF, the yfields shall be allowed to be put into effect. If the res the sprayfield plans to be modified, they shall be ording to the USFWS recommendations prior to the construction. It is encouraged The City of Hollister into County shall require that all machinery, equipment, bserve USFWS decontamination guidelines to prevent CRF parasites and diseases.	
4.4.18 The demolition of roosting sites for special-status bat species.	LTS			LTS
Three special-status bat species have the potential to occur on the project site. AES biologists identified abandoned and older buildings in and around the Airport that may serve as roosting sites for bats. The Proposed Project does not include the demolition of any potential roosting sites.			None required.	
4.4.19 Irrigating with recycled water at the San Juan Oaks Golf Club may impact the California tiger salamander due to the salamander's sensitivity to water-soluble toxins.	SI			LTS
The California tiger salamander (CTS) is known to occur on the eastern side of the San Juan Oaks Golf Club, traveling across golf course property between various wetland areas (including seasonal wetlands and artificial wetlands). Salamanders can absorb toxins through their skin, making them particularly sensitive to water-soluble toxins (e.g.		migration patts mile of a know	e in irrigation patterns can cause CTS to change their erns, no new sprayfields shall be developed within one on CTS occurrence. The recycled water shall only be where an irrigation regime has already been established	
Less than Significant = LTS Significant = SI	Significant and	Unavoidable ± SU	BI = Beneficial NII -	No limpact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
pesticides, heavy metals, treated effluent (estrogens), urban runoff and agricultural runoff). Additionally, CTS larval development can be impaired if the water the larvae are exposed to has high levels of nitrogen		 To avoid impacting CTS larvae, the irrigation systems shall be arranged so no recycled water shall enter CTS breeding ponds except in rare, incidental events. 	
and low levels of dissolved oxygen. The CTS may also be impacted by a change in irrigation patterns, since irrigating an area that was not previously being irrigated can cause the CTS to start migrating early. Migrating in the summer would cause the CTS to be exposed to high temperatures they are not able to tolerate.		c) The salinity of the water sprayed at the San Juan Oaks Golf Club shall not exceed 500 mg/L TDS.	
1.4.20 Construction activities may impact the coast range newt.	SI		1.TS
One population of coast range newt has been recorded within the project site near the San Juan Oaks Golf Club. This species migrates up to 0.6 miles over grasslands and pastures to their breeding ponds during		(a) To avoid impacts to the newts while migrating, construction of the pipeline route to the San Juan Oaks Golf Course shall occur during the dry season (June to October).	
breeding season (January through April). Construction of the pipelines and sprayfields during the local breeding season of this newt and within or near suitable breeding habitat, would be considered a potentially significant impact.		(b) If the construction of the pipeline must occur during the wer season when the newts may be migrating, the following mitigation measures shall apply:	
		(1) A biologist shall survey the area each morning before construction begins and move all coast range newts found within 25 feet of the construction zone to a suitable location outside of the construction zone.	
		(2) The construction area and trench shall be monitored for Coast Range newts while construction activities are occurring. If any coast range newts are found, a qualified biologist shall move them to a stritable location outside of the construction zone.	
		(3) Appropriate precautionary measures such as covering the trench at night shall be used to prevent the coast range newts from falling into the trench or hiding in the pipes.	

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.5 CULTURAL RESOUCES			
4.5.1 Construction of the proposed pipelines may disrupt a historical, archaeological, or unique paleontological resource, or disturb human remains, including those interred outside of formal cemeteries.	SI		LTS
A record search of the project area revealed that two National Register of Historic Places (NRHP)-eligible resources (P-35-302 and -304) are located adjacent to the proposed pipeline routes along San Juan Hollister Road, Wright Road and Mitchell Road. These structures are located more than 50 feet from the pipeline route along Wright Road and Mitchell Road, respectively, and will not be impacted by construction of the proposed pipeline alignment. Results of the field survey were negative; no prehistoric or historic resources were noted within the areas of direct impact for the proposed pipeline alignments. However, several residential structures that appear to be more than 50 years old were located adjacent to the pipeline route on Wright Road and Mitchell Road. Visual impacts to the setting of these historic structures will be temporary during the construction of the Proposed Project. Previously unknown subsurface cultural resources may be uncovered during construction activities. Resources, such as prehistoric sites associated with habitation by Native Americans, as well as historic buildings, structures or features may be present.		(a) In the event that any prehistoric or historic archaeological resources or paleontological resources are discovered during construction-related earth-moving activities, all work within 50 feet of the find shall be halted until the professional archaeologist can assess the significance of the find. If any find is determined to be significant by the archaeologist, then representatives of the City shall meet with the archaeologist to determine the appropriate course of action. All significant cultural materials recovered shall be subject to scientific analysis, professional curation, and a report prepared by the professional archaeologist according to current professional standards. If human remains are discovered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the coroner determines that no investigation of the cause of death is required and if the remains are of Native American origin, the coroner will notify the Native American Heritage Commission, which will notify a Most Likely Descendant (MLD). The MLD is responsible for recommending the appropriate disposition of the remains and any grave goods.	
4.5.2 Construction of the proposed upgrades to the DWTP may disrupt a historical, archaeological, or unique paleontological resource, or disturb human remains, including those interred outside of formal cemeteries.	SI		LTS
Results of a record search and field survey of the DWTP project area were negative; no prehistoric or historic resources were noted within the areas of direct impact for the Proposed Project. Previously unknown subsurface cultural resources may be uncovered during construction		Implement Mitigation Measure 4.5.1	
Less than Significant = LTS Significant = SI	Significant and	Unavoidable = SU SI = Beneficial Mi =	No Impact

1-47

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANC AFTER MITIGATION
activities. Resources such as prehistoric sites associated with habitation by Native Americans, as well as historic-period features, may be present.			
5.3 Construction of the proposed Hollister Airport and San Juan Golf Club project locations may disrupt a historical, archaeological, or unique paleontological resource, or disturb human remains, including those interred outside of formal cemeteries.	SI		LTS
Results of a record search and field survey of the Hollister Airport and San Juan Oaks sprayfield project areas were negative; no prehistoric or historic resources were noted within the areas of direct impact for the Proposed Project. Ground disturbing activities at the sprayfield location will be conducted within the limits of existing disturbance. Previously unknown substracte cultural resources may be uncovered during construction activities. Resources such as prehistoric sites associated with habitation by Native Americans, as well as historic-period features, may be present.		Implement Mitigation Measure 4.5.1.	
.6 HAZARDOUS MATERIALS AND PUBLIC HEALTH AND SAFETY			
6.1 Construction of the proposed City of Hollister DWSI Project would involve the use and storage of hazardous materials such as gasoline and diesel fuel in addition to solvents, hydraulic fluids and oils, paints, etc.	SI		LTS
During grading and construction it is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, and hydraulic fluid, would be brought on site. Various contractors for fueling and maintenance purposes would likely use temporary bulk aboveground storage tanks as well as storage sheds/trailers. As with any liquid and solid, during handling and transfer from one container to another, the potential for an accidental release exists. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose a hazard to both construction employees and the environment. Although typical construction transgement practices limit and often eliminate the impact of such accidental releases,		(a) The City of Hollister shall ensure through the enforce contractual obligations that all contractors transport, store, an construction-required hazardous materials in a manner consist relevant regulations and guidelines, including those recommendationed by the City of Hollister Fire Department and the Sa County Fire Protection District. Recommendations may include not limited to, transporting and storing materials in appeared approved containers, maintaining required clearant handling materials using approved protocols. (b) The City of Hollister shall ensure through the enforce	d handle tent with nded and in Benito lude, but propriate ces, and
ess than Significant = LTS Significant = SI			

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
the potential exists, with the temporary on-site storage of hazardous materials, that a significant release could occur		contractual obligations that all contractors immediately control the source of any leak and immediately contain any spill utilizing appropriate spill containment and countermeasures. If required by the Fire Department or other regulatory agency, contaminated media shall be collected and disposed of off site at a facility approved to accept such media.	
4.6.2 Construction activities conducted during the dry season in and around dry grasses pose a fire hazard.	SI		LTS
Equipment used during grading and construction activities may create sparks, which could ignite dry grass on the project site. During construction, the use of power tools and acetylene torches may also increase the risk of fire hazard.		(a). During construction, staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak.	
		(b) Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws.	
4.6.3 During site grading and excavation phases, contaminated soil and/or groundwater could be encountered.	SI		LTS
Construction of the Proposed Project could result in the disturbance of contaminated soil and/or groundwater. A Hydrogenlogic Assessment for the proposed DWTP site found soil and groundwater contamination extends beneath the southern edge of the DWTP. The contamination plume is due to previous hazardous materials involvement at the adjacent Former Whittaker Ordnance Facility.		If contaminated soil and/or groundwater is encountered or if suspected contamination is encountered during project construction, work shall be halted in the area, and the type and extent of the contamination shall be identified. A qualified professional, in consultation with regulatory agencies (Regional Water Quality Control Board, State Department of Toxic Substance Control, or San Benito County) shall then develop an appropriate method to remediate the contamination. If necessary, the City of Hallister shall implement a remediation plan in conjunction with continued project construction.	

Significant = SI

Significant and Unavoldable = SU

BI = Béneficial

N = No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.6.4 The proposed reservoir could be susceptible to structural failures from flooding, seismic events, and design flaws. In the event of a failure, the treated effluent could be released, which could cause flooding hazards and possible loss of life and property.	LTS		LTS
A seismic event could cause the failure of the seasonal storage reservoir causing tertiary treated recycled water to flow into the San Benito River. The potential for seismic failure is addressed in Impact 4.2.3. In the event of a failure of the reservoir dam, the water from the reservoir will drain away from neighboring residential structures and into the San Benito River. The location of the reservoir will allow the water to flow from the reservoir into the San Benito River, therefore minimizing the risk of loss of life and property as a result of a failure.		None required.	
4.6.5 Construction and excavation activities required for the development of the proposed recycled water pipelines, spray fields, potential off-site storage basin, and evaporation ponds in Phase II could involve the use and storage of hazardous materials such as gasoline and diesel fuel in addition to solvents, hydraulic fluids and oils, paints, etc. Excavation could also expose natural gas pipelines and other underground utilities. This would be a potentially significant impact.	SI		LTS
During grading and construction it is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, and hydraulic fluid, would be brought on site. Various contractors for fueling and maintenance purposes would likely use temporary bulk aboveground storage tanks as well as storage sheds/trailers. As with any liquid and solid, during handling and transfer from one container to another, the potential for an accidental release exists. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose a hazard to both construction employees and the environment.		(a) The agency with project approval authority shall ensure through the enforcement of contractual obligations that all contractors transport, store, and handle construction-required hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the City of Hollister Fire Department and the San Benito County Fire Protection District. Recommendations may include, but are not limited to, transporting and storing materials in appropriate and approved containers, maintaining required clearances, and handling materials using approved protocols.	
		(b) The agency with project approval authority shall ensure through the enforcement of contractual obligations that all contractors immediately control the source of any leak and immediately contain any spill utilizing appropriate spill containment and countermeasures.	

Significant = 81

Significant and Unavoidable = SU

Bi = Beneficial

MI = No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		If required by the Fire Department or other regulatory agency, contaminated media shall be collected and disposed of off site at a facility approved to accept such media.	
i.6.6 During excavation of the sprayfields and pipelines, the possibility exists that underground utilities and pipelines could be encountered. An explosion, fire, and loss of life could result if an underground utility or gas line is ruptured from excavation equipment.	SI		LTS
During excavation of the sprayfields and pipelines, the possibility exists that underground utilities and pipelines could be encountered. An explosion, fire, and loss of life could result if an underground utility or gas line is ruptured from excavation equipment.		In order to prevent incidental rupturing of underground utilities and pipelines thating excavation, underground services after (USA) will be notified to mark and map any underground utilities that are located along the pipeline alignment. The agency with project approval authority or construction contractors through contractual obligations with the agency with project approval authority will notify USA one week prior to the beginning of excavation activities, or within an appropriate timeline so the entire pipeline alignment can be properly surveyed in order to minimize the risk of exposing or damaging underground utilities.	
.6.7 Operation of the Proposed Project would involve the use and bulk storage of hazardous materials.	LTS		LTS
The Proposed Project would require the storage of sodium hypochlorite, acid, sodium hydroxide, and diesel fuel on site in bulk quantities. Protection storage systems, sodium hypochlorite and diesel fuel, and mixed small quantities of solvents and other chemicals used at the DWTP would be regulated under the Hazardous Materials Release Response Plans and Inventory Law (HMRRPIL) of 1985, which requires that a Hazardous Materials Business Plan be prepared for tracking hazardous materials use storage, and that generation and emergency response plans be prepared in the event of the release or threatened release of a hazardous material. All hazardous materials use, storage, and generation would be tracked and documented as a requirement of the HMRRPIL. Bulk hazardous wastes would not be stored on site and would be removed quarterly by a certified recycler or a properly licensed hazardous waste transporter. In the event of an accidental release, the		None required.	
Less than Significant = LTS Significant = SI	Acres 7 de	Unavoidable = SU Bl = Beneficial MI -	

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
emergency response plan would provide emergency responders with a protocol for containing and disposing of the unintentional release.				
6.6.8 Operation of the proposed DWTP would require hazardous materials deliveries, particularly of liquid sodium hypochlorite, on a schedule of every 10 days during the summer reclamation season.	LTS			LTS
Hazardous materials delivered in bulk by trucks would be transported to the DWTP by licensed transporters and would require special vehicles with cargo containers designed to withstand impacts as a result of a typical highway accident. Deliveries of hazardous materials, whenever possible, would be routed around existing residential areas. All deliveries of bulk hazardous materials will enter the City of Hollister DWTP via State Route 156 and San Juan Road, avoiding residential areas. This excludes septage trucks that are less likely to avoid residential areas.			None required.	
4.6.9 Operation of a recycled water system could possibly result in the ingestion of recycled water by the public, or some other form of unacceptable exposure as supported by scientific literature.	51			LIS
The long-term use of recycled water for sprayfield irrigation could raise public health concerns for potential users and the community. The Proposed Project would be required to comply with regulations dictating the production, monitoring, and distribution of recycled water, which have been established by the California Department of Health Services (DHS) and the Regional Water Quality Control Board (RWQCB) to assure public health protection. The California wastewater reclamation		(A)	A recycled water use permit, including a monitoring program, shall be developed by the City of Hollister in conjunction with San Benito County Water District (SBCWD). The City shall implement appropriate measures designed to protect public health and monitor the water quality of recycled water that will be used for irrigation. The following measures shall be developed in conjunction with the RWQCB and SBCWD.	
criteria in Title 22, as established by the DHS, have been determined to provide a high degree of health protection, particularly for non-potable uses (Crook, 1991). The use of recycled water for irrigation is readily			 The treatment, storage, distribution, or reuse of recycled water shall not create a misance. 	
practiced, and based on available evidence from studies, it can be concluded that for non-potable uses, the public health risk associated with exposure to treated recycled water that meets California reclamation			(2) No recycled water used for irrigation shall be applied during periods of rainfall or when soils are saturated such that runoff is likely to occur.	
standards is negligible. However, mitigation should be considered to unsure compliance with California reclamation standards.			(3) No recycled water used for irrigation shall be allowed to escape to areas outside the designated use areas by	

	TABLE 1-2 Summary of Impacts and Mitigation Measures			
ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION	
		surface flow or by airborne spray		
		(4) Recycled water shall not be applied to park, course, or landscape areas in such a manner or at times that may expose golfers, picnickers, individuals, picnic tables, or food and drinking of to airborne spray droplets.	such other	
		(5) Spray, mist, or runoff of recycled water shall not a dwelling, food handling facility, or place when public may be present. The recycled water shall contact any drinking fountain.	re the	
		(6) Recycled water shall not be used as a domest animal water supply.	tic or	
		(7) There shall be no cross-connections between	the the	

- (7) There shall be no cross-connections between the potable water supply and pipes containing recycled water.
- (8) The permit holder and users shall provide employee training to assure proper operation of reclamation facilities, worker protection, and compliance with the RWOCB order.
- (9) Piping, valves, and outlets shall be color-coded and marked to differentiate recycled water from domestic or other water, and all recycled water controllers and valves shall be affixed with recycled water notification signs.
- (10) The permit holder and users shall make necessary provisions to inform the public that the liquid being distributed is recycled water and is unfit for human consumption.
- (11) Recycled water lines shall be separated from potable water lines by 10 fees in a horizontal direction and one foot in a vertical direction, with the potable line at the higher elevation.
- (12) Potable water services to each site shall be protected

TABLE 1-2 Summary of Impacts and Mitigation Measures

	LEVEL OF
- 0	SIGNIFICANCE
ENVIRONMENTAL IMPACT	BEFORE
	MITIGATION

MITIGATION MEASURES

LEVEL OF SIGNIFICANCE AFTER MITIGATION

with an approved reduced-pressure principal techflow prevention valve or similar device.

- (13) No hose bibs shall be used on recycled water systems.
- (14) Specific pressure or dye tests shall be performed to verify that no cross-connections exist between the recycled water and potable water systems.
- (15) The permit holder shall comply with the self-monitoring program as adopted by the RWQCB (i.e., including start-up inspection of each site by the City and DHS and continued area inspections and monitoring of the golf course, sprayfields, irrigation sites, and pipelines to be implemented by the City).
- (16) The self-monitoring program shall requirements for reporting, sampling, analysis, and use observations. Water quality monitoring of recycled water shall be conducted for all parameters required under Title 22 Wastewater Reclamation Criteria, including coliform, turbidity, chemical-biological oxygen demand (BOD), dissolved oxygen (DO), dissolved sulfides, pH adjustment, and chlorine dose. In addition, flow rate measurements and standard observations at user sites and impoundment facilities shall be conducted. Water quality monitoring shall be reported to the RWQCB as required Additional water quality analysis beyond what is required by Title 22 requirements shall be implemented if included as part of other permit requirements. Implementation of waste discharge requirements (WDRs) and the selfmonitoring program would provide a continuous, ongoing system for tracking treatment plant effectiveness and assuring protection of public health and water quality.

In addition to the above measures, the City shall be responsible for evaluating the public health suitability of individual user sites for recycled water irrigation. The following information shall be

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		considered with respect to the specific user sites:	
		 The ability to apply unrestricted use water (i.e., disinfected tertiary treated wastewater) on the site. 	
		 The depth to groundwater at the site (i.e., irrigation should not be performed in areas where the groundwater table is less than 10 feet from the ground surface). 	
		 The soil type and permeability at the site (i.e., permeability should be sufficient to prevent ponding of irrigation water but would allow irrigation water to pass through the root zone slowly enough that nitrate can be absorbed by the plants). 	
		The proximity of the site to domestic use wells (i.e., irrigated areas shall be kept completely separate from domestic water wells or reservoirs and buffer zones shall be maintained between areas irrigated with recycled water and domestic wells, as required and approved by the DHS and the RWQCB).	
		 The ability to control surface water runoff at the site (i.e., steep sites and sites with little to no surface vegetation 	

- would be poor candidates for recycled water irrigation).
- The amount of vegetative cover at the site (i.e., sites with substantial vegetative cover and high water and nitrogen uptake rates would be advantageous for irrigation with recycled water).
- The amount of water consumption at the site (i.e., sites with demonstrated high water demand and flexible daily and seasonal irrigation requirements would be advantageous for irrigation with recycled water).
- The proximity of the site to sensitive surface features (i.e., sites within close proximity to surface streams, lakes, or ponds that could be affected by runoff from recycled water irrigation would be less desirable)
- The proximity of the site to places of public gatherings

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
----------------------	--	---------------------	---

(public parks, etc), eating or harbecue areas, and drinking fountains.

- The crop type on the site (i.e., crops or landscape plants with a high tolerance for accumulated salts and high water and nitrate uptake rates would be considered advantageous).
- The existing irrigation system at the site (i.e., would a drip irrigation system be considered advantageous over spray irrigation due to the reduced potential for public exposure).
- Regulations contained in Title 17 of the CCR specify requirements to prevent contamination of the potable water supply through crossconnection with any non-potable water system. In accordance with these regulations, all newly installed recycled water pipes constructed as part of the Proposed Project shall be labeled and color-coded purple to distinguish them from potable water pipes. Other measures, including the use of backflow prevention devices on potable water systems, shall be employed to prevent cross-connection with the potable system. Backflow prevention assemblies shall be approved for use by the California Department of Health Services, as indicated by the Division of Drinking Water and Environmental Management.

In addition, the RWQCB's Water Reuse Requirements, as discussed in 4.7.6(h) above, would prohibit any cross-connection between potable water supply and piping containing recycled water. The requirements would also likely specify that supplementing recycled water with water used for domestic supply shall not be allowed except through an air-gap separation, and an air-gap or reduced pressure principle backflow device shall be provided at all domestic water service connections to recycled water use areas. Compliance with these regulations during design and construction of the recycled water distribution system would prevent any potential for cross-connection between the potable water system and the proposed recycled water system. Therefore, there would be no possibility of direct ingestion of recycled water through pipeline cross-connections.

(c) The City of Hollister shall develop an ongoing public information

	ENVIRONMENTAL IMPACT	Summary of Impacts an LEVEL OF SIGNIFICANCE BEFORE	Mitigation Measures Mitigation Measures	LEVEL OF SIGNIFICANCE
P		MITIGATION	pungram regarding the use of recycled water for irrigation. In addition	AFTER MITIGATION
			to notifying the public of the proposed changes in water supply sources for various designated uses, the program shall provide ongoing information regarding construction status, start dates and locations of recycled water operations, agency coordination efforts, water quality, and public health safeguards (such as compliance with applicable standards and opening monitoring). The City shall be	

4.6.10 Operation of sprayfields at the Hollister Airport and vicinity could result in aviation safety hazards associated with a potential increase in wildlife and birds, and deterioration of runway surfaces, and potential detrimental effects to aircraft.

The development of sprayfields at the Hollister Airport could increase the density and duration of vegetation in the airport vicinity as a result of constant irrigation and water supply during months that typically receive limited rainfall. This grass could attract deer or other forms of wildlife as 2 potential food source. These animals could cross runways and endanger aircraft safety. Possible irrigation overspray adjacent to active runways could lead to standing water. This standing water could create an environment that is attractive to birds, resulting in further aircraft safety hazards. Irrigation overspray could also cause deterioration of runway surfaces and potentially detrimental effects to aircraft.

Additionally, the location of irrigation equipment and infrastructure

51

LTS

(a) Consult with the Federal Aviation Administration and the San Benito County Airport Land Use Commission, and the State of California Department of Transportation Division of Aeronautics to ensure that the sprayfield will be compatible with airport operations.

responsible for notifying designated users of recycled water and providing information regarding recycled water quality, signage. plumbing, cross-connection, and public health issues. Information to site users shall be provided to assist them in site-specific water quality management, and information to the general public shall assure them of public health protection. In addition, signs shall be posted at all

More detailed and specific education programs shall be provided to persons handling recycled water or who may be exposed to it, such as treatment plant workers, landscape managers and gardeners, firefighters, etc., to inform them of necessary public health precautions

user sites indicating the use of recycled water.

associated with handling recycled water.

- (b) The full perimeter fence that surrounds the airport property shall be inspected weekly by airport personnel to ensure the integrity of the fence. This shall prevent large wildlife such as deer from entering the property.
- (c) In order to prevent the attraction of birds, sprayfield operation and watering cycles will be such that standing water is kept to a

25 feet of the runway will utilize a subterranean irritation will eliminate the potential for wind driven overspray, ensure deterioration of runways surfaces would not occur r damage. quipment will have breakaway risers. ce with FAA regulations, a Wildlife Habitat Plan shall be not submitted to the FAA for teview and approvalution of this plan on the airport property shall ensure reds do not occur associated with damaged runways from poles or the attraction of raptors. The City of Hollister in
will eliminate the potential for wind driven overspray, ensure deterioration of runways surfaces would not occur r damage. quipment will have breakaway risers. the with FAA regulations, a Wildlife Habitat Plan shall be not submitted to the FAA for teview and approval, then of this plan on the airport property shall ensure reds do not occur associated with damaged runways from
nce with FAA regulations, a Wildlife Habitat Plan shall be and submitted to the FAA for review and approvalution of this plan on the airport property shall ensure risk do not occur associated with damaged runways from
nd submitted to the FAA for teview and approval. tion of this plan on the airport property shall ensure rds do not occur associated with damaged runways from
n with airport staff shall be responsible for tion of the Wildlife Habitat Plan.
oblister shall prepare and implement a salt concentrate posal plan. The plan shall include semi-annual testing of nonitor heavy metals and other hazardous constituents, identify operational procedures for the removal of would ensure the safety of workers and potentially along uses.
LTS
ation Measure 4.3.8, which requires the completion of a od Water Balance Plan. The plan includes the completion studies for the DWTP and IWTP storage facilities, and of safeguards to ensure that resurfacing does not occur.
ric c

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

MITIGATION MEASURES

LEVEL OF SIGNIFICANCE AFTER MITIGATION

the abandonment of Pond 2, which currently provides storage capacity, andmonal storage capacity at the DWTP would be required for storage of treated effluent during the winter months. Additional storage would be provided by utilizing Emergency Storage Basins 1 and 2 at the DWTP site and by increasing diversions of municipal wastewater to the IWTP for treatment and disposal. However, it is uncertain that adequate disposal capacity will be available during the construction process.

Safeguards include lining the proposed DWTP seasonal storage reservoir, minimizing or eliminating the additional domestic effluent treatment and disposal at the IWTP, and the identification of additional disposal capacity through the development of sprayfields or recycled water projects.

4.7.2 The Proposed Project would require the disposal of biosolids and salt concentrate generated by the development of evaporation ponds. The improper disposal of biosolids and salt concentrate could result in degradation to soil or water resources.

It is estimated that the MBR process will generate approximately 12,400 pounds dry weight of solids per day at the design flow of 5.0 MGD. A number of facilities located outside San Benito County are permitted to accept biosolids. The closest landfill that accepts biosolids or sludge is the NORCAL Waste Systems Pacheco Pass landfill located in Gilroy, approximately 19 miles north of Hollister. This facility is a Class III landfill with a maximum throughput of 1,000 tons per day. The estimated closure date of this facility is 2104.

Evaporation ponds that could be developed as a component of the Salt Management Program in Phase II of the Proposed Project would produce approximately 3,000 cubic yards of salt concentrate per year. Salt concentrate that does not exceed hazardous waste criteria for heavy metal concentration and conforms to maximum moisture content levels and other requirements could be disposed of at the Kirby Canyon Landfill.

In the event that salts exceed hazardous waste levels, they would need to be handled and disposed of at a landfill that accepts hazardous waste. The Chemical Waste Management Inc. Landfill, located near Kettleman City approximately 135 miles away, is the nearest landfill that accepts hazardous materials. This landfill is a Class I facility. These facilities have sufficient capacity and therefore, the disposal of salt concentrate is not expected to result in significant impacts to landfill capacity.

SI

LTS

In accordance with AB 939 and to the extent feasible, the City shall put the stabilized biosolids generated at the DWTP to beneficial use. Biosolids may be used as a soil amendment and fertilizer for agricultural lands and as a landfill cover material. Spreading properly treated biosolids on orchards, pasture, and farmland can increase crop yields and improve the soil's ability to retain moisture, thereby reducing irrigation requirements. The beneficial reuse of biosolids will decrease the amount of waste diverted to landfills. If land application of biosolids is to take place, the City shall obtain necessary approvals from the Department of Health Services and the RWQCB.

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.7.3 The construction of pipelines could result in the disruption of existing utility lines during construction.	ŠI		LTS
Water, sewer, storm drain, natural gas, electric, (elephone, and television cables and other pipelines are potentially located within the proposed project pipeline routes. The proposed pipelines would run parallel to or cross over or under many of these utility lines. The construction of a new pipeline as part of the Proposed Project could result in temporary planned or accidental disruption of existing utility lines. In most cases, impacts to utilities and services would be temporary.		Implement Mitigation Measure 4.6.6, which requires that the underground services alert (USA) be notified to mark and map any underground utilities that are located along the pipeline alignment.	
4.7.4 The Proposed Project may indirectly increase the use of groundwater for municipal purposes to supply future growth in the Hollister DWTP Service Area. Increased use of groundwater could result in decreased groundwater levels near municipal wells. The decrease in water levels could impact municipal wells by increasing pumping costs.	LTS		LTS
The Proposed Project would expand the wastewater treatment and disposal capacity in the Hollister DWTP Service Area. This expanded capacity would accommodate growth projected to occur in the 2005 City of Hollister General Plan. This growth would increase demand an municipal water suppliers including the City of Hollister and SCWD.		None required.	
Impacts to municipal wells were analyzed for Phase I and Phase II conditions by simulation. In Phase I, groundwater levels would lower near municipal wells and would slightly increase pumping costs. However, the amount of lowering is small compared to the range of water level variation associated with cycles of drought and wet periods. In Phase II the effects on groundwater levels are similar to but proportionally larger than those of Phase I. If City of Hollister and SCWD were to meet all future increases in demand with groundwater, it is very likely that additional wells would be installed for that purpose. This would tend to decrease the amount of water level depression that would occur near existing manicipal wells, which would lessen the impact on nearby well operators.			

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
2.7.5 During Phase I, to supply some recycled water projects, recycled water from the DWTP would be blended with CVP water to reduce TDS levels. During critically dry years, CVP water may not be available. This could result in the inability to utilize recycled water for some projects, which could result in insufficient disposal capacity and could potentially result in an emergency release of treated effluent.	SI		LTS
Blending of treated effluent from the DWTP with CVP water is proposed for recycled water use at San Juan Oaks Golf Club to meet TDS requirements for sensitive grasses on golf course greens. The development of other sprayfields and recycled water projects may also require blending to suit specific crops. As a result of blending requirements, a significant shortfall in the availability of CVP water could result in a proportional reduction in the amount of recycled water able to be utilized. This could result in insufficient disposal capacity for DWTP treated effluent and an emergency release of treated effluent. A release could occur at the DWTP if storage capacity is insufficient to contain treated effluent that could not be disposed by recycled water projects. Based on recent deliveries, it is expected that during normal years sufficient CVP water would be available for blending. However, during critically dry years, it is possible that no CVP water would be provided to the SBCWD for agricultural purposes. This could prevent the ability to dispose of recycled water at sites requiring blending.		Implement Mitigation Measure 4.3.8(b), which identifies the completion of a Comprehensive Effluent Disposal Plan. This plan will include an Annual Operation Water Balance that will address the availability of CVP water.	
8 AIR QUALITY			
.8.1 Short-term construction activities associated with the Proposed Project would result in the generation of ROG, NO _X , and PM ₁₊ emissions.	SI		LYS
Short-term construction emissions of the DWTP portion of the Proposed Project would be associated primarily with demolition of an existing wastewater storage basin and the construction of additional facilities for the membrane treatment system. The primary emission sources related to these construction activities would include construction worker vehicle trips, stationary fuel combustion driven equipment, and mobile construction equipment. In addition, site preparation, including		Construction and site grading activity would result in PM ₃₀ -containing fugitive dust potentially in exceedance of the PM ₁₀ significance threshold. Therefore, implementation of the measures listed below would control fugitive dust generation during construction and site grading. Implementation of these measures would ensure that construction-related fugitive dust emissions are minimized. No mitigation measures are needed for exhaust PM10, ROG and NOx because no significance thresholds will	
Less than Significant = LTS Significant = SI			

October 2006

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

MITIGATION MEASURES.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

excavation, grading, grubbing, and trenching would be required, resulting in fugative dust emissions. Unmitigated construction emissions from the Proposed Project would have the potential to cause significant temporary emissions of PM₁₀.

be exceeded. However, mitigation has been identified to reduce these emissions. The following measures would reduce the ROGs, NOx, and PM₁₀ emissions from construction activities:

- (a) Preserve existing vegetation to the maximum extent feasible.
- (b) For projects that exceed the threshold limits established by the Monterey Bay Unified Air Pollution Control District (currently 2.2 acres of disturbance or 82 lb/day), a dust abatement program shall be implemented. A person or persons shall be designated to oversee the implementation of the dust abatement program.
- (c) Water all exposed soil, material piles, and dirt roadways with adequate frequency to keep soil moist at all times.
- (d) Cover all haul trucks.
- (e) Sweep paved roads that collect tracked soil from exiting construction site vehicles.
- (f) Stabilize the construction site entrance by either paving the entrance or laying gravel.
- (g) Hydroseed or landscape all exposed and disturbed surfaces as soon as feasibly possible.
- (h) Prohibit all grading activities during periods of high wind (over 15 mph).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- (j) Haul trucks shall maintain at least 2 feet of freeboard.
- (k) Cover inactive storage piles.
- (I) Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District shall be visible to ensure compliance with Nuisance Rule 402.

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		(m) Limit the area under construction at any one time.	
		 (n) Construction equipment shall be adequately muffled and maintained. 	
		(n) Use of aqueous diesel fuel.	
		(p) Use of cooled exhaust gas recirculation	
		(g) Use of lean-NOx catalysts.	
i.8.2 Short-term construction activities associated with construction of the recycled water pipelines and disposal areas would result in the generation of ROG, NO _X , and PM ₁₀ emissions.	st		LTS
Short-term construction emissions from construction of the recycled water lines and sprayfields associated with the Proposed Project would be associated primarily with the construction of the recycled water pipelines including necessary trenching and repaying activities. Unmitigated construction emissions from the disposal portion of the Proposed Project would have the potential to cause significant temporary emissions of PM ₁₀ .		Implement Mitigation Measure 4.8.1	
.8.3 Operation of the proposed DWTP would generate mobile-source and stationary-source criteria air pollutants.	LTS		LTS
The Proposed Project would be required to comply with District Rule 216, which requires that new or modified wastewater treatment facilities are consistent with the adopted Air Quality Management Plan (AQMP). Operational criteria air pollutant emissions would primarily occur through the use of employee (treatment plant operators) vehicles and associated commute trips. CO, ROG, NO _X , and PM ₁₀ emissions would not exceed their respective significance thresholds and, consequently, operation emissions would not be considered significant.		None required.	
Additionally, operation of the DWTP would require the transportation of biosolids to an off-site location for disposal. Biosolids would be transported off-site when the storage capacity at the plant is reached. Maximum capacity at the plant is expected to occur every 16 years, and would generate approximately 17,805 tons of solid waste. Assuming an			
Less than Significant = LTS Significant = SI	Significant and Unav	oidable = SU Bi = Beneficial NI =	No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
everage truck load of 15 tons, disposal would require 1.187 truck trips. Vehicular emissions resulting from the disposal of biosolids were quantified. It was projected that ROG, NO _N SO _N and PM ₁₀ emissions resulting from the disposal of biosolids would not exceed their respective significance thresholds. Therefore impacts would be less than significant.			
8.4 Operation of the Proposed Project would potentially result in the increase of emission of toxic air contaminants.	LTS		LTS
Emission of toxic air contaminants would primarily result from the volatilization of contaminants present in sewage as it is processed through the treatment train. Therefore, emissions of toxic air contaminants are primarily the function of what is entering the sewer system. Although the treatment of wastewater and/or the activities associated with the treatment of wastewater would likely emit known toxic air contaminants (such as chlorine), the impact is considered less than significant, because the emissions in municipal sewage are typically at extremely low concentrations. Given the proposed Hollister DWTP's service area and source of influent, toxic air contaminant loadings are estimated to be small, and resultant emissions of little risk to human health or the environment. Operation of the wastewater facilities also requires compliance with District Rule 216, which requires that new or modified wastewater treatment facilities conduct a toxic risk assessment and be consistent with the adopted AQMP.		None required.	
8.5 The Proposed Project would increase the capacity of the wastewater treatment facility, which would potentially increase the generation of objectionable odors in the project vicinity.	LTS		LTS
Odor, especially those emissions comprised of malodorous compounds, is typical of activities associated with the treatment of municipal wastewater. The Proposed Project would increase the DWTP's treatment capacity thereby increasing the volume of wastewater and potential odorgenerating activity. According to the existing DWTP Permit to Operate, the permit is conditional upon the ability of the DWTP to operate without the discharge of objectionable odors that would constitute a public nuisance.		Nune required.	
ess than Significant = LTS Significant = SI	Significant and Unavoidable = SU	Bi = Beneficial	Ni = No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
These are scattered rural residences in the vicinity of the DWTP. However, a record of odor complaints from the past three years indicates that there have been no odor complaints associated with the DWTP site. The Proposed Project would include the addition of an odor control biofilter. This includes a new pretreatment facility that will be designed to be fully enclosed with all open channels covered with removable checkered plates or with a concrete decking to help contain odors inside the gnt chamber and fine screen areas. Additionally, the biofilter's grit washer and screenings washer/compactor areas, along with their associated dumpsters, will be enclosed in a building. Foul air will be collected from the airspace of the pretreatment structures and from the grit washer and screenings building. The foul air will be deodorized by a odor control biofilter that would consist of a packaged synthetic media biofilter. The septage receiving station would utilize the existing odor control biofilter located at the influent pump station to remove odors.			
.8.6 The Proposed Project would transport disinfected tertiary treated recycled water through pipelines to sprayfields for disposal.	LTS		LTS
Odor, especially those emissions comprised of malodorous compounds, is sometimes associated with treated wastewater. The construction of an effluent pipeline and the application of the disinfected tertiary treated recycled water to the sprayfields would have the potential to create an odor impact. However, disinfected tertiary treated recycled water would have very little odor.		None required.	
1.8.7 The Proposed Project would transport disinfected tertiary treated recycled water through pipelines to the IWTP for disposal.	LTS		LTS
Currently, odor impacts resulting from the diversion of untreated domestic wastewater to the IWTP are being addressed through implementation of mitigation measures recommended in the EIR completed for the IWTP to DWTP diversion project. Existing measures have been successful in addressing odor impacts. Implementation of the Proposed Project would continue to divert flows to the IWTP for disposal; however, the wastewater would be tertiary treated at the DWTP.		None required	
Less than Significant = LTS Significant = SI	Significant and Unavoidable = SU	BI = Beneficial	NI = No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
prior to diversion. Because the effluent would be tertiary treated at the MBR facility, effluent disposed at the IWTP is expected to be improved in quality, and therefore would have a lower potential for resulting in odor impacts.			
4.8.8 The Proposed Project would create a modification to an existing Monterey Unified Air Pollution Control District (MBUAPCD) air quality permit. This may result in population or industrial growth that is inconsistent with the local air quality management plan implemented for the attainment and maintenance of State and national ambient air quality standards.	LTS		LTS
MBUAPCD Rule 200 requires the DWTP to obtain permits. The Air District issued the DWTP a Permit to Operate in 1997. The Proposed Project would require an application for an Authority to Construct (ATC) (Ericksen, 2006). The Proposed Project would have to continue complying with all applicable requirements of Air District Rules. Successful compliance with MBUAPCD rules will ensure that the Proposed Project will not directly or indirectly through population or industrial growth inducement cause the emission of any air pollutant for which there is a State or national ambient air quality standard.		None required.	
4.8.9 The proposed MBR facility would include two emergency diesel generators. Emissions from the occasional operation of these generators would have an impact on regional air quality.	LTS		LTS
The two emergency generators would potentially generate NO _X , CO ₁ , ROG, and PM. The emissions from these engines are expected to be less than the MBAQMD's Best Available Control Technology (BACT) limitation for NO _X and would not exceed the Stationary Diesel Airborne Toxic Control Measure (ATCM) for particulate emissions. The generators would meet all applicable requirements imposed by the California Code of Regulations Title 17 Section 93115 – Airborne Toxic Control Measure for Stationary Compression Ignition Engines. Additionally, operation of the emergency diesel generators would require the City of Hollister to obtain a MBUAPCD ATC permit.		None required.	
Less than Significant = LTS Significant = Si	Significant and Unavoidable = SU	BJ = Beneficial	NI = No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICAND AFTER MITIGATION
4.8.10 A 175 hp emergency diesel generator may be provided at the Hollister Municipal Airport. Emissions from the occasional operation of this generator would have an impact on regional air quality.	LTS		LTS
An emergency diesel generator may be provided at the Hollister Municipal Airport to provide backup power to booster pumps. This generator would be considerably smaller than those proposed for the DWTP, and would result in a negligible amount of emissions of NO _X . CO, ROG, and PM. The generator would meet all applicable requirements imposed by the California Code of Regulations Title 17 Section 93115 – Airborne Toxic Control Measure for Stationary Compression Ignition Engines. Operation of the generator would also require the City of Hollister to obtain a MBUAPCD ATC permit.		None required.	
4.8.11 Dust created during the removal of salt concentrate from evaporation ponds could impact sensitive land uses.	SI		LTS
During collection and trucking of the salt concentrate from the evaporation ponds, dust could be generated and blown downwind. This dust could adversely impact sensitive land uses such as residences, schools, or businesses.		A dust abatement program shall be developed for transportation of salt concentrate from evaporation p shall be implemented in accordance with Air Pollu- requirements.	onds. This program
19 TRAFFIC			
4.9.1 Construction of the proposed DWTP transmission would temporarily increase construction traffic on adjacent roadways, limit access and interfere with emergency response.	SI		LTS
Construction of the pipelines would be required to convey treated effluent to disposal locations including sprayfields, recycled water projects and the IWTP percolation beds. Construction of pipelines would result in temporary disruptions to traffic along the identified roadways. Adjacent roadways may also be impacted as the result of the extension of		A Traffic Management Plan (TMP) shall be prepar Caltrans and San Benito County for approval pric construction within the right-of-way of any State of TMP may include the following provisions:	or to each phase of
pipelines to serve specific parcels or by limiting access to these roadways. Access to private driveways along pipeline routes may be temporarily blocked by construction activities. Proposed construction activities may interfere with emergency response vehicles and create a		 Construction plans which detail sp information; haul routes; signing for closs public notification identifying location, sche of construction activities. 	ares or detours; and
Less than Significant = LTS Significant = Si	Significant and I	návoídable = SU BI = Beneficial	NI = No Impact

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
delay in emergency response time as a result of lane closures or blockages and an increased presence of construction vehicles on local roadways. It is also possible that emergency services may be needed in			uting plans which address the specific requirements for strol, including construction timing for specific areas detours.	
areas where access is temporarily blocked by pipeline trenching activities.		times and	service agencies will be notified as to construction lane closures. This would insure that alternate routes to allow public services to function at an adequate rvice.	61
		each direct	nstruction, at least one travel lane shall remain open in tion when feasible. Traffic lanes shall be delineated by traffic cones/barricades. Flag persons should control ons of traffic, if necessary.	. 1
		nff-peak tr and 156. Thursday 7:00 PM, intersectio	on work on major roadways shall be conducted during raffic periods whenever possible. For State Routes 25 construction should be limited to Monday through outside of the hours of 7:00 to 9:00 AM, and 3:00 to alleviate traffic impacts. Construction within at n will be restricted to only half of the intersection a time, whenever possible, in order to maintain traffic	
.9.2 Trucking of salt concentrate from evaporation ponds_and biosolids from the DWTP would increase traffic on affected roadways.	LTS			LTS
Operation of the proposed DWTP improvements would require the transportation of biosolids to an off-site location for disposal. Biosolids would be transported off-site when the storage capacity at the plant is reached approximately every 16 years. Disposal would require 1.187 truck trips. These truck trips would occur over a month long period, resulting in approximately 40 trucks trips per day. This increase in traffic along affected roadways from disposal of biosolids would be temporary and would not significantly affect roadway service levels.			None required	
The potential trucking of salt concentrate from evaporation ponds in a landfill would increase the number of daily trips on affected roadways. It				
Less than Significant = LTS Significant = St	Significant and Un	navoidable = SU	B) = Beneficial N	= No Impact

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

MITIGATION MEASURES.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

is anticipated that during a seven month dry season, approximately 300 truck trips, or two trips per day, would be required to haul the amount of salt concentrate produced at evaporation ponds. The existing service levels of affected roadways are unknown at this time because the location of evaporation ponds has not been identified. However, the minor increase in traffic associated with the trucking of salt concentrate is marginal and would most likely not affect roadway service levels.

4.10 NOISE

4.10.1 Construction of the DWTP improvements would temporarily increase noise and vibration levels in nearby areas. This would be a potentially significant impact.

Modifications to the City of Hollister DWTP and construction of the seasonal storage reservoir and associated pipelines would require construction activities primarily related to the excavation, foundation, erection, and finishing categories. Construction of the MBR facility would require the placement of stone columns under essential facilities. Conventional pile driving produces potentially significant ground-borne vibration. Construction of the Proposed Project could result in public annoyance, sleep disruption, or property damage due to construction noise and vibration.

SI

LTS

- (a) Noise-generating construction shall only occur during the hours of 7:00 AM to 7:00 PM, Monday through Saturday. If construction falls outside those hours specified in encroachment permits, the City of Hollister shall obtain a variance from the appropriate jurisdictional agency.
- (b) The City of Hollister shall require in construction specifications that the contractor select staging areas as far as feasibly possible from existing residences.
- (c) The City of Hollister shall require in construction specifications that the contractor maintain all construction equipment with manufacturerspecified noise-muffling devices.
- (d) The City of Hollister shall require in construction specifications that the contractor place all stationary noise-generating construction equipment as far away as feasibly possible from sensitive receptors or in an orientation minimizing noise impacts (i.e., behind existing barriers or storage piles, etc.).
- (e) Vibration due to pile driving shall not exceed 0.2 inches per second peak particle velocity as measured at the nearest residence. Upon commencement of pile driving, the project owner shall conduct.

TABLE 1-2 Summary of Impacts and Mitigation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		continuous vibration monitoring at the nearest residential receiver south of San Juan Hollister Road and will continue the monitoring until the pile nearest that residence is installed. If vibration measurements indicate at any time that the pile driving vibration at any sensitive receiver has exceeded a peak particle velocity of 0.2 in/sec, the operator shall notify the City of Hollister immediately, and shall cease pile driving until a mitigation plan is developed and implemented.	
1.10.2 Operation of the proposed DWTP would generate treatment plant machinery noise. This would be a potentially significant impact.	SI		LTS
Operation of the proposed City of Hollister DWTP system improvements would include multiple noise-generating sources. Of these sources, noise from the operation of the membrane filtration building would likely dominate. Treatment plant noise could result in significant noise impacts to the nearest sensitive receptor, approximately 600 feet to the south of the treatment plant site.		Final design of the DWTP shall incorporate noise attenuating technologies and noise barriers such that noise emanating from the DWTP at ultimate design capacity will not cause the ambient noise level in the outdoor activity areas of the nearest sensitive receptor to exceed 65 dBA. L _{th} or the noise standards as outlined in the County and City adopted Noise Ordinance. Such technologies shall focus on the design of acoustical enclosures for stationary noise sources such as pumps, motors, filters, and generators, and the use of inherently quieter treatment equipment, when available.	
1.10.3 Construction of sprayfields, pipelines, off-site storage reservoirs, off-site evaporation ponds and associated pump stations would temporarily increase noise levels in nearby areas.	st		LTS
Trenching for pipelines and grading of sprayfields, reservoirs, ponds and associated facilities would involve sustained intrusive noise-generating activities in relatively close proximity to some residences. Pipelines would be installed in agricultural, rural, and rural residential areas. Rural residences are located along the proposed pipeline corridors. Construction activities would occur adjacent to these homes, exposing residents to noise levels approximately 88 dBA, L _{oc} Such noise levels would exceed the noise standards of both the County Noise Ordinance		Implement Mittgation Measures 4.10-1(a-d).	
Less than Significant = LTS Significant = Si	Charles	Unavoirtable = SU Ri - Romatrital	Ma Services

TABLE 1-2 Summary of Impacts and Miligation Measures

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
and City Noise Ordinance, and therefore would be significant.			
4.10.4 Operation of the noise generating equipment such as pump stations and compressors would result in new or modified stationary noise sources.	SI		LTS
The development of an off-site storage reservoir and evaporation ponds in Phase II would most likely occur in a rural area, although a specific locations have not been identified. Noise generating equipment such as pump stations and compressors may be required at the off-site storage reservoir and evaporation ponds or elsewhere along the pipeline routes. The potential exists that the pump stations could result in operational noise impacts to nearby sensitive receptors.		(a) Final design and redesign of noise generating equipment, such as pump stations and compressors, shall incorporate noise attenuating technologies and noise barriers such that noise emanating from the pump station at maximum operation load will not cause the ambient noise level in the outdoor activity areas of the nearest sensitive receptor to exceed the stated noise standards of the City and County adopted Noise Control Ordinance, or the standards stated in Table 4.10-5. Sensitive receptors are defined as residences, schools, medical facilities, libraries, churches, day care centers, and convalescent homes.	
		(b) In addition, future projects with noise generating equipment shall be sited and designed so that noise levels, using the 24-hour Day-Night Level (DNL) descriptor, shall not exceed 60 dBA in outdoor activity areas for noise sensitive uses. Noise levels shall be reduced by incorporating noise reduction technology (acoustical treatments) such as acoustical enclosures and mufflers, or the use of inherently quieter equipment capable of achieving the previously specified noise performance standard.	
		(c) A noise analysis that addresses existing and future conditions shall be completed by a qualified acoustical consultant prior to the approval of noise generating projects located within the vicinity of noise sensitive receptors. The noise analysis shall identify measures required to conform with the noise guidelines listed in Mitigation Measure 4.10.4 (a)	
4.10.5 Trucks required for the transportation of concentrate from evaporation ponds to disposal locations would temporarily increase ambient noise levels in the vicinity of the evaporation ponds and along affected roadways.	ŠĪ		LTS

Significant = \$1

Significant and Unavoidable = SU

El = Béneficial

10 = No impact

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

SI

MITIGATION MEASURES

LEVEL OF SIGNIFICANCE AFTER MITIGATION

SU

Operation of evaporation ponds during the Salt Management Program in Phase II would require the collection and removal of concentrate produced by trucks. Loading and operation of the tanker trucks would produce temporary increases in the ambient noise environment at the evaporation ponds and along affected roadways.

Truck traffic shall be limited to the hours between 7:00 sm and 7:00 pm. Monday through Saturday.

5.0 SECONDARY IMPACTS

5.1 The Proposed Project would result in expansion of treatment capacity, which could result in the potential for additional growth beyond that anticipated under the Hollister General Plan by allowing for growth within the unincorporated service area. This could occur as the result of service connections for new homes or businesses located outside of the Hollister Planning Area, within the service area identified for the DWTP.

- (a) The City of Hollister shall prepare an annual wastewater demand report for the DWTP, and make the report available to San Benito County and the public. The report shall provide updated assessments of plant capacity, anticipated flow increases from urban growth in the service area, and updated timetables for plant expansions matching service area demands. The City of Hollister shall utilize information provided by San Benito County to estimate the demands of the unincorporated portion of the DWTP service area.
- (b) The City of Hollister shall work cooperatively with San Benito County to serve the unincorporated portion of the DWTP service area in order to support the County's Growth Management System.