

4.11 WASTEWATER

This section describes and analyzes the proposed collection, treatment, and disposal of the project's wastewater demands.

4.11.1 Existing Conditions

Wastewater disposal for the park is currently treated by individual septic systems for the four existing restroom facilities. The park is also within the Nipomo Urban Services Line, and surrounding areas are serviced by the NCSO. The NCSO, which serves approximately 12,000 people over an area of about 4,650 acres provides water and wastewater service to approximately 25% of the Nipomo Mesa area's population (Urban Water Management Plan 2005 Update, SAIC Engineering).

The NCSO currently operates two wastewater treatment facilities. The Blacklake Wastewater Treatment Plant (WWTP) collects and treats water from the Blacklake water system. The Southland Wastewater Treatment Facility (WWTF) collects and treats water from the rest of the NCSO as well as some properties outside of the NCSO boundary (*2010 Urban Water Management Plan*, Water Systems Consulting, Inc., June 29, 2011). According to the NCSO, the Southland WWTF currently operates at approximately 63% of capacity (County of San Luis Obispo 2009). The Southland WWTF has a permitted capacity of 900,000 gallons per day (gpd) based on its maximum monthly flow. Average annual flow is approximately 570,000 gpd with a maximum recorded monthly flow rate of approximately 613,000 gpd. Proposed phased improvements to the WWTF will improve effluent quality, biosolids management, and increase the ultimate treatment capacity to a maximum flow of 1.8 million gpd from its current capacity of 0.9 million gpd. Other properties within the Nipomo Urban Services Line utilize individual septic systems where centralized sewer service is not provided. Previously identified operational issues include occasional BOD (biochemical oxygen demand) limit violations during settling pond maintenance.

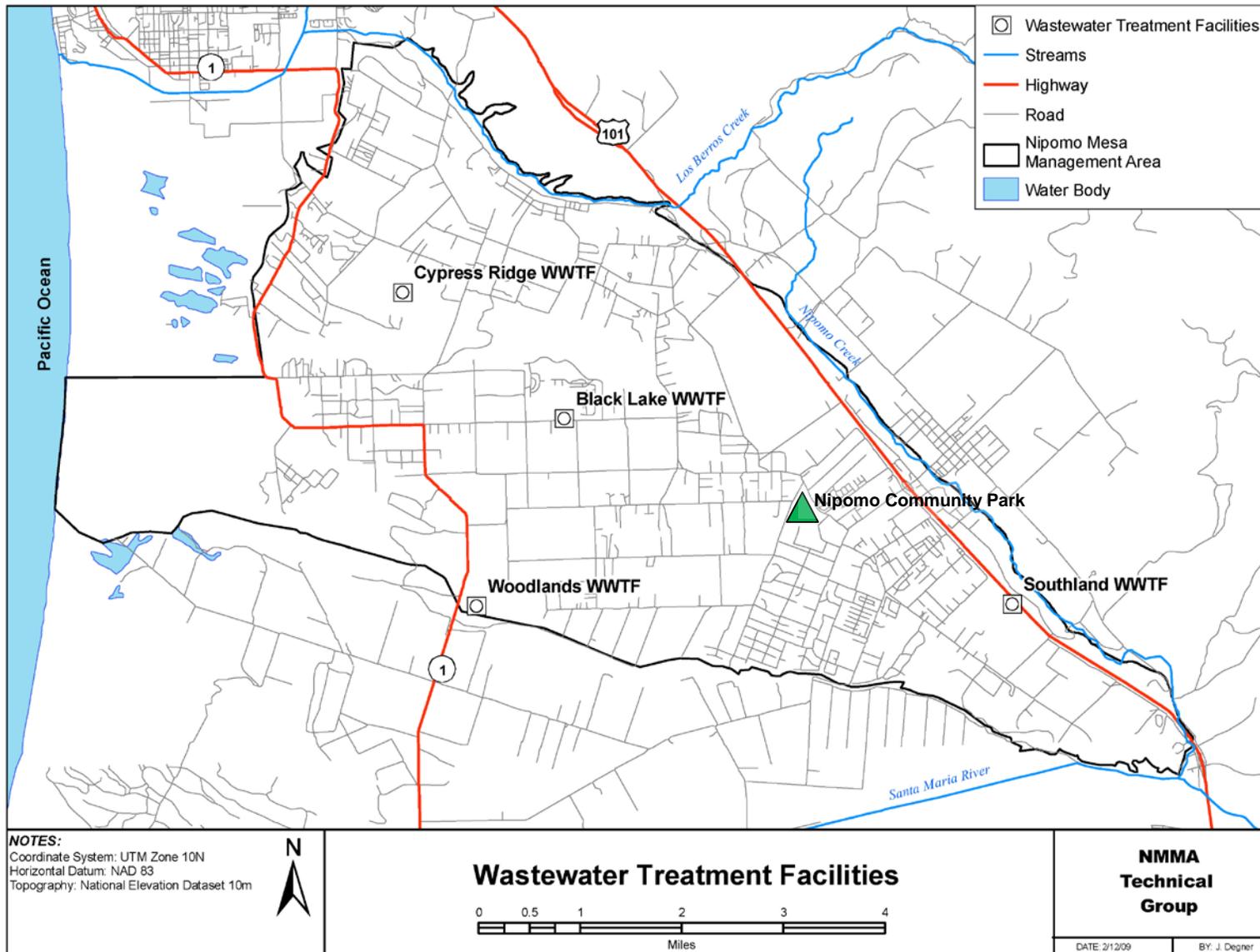
Two additional WWTPs discharge treated effluent within the Nipomo Mesa Management Area (refer to Figure 4.11-1): the Rural Water Company's Cypress Ridge Wastewater Facility and the Woodlands Mutual Water Company Wastewater Reclamation Facility. The total WWTP effluent was 640 acre feet per year (afy). Table 4.11-1 shows estimated wastewater volumes for all WWTPs in the NMMA in 2010.

Table 4.11-1. 2010 Wastewater Volumes

Facility	Influent (afy)	Estimated Effluent (afy)	Re-Use
Blacklake WWTP	82	70	Irrigation
Southland WWTF	534	474	Infiltration
Cypress Ridge Wastewater Facility	Not reported	47	Irrigation
Woodlands Wastewater Reclamation Facility	Not reported	39	Irrigation
La Serena	Not reported	6	Infiltration
Total		640	

Source: NMMA 3rd Annual Report, 2010 Calendar Year (NMMA Technical Group 2011)

Figure 4.11-1. NMMA Wastewater Treatment Facilities



Source: NMMA 1st Annual Report, 2008 Calendar Year (NMMA Technical Group 2009)

The Blacklake, Cypress Ridge, and Woodlands WWTPs utilize secondary treatment and recycled water for golf course irrigation. The amount of recycled water used in 2010 for irrigation at Blacklake, Cypress Ridge, and Woodlands are 70 acre feet (af), 47 af, and 39 af, respectively (NMMA [Nipomo Mesa Management Area] 3rd Annual Report, 2010 Calendar Year, NMMA Technical Group 2011). The Blacklake WWTP is the only place in the NCSD facility where wastewater is recycled, as shown in Table 4.11-2, below. The Southland WWTF utilizes secondary treatment and treated water is disposed of in percolation ponds on-site, although the NCSD is considering treating this water to recycled water standards (2010 Urban Water Management Plan, Water Systems Consulting, Inc. 2011).

Table 4.11-2. Wastewater Collected and Recycled by the NCSD

Wastewater Collection and Treatment System	2005	2006	2007	2008	2009	2010
Southland WWTP Average Annual Flow (afy)	661	818	1,086	1,344	1,613	1,870
Blacklake WWTP Average Annual Flow (afy)	71	71	71	71	71	71
Quantity that meets recycled water standard*	71	71	71	71	71	71

* All water processed through the Blacklake WWTP meets reclaimed water permit conditions.

Source: 2010 Urban Water Management Plan, (NCSD 2011)

4.11.2 Regulatory Setting

4.11.2.1 Federal Policies and Regulations

Federal standards for the quality of treated wastewater effluent would apply to this project. However, no other Federal policies or permits relating to wastewater services or utilities would be applicable. The project would not affect potential impacts to “waters of the U.S.” and no actions would be subject to §§ 404 and 401 of the Clean Water Act and the NPDES.

4.11.2.2 State Policies and Regulations

The Central Coast RWQCB’s Water Quality Control Plan for the Central Coast Region (Basin Plan) includes various guidelines, criteria, and prohibitions for on-site wastewater treatment and disposal. On-site wastewater systems may be used to treat and dispose of wastewater, provided the daily flow rate is less than 2,500 gallons.

Based on consultation with County Environmental Health Services (personal communication, Leslie Terry; December 17, 2008), the Central Coast RWQCB is proposing to amend the Basin Plan regarding the on-site wastewater system implementation program. The RWQCB has entered into a multi-agency memorandum of understanding (MOU) governing regulation of on-site systems, and local permitting agencies (i.e., County) implemented criteria for on-site systems through their own permits. Draft Basin Plan Amendments are proposed, which would make the existing program more stringent and provide greater environmental protection. The Amendments also require the preparation and implementation of on-site wastewater management plans in urbanizing areas to investigate and mitigate long-term cumulative impacts resulting from continued use of individual, alternative, and community on-site wastewater systems (RWQCB 2008).

Standards for the quality of treated effluent are established by federal and state water quality laws. Effluent is required to be treated in accordance with the applicable standards set forth in CCR Title 22 (Environmental Health) as well as standards set by the SWRCB, which sets specific effluent discharge requirements for wastewater facilities in the county. Standards for quality of treated effluent are set to protect present and potential beneficial uses of surface and/or groundwater that receive the treated effluent, including recreation, agriculture, and wildlife. Use of treated effluent as recycled water is also regulated by Title 22 (Chapter 3, Recycling Criteria). In the event recycled water is used within the park for irrigation, requirements would likely include:

- 100-foot buffer between irrigated area and domestic water supply wells;
- Irrigation runoff shall be confined to the recycled water use area, unless the runoff does not pose a public health threat and is authorized by the regulatory agency;
- Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities;
- Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff; and,
- All use areas where recycled water is used that are accessible to the public shall be posted with signs stating “recycled water, do not drink.”

4.11.2.3 Local Regulations

The County Environmental Health Services and the Central Coast RWQCB are the local agencies responsible for effluent treatment standards and siting of wastewater treatment and disposal facilities. These agencies ensure that proposed projects conform to all applicable local standards, including the Basin Plan. Implementation of the NCPMP would be a County project; therefore, compliance with the County Ordinance is not required; however, standards are useful as thresholds of significance when assessing potential impacts resulting from the project.

Title 19 – Building and Construction Ordinance

Section 19.07.022 (Private Sewage Disposal Systems) states that the use of private on-site sewage disposal systems are allowed only within the rural areas of the county and within urban and village areas where no community sewage collection, treatment, and disposal system exists. Section 19.07.022(a) notes that these regulations are enacted in part to implement the requirements of the “Water Quality Control Plan Central Coast Basin” (Basin Plan). Based on consultation with the RWQCB regarding the Basin Plan and Basin Plan Amendment requirements, restroom facilities within the park are not required to connect to the NCSD sewer system unless compliance with the Basin Plan cannot be demonstrated (RWQCB 2010).

Since the proposed project includes on-site wastewater treatment and disposal, requirements that would be imposed on this project potentially affecting water resources include:

- Depth to groundwater (minimum vertical separation of 5 feet from the bottom of the disposal field for soils having percolation rates slower than 30 minutes per inch. Greater separation distances are required for faster percolation rates).

- Setbacks (minimum setback of 100 feet between disposal area and any water supply well, spring, or water course).
- Surface and Subsurface Irrigation Water Recycling (subject to CCR Title 22 for water reuse criteria).

The following policies are contained in the Central Coast RWQCB Basin Plan:

- Groundwater recharge with high quality water shall be encouraged.
- In all groundwater basins known to have an adverse salt balance, total salt content of the discharge shall not exceed that which normally results from domestic use, and control of salinity shall be required by local ordinances, which effectively limit municipal and industrial contributions to the sewerage system.
- Wastewaters percolated into the groundwaters shall be of such quality at the point where they enter the ground so as to assure the continued usability of all groundwaters of the basin.

4.11.3 Thresholds of Significance

Consistent with CEQA Guidelines Appendix G, the County states that a significant wastewater resource impact would occur if the project would:

1. Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems;
2. Change the quality of surface or ground water (e.g., nitrogen-loading, daylighting); or
3. Adversely affect community wastewater service provider.

4.11.4 Impact Assessment and Methodology

Wastewater disposal for the park is currently treated by individual septic systems for the four existing restroom facilities. NCP is located within the Nipomo urban area, and surrounding uses are served by the NCSD. Effluent disposal for NCP could be accomplished by three methods: connection to an existing NCSD system, septic tanks and leachfield systems, or fiberglass holding tanks that are regularly pumped and maintained. Septic system disposal is considered the preferred method because of the open space areas within NCP. Additionally, there are multiple level to relatively level areas that would be suitable for leachfield siting, and depth to bedrock and/or groundwater are not expected to be significant issues for standard septic system design. Percolation tests performed on the adjacent Mesa Meadows property indicate that soil conditions are adequate for on-site septic systems (*Constraints Analysis*, Morro Group 2004). Site specific testing pursuant to current (or amended) Basin Plan regulations would be implemented.

4.11.5 Project-specific Impacts and Mitigation Measures

4.11.5.1 Violate Waste Discharge Requirements or Central Coast Basin Plan Criteria

The proposed on-site systems would be located on public land, be operated and maintained by a public agency (County), and would serve the public visitors to NCP. Prior to development of the Mesa Meadows residential area, percolation tests were performed by Earth Systems Consultants (1994) to assess the Mesa Meadows area for suitability of on-site effluent disposal via septic system, and to determine the ability for on-site stormwater retention via percolation. Percolation tests occurred approximately 1,300 to 2,000 feet from the proposed additional park restrooms and associated on-site wastewater treatment and disposal systems. Observed percolation rates ranged from a low of <1 minute per inch (min/inch) up to 8 min/inch. Because no groundwater was encountered at bore depths ranging from 10 to 21 feet below the surface, soil conditions were judged to be adequate for on-site septic systems for the Mesa Meadows residential project.

Per the Basin Plan, if the percolation rate is less than 4 min/inch, depth to groundwater must not be less than 20 feet. Proposed Basin Plan Amendments require additional treatment of wastewater if the rate is less than 1 min/inch. The Master Plan does not include the construction of restrooms in the Mesa Meadows area; however, the existing soils and percolation data can be generally be applied to the park area. Because Mesa Meadows is located immediately adjacent to the park, contains the same soil profile mapped by the NRCS (Oceano sand), and standard septic systems were constructed for that development, conditions appear to meet Basin Plan, and Basin Plan Amendment, requirements. Some standard requirements, which were reviewed to assess the feasibility of new on-site wastewater treatment and disposal, include the following key standards:

- Natural ground slope of the disposal area should not exceed 20%.
- Setback distance from a cut, embankment, or steep slope (greater than 30%) should be determined by projecting a line 20% down gradient from the sidewall at the highest perforation of the discharge pipe. The leachfields shall be set back far enough to prevent this projected line from intersecting the cut within 100 feet, measured horizontally, from the sidewall. If restrictive layers intersect cuts, embankments or steep slopes, and geologic conditions permit surfacing, the setback shall be at least 100 feet measured from the top of the cut.
- On-site discharge in soils with percolation rates faster than one minute per inch is prohibited without additional treatment consistent with an on-site management plan.
- On-site discharge is prohibited in fill unless specifically engineered as a disposal area.
- Dual disposal fields (200% of original calculated disposal area).

Based on site conditions, it appears that the site is suitable for additional on-site wastewater treatment and disposal. Applying a sewer flow duty factor of 0.62 afy/acre (NCSD 2007), and applying this rate to approximately 25 acres of active recreation land, the estimated sewer flow would be approximately 14,000 gpd. Dividing this among the six proposed restrooms would result in a flow less than 2,500 gpd per restroom.

Implementation of on-site wastewater disposal is subject to updated regulations regarding wastewater disposal and water quality, including specific requirements for site specific sub-surface investigation and testing. In the event the County cannot demonstrate compliance with the Basin Plan, connection to the NCSD sewer system would be necessary. Based on consultation with the NCSD (personal communication, Bruce Buel; December 17, 2008), the NCSD notes that a connection is possible, based on further review of additional information at the time connection is proposed. There is an existing sewer line along West Tefft Street, adjacent to the park site.

Based on review of the Basin Plan, the project appears to be consistent with noted requirements; therefore, this impact would be *less than significant* (Class III) and no mitigation is necessary.

4.11.5.2 Change the Quality of Surface or Groundwater

This threshold of significance consider any adverse change to existing water quality as a result of wastewater treatment and disposal, including nitrogen-loading, day-lighting, violation of water quality standards or waste discharge requirements, and substantial degradation of water quality.

The site demonstrates characteristics (slope, percolation rate, depth to groundwater) suitable for disposal, while avoiding adverse effects to surface or groundwater. In addition, the County is required to comply with the Basin Plan prior to siting and development of the restrooms and associated on-site systems. Therefore, this impact is *less than significant* (Class III) and no mitigation is necessary.

4.11.5.3 Adversely Affect Community Wastewater Service Provider

As proposed, the project would not require connection to the NCSD sewer system and Southland WWTF. In the event that site specific testing and analysis shows that the project would not comply with the Basin Plan, connection to the community system may be necessary. The project would adversely affect the NCSD in the event implementation would:

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or,
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Based on review of the Southland WWTF EIR (2011), and consultation with the NCSD, the facility has the capacity to serve the park, if necessary. The project could feasibly connect to the existing sewer system, provided on and offsite infrastructure is provided. Based on review of available information, the project would not result in an adverse effect to the NCSD, regardless of the treatment and disposal method. Information available in this Program EIR could be used to avoid or mitigate impacts associated with additional infrastructure, including avoidance of oak trees and special status species, minimization of soil erosion, avoidance or remediation of potentially hazardous subsurface materials). This impact would be *less than significant* (Class III) and no mitigation is necessary.

4.11.6 Cumulative Impacts

As proposed, the project would include the development of additional on-site wastewater treatment and disposal systems. The siting and operation of the systems would comply with the Basin Plan, and would therefore have no adverse effect on surface or groundwater, or the NCSD community system. Therefore, the project would not contribute to the cumulative impacts related to wastewater.