City Of Merced Wastewater Collection System Master Plan

DRAFT ENVIRONMENTAL IMPACT REPORT

CHAPTER 3.13 PUBLIC SERVICES AND UTILITIES

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3.13 PUBLIC SERVICES AND UTILITIES

3.13.1 Basis for Analysis

The California Environmental Quality Act (CEQA) Guidelines' Appendix G Environmental Checklist was used during the Notice of Preparation (NOP) scoping process (included in Appendix A) to identify the Program components that have the potential to cause a significant impact. The following potential impacts were determined to warrant further evaluation within this Environmental Impact Report (EIR):

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - Fire protection;
    - Police protection;
    - Schools;
    - Parks; or
    - Other public facilities
- Require or result in the relocation or construction of new or expanded water, wastewater, or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- Have sufficient water supply available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

The remainder of this section describes the regulatory and environmental setting to support the evaluation of the potential impacts and describes the potential impacts to public services and utilities resources that may result from implementation of the Program, identifying mitigation for potentially significant impacts, where feasible and necessary.

3.13.2 Regulatory Framework

This section discusses the federal and state regulations and local policies and objectives that relate to public services and utilities resources and are relevant to the Program.

3.13.2.1 Federal

Clean Water Act

The Federal Water Pollution Control Act (33 United States Code [USC] 1251 et seq.), otherwise known as the Clean Water Act (CWA), sets forth national goals that waters shall be “fishable, swimmable” waters (CWA Section 101 (a)(2)). To enforce the goals of the CWA, the United States Environmental Protection Agency (USEPA) established the National Pollutant Discharge Elimination System (NPDES) program. NPDES is a national program for regulating and administering permits for discharges to receiving waters, including non-point sources. Under Section 1251 (b) of the CWA, Congress and USEPA must recognize and preserve the primary responsibilities and rights of states concerning the reduction of pollution in water resources.

Safe Drinking Water Act (1974)

The Safe Drinking Water Act was established in 1974 to protect the quality of drinking water in the United States. This law focuses on all waters actually or potentially designed for drinking use, whether from aboveground or underground sources.

The state has expanded the federal requirements through passage of an Antidegradation Policy – State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality Waters in California"). Resolution 68-16 has been approved by the USEPA to be consistent with the federal antidegradation policy.

3.13.2.2 State

Porter Cologne Water Quality Control Act

The State of California established the State Water Resources Control Board (SWRCB), which oversees the nine RWQCBs, through the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). Through the enforcement of the Porter Cologne Act, the SWRCB determines the beneficial uses of the waters (surface and groundwater) of the state, establishes narrative and numerical water quality standards, and initiates policies relating to water quality. The SWRCB, and more specifically, the RWQCB, is authorized to prescribe Waste Discharge Requirements (WDRs) for the discharge of waste, which may impact the waters of the state. Furthermore, the development of water quality control plans, or Basin Plans, are required by the Porter-Cologne Act to protect water quality. The SWRCB issues both general construction permits and individual permits under the auspices of the federal NPDES program.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation (i.e., recycling) and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), effective January 1990. According to AB 939, all cities and counties are required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city’s AB 939 plan will be integrated within the respective county’s plan. They must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation, and land disposal. Cities and counties that do not meet this mandate are subject to $10,000-per-day fines.

California Constitution, Article X

Article X (10), Section 2, of the California Constitution recognizes the need to put the state's water resources to maximum beneficial use:

> *It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.*

Uniform Fire Code

The Uniform Fire Code (UFC) contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and their surrounding premises. The code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, include regulations for building standards (as also set forth in the California Building Code [CBC]), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Utilities – Protection of Underground Infrastructure

California Government Code Sections 4216-4216.9, "Protection of Underground Infrastructure" requires an excavator to contact a regional notification center (e.g., Underground Services Alert or Dig Alert) at least 2 days prior to excavation of any subsurface installations. Anyone seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification center for Northern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the Program components. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of Program construction activities in the area.

3.13.2.3 Local

Merced Municipal Code

Section 17.62 (Public Facilities Impact Fees) of the Merced Municipal Code states that, to implement the goals and objectives of the City of Merced's Merced Vision 2030 General Plan (2030 General Plan) and to mitigate the impacts caused by future development in Merced, certain public facilities must be or have been required to be constructed, and/or compensation measures must be or have been required to be taken to offset resources lost due to the future development. The City Council has determined that public facilities impact fees and/or compensation measures are needed to finance these public facilities and to pay for each development's fair share of the construction costs of

these improvements and/or the costs of the compensation measures. In establishing the fees, the City Council has found the fees to be consistent with the 2030 General Plan and pursuant to Government Code Section 65913.2, has considered the effects of the fee with respect to the City of Merced's (City's) housing needs as established in the Housing Element of the 2030 General Plan.

A public facilities impact fee is established on issuance of building permits for development in the City to pay for municipally owned public facilities, including but not limited to fire stations, police stations, community recreation facilities, traffic-related improvements, and bikeways facilities.

Merced Vision 2030 General Plan

The 2030 General Plan, adopted January 3, 2012 (City of Merced 2012), contains several policies that directly or indirectly pertain to public services and utilities, including the following:

Goal Area P-2: Police and Fire Protection Services

- **Policy P-2.1.** Maintain and enhance public protection facilities, equipment, and personnel to the maximum extent feasible within the resource constraints of the City to serve the City's needs.

Goal Area P-3: Water

- **Policy P-3.1.** Ensure that adequate water supply can be provided within the City's service area, concurrent with service expansion and population growth.

Goal Area P-4: Wastewater

- **Policy P-4.1.** Provide adequate wastewater collection, treatment and disposal capacity for existing and projected future needs.
- **Policy P-4.2.** Consider the use of reclaimed water to reduce non-potable water demands whenever practical.

Goal Area P-6: Solid Waste

- **Policy P-6.2.** Minimize the potential impacts of waste collection, transportation, and disposal facilities upon the residents of Merced

Goal Area S-4: Fire Protection

- **Policy P-4.2.** Maintain a reasonable level of accessibility and infrastructure support for fire suppression, disaster, and other emergency services.

City of Merced Urban Water Management Plan

Urban Water Management Plans (UWMPs) are required under the California Water Code to be completed every five years by urban water suppliers within the state. These UWMPs are designed to maintain efficient use of urban water supplies, continue to promote conservation programs and policies, ensure that sufficient water supplies are available for future beneficial use, and provide a mechanism for response during water drought conditions. The 2015 UWMP

for the City was completed in November 2017 in conjuncture with other water planning efforts completed such as the City's 2030 General Plan, the Merced Area Groundwater Pool Interests, the Water Master Plan Update, the Merced Groundwater Basin Groundwater Management Plan Update, and the Merced Integrated Regional Water Management Plan (City of Merced 2017).

3.13.3 Environmental Setting

3.13.3.1 Wastewater

Wastewater collection and treatment in the Program Study Area is or is planned to be provided by the City. The wastewater collection system handles wastewater generated by residential, commercial, and industrial uses in the City.

The City's Wastewater Treatment and Reclamation Facility (WWTRF), located in the southwest part of the City about 2 miles south of the Merced Airport, has periodically been expanded and upgraded to meet the needs of the City's growing population and new industry. As discussed in Section 2.0, Project Description, the City's WWTRF has a capacity of 12 million gallons per day (Mgal/d). This Draft EIR for the City's 2017 Wastewater Collection System Master Plan (2017 WCSMP) considers the expansion of the wastewater collection system from current capacity to approximately 35 Mgal/d to accommodate the reasonable build-out identified and analyzed in the 2030 General Plan.

The current treated effluent is disposed of in several ways depending on the time of year. Most of the treated effluent (75 percent average) is discharged to Hartley Slough throughout the year. The remaining treated effluent is delivered to a land application area and the on-site City-owned wetland area south of the treatment plant.

3.13.3.2 Water

The City is the only water purveyor for uses within the City boundaries. The City uses groundwater exclusively, drawing water from 20 wells with a combined capacity of 49,500 gallons per minute (gpm). The active wells are fully operational and used on a regular basis for water supply within the City (City of Merced 2017). Well depths range from 161 to 800 feet, and individual capacities of the operating wells range from 1,000 gpm to 4,000 gpm. The depth of the City's wells suggests that the City is primarily drawing water from the deep aquifer associated with the Mehrten formation, a significant aquifer in terms of water supply. The wells are arrayed in a mile grid system supplying 16-inch mains on a mile grid and 12-inch mains on a one-half mile grid. This strategy for well siting is intended to minimize the potential for local drawdown of groundwater from pumping operations.

Instead of a centralized water treatment plant, water is treated at the wellhead with disinfection and fluoridation systems and distributed through a transmission system with the help of well pumps. The City has a storage capacity of approximately 1.4 million gallons in four elevated storage tanks. These facilities provide average daily demand, meet peak urban level conditions, and provide for adequate flows to end users (City of Merced 2017).

3.13.3.3 Solid Waste

The solid waste disposal for the City is managed by the Merced County Solid Waste Regional Agency. Merced County and its six incorporated cities jointly own and operate two active solid waste landfill facilities, the Highway 59

Landfill serving the eastern end of the County and the Billy Wright Landfill serving the western end of the County. Both of these facilities are permitted to accept municipal solid waste.

The City provides all waste collection and transport services within the City limits, processing approximately 60,000 tons per year. Commercial and industrial solid waste collection services are provided up to six times per week. It is anticipated that the Highway 59 Landfill approximately 2 miles north of the City would accommodate solid waste generated from Program construction activities. Permitted waste types at the Highway 59 Landfill are Class III, nonhazardous solid waste, inert wastes, and nonfriable asbestos. Currently, this landfill has a permitted capacity to accept a maximum of 1,500 tons per day (tpd) of solid waste; however, the landfill is currently under preliminary review for a new permit package to increase the permitted capacity from 1,500 tpd to 3,000 tpd over incremental periods from 2019 to 2035 (CalRecycle 2019). The estimate closure date is 2055 (CalRecycle 2019).

Additionally, the Synagro Central Valley Compost Facility is located approximately 22 miles from the WWTRF and is permitted to accept 355 tpd of materials with a maximum permitted capacity of 149,100 cubic yards per year (CalRecycle 2020).

3.13.3.4 Electrical Services

Two public utility providers provide electrical service to customers within the Program Study Area: the Merced Irrigation District (MID) and Pacific Gas and Electric Company (PG&E). MID, under the authority of the California Water Code, has the authority to operate as an electric utility. During the past 70 years, MID has provided wholesale power to PG&E. Historically, MID has served the general area from the City of Livingston to the City of Atwater. MID has expanded its power delivery area in recent years, and in 2000, it completed the extension of its network to the City of Merced with a series of overhead and underground lines.

PG&E delivers approximately 81,923 million kilowatt-hours (kWh) of electricity to its 13 million customers throughout the 70,000-square-mile service area in Northern and Central California. The Wilson Substation, which is located immediately south of State Route 140 and west of Tower Road, is one of PG&E's substations serving the City. Two parallel transmission lines originate from this substation and extend to the northwest: a 115-kilovolt (kV) line, called the Wilson-Atwater, and a 230-kV line called the Belotta-Harndon.

3.13.3.5 Telecommunications Service

The Program Study Area is located in the service area of AT&T, which would provide telephone communications service to the Program Study Area (i.e., at the WWTRF facility). AT&T provides telecommunications services, including local, long distance, and digital subscriber line to the City.

Cable television services are provided by Comcast, who is in the process of renovating local facilities to offer high speed internet access through the cable system and other products.

3.13.3.6 Schools

The City includes four school districts, the Merced City School District, Merced Union High School District, Weaver Union School District, and the McSwain Union School District, all of which contain a number of individual schools, which are shown on Figure 3.8-1 in Section 3.8, Hazards and Hazardous Materials.

3.13.3.7 Police Protection

Police protection for the Program Study Area is provided by the City of Merced Police Department. There are three separate police districts with three main police stations located at the following locations:

- District 1 – North Station at 1109 Loughborough Drive (serves area north of Bear Creek);
- District 2 – Central Station at 611 West 22nd Street (serves area between Highway 99 to the south and Bear Creek to the north); and
- District 3 – South Station at 470 West 11th Street (serves area south of Highway 99).

The Police Department employs a combination of sworn officers, non-sworn officers, and unpaid volunteers. The service standard is approximately 1.32 sworn officers per 1,000 population. Police stations and patrols are staffed 24 hours a day, seven days a week. Approximately 111 sworn officers are employed at the City of Merced Police Department. Services provided by the Merced Police Department include patrol and crime prevention, special weapons and tactical negotiations, domestic violence, bomb squad services, K-9 units, bicycle patrols, mounted patrols, and identification and fingerprinting services (City of Merced 2010, 2012).

3.13.3.8 Fire Protection

The Program Study Area is within the service area of the Merced Fire Department. There are currently five fire stations located within the City including the following:

- Station 51 at 99 East 16th Street;
- Station 52 at Merced Municipal Airport;
- Station 53 at 800 Loughborough Drive;
- Station 54 at 1425 East 21st Street; and
- Station 55 at the intersection of Parsons Avenue and Silverado.

Fire service personnel are typically assigned on a three-platoon work schedule, which provides the City coverage 24 hours a day, seven days a week. This around the clock coverage is staffed with approximately 54 full-time staff (15 Captains, 18 Engineers, and 21 Firefighters), three Battalion Chiefs, two Division Chiefs, one Chief, and two Secretaries. The Department equipment includes first-line engine companies, ladder companies, reserve engines and ladder trucks, airport emergency vehicles and other miscellaneous vehicles such as rescue boats and trailers. According to the Draft EIR completed for the 2030 General Plan, the City's service protection rating is considered to be well above average (City of Merced 2010).

3.13.3.9 Parks and Recreation

The City has approximately 238 acres of developed parks, which are scattered around the City and include mini parks, neighborhood parks, community parks, school parks, special use areas, urban plazas, athletic parks, and linear parks. Historically, the City has used the standard of having 5 acres of park space for every thousand residents, with supplemental areas such as Lake Yosemite and school grounds that provide additional open space not included in the 5 to 1,000 ratio. In addition to the parks located within the City, there is also an extensive bicycle system, which covers approximately 13 miles and crosses through four creek corridors and numerous City roadways

with expansion planned. Other minor recreational facilities including sports fields, gymnasiums, pool space, and tennis courts are less used by the general public within the City (City of Merced 2010).

3.13.4 Environmental Impacts

This section analyzes the Program's potential to result in significant impacts to public services and utilities. When a potential impact was determined to be potentially significant, feasible mitigation measures (MMs) were identified to reduce or avoid that impact.

3.13.4.1 Impact Analysis

Impact PUB-1	**Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:** • **Fire protection;** • **Police protection;** • **Schools;** • **Parks; or** • **Other public facilities**

Impact PUB-1 Analysis
Combined Program/Proposed Project Impacts

Police and Fire Protection

Construction

The Program would not include or require new fire departments or police stations or the expansion of existing fire and police protection facilities. Implementation of the Program would not directly induce population growth in the region that would require expanded fire or police protection facilities. Construction activities would involve a temporary increase in employees. However, employment opportunities associated with the construction of the Program would be assumed to be filled by the local workforce and would not result in an increased housing demand (See Section 3.12, Population and Housing, for more details).

Operation

Operation of the Program would no require new full-time employees to operate; therefore, implementation of the pipelines, pump stations, and associated appurtenances would not require new fire or police facilities to maintain response ratios, service ratios, or other measures of performance. The WWTRF expansion may involve a minimal increase in staff to accommodate future expansion (up to 35 Mgal/d). The number of staff would be minimal (ranging from 2 to 10 additional workers) compared with baseline staff numbers and would not present a substantial increase in workers to the WWTRF facility. Further, operational activities associated with the facilities would not require fire

department or police services. As such, because Program components would not result in the significant permanent increase in residences or populations, no increase in the need for new fire or police protection facilities would occur, and there would be no impact.

In addition to direct impacts related to implementation of the Program, the Program could also result in indirect impacts of new infrastructure allowing for the development of unplanned growth which could place a strain on other public resources. The Program, however, is designed to accommodate growth planned within the 2030 General Plan and evaluated in the 2030 General Plan EIR. Because the growth is planned, it is anticipated that other City services are planned in relation and the proposed Program would not initiate an indirect substantial adverse impact requiring additional public facilities or more fire or police protection services. The analysis in the 2030 General Plan EIR concluded that with compliance with General Plan policies, implementation actions, and with payment of in-lieu fees by developers, impacts related to fire and police protection services would be less than significant under reasonable build-out. Therefore, the Program would not induce growth beyond the levels of growth already planned, analyzed, and approved in the 2030 General Plan, and there would be a less than significant impact to fire and police protection services.

Schools

Construction and Operation

Similar to the police and fire protection discussion above, implementation of the Program would not directly induce population growth in the region. A minimal number (estimated 2 to 5) of new employees would be required to operate Program components, including new pipelines, pump stations, and WWTRF facilities; therefore, there would be very little demand for new housing units that could generate school-age children. No new schools would need to be built in order to maintain acceptable performance objectives. Additionally, as discussed above, because the 2017 WCSMP used growth projections that were discussed and analyzed in the 2030 General Plan, no indirect impacts related to development would result from implementation of the Program. As such, the Program would not require the construction of new schools, and no impacts from school construction would occur.

Parks and Other Public Facilities

Construction and Operation

Similar to the police and fire protection discussion above, implementation of the Program would not include any park, recreation, or other public facilities and would not directly induce population growth in the City's Specific Urban Development Plan/Sphere of Influence (SUDP/SOI). A minimal number (estimated 2 to 5) of new employees would be required to operate new wwtrf facilities; therefore, there would be limited demand for new housing units that could generate the demand for new or expanded recreational or other public facilities. Additionally, as discussed above, because the 2017 WCSMP used growth projections that were discussed and analyzed in the 2030 General Plan, no indirect impacts related to development would result from implementation of the Program. As such, because implementation of the Program would not require the construction of new recreational or other public facilities, no impact would occur.

Level of Significance Prior to Mitigation: No Impact

Mitigation Required: None Required

Level of Significance After Mitigation: No Impact

Impact PUB-1 Findings

Impact PUB-1 Overall Level of Significance Prior to Mitigation: No Impact

Impact PUB-1 Mitigation Required: None Required

Impact PUB-1 Overall Level of Significance After Mitigation: No Impact

Impact PUB-2 **Potential to require or result in the relocation or construction of new or expanded water, wastewater, or stormwater drainage, electrical power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects.**

Impact PUB-2 Analysis

Combined Program/Proposed Project Impacts

Construction and Operation

Implementation of the Program would result in the construction and operation of wastewater collection system facilities including pipelines, pump stations, associated appurtenances, and upgrades to the existing WWTRF. These facilities do not involve the construction of new or expanded water, stormwater drainage, electrical power, natural gas, or telecommunications facilities. This EIR analyzes the environmental impacts associated with implementation and operation of the Program in order to accommodate growth projections identified in the 2030 General Plan. As discussed throughout this document, all potential environmental impacts associated with the construction and operation for the Program would be reduced to a less than significant level with mitigation incorporated. Furthermore, any additional energy requirement needed for operation of the Program components, including the new pipelines, pump stations, or the expansion of the WWTRF, would incorporate appropriate energy efficiency standards as identified and analyzed in Section 3.7, Greenhouse Gases and Energy Resources. Therefore, implementation of the Program would result in a less than significant impact to relocation or construction of new or expanded water, wastewater, stormwater drainage, electrical power, natural gas, and telecommunications facilities.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact PUB-2 Findings

Impact PUB-2 Overall Level of Significance Prior to Mitigation: Less than Significant

Impact PUB-2 Mitigation Required: None Required

Impact PUB-2 Overall Level of Significance After Mitigation: Less than Significant

Impact PUB-3 Potential to have sufficient water supply to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

Impact PUB-3 Analysis

Combined Program/Proposed Project Impacts

Construction

Construction of the Program, including the pipelines, pump stations, and WWTRF expansion components, and associated appurtenances would require water for dust control, clean-up, soil compaction, and testing of the system. The water demand during construction would be served by the City's existing municipal water supply, which consists of 20 active wells that collectively produce over an average of 49,500 gpm (City of Merced 2017). The average water truck can hold 2,000 to 4,000 gallons of water, which would be used daily during earth-moving activities, and approximately 2,000 gallons of water would be required per acre of disturbed soil for fugitive dust control. The existing supply would have sufficient capacity to serve the Program components throughout construction activities. Therefore, the Program would have sufficient water supply to serve the projected and reasonably foreseeable future development during normal, dry, and multiple dry years and therefore would result in a less than significant impact.

Operation

Operation of the Program would not require additional water supplies. Similar to the discussion above indirect impacts of the Program providing new growth-accommodating infrastructure could result in significant impacts to water supplies if that growth were unplanned. The new, unplanned growth could indirectly result in the new homes and thus increase the demand for water supplies and infrastructure beyond what was planned. However, as mentioned previously, the Program is designed to accommodate the planned growth set forth in the 2030 General Plan and that growth was analyzed in the 2030 General Plan EIR. The analysis in the 2030 General Plan EIR evaluated water supply impacts and the need for water supplies to meet reasonable build-out. Because the 2017 WCSMP, and thus the Program, were developed to accommodate the planned growth set worth in the 2030 General Plan the Program would not induce indirect impacts related to water supplies. Therefore, the Program would not induce growth beyond the levels of growth already analyzed and approved in the 2030 General Plan, and there would be a less than significant impact to water supplies. Therefore, there would be no operational impacts from the Program to water supplies.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact PUB-3 Findings

Impact PUB-3 Overall Level of Significance Prior to Mitigation: Less than Significant

Impact PUB-3 Mitigation Required: None Required

Impact PUB-2 Overall Level of Significance After Mitigation: Less than Significant

Impact PUB-4 Potential to result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Impact PUB-4 Analysis

Combined Program/Proposed Project Impacts

Construction

Construction activities associated with the Program could potentially cause a temporary increase in wastewater generation from dewatering activities (e.g. if groundwater is encountered during excavations or trenching activities and requires discharge) and for hydraulic testing that would be required of the new and upgraded pipelines. The wastewater generated from dewatering activities would be tested and treated, if necessary, and may be used for other construction activities, such as dust control. Wastewater generated by any hydraulic testing would be transported to the WWTRF once testing is complete. The wastewater generation would be temporary and would not place a demand on the WWTRF service capacity beyond what has been currently permitted. Therefore, the impact from construction activities would be less than significant.

Operation

The Program aims to meet reasonable build-out of the City's SUDP/SOI as identified in the 2030 General Plan. Current capacity of the WWTRF would be expanded from 12 Mgal/d to 35 Mgal/d in order to accommodate reasonable growth identified, planned, and analyzed in the 2030 General Plan. As such, environmental impacts associated with the implementation of the Program are discussed throughout this EIR and are either considered less than significant or include mitigation to reduce any potential impacts to a less than significant level. The Program would not result in inadequate capacity to serve the projected demand in addition to existing commitments and therefore the impact would be less than significant.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact PUB-4 Findings

Impact PUB-4 Overall Level of Significance Prior to Mitigation: Less than Significant

Impact PUB-4 Mitigation Required: None Required

Impact PUB-4 Overall Level of Significance After Mitigation: Less than Significant

Impact PUB-5 Potential to generate waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Impact PUB-5 Analysis
Combined Program/Proposed Project Impacts

Construction

Construction activities associated with implementation of the Program would result in a temporary increase in solid waste, such as pavement removal, excess or unsuitable spoils, excess concrete, and excess excavated materials. This waste would be accumulated over the duration of the construction of the Program components, including for the new pump stations, pipelines, and WWTRF expansion activities, and would periodically be hauled offsite, thus not impacting the landfill all at once. Based on the remaining capacity, it is expected that the Highway 59 Landfill would have sufficient capacity to receive solid waste generated during construction of the Program. Some Program components are anticipated to be completed as needed to accommodate reasonable build-out, which based on recent estimates would be approximately 2045. The Highway 59 Landfill has capacity to receive solid waste through 2055, which should accommodate waste generated by these components over time. Additionally, excavated materials during pipeline placement would be stockpiled and reused onsite to backfill the trench. This would limit the amount of excavated materials hauled offsite from construction activities. Therefore, construction impacts from the Program components related to the generation of waste in excess of state or local standards or in excess of local infrastructure capacity would be less than significant.

Operation

Operation of the Program would largely involve the storage, transport, and treatment of wastewater, and thus would not generate solid waste during operation. The increase in biosolids generated at the WWTRF is discussed in further detail under the WWTRF heading below. Therefore, the impact would be less than significant.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Proposed Project: WWTRF Expansion Impacts

Construction and Operation

As discussed in Section 2.3.2.3, Existing Wastewater Treatment and Reclamation Facility Projects, the expansion of the WWTRF would involve an increase in biosolid generation from the current 14,800 pounds per day (lbs/day) at 12 Mgal/d to 43,050 lbs/day at the reasonable build-out of the facility to 35 Mgal/d. This is almost a tripling of biosolids production; however, as stated in Section 2.3.2.3, Existing Wastewater Treatment and Reclamation Facility Projects, biosolids generated at the WWTRF are currently applied to 580 acres of City-owned agricultural areas south of the WWTRF. It is anticipated that biosolids would continue to be land-applied to the agricultural areas onsite. However, there are any number of factors that could warant transport of biosolids to offsite locations. In the event biosolids require disposal other than direct land application they could be hauled to the Synagro Central Valley Compost Facility (located approximately 22 miles from the WWTRF), which has both the capacity and permitted waste classification to accept such materials (CalRecycle 2020). Therefore, operational impacts associated with the WWTRF expansion would be less than significant.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact PUB-5 Findings

Impact PUB-5 Overall Level of Significance Prior to Mitigation: Less than Significant

Impact PUB-5 Mitigation Required: None Required

Impact PUB-5 Overall Level of Significance After Mitigation: Less than Significant

Impact PUB-6 Potential to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Impact PUB-6 Analysis

Combined Program/Proposed Project Impacts

Construction

The City is currently in compliance with the State of California's 50 percent waste diversion goal, and implementation of the Program would comply with this goal. Construction of the Program components would generate debris, including pavement removal, excess or unsuitable spoils, excess concrete, and excess excavated materials. As discussed under Impact PUB-5, some of the excavated material during trenching and pipeline placement would be used as backfill, which would reduce waste generation at the Highway 59 Landfill location. The Program construction activities would be in compliance with both state and local regulations regarding waste from construction. Construction waste is expected to be limited and temporary in nature and would not conflict with any of the applicable goals and regulations. Therefore, the impact would be considered less than significant.

Operation

Operation of the Program would only generate waste at the existing WWTRF through the increase in biosolid production from the increase in treatment capacity of the WWTRF. As discussed in Impact PUB-5, the majority of these biosolids would be land applied to the agricultural areas south of the WWTRF. Any application of these solids at different City owned property would comply with the Merced County biosolids disposal ordinance and 40 Code of Federal Regulations (CFR) Part 503. If City lands are not able to accommodate land application, biosolids may also be transported offsite to the Synagro Central Valley Compost Facility (located approximately 22 miles from the WWTRF), which has both the capacity and permitted waste classification to accept such materials (CalRecycle 2020). Therefore, operational impacts associated with implementation of the Program and compliance with federal, state, and local management and reduction for solid waste would be less than significant.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact PUB-6 Findings

Impact PUB-6 Overall Level of Significance Prior to Mitigation: Less than Significant

Impact PUB-6 Mitigation Required: None Required

Impact PUB-6 Overall Level of Significance After Mitigation: Less than Significant

3.13.5 Public Service and Utilities Mitigation

No mitigation required.

3.13.6 Abbreviations

CBC	California Building Code
CEQA	California Environmental Quality Act
City	City of Merced
CWA	Clean Water Act
EIR	Environmental Impact Report
GPM	Gallons Per Minute
kV	Kilovolt
kWh	Kilowatt-Hours
Mgal/d	Million Gallons Per Day
MID	Merced Irrigation District
MMs	Mitigation Measures
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
PG&E	Pacific Gas and Electric Company
SUDP/SOI	Specific Urban Development Plan/Sphere of Influence
SWRCB	State Water Resources Control Board
TPD	Tons Per Day
WDRs	Waste Discharge Requirements
UFC	Uniform Fire Code
USC	United States Code
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
2017 WCSMP	Wastewater Collection System Master Plan
WWTRF	Wastewater Treatment and Reclamation Facility
2030 General Plan	Merced Vision 2030 General Plan

3.13.7 References

CalRecycle. 2020. El Nido Composting Facility – Synagro West (24-AA-0011). Website: https://www2.calrecycle.ca.gov/swfacilities/Directory/24-AA-0011. Accessed June 2020.

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