

Section 6

Increased Demand for Sanitary Sewer Services

This section describes how development associated with the *City of Modesto Urban Area General Plan* (UAGP) would affect increased demand for sanitary sewer services.

A. ENVIRONMENTAL SETTING

The following information is provided in accordance with Section 15125 of the California Environmental Quality Act (CEQA) Guidelines. This environmental setting is the baseline for determining whether an impact of the UAGP is significant.

1. Study Area for Direct Impacts

The study area for direct impacts on demand for sanitary sewer services is the UAGP planning area. The Modesto wastewater collection and treatment system serves Modesto as well as the unincorporated community of Empire and some Stanislaus County areas by agreement and the northern portion of the City of Ceres. The City of Modesto's (City's) facilities process domestic wastewater from residential and commercial sources and wastewater generated by industrial facilities (i.e., local canneries) in the southeastern part of the city. The City operates a primary treatment plant on Sutter Avenue adjacent to the Tuolumne River (Sutter Plant) and a secondary / tertiary treatment facility located on Jennings Avenue near the San Joaquin River (referred to as the Jennings Plant). A limited area within the City's sphere of influence relies on septic tanks for wastewater disposal and is not served by the sewer system, primarily in the county "islands."

2. Study Area for Cumulative Impacts

This analysis will be based on the plan or projection approach to examining cumulative impacts, as provided under Section 15130(b)(1)(B) of the State CEQA Guidelines. Pertinent plans and projections to be used for this purpose are the UAGP, the City's *Wastewater Collection System Master Plan* (Carollo Engineers 2016a), and the *City's Wastewater Treatment Master Plan* (Carollo Engineers 2016b). The study area for cumulative impacts on demand for sanitary sewer services is the City's sewer service area (including the City of Modesto, the community of Empire, the northern portion of Ceres, and other areas of unincorporated Stanislaus County that are served by agreement) because that is the area that would be served by the City's wastewater treatment and disposal system.

3. Existing Physical Conditions in the Study Area

The City's sanitary sewer system comprises more than 600 miles of wastewater collection system pipelines, ranging from six to 66 inches in diameter; 69 miles of trunk lines greater than 15 inches in diameter; an additional 15 miles of trunk lines connecting cannery food processors directly to

land disposal (application) areas; and approximately 40 lift stations (also referred to as pump stations) used to pump wastewater against gravity where necessary (Englent, Anhalt pers. comm. 2015; Carollo 2016a). The Sutter Plant provides processes such as screening, sedimentation and grit removal. The resulting pretreated wastewater is transferred along 6.5 miles of 60-inch pipe to the Jennings Plant.

The Jennings Plant includes secondary treatment facilities, tertiary treatment facilities, and a 2,526-acre agricultural ranch land used for application of treated domestic secondary effluent, cannery process water, and anaerobically digested biosolids trucked from the Sutter Plant. The secondary treatment facility includes three 140-foot-diameter fixed film reactors, a 100-acre aerated recirculating channel, three treatment ponds that are approximately 334 acres, and approximately 600 acres of treated wastewater storage ponds. Most of the treated wastewater is used for irrigation, and a limited amount is discharged to the San Joaquin River. The treated effluent is stored in the City's storage pond system until irrigation and/or discharge can occur. Any water that is discharged to the San Joaquin River (typically between October and May) is first disinfected with chlorine and then dechlorinated with sulfur dioxide.

The tertiary treatment facilities at the Jennings Plant consist of two plants: Phase 1 and Phase 2 Biological Nutrient Removal (BNR) / Tertiary Facilities. The Phase 1 facilities were completed in 2010 and the Phase 2 facilities were completed in 2015. Each plant has secondary biological reactors for biological oxygen demand (BOD) removal and nitrification / denitrification, membrane filtration, and ultraviolet (UV) disinfection. These facilities increase the level of treatment and will enable year-round surface water discharge or reuse. Effluent from both the Phase 1 and Phase 2 facilities are used to supply tertiary-treated recycled water demands off-site. The combined BNR/tertiary facilities have a production capacity of 14.9 mgd.

The current capacity of the City's wastewater treatment system is 81 million gallons per day (mgd) (including capacity for 40.2 mgd for cannery wastewater). In 2014, the average non-canning-season domestic wastewater flows (exclusive of cannery segregated flow) were 18.5 mgd. During the 2014 dry season, the sewer system received an average of approximately 20 mgd of wastewater, with a peak of 36.3 mgd. The peak wet weather wastewater flow was approximately 72.8 mgd (Carollo Engineers 2016a).

During the non-canning season (October through mid-July), the Sutter Plant receives flows and loads from domestic sources, minor industrial facilities, and major industrial facilities, and smaller volumes from the canning segregated industries. During the non-canning season, year-round flows from major food processing industries (Frito-Lay and Gallo Winery) are combined with domestic wastewater and treated at the Sutter and Jennings Plant facilities. Conversely, as discussed above, during the canning season (July through September or early October), canning segregated flows received at the Sutter Plant are sent directly to the Jennings Plant and get applied directly to the City's ranch land. During the canning season, the City is able to augment treatment capacity at the Sutter Plant by sending cannery wastewater directly to the Jennings Plant after it has been screened at the primary plant. Cannery waste is disposed of by irrigation at agricultural ranch lands owned by the City. Cannery waste consists of wash water containing organic vegetable material. The process of segregating cannery wastewater flows began in July 1999. In 2014, an average of 14.8 mgd of cannery segregated wastewater was received at the Sutter Plant during the canning season. The peak 30-day flow during the canning season was 20.3 mgd.

4. Existing Policies Applying to the Study Area

Below is a comprehensive list of major federal, state, and local policies or summaries of policies in effect that apply to the study area. This list provides the full range of applicable policies that a project within the study area potentially would need to comply with, including policies beyond the jurisdiction of the City. This list of laws, regulations, and programs also serves to describe the circumstances under which the Master EIR analyzed this environmental topic.

A discrete reference number, following the initials of the resource topic, is assigned to each policy or policy summary listed to facilitate its identification elsewhere in this Master EIR or, where appropriate, its incorporation as a mitigation measure into subsequent projects analyzed under this Master EIR (e.g., Sewer Service policies are designated as SS-X, where X is the discrete number).

a. Federal and State Regulations

SS-1: Wastewater disposal is regulated under Section 402 of the Clean Water Act (33 U.S. Code Section 121 et seq.) and the state Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.). The Central Valley RWQCB implements these acts by administering the National Pollutant Discharge Elimination System (NPDES) and by the issuing of waste discharge requirements (WDRs), respectively. The Central Valley RWQCB is also responsible for ensuring that operation of City wastewater treatment facilities meets the requirements of those permits. The City's NPDES permit allows treated effluent to be used for irrigation during proper soil and weather conditions and to be discharged into the San Joaquin River from October 1 through May 31 when river flows meet prescribed standards. The NPDES permit requirements of the Central Valley RWQCB ensure that discharges from the sewage treatment plants do not adversely affect water quality. (California Water Code, Division 7.)

The City's NPDES Permit is on a five-year renewal cycle and was recently renewed in June 2017. After new discharge limits take effect on May 1, 2018, only tertiary effluent will be able to meet regulatory requirements applicable to river discharge.

SS-2: Title 22 of the California Code of Regulations (CCR) regulates the production of reclaimed water in California for three main types of recycled water uses: landscape irrigation, recreational impoundments, and industrial uses. The California Department of Public Health (CDPH) is responsible for reviewing proposed water recycling projects and for providing comments and recommendations to the Central Valley RWQCB, which issues water recycling requirements through the waste discharge permit process. Title 22 of the CCR, Division 4, Chapter 3, establishes "Water Recycling Criteria," which include criteria for water quality, treatment process requirements, and treatment reliability criteria for reclamation operations. Title 22 of the CCR also defines requirements for sampling and analysis of reclaimed water and requires specific design requirements for facilities. Under 22 CCR, the proposed use of recycled water for landscape irrigation would fall under the guidelines for "landscape irrigation with high public contact." To be used as a supply source for this designation, the recycled water must meet the process requirements for "disinfected tertiary recycled water," which is defined in 22 CCR, Division 4, Chapter 3, Section 60301.230, as recycled water that has been oxidized, coagulated, clarified, filtered, and disinfected.

b. Stanislaus Local Agency Formation Commission Policies

SS-3: The Stanislaus Local Agency Formation Commission (LAFCO) oversees the annexation of unincorporated lands to the City and the efficient provision of services to those lands. LAFCO policies discourage urban sprawl (i.e., irregular and disorganized growth occurring without apparent design or plan) and promote an efficient system of service delivery (California Government Code Section 56425). Before an area is annexed, the applicant is required to show that the area will have adequate sanitary sewer service.

To coordinate services provided by local government agencies, the LAFCO establishes a sphere of influence delineating the area to be served by each agency. For the City, the criteria for its sphere of influence include the capacity to provide public facilities such as sewer service. By designating a sphere of influence for each service provider, the LAFCO prevents overlapping jurisdictions and duplicated services.

When determining spheres of influence for cities and special districts, the LAFCO must conduct a service review of the municipal services provided in an area, as determined by the LAFCO. The municipal services review (MSR) is a comprehensive review of all the agencies that provide the service within the identified area. Typical municipal services include police, fire, sewer, water, and storm drainage services. When conducting the MSR, the LAFCO must prepare a written statement of its determinations with respect to the factors identified in Government Code Section 56430. These factors require the consideration of several factors such as: growth and population projections; present and planned capacity of public facilities and adequacy of public services, including infrastructure needs and deficiencies; financial ability of agencies to provide services; status of, and opportunities for, share facilities; and accountability for community service needs, including governmental structure and operational efficiencies.

c. City of Modesto Policies

SS-4: Under its NPDES permit, the City is required to develop, administer, implement, and enforce a comprehensive stormwater management program to reduce pollutants carried in urban runoff to the maximum extent practicable. The City's adopted guidance manual specifically controls post-construction urban runoff pollutants from newly developed and redeveloped areas. The *Erosion and Sediment Control for Construction Activities* manual describes the best management practices (BMPs) that will be required as source control and treatment control measures for commercial / industrial and multi-family residential sources.

In addition, the UAGP (Chapter VI, Section B) provides the following policies related to wastewater disposal services.

SS-5: Consider reclaiming wastewater as a means to optimize the region's water resources, reduce discharge from the treatment plant, reduce the risk of fines and reduce costs associated with producing water from new / additional sources. (UAGP Policy VI.D.1)

SS-6: Comply with the Central Valley Regional Water Quality Control Board requirement to cease all discharge of wastewater that is treated at less than tertiary levels by May 1, 2018. (UAGP Policy VI.D.2)

- SS-7:** Consider reuse of wastewater treatment byproducts, such as biosolids and digester gas, which can reduce costs associated with treatment plant operations. (UAGP Policy VI.D.3)
- SS-8:** Pursue the near-term expansion of the wastewater treatment and disposal capacity of the Jennings Road Treatment Plant. (UAGP Policy VI.D.4)
- SS-9:** Pursue the long-term relocation of the Sutter Avenue Primary Treatment Plant, to the Jennings Road site, in order to consolidate operations and reduce treatment plant flooding risks. (UAGP Policy VI.D.5)
- SS-10:** Construct, operate, maintain, and replace wastewater facilities in a manner that will provide the best possible service to the public. In developing implementation plans, consideration should be given to rehabilitation of essential existing facilities, expansion to meet current excess demand, and the timely expansion for future demand. (UAGP Policy VI.D.6)
- SS-11:** Allocate the City’s wastewater system capacity to existing and future residential, commercial, and industrial customers. Discharges from environmental cleanup sites may be issued conditional discharge permits subject to the availability of excess treatment capacity. In accordance with federal and state regulations, discharges to the wastewater system may not, or may not threaten to, upset or interfere with, the wastewater system. (UAGP Policy VI.E.1)
- SS-12:** Require wastewater infrastructure master plans for the specific public infrastructure or when otherwise pertinent to provision of service at adopted service levels for the specific plan areas or other projects depending on site issues and location. (UAGP Policy VI.E.2)
- SS-13:** Individual development projects are subject to review by the City for adequate wastewater collection service and treatment. (UAGP Policy VI.E.3)
- SS-14:** Subject to the approval of the Stanislaus Local Agency Formation Commission, the City of Modesto will be the sole provider of wastewater services to the area within the City’s Sphere of Influence and sewer service area. (UAGP Policy VI.E.4)
- SS-15:** Prior to annexation, determine that adequate wastewater treatment and disposal capacity can be provided for the proposed annexation area. (UAGP Policy VI.E.5)
- SS-16:** Within the city limits and the sewer service area, all existing developed properties should connect to the sewer system within five (5) years of the extension of service. (UAGP Policy VI.E.6)
- SS-17:** Encourage the regional beneficial reuse of reclaimed water, and commit to development of a full reclamation program in the long term. Comply with Title 22 standards for use of reclaimed water and criteria contained in the California Department of Public Health “Purple Book.” (UAGP Policy VI.E.7)
- SS-18:** Participate in the North Valley Recycled Water Program, which involves routing of tertiary treated wastewater to the Delta Mendota Canal. (UAGP Policy VI.E.8)
- SS-19:** Strive to use land application of biosolids as the most environmentally beneficial reuse of this resource, rather than the disposal options of landfilling or incineration. (UAGP Policy VI.E.9)

- SS-20:** Develop methods to discontinue use of the sanitary system to temporarily drain stormwater runoff, and strive to eliminate cross-connections between the wastewater and stormwater infrastructure systems. (UAGP Policy VI.E.10)
- SS-21:** Strive to establish odor buffer zones around primary and secondary wastewater plants, thereby minimizing the likelihood of odors impacting new residential or commercial development. (UAGP Policy VI.E.11)
- SS-22:** Utilize source control and demand management among its tools for accomplishing the most cost-effective wastewater management that protects public health and the environment. (UAGP Policy VI.E.12)
- SS-23:** Require each new development project to be served with public sanitary sewers. Utilities located in private streets shall be part of the public sewerage system and shall be connected to a sewer lateral. (UAGP Policy VI.E.14)
- SS-24:** For properties outside the City limits and sewer district boundaries, the extension of sewer service may be approved by the City Manager per City Council Policy 5.002, as amended. (UAGP Policy VI.E.15)
- SS-25:** Prepare and implement an update to the City's *Wastewater Master Plan (WWMP)*, and complete an EIR for the updated WWMP. The updated WWMP should account for the UAGP, zoning revisions, updated growth projections, updated sewer demand information, regulatory requirements, and identify new capital improvement projects. The WWMP should involve several improvements to the City's collection system and upgrades to the Sutter and Jennings plants. The objectives of the updated WWMP may include the following:
- To implement the City's economic goals and Urban Area General Plan by planning for, and providing, sewer infrastructure in a timely and cost-effective manner to serve new and existing development.
 - To repair and replace aging wastewater infrastructure.
 - To ensure adequate wastewater infrastructure and services are available to serve new growth within the General Plan and City's Sphere of Influence.
 - To plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

For collection system improvements, the objectives of the updated WWMP may include:

- To increase sewer capacity to convey peak wet weather flows for a 10-year storm event, and where required, to serve future customers.
- To reduce wet weather flow volumes by removing cross connections with stormwater sewers.
- To extend service to new customers.
- To replace, repair, or rehabilitate existing trunk sewers, and to reduce infiltration and inflow of stormwater into the sanitary sewers.
- To improve sewer collection reliability by providing new and redundant infrastructure improvements, including sewer trunk lines and lift stations, in known deficient areas at critical areas within the existing system.

For treatment plant improvements, the objectives may include the following:

- To reduce flooding impacts at the Sutter Plant site and increase treatment process operational flexibility and efficiencies.
- To increase the capacity of the outfall connecting the primary and secondary treatment plants, and to provide increased reliability for the existing outfall.
- To increase treatment systems efficiency, reliability, and functionality for both domestic and cannery process stream flows.
- To increase or modify treatment systems to remain in compliance with existing Central Valley RWQCB's NPDES requirements and plan for potential future permitting regulations. (UAGP Policy VI.E.16)

5. Policies That Reduce or Avoid Impacts

The following City policies are in effect and have been determined to reduce, avoid, or mitigate environmental impacts within the existing city limits and within the Planned Urbanizing Area as they annex and develop. The policy reference numbers are listed; the full text of these policies is found above, under the heading *Existing Policies Applying to the Study Area*.

- a. SS-5 through SS-10, which address the Central Valley RWQCB's wastewater regulations.
- b. SS-11 through SS-24, which address protection of surface water and groundwater resources while providing wastewater services.
- c. SS-25, which addresses the City's WWMP update.

B. CONSIDERATION AND DISCUSSION OF SIGNIFICANT ENVIRONMENTAL IMPACTS

The following information is provided in accordance with Section 15126.2 of the State CEQA Guidelines.

1. Thresholds of Significance

Section 15063 of the State CEQA Guidelines provides that Appendix G of the State CEQA Guidelines can be used as a guide. The following thresholds adopted by the City of Modesto, which are based on the applicable portions of Appendix G, provide that a project may result in a significant effect if it would:

- a. exceed wastewater treatment requirements of the Central Valley RWQCB;
- b. require or result in the construction of new wastewater facilities or the expansion of existing facilities, beyond those identified improvements needed to serve the Project, that would cause significant effects; or,

- c. result in a finding that the wastewater treatment facilities do not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

2. Significant Direct Impacts

Based on projected demand in the Baseline Developed Area, Downtown Area, and Planned Urbanizing Area under the UAGP, the *Wastewater Treatment Master Plan* (Carollo 2016b) estimates that average annual domestic wastewater flow in 2035 would be approximately 25.6 mgd. Projected average annual dry weather flows in 2057 are estimated at 34.4 mgd. These increases in domestic wastewater demand represent an increase of approximately 38 percent and 85 percent, respectively, over existing conditions of 18.5 mgd. The growth provided for under the UAGP will require sewer capacity improvements; plant improvements; replacement, repair or rehabilitation of trunk sewers; new sewer trunk lines, lift stations, and connection lines; and reliability improvements to the outfall pipelines.

a. Exceed Wastewater Treatment Requirements of the Central Valley RWQCB

Since the 2007 WWMP was published, the City has developed the *Wastewater Collection System Master Plan* (Carollo 2016b) and *Wastewater Treatment Master Plan* (Carollo 2016a), which describe new and upgraded collection and wastewater treatment facilities needed to accommodate the increased flows over the next 18-40 years and meet future demand for sanitary sewer services. As City wastewater treatment facilities are expanded to meet the needs of the Baseline Developed Area, Downtown Area, and Planned Urbanizing Area, the City will obtain the necessary wastewater discharge and NPDES permits from the Central Valley RWQCB. As required under UAGP Policy VI.D.2, the City would comply with its current NPDES permit (Order No. R5-2017-0064, NPDES No. CA0079103) including the Central Valley RWQCB's requirement to cease all discharge of wastewater that is treated at less than tertiary levels by May 1, 2018. The City plans to construct and operate new tertiary treatment facilities at the Jennings Plant (Carollo 2016b) in effort to comply with new ammonia effluent limits that take effect in 2018. By complying with necessary wastewater discharge and NPDES permits from the Central Valley RWQCB as well as UAGP Policy VI.D.2, the City would avoid violation of applicable wastewater treatment requirements. As a result, this impact would be less than significant.

b. Require or Result in the Construction of New Wastewater Facilities or the Expansion of Existing Facilities that Would Cause Significant Effects

Consistent with UAGP Policy VI.E.16, the City is in the process of developing an update to the 2007 WWMP. To date, the City has prepared the *Wastewater Collection System Master Plan* (Carollo 2016b) and *Wastewater Treatment Master Plan* (Carollo 2016a), which include several improvements to the City's sewer collection system and upgrades to treatment facilities at the Sutter and Jennings plants that are needed to meet the City's projected sanitary sewer demands. Specific upgrades proposed include decommissioning the City's primary treatment facilities at the Sutter Plant and constructing new primary treatment and solids handling facilities at the Jennings Plant, three major outfall improvements at the Tuolumne River, expansion of the biological nutrient removal / tertiary treatment facilities at

the Jennings Plant, and modifications to secondary treatment facilities at the Jennings Plant. Construction or expansion of such facilities could result in significant impacts. Examples include degradation of water quality due to excavation activities and subsequent erosion and accidental release of chemicals used during construction, impacts to agricultural resources, short-term increase in noise levels, temporary increase in air pollutant and greenhouse gas emissions due to operating construction equipment and vehicles, and temporary increases in traffic levels on local roadways. Potential adverse effects on biological resources and cultural resources could also occur depending on the timing and location of construction activities. An EIR is currently being developed for capital improvement projects described in both the *Wastewater Collection System Master Plan* and the *Wastewater Treatment Master Plan* (collectively referred to as the “Wastewater Master Plan [WWMP] EIR”). These improvement projects are necessary for providing sanitary sewer collection demands projected through 2057 and wastewater treatment needs through 2035, respectively.

Regardless of the WWMP EIR that is currently underway, the UAGP amendment includes policies that would reduce impacts from construction of wastewater facilities. Specifically, certain policies listed in Chapter VII, Section H of the proposed UAGP amendment (VII-H.2.h and VII-H.2.m) would reduce air quality impacts. Implementation of policies SWPH-12, SWPH-13, and policies in Table V-7-1 in Section V-7 of this Master EIR, would reduce biological resources impacts. Implementation of UAGP policies VII.F-2.f, VII.F-2.h, VII.F-2.j, VII.F-2.k, VII.F-2.l, and VII.F-2.m would reduce cultural resources impact associated with construction of new or expanded wastewater treatment facilities. General Plan policies VII.L.g, VII.L.h, and VII.L.i would address potential flooding hazards. General Plan policies VII.G-2.a, VII.G-2.b, VII.G-2.f and VII.G-2.g would minimize construction and operational noise impacts, and VII.G-2.o would minimize construction vibration effect. Therefore, impacts of these facilities are generally addressed in this EIR and the facilities would be subject to the applicable policies, any mitigation measures and impact conclusions in the respective resource chapter. To the extent that a particular future improvement presents potential additional impacts than analyzed in this EIR, then project-specific environmental documentation would be prepared in compliance with any CEQA requirements.

c. Result in a Finding that the Wastewater Treatment Facilities Do Not Have Adequate Capacity to serve the Project’s Projected Demand in addition to the Provider’s Existing Commitments

As described above, the City has prepared the *Wastewater Collection System Master Plan* (Carollo 2016b) and *Wastewater Treatment Master Plan* (Carollo 2016a), which serve as an update to the 2007 WWMP. Both plans include various capital improvement projects that are intended to ensure that sufficient sewer capacity is available to match the level of growth projected by the UAGP. These two plans will be evaluated in the (in-progress) WWMP EIR, which is expected to include a mitigation measure consistent with proposed UAGP policy SS-25. This policy would reduce impacts related to insufficient treatment capacity by mandating periodic updates to the WWMP, and implementation thereof, such that the City’s wastewater treatment facilities would have adequate capacity in the future. This impact would be less than significant.

3. Significant Cumulative Impacts

CEQA and the State CEQA Guidelines require the disclosure of significant cumulative environmental impacts, of whether the project will make a cumulatively considerable contribution to any such impacts, and, if so, of mitigation measures intended to reduce the project's contribution (Section 15130 of the State CEQA Guidelines). A cumulative effect is one that results from past, present, and probable future projects. A project that has a less than significant direct effect on the environment may make a considerable contribution to a cumulative effect nonetheless.

A cumulative impact analysis first identifies whether there exists a cumulatively significant effect in the given resource area. If so, it determines whether the project will make a considerable contribution to that effect. Where a cumulative impact is severe, even a small contribution may be considerable. Where a project is required to implement or fund its fair-share of a mitigation measure designed to alleviate the cumulative impact, its contribution would be rendered less than considerable. (Section 15130(a) of the State CEQA Guidelines.)

As noted above, the project's cumulative study area includes the UAGP planning area and other unincorporated areas of Stanislaus County that are within the City's sewer service area, including the community of Empire and the northern portion of Ceres, and other areas of the County that are served by agreement. Stanislaus Council of Governments estimates that the population of Ceres will increase from 48,028 (as of 2015) to 71,050 by 2050, representing a 27.6 percent increase; and that the population of Empire will increase from 4,394 (as of 2015) to 6,190, representing a 29 percent increase (StanCOG 2016). The population of unincorporated Stanislaus County is projected to increase from 113,772 to 141,627 to 2040 (StanCOG 2016).

a. Cumulative Exceedance of Wastewater Treatment Requirements of the Central Valley RWQCB

As described above, the City would comply with its current NPDES permit (Order No. R5-2017-0064, NPDES No. CA0079103) including the Central Valley RWQCB's requirement to cease all discharge of wastewater that is treated at less than tertiary levels by May 1, 2018. The *Wastewater Collection System Master Plan* (Carollo 2016b) and *Wastewater Treatment Master Plan* (Carollo 2016a) take into consideration projected wastewater flows generated by both the City of Modesto as well as those generated in Ceres, Empire, and other unincorporated areas within the City's sewer service area. By complying with necessary wastewater discharge and NPDES permits from the Central Valley RWQCB as well as UAGP Policy VI.D.2, the City would not exceed wastewater treatment requirements and no contribution to a significant cumulative impact would occur.

b. Cumulative Impacts that Require or Result in the Construction of New Wastewater Facilities or the Expansion of Existing Facilities that Would Cause Significant Effects

The *Wastewater Collection System Master Plan* (Carollo 2016b) and *Wastewater Treatment Master Plan* (Carollo 2016a) take into consideration projected wastewater flows generated by both the City of Modesto as well as those generated in Ceres, Empire, and other unincorporated areas within the City's sewer service area. As such, sanitary sewer demands within the project's cumulative study area, have been accounted for in both the *Wastewater Collection System Master Plan* and the *Wastewater Treatment Master Plan*. As described above, construction of the various capital improvement projects necessary to address projected growth in the City's UAGP planning area and the cumulative study area are

currently being addressed in the WWMP EIR. The majority of wastewater treatment improvements are needed to accommodate projected sanitary sewer demands of the City of Modesto.

Although the WWMP EIR is currently underway, policies described throughout the proposed UAGP amendment would minimize construction and operational impacts associated with WWMP improvements. Specifically, policies VII-H.2.h and VII-H.2.m listed in Chapter VII, Section H of the proposed UAGP amendment would reduce air quality impacts. Implementation of policies SWPH-12, SWPH-13, and policies in Table V-7-1 in Section V-7 of this Master EIR, would reduce biological resources impacts. Implementation of UAGP policies VII.F-2.f, VII.F-2.h, VII.F-2.j, VII.F-2.k, VII.F-2.l, and VII.F-2.m would reduce cultural resources impact associated with construction of new or expanded wastewater treatment facilities. General Plan policies VII.L.g, VII.L.h, and VII.L.i would address potential flooding hazards. General Plan policies VII.G-2.a, VII.G-2.b, VII.G-2.f and VII.G-2.g would minimize construction and operational noise impacts, and VII.G-2.o would minimize construction vibration effect. As such, impacts of these facilities are generally addressed in this EIR and the facilities would be subject to the applicable policies, any mitigation measures and impact conclusions in the respective resource chapter. To the extent that a particular future improvement presents potential additional impacts than analyzed in this EIR, then project-specific environmental documentation would be prepared in compliance with any CEQA requirements. By complying with the policies contained in the UAGP and this Master EIR, the project's contribution to significant cumulative impacts related to expansion of existing facilities would not be considerable.

c. Cumulative Impacts that Result in a Finding that the Wastewater Treatment Facilities Do Not Have Adequate Capacity to serve the Cumulative Projected Demand in addition to the Provider's Existing Commitments

As described in the cumulative impact discussion above, the *Wastewater Collection System Master Plan* (Carollo 2016b) and *Wastewater Treatment Master Plan* (Carollo 2016a) take into consideration projected wastewater flows generated by both the City of Modesto as well as those generated in Ceres, Empire, and other unincorporated areas within the City's sewer service area. The Draft WWMP EIR describes the environmental impacts associated with wastewater treatment facilities and improvements needed to serve projected sanitary sewer demands within the cumulative study area. A primary purpose of the WWMP is to facilitate the subsequent updates of it, consistent with proposed UAGP amendment policy VI.E.16. The proposed Project's contribution to significant cumulative impacts related to inadequate wastewater treatment would be less than significant.

C. POLICIES ADOPTED TO MINIMIZE SIGNIFICANT EFFECTS

The following information is provided in accordance with State CEQA Guidelines Section 15126.4.

1. Policies that Reduce Direct Impacts

The existing and proposed policies described above under the heading *Existing Policies Applying to the Study Area* would mitigate future impacts relative to the provision of sewer collection and

wastewater treatment. Complying with policy UAGP VI.D.2 would ensure that the City does not exceed wastewater treatment requirements of the Central Valley RWQCB. As described above, an EIR is currently being prepared for the City's updated WWMP. Complying with the following policies contained in the UAGP and Master EIR would reduce environmental impacts associated with constructing new or expanded wastewater treatment facilities:

- Policies VII-H.2.h and VII-H.2.m listed in Chapter VII, Section H of the proposed UAGP amendment would reduce air quality impacts.
- Policies SWPH-12, SWPH-13, and policies in Table V-7-1 in Section V-7 of this Master EIR would reduce biological resources impacts.
- UAGP policies VII.F-2.f, VII.F-2.h, VII.F-2.j, VII.F-2.k, VII.F-2.l, and VII.F-2.m would reduce cultural resources impact associated with construction of new or expanded wastewater treatment facilities.
- UAGP policies VII.L.g, VII.L.h, and VII.L.i would address potential flooding hazards.
- UAGP policies VII.G-2.a, VII.G-2.b, VII.G-2.f and VII.G-2.g would minimize construction and operational noise impacts, and VII.G-2.o would reduce vibration impacts.

The proposed UAGP amendment policies described above would reduce potential direct impacts to a less than significant level. To the extent that a particular future improvement presents potential additional impacts than analyzed in this EIR, then project-specific environmental documentation would be prepared in compliance with any CEQA requirements.

2. Policies That Reduce Cumulative Impacts

By implementing policy UAGP VI.E.16, the City would have sufficient treatment capacity to meet future needs. Compliance with the City's NPDES permit and UAGP policy VI.D.2 would ensure that wastewater treatment thresholds would be maintained. In addition, compliance with the following policies would ensure that environmental impacts associated with constructing new or expanded wastewater treatment facilities are reduced:

- Policies VII-H.2.h and VII-H.2.m listed in Chapter VII, Section H of the proposed UAGP amendment would reduce air quality impacts.
- Policies SWPH-12, SWPH-13, and policies in Table V-7-1 in Section V-7 of this Master EIR would reduce biological resources impacts.
- UAGP policies VII.F-2.f, VII.F-2.h, VII.F-2.j, VII.F-2.k, VII.F-2.l, and VII.F-2.m would reduce cultural resources impact associated with construction of new or expanded wastewater treatment facilities.
- UAGP policies VII.L.g, VII.L.h, and VII.L.i would address potential flooding hazards.
- UAGP policies VII.G-2.a, VII.G-2.b, VII.G-2.f and VII.G-2.g would minimize construction and operational noise impacts, and VII.G-2.o would reduce vibration impacts.

Implementing the above-referenced policies would minimize the environmental impacts associated with constructing new and improved wastewater treatment and collection facilities, and thereby ensure adequate capacity of wastewater treatment facilities as new growth and development envisioned by the UAGP occurs. To the extent that a particular future improvement presents potentially greater environmental impacts than analyzed in this EIR, then project-specific environmental documentation would be prepared in compliance with any CEQA requirements. Complying with the above-referenced policies during construction of future wastewater and collection system infrastructure projects would ensure that cumulative impacts associated with the UAGP amendment are not considerable.

D. MONITORING POLICIES THAT REDUCE IMPACTS

The following information is provided in accordance with PRC Section 211081.6. The policies identified in this Master EIR have been drawn from the proposed UAGP amendment, and they are implemented by that plan. City staff provides the City Council with an annual report on UAGP implementation; therefore, no separate mitigation monitoring program is required for the UAGP Master EIR.

REFERENCES

Carollo Engineers. 2016a. City of Modesto Collection System Master Plan.

Carollo Engineers. 2016b. City of Modesto Wastewater Collection System Master Plan.

Stanislaus Council of Governments (StanCOG). 2016. Stanislaus County Forecast Summary. Available: www.stancog.org/pdf/2016ForecastSummary.pdf. Accessed August 23, 2017.

