

Introduction

The City of San Mateo (City or San Mateo) is implementing a series of capital projects to upgrade and increase the capacity of its wastewater collection system and wastewater treatment plant, referred to collectively as the Clean Water Program (CWP). A significant collection system project is the Underground Flow Equalization System Project (UFES or Project). This chapter provides background information on the CWP and the Project and describes the relevant California Environmental Quality Act (CEQA) environmental review processes.

1.1 Background

1.1.1 Wastewater Collection System

The City of San Mateo's wastewater collection system includes approximately 234 miles of sanitary sewer pipeline, 5,555 sewer manholes, and 26 pump stations. The system conveys wastewater from all properties located within the city's limits to the City's WWTP. The system also conveys wastewater from the collection systems serving the Town of Hillsborough, City of Belmont, Crystal Springs County Sanitation District (CSCSD), and other portions of unincorporated San Mateo County.

The existing collection system infrastructure faces a number of challenges. First, the sewer pipelines are very old. The system consists primarily of sewer pipes that were constructed between 1900 and 1960. The pipes have average life span of 50 to 60 years, so most are older than the expected average life span.

Second, although the City's current minimum sewer diameter standard is 8 inches, approximately 60 percent of the existing collection system was constructed prior to this standard and includes pipes with diameters of 6 inches or smaller. Sewer mains less than 8 inches in diameter are susceptible to blockages.

Third, the collection system relies on 26 pump stations, located mostly in the eastern (flatter) half of the City, to assist in the conveyance of wastewater to the WWTP. Some of the pump stations are undersized.

Finally, the system is prone to inflow and infiltration of groundwater and surface water, particularly during rain events. Approximately 78 percent (about 180 miles) of the City's collection system was installed before 1960, with 26 percent (approximately 60 miles) installed before 1940. Prior to 1940, pipelines were often constructed in short pipe segments, requiring a higher number of pipe joints through which tree roots and water infiltrate. Improvements in pipe joints occurred around 1960, reducing infiltration. However, inflow and infiltration remain a significant problem. These challenges leave the collection system susceptible to sanitary sewer overflows (SSOs) during periods of wet weather. The City's CWP includes a number of collection system projects, including the proposed Project, that are intended to eliminate SSOs by reducing inflow and infiltration and improving the system's capacity to handle the temporary spikes in wastewater flows that occur during wet weather.

1.1.2 Wastewater Treatment Plant

Under the City's current National Pollutant Discharge Elimination System (NPDES) permit, the WWTP is permitted to discharge 15.7 million gallons per day (mgd) for average dry weather flow (ADWF). The WWTP's current ADWF is approximately 11 mgd. Future dry weather flows and loads to the WWTP were projected using a per capita method, which assumes that flows and loads will increase proportionally to the anticipate increase in population. With a 2010 census-based service area population of

approximately 143,100, and assuming a 16 percent increase in population over the planning period, the 2035 service area population is estimated to be 166,400. Using this method, ADWF for the year 2035 was estimated to be 13.9 mgd (Carollo Engineers, Inc., 2014). The WWTP influent loadings are expected to increase similarly. Therefore, the City does not anticipate increasing its permitted capacity for dry conditions over the 20-year planning period.

The permitted peak wet weather flow (PWWF) for the WWTP is 40 mgd, based on secondary treatment capacity. However, flows often exceed 40 mgd during peak wet weather events. When flows exceed 40 mgd, primary and secondary effluent are blended for discharge of up to 60 mgd, which is the outfall pipeline capacity limitation. This 60-mgd limitation and the insufficient capacity of portions of the City's collection system have historically caused backups in the system, resulting in SSOs.

By 2035, it is expected that the PWWF conveyed to the plant would be 98 mgd (Carollo Engineers, Inc., 2014).

1.1.3 City of San Mateo Clean Water Program

To manage the PWWF, projects are needed that increase pump station capacity, upsize pipelines, add relief lines in the collection system, provide temporary storage (equalization) in the collection system, and increase treatment capacity at the WWTP. The San Francisco Bay Regional Water Quality Control Board (RWQCB) regulates the operation of the sanitary sewer collection system and WWTP. In March 2009, the RWQCB issued a Cease and Desist Order jointly to the City of San Mateo, Town of Hillsborough, and the CSCSD mandating elimination of SSOs in the collection system and requiring specific corrective actions. In response, the City developed a sewer system management plan that focuses on operation and maintenance (O&M) of the treatment facilities and a capital improvement program (CIP) that primarily focuses on the collection system.

In 2015, the City initiated the CWP. The CWP is being implemented to address the expected PWWF of 98 mgd by upgrading the City's collection system and WWTP. UFES is a critical component of the CWP to provide sufficient capacity in the City's collection system to reduce SSOs.

1.2 Objectives

The proposed Project is in line with the CWP objectives, and specifically helps to increase the capacity of the City's collection system to eliminate SSOs and meet regulatory requirements. The following are objectives of the CWP:

- Provide adequate system capacity to efficiently convey and treat the PWWF.
- Meet current regulatory requirements regarding blending, SSOs, and infiltration and inflow (I/I) reduction.
- Meet anticipated future regulatory requirements, including total nitrogen and total phosphorous concentrations, pathogens, and recycled water use.
- Meet San Mateo's sustainability objectives, including more efficient use of energy and recycled water.
- Provide space planning to support implementation of projects addressing the objectives above within the limitations of the sites available for WWTP facilities.

The following are specific objectives of the proposed Project:

- Provide adequate system capacity to efficiently convey and treat the PWWF, including the proposed Project for wet weather flow equalization and optimization of the existing collection system performance.

- Meet current regulatory requirements regarding SSOs. The proposed Project provides storage for the flow that contributes to SSOs.
- Provide space planning to support implementation of projects addressing the objectives above within the limitations of the sites available for WWTP facilities. The proposed Project reduces the storage needed at the WWTP.
- Improve safety and reliability of the collection system and WWTP. The proposed Project will reduce discharge of raw sewage within San Mateo and to the Bay.

1.3 California Environmental Quality Act Environmental Review Process

In 2015 and 2016, the City prepared a program-level CEQA review of the CWP, which was adopted by the City Council in June 2016 (2016 Final PEIR) (SCH. 2015032006). The 2016 Final PEIR analyzed two alternative approaches for improving the collection system and corresponding new treatment processes at the WWTP.

In adopting the 2016 Final PEIR, the City Council selected the “In-System Storage Program” alternative as the City’s preferred alternative. The proposed Project is among the collection system projects described for the in-system storage approach.¹

The 2016 Final PEIR analyzed the proposed Project at a programmatic level. In other words, it identified several potential locations for the Project, provided criteria for the site selection process and described the size and features of the facility in general terms.

This Environmental Impact Report (EIR) is being prepared to evaluate project-level environmental impacts associated with the proposed Project. State CEQA Guidelines Section 15162, provides that a EIR is warranted if the lead agency determines, among other things, that substantial changes have occurred with respect to the project or with respect to the circumstances under which the project is undertaken that will require major revisions to the previous EIR due to new significant environmental effects or an increase in the severity of a previously identified effect; or new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, becomes available and shows that the currently proposed Project will have one or more significant effects not discussed in the previous EIR. This EIR is appropriate for project-level environmental review of the proposed Project. In particular, this EIR provides substantial new information related to implementation of the proposed Project.

A Notice of Preparation (NOP) of this Draft EIR was circulated to the California State Clearinghouse, EMID, Foster City, Town of Hillsborough, City of Belmont, CSCSD, County of San Mateo, California Department of Public Health, Bay Area Air Quality Management District (BAAQMD), California Department of Fish and Wildlife (CDFW), and San Francisco RWQCB. The NOP was released to the public on September 7, 2018, for a 30-day review period. In addition, the NOP was provided in the *Examiner*, *San Mateo Edition* and *Daily Journal*.

The NOP listed each issue identified as significant or potentially significant and that would, therefore, require analysis in the EIR. The purpose of the NOP was to solicit comments from the public and from public agencies on issues germane to that agency that should be considered in the EIR. The NOP included a description of the proposed Project, Project location, and the following list of resource areas proposed to be addressed in the EIR: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas, Hazardous Materials, Hydrology and Water Quality, Land Use,

¹ In the 2016 Final PEIR, the UFES Project was called the In-System Storage Facility. See Section 2.2.1.4.

Noise, Population and Housing, Public Services, Recreation, Traffic, and Utilities. Members of the public were given an additional opportunity to comment on the scope of the EIR at a public scoping meeting on October 2, 2018, at San Mateo City Hall. Comments were received during the scoping meeting and four written comment letters were received during the scoping period. Comments are summarized below by topic:

- Consideration of background conditions
- Concern about water quality surrounding the Project site both from Project construction and operations, specifically from facility failure due to cracking
- Concern about air quality, including odor, fungus in the soil that may be released during excavation, and fugitive dust, surrounding the Project site, from both Project construction and operations
- Concern about noise from construction activities and O&M activities
- Risk of Project failure, including accidental spills and cracks in the Project, due to earthquakes and/or flooding
- Concern about hazardous chemicals use during Project O&M
- Concern about traffic impacts during construction
- Concern about loss of parking for major events at Event Center during construction
- Concern about subsidence in the Project area from groundwater extraction during construction
- Contamination in soils in the Project site
- Concern about public health issues due to Project construction and operations

1.4 Uses of this Document

Consistent with CEQA requirements, the intended uses of this document are to:

- Identify potential direct and indirect environmental impacts associated with the proposed Project.
- Describe mitigation measures that avoid potentially significant impacts or reduce them to a less-than-significant level.
- Identify and evaluate the potential for growth inducement due to the proposed Project.
- Discuss potential alternatives to the proposed Project.

After review, the City will consider this Draft EIR and, if approved, the Project would move forward for detailed design and construction.

In addition, the City and other Responsible Agencies with regulatory authority would use this document to provide required CEQA review for other discretionary decisions to support the Project. Specific approvals would depend on the project and location, and may include, but are not limited to, the following:

- City of San Mateo (special use permit, site plan and architectural review [SPAR], grading or building permits)
- San Mateo County (permanent easement)
- BAAQMD (authority to construct/permit to operate)

1.5 Public Review and Comment

California Code of Regulations (CCR) Section 15087 requires that a lead agency provide public notice of the availability of a Draft EIR at the same time it sends notice to the Office of Planning and Research. Notice was provided to the Office of Planning and Research and mailed directly to property owners within 1,000 feet of any proposed Project facility location as well as individuals and agencies that requested notice in writing and submitted written comments during the scoping period. Agencies and interested members of the public will have 40 days to review and provide comments on this Draft EIR.

Written comments on the Draft EIR will be accepted from March 6, 2019, to May 7, 2019, by email to info@cleanwaterprogramsanmateo.org or U.S. Mail to the following address:

Clean Water Program
 San Mateo City Hall
 Public Works Engineering PMO
 330 W. 20th Avenue
 San Mateo, CA 94403

A digital copy of the Draft EIR is available for download on the CWP website at <http://www.cleanwaterprogramsanmateo.org/>. Hard copies are available for viewing at the following locations:

- City Hall, 330 West 20th Avenue
- San Mateo Main Library, 55 West 3rd Avenue (Reference Desk)
- San Mateo Marina Branch Library, 1530 Susan Court (Reference Desk)
- San Mateo Wastewater Treatment Plant, 2050 Detroit Drive.

Referenced materials used in the preparation of the Draft EIR may be reviewed upon request to the City. CDs and hard copies are available for purchase.

A public meeting on the Draft EIR will be held April 9, 2019, at 7 p.m. at 330 West 20th Avenue, San Mateo, CA 94403.

1.6 References

Carollo Engineers, Inc. 2014. *City of San Mateo Integrated Wastewater Master Plan*. Prepared for City of San Mateo. October.

City of San Mateo. 2010. *City of San Mateo General Plan – Vision 2030*. Resolution No. 134-2010. Adopted by the City Council on October 18.

Pacific Municipal Consultants. 2015. *City of San Mateo Climate Action Plan*. Prepared for City of San Mateo. February.