# **Project Report**

(Suggested Content for Publicly-Owned Treatment Works Projects)

### I. Project Area

- A. Vicinity and service area map(s) showing:
  - 1. Detailed map(s) of project site(s) and service area boundary;
  - 2. Relevant hydrologic, geologic, and topographic features;
  - 3. Relevant ground and surface water resources; and
  - 4. Existing collection, distribution, storage, and treatment facilities
- B. Current land use and land use trends
- C. Current system users and any new users
- D. Current population and population trends

#### II. Wastewater Characteristics, Existing Facilities, and Current Water Quality

A. Description of existing facilities, including treatment/reuse processes/schematic(s), design criteria, current capacities, current flows, current water quality characteristics and beneficial uses of the water resources affected by the facility, and the current discharge location(s)

- B. Description of all entities responsible or contributing to the existing facilities
- C. Sources of wastewater to the facility
- D. Sources of industrial or other problem constituents and current control measures
- E. Information about any discharge violations
- F. Wastewater influent characteristics and variations
- G. Wastewater effluent characteristics and variations
- H. Past efforts to address the problem through operational improvements
- I. Current asset, operation, and maintenance management systems

J. An evaluation of excessive infiltration/inflow (I/I) to the system. If the average daily flow is above 120 gallons per capita per day, a Sewer System Evaluation Survey is required.

### III. Treatment Objectives for Discharge or Reuse

- A. Reason for the project and its objectives/expected benefits
- B. Performance characteristics required for efficient treatment
  C. Health-related water characteristics required for discharge, operational, and onsite requirements
- D. Wastewater discharge or reuse requirements and anticipated changes in requirements
- E. Relevant operation and on-site requirements
- F. Projected future flow rates or other changes to the influent wastewater characteristics
- G. Additional facilities or actions needed to comply with waste discharge requirements

### IV. Project Alternatives Analysis

- A. Planning and design parameters and assumptions
  - 1. Relevant design criteria
  - 2. Cost index, discount rate, useful lives
  - 3. Planning period
- B. Detailed alternatives analysis, including the no action alternative
  - 1. Comparison of all alternatives based on life cycle costs for each alternative with breakdown of total capital, operation and maintenance (O&M), and replacement costs
  - 2. Comparison of how the project alternatives address the state planning priorities in section 65041.1 of the Government Code and sustainable water resource management priorities
  - 3. Climate change analysis for each alternative

# V. Selected Project

- A. A detailed description of the recommended project alternative and basis for selection
- B. Design criteria and useful life of the project
- C. Life cycle cost estimate based on time of construction. Include project cost breakdown, cost index, discount rate, useful life (years), life cycle cost, total capital, annual O&M, replacement cost, etc.
- D. Detailed schedule
- E. Permits required for project implementation
- F. Description of any key issues to be resolved, particularly items likely to significantly impact the project budget or schedule, i.e., environmental review, land acquisition, etc.