



Agenda Date: 5/15/2019

Agenda Placement: 8D

Napa Sanitation District Board Agenda Letter

TO: Honorable Board of Directors

FROM: Timothy Healy - General Manager
NS-Technical Services/Engineer

REPORT BY: Matthew Lemmon, Senior Civil Engineer - 707-258-6004

SUBJECT: Award Task Order for the Collection System Master Plan (CIP 19727) Phase 2 Design Services

RECOMMENDATION

Authorize the Purchasing Agent to execute Task Order 71 with GHD to provide engineering services for Phase 2 of the Collection System Master Plan (CIP 19727) in the amount of \$563,461.

EXECUTIVE SUMMARY

The primary goal of the Collection System Master Plan (CSMP) is to identify a plan for long-term collection system reliability by evaluating the anticipated service levels required against the existing and planned demands on the system. NapaSan last updated its CSMP in 2007. An update to the CSMP is needed for the following reasons:

- | Reconstruct the collection system hydraulic model with advanced software to evaluate flows and capacity deficiencies. Current and projected flows in the collection system have changed since 2007 due to water conservation and changes to growth projections and development density.
- | Assess the performance of the I/I reduction program recommended by the 2007 CSMP to determine the lowest life-cycle cost program to address the capacity deficiencies within the collection system.
- | Establish service levels and conduct condition assessments to recommend a 10-year CIP for collection system upgrades. Integrate this analysis with NapaSan's asset management program.
- | Complete the evaluation of the capacity of the 66-inch trunk main and confirm the recommendation to rehabilitate the existing pipe.

Phase 1 of the CSMP accomplished wet weather flow monitoring and a preliminary capacity analysis of the 66-inch trunk main. Phase 2 of the CSMP will assess the performance of NapaSan's I/I program, create a dynamic all-pipes hydraulic model, integrate with NapaSan's asset management program, and recommend projects for NapaSan's Capital Improvement Program.

The hydraulic analysis of the collection system conducted in the CSMP will help NapaSan meet the requirements of the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The CSMP study area will be consistent with the District's Sphere of Influence.

FISCAL IMPACT

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	Yes
Where is it budgeted?	The project is budgeted in the approved FY 2018/19 and the proposed FY2019/20 budget.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	NapaSan last updated the CSMP in 2007. The 2007 CSMP is now out of date and is no longer relevant for project planning or decision making. The CSMP will include a dynamic all-pipes hydraulic model which will more accurately model NapaSan's collection system than the previous model. Industry practice is to update the CSMP every five-to-ten years.
Is the general fund affected?	Yes
Future fiscal impact:	The project is budgeted in the proposed FY2019/20 budget and will be completed in FY2019/20.
Consequences if not approved:	NapaSan's Collection System Master Plan will not be updated. NapaSan will continue to reference the 2007 CSMP which does not accurately reflect the current conditions and is no longer relevant for capital project planning.
Additional Information:	None.

ENVIRONMENTAL IMPACT

The Collection System Master Plan (CSMP) is not a project under the California Environmental Quality Act (CEQA). Future approval of the completed CSMP will not constitute or authorize the approval of any future project or activity identified in the CSMP. These projects will be subject to future approval by NapaSan and may be subject to change as more detailed plans are formulated during the formal project approval process. These future projects will be subject to compliance with CEQA as applicable. No physical changes to the environment from these projects will occur without required CEQA compliance. The discretion of NapaSan to approve, approve with conditions, or disapprove these projects following the completion of any required CEQA environmental review is not limited by the future approval of the CSMP. The future projects and activities described in the CSMP are conditioned upon and may be modified based on any mitigation measures imposed in connection with CEQA review and any review and approval of entitlements or permits required by other agencies for the project or activity.

BACKGROUND AND DISCUSSION

NapaSan last updated its CSMP in 2007. The study evaluated the condition and performance of the collection system under current and future (2030) buildout conditions. "Buildout" was based on the existing City of Napa General Plan and the General Plan update for the County of Napa that was underway at the time. Flow monitoring

was conducted to evaluate peak flows during wet-weather conditions. The study found that the collection system had adequate dry-weather capacity to handle anticipated growth in the General Plans, but had inadequate capacity for peak wet-weather flows.

The 2007 CSMP estimated that \$120 million (2007 dollars) in collection system upgrades would be required to convey the existing peak wet-weather flows. This cost did not include treatment plant upgrades necessary to accommodate increased flows from the collection system. Instead of constructing \$120+ million in capacity improvement projects, the 2007 CSMP recommended a 5-year Capital Improvement Program focused on I/I reduction, followed by a performance assessment. The study anticipated that the most cost-effective solution would be a mixture of I/I reduction projects and capacity upgrades.

SUPPORTING DOCUMENTS

- A . Presentation Slides
- B . Task Order 71

Napa Sanitation District: Approve

Reviewed By: Timothy Healy