



Agenda Date: 8/1/2018

Agenda Placement: 8E

Napa Sanitation District Board Agenda Letter

TO: Honorable Board of Directors

FROM: Andrew Damron for 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 1 Design Services

RECOMMENDATION

Authorize the Purchasing Agent to execute Task Order 65 with GHD to provide engineering services for Phase 1 of the Collection System Master Plan (CIP 19727) in the amount of \$410,608.

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 required for the following reasons:

- | Re-construct 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.
- | Evaluate the current and future capacity for the 66" trunk main and provide a recommendation for rehabilitation or replacement with a larger pipe.
- | 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 Plan.

Phase 1 of the Collection System Master Plan will provide a recommendation based on existing and future flows. A Task Order for Phase 2 (completion of the Master Plan) is anticipated for Board approval in Spring/Summer 2019. Phase 2 of the Master Plan will assess the performance of NapaSan's I/I program, update the system-wide hydraulic model, integrate with NapaSan's Asset Management Plan, and recommend projects for NapaSan's Capital Improvement Program.

The hydraulic analysis of the collection system conducted in the CSMP will comply with the requirements of the state regulatory requirement known as the "Sewer System Management Plans". 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 FY2019/20 budget and was moved forward one year by using savings from other projects.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	A capacity analysis of the 66" trunk main is required to determine if the main can be rehabilitated or if it must be replaced with a larger pipeline.
Is the general fund affected?	Yes
Future fiscal impact:	Phase 2 of the Collection System Master Plan will occur during FY 2019/20 and will be conducted under a separate task order.
Consequences if not approved:	The capacity requirements of NapaSan's 66" trunk main will not be studied. The trunk main is in need of repair but NapaSan will not obtain recommendations for repair or replacement of the pipeline.
Additional Information:	None.

ENVIRONMENTAL IMPACT

The approval of the Collection System Master Plan (Master Plan) is not a project under the California Environmental Quality Act (CEQA). The approval of the Master Plan does not constitute or authorize the approval of any new future project or activity identified in the Master Plan. These projects are 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 approval of the Master Plan. The future projects and activities described in the Master Plan 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 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 . GHD Task Order 65
- B . Presentation Slides

Napa Sanitation District: Approve

Reviewed By: Andrew Damron