



Agenda Date: 12/18/2019  
Agenda Placement: 8B

## Napa Sanitation District Board Agenda Letter

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**TO:** Honorable Board of Directors

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

**REPORT BY:** Robin D. Gamble Holley, Asset Management Analyst - (707) 258-6031

**SUBJECT:** Authorize the General Manager to Issue Notice Inviting Bids for the West Napa Pump Station Project (CIP 17711)

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### **RECOMMENDATION**

Authorize the General Manager to issue Notice Inviting Bids for the West Napa Pump Station Project (CIP 17711), after confirmation of funding approval from the State Water Board.

### **EXECUTIVE SUMMARY**

A pre-design report was prepared in 2003 for the West Napa Pump Station (WNPS) that identified deficiencies in the pump station that required improvements including replacement of handrails and stairs, seismic upgrades to the building, and replacement of outdated electrical to name a few. The primary deficiency was that there was inadequate firm capacity to pump peak wet-weather flows. Firm capacity of a pump station is the total pumping capacity remaining when the largest pump is out of service.

Hazen and Sawyer further evaluated the pump station and did a cost benefit analysis between retrofitting the existing pump station or building a new pump station and determined it was approximately the same price but a retrofit would not allow for any future expansion. Staff determined replacement of the pump station was the better long term option. Later, energy efficiency components were added to the scope of the project which allowed for the project to be eligible for the State Revolving Fund (SRF) Green Project Reserve (GPR) funding.

The Project includes installation of a new underground WNPS adjacent to the existing WNPS. The old WNPS will be abandoned and demolished once the new WNPS is operational and installation of elevated solar in the location of the existing WNPS once demolished.

The new WNPS will consist of the following major components:  
- New wet well self-cleaning trench type pump station

- Two large and two small pumps
- Odor control facility
- Solar panels
- Electrical building and transformer

The engineer's estimate of probable construction cost for the project is \$8,450,000.

Staff anticipates issuing the Notice Inviting Bids in December with a bid opening in February and award of the construction contract in March. The contractor will have 750 calendar days to substantially complete the project from Notice to Proceed. The Notice to Proceed is expected in late March 2020 and construction is expected to be completed by the end of April 2022.

It is anticipated that the construction of the new pump station will be completed by July 2021. Once the new pump station is completed the existing pump station can be demolished, followed by the construction of site improvements such as paving and solar panels which will extend into Spring 2022.

Construction management for the project will be performed by a consultant and approval of the task order will be presented to the Board for approval at a future meeting.

Plans are available for review in the NapaSan's Administrative Office and will be available at the NapaSan Board meeting.

#### **FISCAL & STRATEGIC PLAN IMPACT**

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	Yes
Where is it budgeted?	This project is budgeted under CIP 17711 with \$5,500,000 in FY19/20 and \$5,500,000 FY20/21. With approval of SRF funding there is adequate funding in the budget for this project.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	The existing pump station has reached the end of its useful life and replacement is necessary.
Is the general fund affected?	Yes
Future fiscal impact:	Construction will be completed in FY21/22. The project cost budgeted in this fiscal year will be carried forward into future fiscal years until completion of the project. Once construction is completed, there will be unspecified operation and maintenance costs however these costs are anticipated to be similar or less than the existing pump station.
Consequences if not approved:	The project will not be constructed, NapaSan will not be eligible for the \$4,000,000 SRF loan forgiveness for a GPR project, and wet-weather flows will exceed the existing firm capacity of the existing pump station.
Additional Information:	None.

**ENVIRONMENTAL IMPACT**

NapaSan approved the project and adopted a Mitigated Negative Declaration on February 15, 2017 by Resolution 2017-006 which included rehabilitation of the West Napa Pump Station. NapaSan adopted an Addendum to the Mitigated Negative Declaration on February 28, 2018 by Resolution 2018-005 which included replacement of the West Napa Pump Station.

**BACKGROUND AND DISCUSSION**

NapaSan's WNPS is located at the northeast corner of the intersection of West Imola Avenue and South Coombs Street. The pump station conveys flow from areas of West Napa and pumps the wastewater under the Napa River. The original facility was constructed in 1948 and was expanded in 1979 with minor modifications since the expansion was completed. Dry weather flow through the pump station is approximately 1.8 mgd, however approximately 16 mgd are experienced during wet-weather events. The project will increase the firm capacity of the pump station so that the pump station is more reliable in wet weather and replace 70-year old assets that have reached the end of their useful life.

Hazen and Sawyer was selected through a competitive process to perform a preliminary evaluation of the design options. Using asset management principals Hazen and Sawyer evaluated the 30-year life cycle cost for the options. The options studied included rehabilitation of the existing pump station, construction of a new pump station using the existing building for electrical equipment, and construction of a new pump station with a new electrical building. The life cycle cost for both options were the same. Staff determined the preferred option was to replace the pump station, build a new electrical building, and install solar panels in the location of the existing building which would allow for NapaSan to take advantage of green project reserve (GPR) funding.

The replacement of the pump station is eligible for the GPR funding due to reducing energy consumption use by 20%. The 20% reduction in energy consumption will be achieved by using more efficient pumps and electrical equipment and installation of solar panels. One of the benefits of a GPR project is that the green components of the project are eligible for up to \$4M in loan forgiveness. The remainder of the project will be funded by an SRF loan.

**SUPPORTING DOCUMENTS**

A . Presentation Slides

Napa Sanitation District: Approve

Reviewed By: Timothy Healy