



Agenda Date: 6/6/2018  
Agenda Placement: 8E

## 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:** Simon Kobayashi, Associate Engineer - 707-258-6030

**SUBJECT:** Approve Project, Concur with CEQA Determination, and Authorize the General Manager to Issue Notice Inviting Bids for the Headworks Equipment Replacement Project (CIP 17726)

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### **RECOMMENDATION**

Approve Project, concur with staff's CEQA Determination, and authorize the General Manager to issue Notice Inviting Bids for the Headworks Equipment Replacement Project (CIP 17726)

### **EXECUTIVE SUMMARY**

This project, which consists of replacing existing equipment in the headworks facility, was identified in the 2011 Wastewater Treatment Plant Master Plan for 2016 implementation and confirmed by equipment condition assessment. The existing equipment scheduled for replacement includes two fine screens, a washer/compactor, and grit removal equipment. The project also includes the rehabilitation of corroded assets in the influent channels, improvements to the ventilation system, and electrical system improvements to support the new equipment.

The engineer's estimate of probable construction cost for the project is \$2,158,000.

Notice Inviting Bids will issued in June, Bids will be opened in July, and Notice To Proceed will be issued in August. Construction is scheduled for the dry-weather season of 2019 to take advantage of lower plant flows during the summer.

Plans are available for review at NapaSan's office and will be available at the Board meeting on June 6, 2018.

### **FISCAL IMPACT**

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	Yes
Where is it budgeted?	The project is budgeted in the 10-year capital improvement plan. There are sufficient funds budgeted to cover project costs.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	The existing headworks equipment has reached the end of its useful life and requires replacement.
Is the general fund affected?	Yes
Future fiscal impact:	Construction will be completed in FY 19/20. Unused budget in this fiscal year will be carried forward into the next fiscal year.
Consequences if not approved:	The existing Headworks equipment, which has reached the end of its service life, will not be replaced. The screening and grit systems would likely require increased maintenance, and be subject to failure. Materials normally removed by the fine screens and grit system would pass through Headworks into the treatment process and affect downstream processes. Normally screened materials would pass on to the Digester and adversely affect the quality of NapaSan's biosolids.
Additional Information:	None.

### **ENVIRONMENTAL IMPACT**

ENVIRONMENTAL DETERMINATION: Staff performed a preliminary CEQA review of this project and determined the project is Categorically Exempt. This project consists of replacement or reconstruction of existing systems and/or facilities involving no expansion of capacity, which corresponds to Categorical Exemption 15302 (c) of the California Environmental Quality Act (CEQA) Guidelines. If the Board concurs with this determination, staff will file the attached Notice of Exemption.

### **BACKGROUND AND DISCUSSION**

The Headworks facility was constructed in 1998 as part of the Phase 2 Soscol Water Recycling Facility Upgrade Project. The Headworks receives raw wastewater flows from the Influent Pump Station. The wastewater passes through screens to remove debris (rags, wrappers, solids) exceeding 6mm to prevent it from continuing into the treatment process. The screenings are conveyed to washer-compactors for cleaning and compaction prior to landfill disposal. Smaller and heavier particles (grit) that pass through the 6mm screens flows into aerated grit chambers where it is collected and pumped to a grit classifier. After the grit is collected it is washed and placed into a hopper for landfill disposal.

The Headworks facility and related equipment is approaching 20 years in age, exposed to raw wastewater, and subject hydrogen sulfide corrosion. The equipment is near the end of its useful life due to wear and corrosion and some equipment is no longer supported by the manufacturer. A condition assessment revealed issues that require rehabilitation or replacement. In addition, newer technologies exist in equipment alternatives in comparison to the existing equipment that provide improved screening, grit removal and processing. HDR was selected to prepare design and construction bid documents in July of 2017 which are now completed.

An options analysis was performed as part of the preliminary design. It found that the grit classifier and washer were no longer supported, making replacement the best option. The washer compactors for the screen were recommended for replacement, as technology has improved and the current device is providing minimal washing. The screen's poor configuration and incompatibility with upgraded washer compactor units made the replacement of the screens necessary. Rehabilitation was not feasible and not recommended.

**SUPPORTING DOCUMENTS**

- A . Presentation Slides
- B . CEQA Notice of Exemption

Napa Sanitation District: Approve

Reviewed By: Timothy Healy