



DATE: December 12, 2023

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT Adopt a Resolution Authorizing the City Manager to Apply for a United States Environmental Protection Agency (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) Loan for the Water Pollution Control Facility (WPCF) Improvements - Phase II Project No. 07760

RECOMMENDATION

That Council adopts a resolution (Attachment II) authorizing the City Manager to apply for a United States Environmental Protection Agency (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) Loan for the Water Pollution Control Facility (WPCF) Improvements – Phase II project.

SUMMARY

The WPCF core infrastructure was originally constructed in 1952 to treat wastewater flows from the City of Hayward's residents and businesses prior to discharge into the San Francisco Bay. Over the years, the WPCF has undergone several major upgrades to meet more stringent discharge requirements, as well as increasing capacity as the City's population and industry has grown. The WPCF now treats an average flow of approximately eleven million gallons per day (MGD) and meets current regulatory requirements for discharge of treated effluent to the deep waters of the San Francisco Bay (Bay).

In May 2019, the San Francisco Bay Regional Water Quality Control Board (Water Board) announced upcoming regulatory requirements limiting discharge of nutrients (nitrogen) to the Bay. In June 2020, the City completed a comprehensive Master Plan update, the WPCF Phase II Facilities Plan (Facilities Plan), to identify improvements required for the WPCF to upgrade its treatment process to incorporate nutrient reduction in the treated effluent to meet the upcoming requirements. In July 2022, Council authorized design and engineering services with Brown & Caldwell for the WPCF Improvements – Phase II Project (Phase II Project).

Staff are exploring funding opportunities for the Phase II Project, including the U.S. Environmental Protection Agency (EPA) Water Infrastructure Finance and Innovation Act

(WIFIA) loan program. This program offers funding for water infrastructure projects for up to 49% of project costs. The first step of the WIFIA loan application involves a Letter of Interest (LOI). The LOI provides information to demonstrate the borrower's project eligibility, financial creditworthiness, engineering feasibility, and alignment with EPA's policy priorities. A signed resolution from Council is required as an attachment to the LOI form.

BACKGROUND

In March 2022, staff issued requests for proposals and selected Brown and Caldwell to perform final design services and engineering services during construction for the project. Staff negotiated the scope and not-to-exceed fee for the project in the amount of \$24,737,324 which includes preliminary and final design services, bid period services, engineering services during construction, optional services, and design contingency. The project will be constructed in three separate bid packages; the first bid package will include the Administration Building and Laboratory, the second bid package will be for the Primary Effluent EQ Tanks Project, and the third bid package will be for the remaining WPCF Improvements – Phase II which includes the biological nutrient removal process upgrades.

On July 5, 2022¹, Council authorized an agreement with Brown and Caldwell (B&C) in an amount not-to-exceed \$3,849,711 for preliminary design services for the Phase II Project. Preliminary design for the entire project will be complete in December 2023.

Early bid packages are required for the Administration Building Project and the Primary Effluent Equalization (EQ) Tanks Project. On December 6, 2022², Council authorized an amendment to the Professional Services Agreement (PSA) with B&C to increase the contract amount by \$4,800,000 to \$8,649,711, which included authorizing final design of the Administration Building and Primary Effluent EQ Tanks Projects, as well as the geotechnical investigation for the WPCF Improvements – Phase II Project.

On December 5, 2023, Council authorized amending the professional services agreement with Brown and Caldwell to increase the contract amount by \$8,023,1176 to a not-to-exceed amount of \$16,672,827 for final design services and authorized use of contingency funds for design of the existing final clarifiers retrofit.

The total estimated construction cost for the entire project including the Administration Building, Primary Effluent Equalization Tanks, and the Phase II Project is estimated to be \$239 million with a range of \$173 to \$350 million reflecting a range of accuracy in the estimate based on the level of design. A cost breakdown is summarized in Table 1.

The upcoming regulatory requirements and cost of implementing biological nutrient removal facilities is not unique to the City. Other agencies are also implementing similar improvements including the City of Palo Alto (construction cost of \$193 million), City of

¹ <https://hayward.legistar.com/LegislationDetail.aspx?ID=5714864&GUID=9ED75AE9-FFB6-4BC4-ACD9-915A6B3F458B&Options=&Search=>

² <https://hayward.legistar.com/LegislationDetail.aspx?ID=5955245&GUID=00AFFC5A-9512-4A36-8AF4-D7F5022920FD&Options=&Search=>

Sunnyvale (construction cost of \$278 million), and Union Sanitary District (planning level cost \$482 million for their secondary treatment upgrades).

DISCUSSION

WIFIA funding is available for construction and other eligible costs including planning, design, and construction management costs related to the eligible project. Assuming the upper range of the estimated project cost (\$350 million) and adding planning, design, engineering services during construction, and estimated construction management fees, the total project cost eligible for funding is estimated to be \$410 million. Of the total project cost, 49% of the total cost is eligible for WIFIA funding. Therefore, staff intends to apply for approximately \$200 million in WIFIA loan funding for the entire project. Although the upper range of the estimated construction cost estimate at \$350 million is conservative, staff recommends applying for a loan based on the upper range of the cost estimate rather than the mid-range cost estimate. The total loan amount can be adjusted as the application progresses and as the project costs are further refined. There are no penalties for not withdrawing the total WIFIA loan amount, and the City can reduce the loan amount up to the loan closing; however, requesting additional funding from WIFIA prior to loan closing is more challenging, can result in delays, and is not recommended. Furthermore, an amendment to the WIFIA loan agreement would be necessary if additional funds are needed after the agreement is fully executed, and a new application and beginning the loan application process over again would then be required. The exact amount of funding is still to be determined as project costs are further refined.

The EPA-administered WIFIA program is a federal loan and guarantee program that aims to accelerate investment in water infrastructure by providing low interest (based on the U.S. Treasury rate on the date of loan closing), fixed rate financing for planning, design, and construction of large dollar water and wastewater infrastructure projects. The WIFIA loan can fund up to 49% of eligible project costs. Other benefits of the WIFIA program include:

- WIFIA can fund multiple projects under a single loan. Phase II (all three construction packages) can be included in one WIFIA loan application and funded via one loan.
- Ability to fund large infrastructure projects that exceed funding limits for other programs such as the Clean Water State Revolving Fund Loan (CWSRF) program.
- Low, fixed interest rate calculated using the weighted average life (WAL) of the loan rather than the loan maturity date. The WAL is usually shorter than the loan's actual length resulting in a lower interest rate.
- Borrowers benefit from AAA Treasury rate as WIFIA loan interest rates are not risk-adjusted based on borrower's credit or loan structure.
- Opportunity for a one-time reset to the interest rate allowing borrowers to negotiate a lower interest rate as market conditions change.
- Borrowers may defer payments for up to 5-years after the project's substantial completion; for a package of projects, this would be triggered by the construction completion of the last project in the package.

- Customized repayment schedule provides flexibility to implement a phased approach to rate increases over a longer duration, which minimizes impacts to ratepayers.

For the remaining project costs, staff will seek \$50 million in funding from CWSRF in fiscal year 2025 and will sell municipal bonds for the remaining balance.

The WIFIA application consists of a two-step application process. The first step in the WIFIA application process is to submit a Letter of Interest (LOI). The purpose of the LOI is for prospective borrowers to provide information to demonstrate its project eligibility, financial creditworthiness, engineering feasibility, and alignment with EPA's policy priorities. If the EPA selects the project, then the prospective borrower is then invited to submit an application. Staff will submit the WIFIA LOI in January 2024. The second step includes up to 365 days to submit the loan application from the date of invitation to apply, and coordinating with EPA staff on project technical, environmental, and financial review. A \$100,000 application fee is due at submittal. Although this fee is nonrefundable, it is credited towards the credit processing fee. The credit processing fee varies with project complexity and risk, and typically ranges between \$150,000 to \$300,000. The application fee can be included in the loan amount.

The LOI requires an authorized signature and resolution to apply for the WIFIA loan. Staff requests that Council authorize the City Manager to sign the WIFIA Letter of Interest and subsequent application, and for the City Manager to be the authorized representative for the City in carrying out the City's responsibilities under the Letter of Interest and Financial Assistance Application including compliance with applicable state and federal laws.

Environmental Review

Staff are seeking funding assistance under both the California Clean Water State Revolving Fund (CWSRF) loan program and the U.S. Environmental Protection Agency (USEPA) Water Infrastructure Finance and Innovation Act (WIFIA) program. As part of that effort, an environmental review of the Project will be performed including CEQA+ documentation as required by the CWSRF and WIFIA funding applications.

ECONOMIC IMPACT

Many of the Phase II improvements were identified in the 2014 Master Plan update and funded in the adopted Capital Improvement Program. The Phase II Project includes a new biological nutrient removal facility to address the nutrient load limits in the 2nd watershed permit, as well as related projects from the City's CIP. This proactive approach will result in the City being identified as an "early actor" by the Water Board and provide protection against having to implement additional, potentially more costly improvements if the regulations change.

The total estimated construction cost for the project at the planning stage was estimated to be between \$125 and \$169 million. The costs have been further refined during the

preliminary design effort that is currently underway. The current estimated construction cost for the project is now estimated to be between \$173 and \$350 million (see summary of construction costs presented in Table 1). It is anticipated that these improvements will affect sewer service rates and sewer connection fees; however, the extent to which rates will need to be adjusted cannot be determined with certainty at this point. It is anticipated that customers could see a significant impact of 20% or more over the current rates.

Funding assistance for the project is included in the consultants' scope of work. Funding efforts will pursue financing under both the CWSRF loan program and the WIFIA program. WIFIA funding is typically at a slightly higher interest rate than SRF; however, the payback period is deferred by up to 5 years after substantial completion of the project. SRF loans payback period begins one year after substantial completion. Up to 49% of the project cost is eligible under WIFIA funding; therefore, staff will pursue both avenues of funding as part of this project.

Table 1 – Estimated Construction Cost⁽¹⁾⁽²⁾	
Project Element	Estimated Construction Cost
New Grit Facility	\$ 21.0 million Range \$15 - \$32 million
New Primary Equalization (PE EQ) Tanks	\$21.3 million Range \$15 - \$32 million
Nutrient Upgrades	\$133.7 million Range \$94 – 201 million
Existing Final Clarifiers Retrofits	\$25.1 million Range 18 – 38 million
New Administration Building and Laboratory	\$31.9 million Range \$27 - \$38 million
Site Waste Pump Station (SWPS) Improvements	\$1.5 million Range 1.0 to 2.2 million
3W System Upgrades	\$4.8 million Range 3.4 to 7.2 million
Total Estimated Construction Cost	\$239 million Range \$173 to \$350 million
Notes: (1) Soft costs including design, engineering services during construction, construction management, inspection, materials testing, etc. are not included in the above costs. (2) Range reflects the accuracy of the estimate based on the level of design at the preliminary design stage (Class 4) with a typical level of accuracy between -30% to +50%. The Administration Building and Laboratory estimate is more refined (Class 2) with a typical level of accuracy between -15% to +20%.	

FISCAL IMPACT

In exploring funding opportunities, staff engaged the City's financial advisor, NHA Advisors, to discuss funding options, including applying for a CWSRF loan and funding from WIFIA to finance the project. Staff intends to apply for a CWSRF loan, and funding from WIFIA to finance the project, as well as selling bonds. WIFIA funding can be applied to fund multiple projects, as well as retroactively reimburse for engineering design services; however, it will

only cover 49% of the project cost. Only the Phase II project is likely to score high enough to be eligible for CWSRF funding, loans are currently limited to \$50 million in the FY 23-24 funding cycle, and competition is very high with many projects already included on the eligible funding list ahead of the City's project. Further CWSRF has announced a funding hiatus that will be in effect for several years starting in FY 25; therefore staff are pursuing financing through bonds as part of the funding strategy. Staff will continue to engage NHA Advisors when applicable, and will continue to seek grants as well.

STRATEGIC ROADMAP

This agenda item supports the various goals of Council's Strategic Roadmap. The WPCF Improvements Phase II Project will address infrastructure needs and improvements to increase the reliability of the City's treatment plant, and construct process improvements to meet more stringent nutrient limits in accordance with upcoming regulatory requirements, while supporting the goals of the City Council. Specifically, this item relates to the implementation of the following projects:

Confront Climate Crises & Champion Environmental Justice.

Mitigate Climate Crisis Impacts through Resilient Design and Community Engagement
Project C14b: Implement Shoreline Master Plan, including mitigating sea level rise in the industrial corridor through building requirements and outreach

Invest in Infrastructure.

Invest in Water Supplies, Sanitation Infrastructure & Storm Sewers
Project N19: Update Water Pollution Control Facility Phase II Plan

SUSTAINABILITY FEATURES

The WPCF Improvement Project Phase II will help maintain and improve the biology and health of the Bay which is vital for the region and the State. The Phase II Project will also satisfy the early action requirements specified in the Water Board's 2nd Watershed Permit to reduce nitrogen loads to the Bay.

The effects and risks of rising sea water levels will be reviewed and incorporated into the design of the new facilities.

The Administration and Laboratory Building will be reviewed by the Building Division for conformance with State and local requirements related to sustainability (i.e., California Building Code, California Energy Code, etc.) which require a minimal level of energy efficiency, resource conservation, material recycling, etc. In addition, the building will be designed and constructed to meet Leadership in Energy and Environmental Design (LEED) standards for a Silver Certification, or better.

PUBLIC CONTACT

As part of the funding process, an environmental study (CEQA and/or Initial Study and Mitigated Negative Declaration) will be posted for public review and comment. In addition, a public hearing will be held to review the environmental study.

The project will include a web page to be hosted on the City's website with periodic updates throughout the multi-year duration of the project.

NEXT STEPS

The following schedule has been developed for this project:

City Council Authorization to Award Final Design and Engineering Services During Construction for the Phase II Project	December 2023
Finalize and Submit WIFIA Letter of Interest	January 2024
Award of Professional Services Agreement for Third Party Construction Management including Value Engineering and Constructability Review for the Phase II Project	February 2024
Approval of Environmental Study – IS/MND or CEQA	July 2024
Approval of Plans and Specifications and Call for Bids for the Administration and Laboratory Building	August 2024
Finalize and Submit WIFIA Application	August 2024
Submit CWSRF Application	July 2024
Award of Construction Contract for the Administration and Laboratory Building Project	October 2024
Approval of Plans and Specifications and Call for Bids for the EQ Basin Relocation Project	September 2024
Award of Construction Contract for the EQ Basin Relocation Project	November 2024
Approval of Application for WIFIA Loan	January 2025
WIFIA Loan Fully Funded	February 2025
Approval of Plans and Specifications and Call for Bids for the Phase II Improvements Project	April 2025
Award of Construction Contract for the Phase II Improvements Project	July 2025
CWSRF Loan Fully Funded	October 2025
Administration and Laboratory Building Project Construction Completion	October 2026
EQ Basin Relocation Project Construction Completion	February 2027
Phase II Improvements Project Construction Completion	January 2029

Prepared by: Suzan England, Utilities Engineering Manager

Recommended by: Alex Ameri, Director of Public Works

Approved by:

A handwritten signature in black ink, appearing to read 'K. McAdoo', with a long horizontal stroke extending to the right.

Kelly McAdoo, City Manager