DATE: July 16, 2019

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Adopt a Resolution Authorizing the City Manager to Amend the Professional Services Agreement with HydroScience Engineers, Inc., to Increase the Contract Amount to a not-to-exceed Amount of $1,028,000 to Provide Additional Recycled Water Support Services

RECOMMENDATION

That Council adopts a resolution (Attachment II) authorizing the City Manager to amend the professional services agreement with HydroScience Engineers, Inc., to increase the contract amount by $50,000 to a not-to-exceed amount of $1,028,000, to provide additional recycled water support services.

SUMMARY

Implementation of the City's Recycled Water Project is well underway and recycled water deliveries are scheduled to begin in spring 2020. In addition to construction of a treatment facility, storage tank, pump station, and distribution pipelines, the Recycled Water Project includes the permitting, design and construction of irrigation system retrofits necessary to convert thirty-one customer sites from the City's potable drinking water system to the newly constructed recycled water distribution system. This specialized work requires extensive knowledge and experience with recycled water regulations and customer irrigation systems. On March 20, 2017, the City and HydroScience, Inc. (HydroScience) entered into a professional services agreement (PSA) for HydroScience to provide engineering, design, and construction support services to retrofit customer sites to use recycled water. Staff is requesting Council approval to increase the contract amount with HydroScience by $50,000 to a not to exceed amount of $1,028,000, to provide additional recycled water support services.

BACKGROUND

The City is implementing the Recycled Water Project, which will provide a locally sustainable and drought-proof supply of recycled water to customers for irrigation and industrial uses. The Recycled Water Project consists of constructing a treatment facility, storage tank, and pump station at the City's Water Pollution Control Facility (WPCF) and installing nine miles of distribution pipelines and customer connections to deliver 260,000 gallons per day of

recycled water to customers. The City-owned recycled water treatment facility was added to the project in December 2017, after the City was unable to make progress with Russell City Energy Corporation, LLC (RCEC) in finalizing an agreement for the City to obtain recycled water from RCEC's Recycled Water Facility, located adjacent to the WPCF. Once the initial infrastructure is constructed, staff will prepare a Recycled Water Master Plan to evaluate potential expansion of the system and identify customers that could be included in future phases.

The Recycled Water Project includes the permitting and design of irrigation system retrofits necessary to convert thirty-one customer sites from the City's potable drinking water system to the new recycled water system. There are also a significant number of supporting tasks that must be completed to set up the City's new recycled water program and comply with State regulations for use of recycled water, including conducting site visits, properly training site supervisors on the use of recycled water, and testing and inspecting the installed customer retrofits to ensure complete separation of the recycled water and potable drinking water systems. The field work includes retrofitting the piping on a customer's property so that the site can use recycled water. This specialized work requires extensive knowledge and experience with recycled water regulations and customer irrigation systems.

On January 6, 2017, a request for proposals was issued to qualified consulting firms to assist with the permitting, design, and other related tasks required to convert customers to recycled water. On February 28, 2017, Council approved execution of an agreement with HydroScience in an amount not to exceed $710,000. On March 20, 2017, the City and HydroScience entered into a PSA for HydroScience to provide engineering, design, and construction support services to retrofit customer sites to use recycled water. Council subsequently approved amendments to the HydroScience PSA on September 19, 2017[1] and July 17, 2018[2], that increased the maximum contract amount with HydroScience to $978,000, in order to provide additional support services that were not anticipated when the PSA was negotiated.

DISCUSSION

Establishing a new recycled water program requires close coordination with customers, regulatory agencies, and the consultants and contractors designing and constructing the recycled water facilities. Staff is finding that the level of effort required to work with regulatory agencies and customers to convert sites from drinking water to recycled water is difficult to estimate and higher than originally anticipated because the program and process is new both for staff and potential recycled water customers.

In addition, in the two years since the contract with HydroScience was awarded, key regulatory agency and customer staff have changed, which has resulted in additional work for

[1] https://hayward.legistar.com/LegislationDetail.aspx?ID=3155392&GUID=6C92995E-A39E-4009-8C48-98BBB681F993&Options=&Search=
[2] https://hayward.legistar.com/LegislationDetail.aspx?ID=3553039&GUID=62AB05BE-7157-46A5-B68F-AB28233EDE1E&Options=&Search=

staff and HydroScience. For example, the City's new contact at the State Board's Division of Drinking Water (DDW) recently requested that the City resubmit all recycled water customer retrofit designs for DDW review, along with documentation showing that City staff had reviewed the design drawings for each customer site and copies of public outreach materials. Multiple customers have also sought changes to the onsite retrofit designs as part of signing up for the City's recycled water program. Although these changes were minor, it took HydroScience time to make sure these changes were reflected in the design drawings.

Given the higher than anticipated effort required so far to respond to regulatory, permitting, and customer requests, staff currently anticipates that HydroScience's remaining budget would not be sufficient to absorb any additional out of scope work. Therefore, staff is requesting HydroScience's budget be increased by $50,000, for a total not to exceed contract amount of $1,028,000, to provide support to staff in the following areas:

- **Permitting.** In November 2017, the City received approval from the San Francisco Bay Regional Water Quality Control Board (RWQCB) for distribution and use of recycled water under the State's 2016 General Order for recycled water. The City was the first agency to be permitted under the State's new General Order. Staff is currently working with the RWQCB to revise the City's permit to add production of recycled water from the proposed City-owned recycled water treatment facility. This effort requires updating the City's Engineering Report in compliance with Title 22 of the California Code of Regulations (Title 22). Title 22 requirements are stringent water quality standards set by the State to ensure the safe production, distribution, and use of recycled water in California.

  Staff plans to submit the revised permitting application to the RWQCB in fall 2019. Because the City is one of the first agencies to seek permit coverage for recycled water production under the new General Order, staff is anticipating a lengthier review process. The RWQCB has also indicated that they will require the City to perform additional studies after the recycled water storage tank is constructed to demonstrate the effectiveness of the City's use of the storage tank to ensure disinfection requirements. Staff anticipates needing HydroScience's support to respond to RWQCB comments and successfully obtain approval for the revised permitting application.

- **Public Outreach and Training**. In May 2019, the City received a letter from DDW confirming that the City's designs for converting customer sites to recycled water meet all regulatory requirements. Because this is a new City program, DDW recommended that the City increase its recycled water public outreach program by adequately training City staff and customer site supervisors to answer questions and make the general public aware that certain sites are irrigated with recycled water. Staff will be working with HydroScience to incorporate additional public outreach materials into the recycled water training for customer site supervisors and staff.

- **Additional Construction Support Services**. Staff anticipates that HydroScience will need to provide additional support during construction. Based on the site surveys

completed, a number of customers have irrigation systems that need repair. By signing the retrofit agreement, the customer agrees to repair their irrigation system prior to being connected to the recycled water system. Staff anticipates that multiple site visits and tests may be required to ensure compliance with regulatory requirements before certain customers can be connected to the recycled water system. DDW has also indicated their intent to schedule inspections of a select number of sites to witness cross-connection testing and confirm construction according to the approved project design drawings. HydroScience will be required to be present during DDW's site inspections.

ECONOMIC IMPACT

The community as a whole will benefit from the Recycled Water Project through greater diversity and reliability of water supplies, especially during periods of drought. The economic impact of the project on customers will, to some extent, depend on the total costs to implement the City's Recycled Water Project, which includes the capital and operating costs for the storage and distribution system and recycled water treatment facility. To the extent that the project is partially funded by grants, the overall cost impact to customers is reduced. On July 2, 2019, Council adopted a recycled water rate structure that provides a balance between recovering costs over the life of the project and offering an incentive to customers who are able to receive recycled water.

FISCAL IMPACT

The total estimated capital cost for the Recycled Water Project, which includes construction of the treatment facility, storage and distribution system, and customer conversions, is currently estimated at $28,155,000. The Ten-Year Capital Improvement Program (CIP) includes $27,811,000 for the Recycled Water Storage and Distribution System Project (Project No. 07507) and $2,300,000 for the Recycled Water Treatment Facility Project (Project No. 07710), for a total funding amount of $30,111,000 for Phase I of the Recycled Water Project. The Recycled Water Project is currently anticipated to come in under budget, primarily due to the construction of the distribution system pipelines that was completed nearly one year ahead of schedule and under budget.

The CIP budget for the Recycled Water Project is sufficient to accommodate the $50,000 increase in HydroScience's contract. The Recycled Water Project will not utilize any General Fund monies.

The City has also secured outside grant funding and low interest loans from the State Water Resources Control Board (SWRCB) Clean Water State Revolving Fund Program to help finance the Recycled Water Project. The total SWRCB financial assistance package is approximately $27 million, of which $5.8 million is in the form of a grant and up to $21.2 million is in the form of a low-interest loan.

STRATEGIC INITIATIVES

Implementation of the Recycled Water Project supports the Tennyson Corridor Strategic Initiative. The purpose of this initiative is to develop an attractive, cohesive, thriving Tennyson Corridor through thoughtful engagement with residents, businesses and community partnerships. There are two sites located in the Tennyson Corridor that are proposed to be connected to the recycled water system, and would therefore support the following goal and objectives:

Goal 3: Improve Community Appearance

Objective 1: Enhance landscaping

Objective 3: Decrease blight

The use of recycled water will help create attractive outdoor spaces in the Tennyson Corridor. Since recycled water is a sustainable and drought-proof source of supply, customers will be able to maintain their landscaping during water supply shortages when drinking water supplies are limited.

SUSTAINABILITY FEATURES

The use of recycled water will reduce the demand for drinking water and improve the reliability and availability of drinking water, while providing a sustainable and drought-proof water supply for some irrigation uses. It will also reduce the volume of wastewater and associated residual pollutants discharged to San Francisco Bay, which is required to meet increasingly stringent discharge regulations.

PUBLIC CONTACT

The City and HydroScience are working closely with Phase I recycled water customers to design onsite piping modifications that would be required to connect the customer to the new recycled water distribution system. This close coordination with customers will continue throughout the construction, testing, and permitting phase. HydroScience will also be implementing educational efforts to train site supervisors, including City staff, on the use of recycled water to ensure a smooth transition. As discussed previously, a portion of the budget increase being requested is to provide for additional staff and customer training for the new recycled water program. Informational materials on the Recycled Water Project can be viewed at the following website.[3]

NEXT STEPS

If Council approves the $50,000 increase in the contract amount with HydroScience, staff will increase the budget with HydroScience to a not to exceed amount of $1,028,000 for additional recycled water support services.

Prepared by: Jan Lee, Water Resources Manager

[3] https://www.hayward-ca.gov/your-government/departments/utilities-environmental-services/recycled-water

Recommended by: Alex Ameri, Director of Public Works

Approved by:

Kelly McAdoo, City Manager