



DATE: December 3, 2019

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Adopt Resolutions Authorizing the City Manager to Execute a Professional Services Agreement with Black & Veatch Corporation to Prepare a Water System Risk and Resilience Assessment and Emergency Response Plan and Appropriate \$228,000

RECOMMENDATION

That Council adopts the attached resolutions authorizing the City Manager to execute a professional service agreement (PSA) with Black & Veatch Corporation to prepare a Water System Risk and Resilience Assessment and Emergency Response Plan, in an amount not-to-exceed \$198,000 (Attachment II) and appropriating \$228,000 in the Water System Replacement Fund (Attachment III) for the Risk and Resilience Assessment and Emergency Response Plan.

SUMMARY

Section 2013 of America's Water Infrastructure Act of 2018 (AWIA) requires community water systems, including Hayward, to complete a Risk and Resilience Assessment (RRA) by March 31, 2020 and develop an Emergency Response Plan (ERP) by September 30, 2020. The RRA will evaluate vulnerabilities, threats, and consequences from potential hazards, including natural hazards (e.g., earthquakes) and malevolent acts, and the ERP will provide strategies and plans to address the identified risks and respond to emergency events. The City does not have the resources and technical expertise to perform this work in-house. Therefore, staff is recommending that Council approve a PSA with Black & Veatch Corporation, in an amount not-to-exceed \$198,000, for preparation of the RRA and ERP. Staff also recommends that the work be funded from the Water System Replacement Fund and that \$228,000 be appropriated from the fund balance for this project.

BACKGROUND

Section 2013 of AWIA requires community water systems that serve more than 3,300 people complete a RRA and develop an ERP. The purpose of this law is to ensure that water systems are adequately prepared for and can respond to malevolent acts or natural hazards. As a public water system serving the City's residential and business community, approximately 160,000 customers in total, the City is subject to the requirements of the AWIA.

The RRA and ERP will build on the City's existing Water System Vulnerability Assessment and Emergency Response Plan, which were developed in 2003 in response to the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. The City's Water System ERP was last updated in 2005. The RRA and ERP update will be developed in accordance with AWIA requirements and will incorporate new City facilities and emergency planning efforts that have been implemented over the past fifteen years. The work required to comply with AWIA requirements is highly specialized and the City does not have the staff resources and technical knowledge to prepare an effective and compliant RRA and ERP in-house. To ensure that the City meets all applicable requirements and deadlines, staff recommends use of consultant services.

DISCUSSION

Development of the RRA and ERP

Working in cooperation with local emergency planning entities, the RRA will evaluate the vulnerabilities, threats, and consequences from potential hazards, including natural hazards (e.g., earthquakes) and malevolent acts. The assessment will include an evaluation of:

- The resiliency of the City's water facility infrastructure (including pipes, water sources, storage and distribution facilities, electronic, computer and other automated systems, and fences or other physical security barriers);
- Practices and procedures for monitoring system performance;
- Financial and billing systems; and
- Operation and maintenance of the system.

Following completion of the RRA, the ERP will be developed to identify and document:

- Strategies and resources to improve resiliency, including physical security and cybersecurity;
- Plans and procedures for responding to a natural hazard or malevolent act that threatens safe drinking water;
- Actions and equipment to lessen the impact of natural hazards and malevolent acts; and
- Strategies to detect natural hazards or malevolent acts.

The AWIA has established a timeline for completing this work, with certification of the RRA completion due to the United States Environmental Protection Agency on March 31, 2020 and the ERP by September 30, 2020. The RRA and ERP must be reviewed every five years thereafter, and if necessary, updated.

Consultant Selection

Staff issued a request for proposals on October 28, 2019, to four qualified consulting firms to obtain professional services for preparation of the RRA and ERP. The scope of work includes all activities necessary to comply with the requirements of the AWIA, including obtaining all the essential information about City facilities and systems, assessing potential risks, preparing the RRA, and updating the City's existing ERP.

The City received a total of 3 proposals from Black & Veatch Corporation, Brown and Caldwell, and Carollo Engineers. The proposals were evaluated and ranked by a team of staff members based on qualifications, experience, proposed work plan, and the reasonableness of the labor hours and rates. Based on this objective evaluation, staff recommends Black & Veatch Corporation.

Black & Veatch has proposed a knowledgeable and experienced project team, with hands-on risk assessment experience with a geographically diverse range of agencies, including Placer County Water Agency, Kansas City Water Services, and the City of Irving in Texas. The firm demonstrated knowledge of the AWIA requirements and has prepared a work plan and detailed schedule to meet the City's requirements and timeline, including sufficient time for City staff review. The number of labor hours and hourly rates are reasonable for the scope of work.

Given the scope of work, staff has negotiated a not-to-exceed amount of \$183,000 for the basic services and \$15,000 for additional services that the City may authorize if needed, for a total not-to-exceed contract amount of \$198,000. Staff has reviewed the costs for similar work performed for other agencies and believes that the negotiated contract amount is reasonable.

ECONOMIC IMPACT

The City provides drinking water to a population of over 160,000 people. Completion of the RRA and ERP update will help improve the resiliency of the City's water system and reduce risks to the City's drinking water supply from natural hazards or malevolent acts. This project will also increase the City's emergency preparedness by ensuring that the Hayward Water System ERP is updated and coordinated with overall City and other local emergency planning efforts.

The total cost for preparation of the RRA and ERP is estimated at \$228,000. This includes \$198,000 for consultant services and \$30,000 for staff time. Due to the potential for capital projects to be recommended as part of the RRA and ERP and because existing ratepayers will benefit from the work through increased water system reliability, staff recommends that the work be funded from the Water System Replacement Fund, which is funded mainly through transfers from the Water System Operating Fund. Preparation of the RRA and ERP can be completed without the need for an additional transfer from the Water System Operating Fund and will not have an appreciable impact on customer water rates.

FISCAL IMPACT

When the current Capital Improvement Program (CIP) was adopted, staff had not yet identified the scope of work for RRA and ERP. After further reviewing the AWIA requirements, staff determined that it is appropriate to fund this work in the Water System Replacement Fund. Staff is therefore requesting that a project be established in the CIP and a total of \$228,000 be appropriated from the fund balance. This amount includes the cost of

the consultant services and staff time. There would be no impact on the City's General Fund.

STRATEGIC INITIATIVES

This agenda item does not directly relate to one of Council's Strategic Initiatives.

SUSTAINABILITY FEATURES

Compliance with AWIA requirements will result in an assessment of the resiliency of the City's water system and an updated ERP, which helps ensure that the City is adequately prepared for and can respond to malevolent acts or natural hazards.

PUBLIC CONTACT

No public contact is anticipated in preparing the RRA and ERP.

NEXT STEPS

If Council approves staff's recommendation, staff will take the steps necessary to execute a PSA with Black & Veatch Corporation and prepare the RRA and ERP in compliance with all mandated requirements and submittal deadlines. The following schedule has been developed for this project:

| Milestone | Date |
|---------------------|--------------------|
| Notice to Proceed | December 10, 2019 |
| Review of Draft RRA | March 13, 2020 |
| Completion of RRA | March 31, 2020 |
| Review of Draft ERP | September 1, 2020 |
| Completion of ERP | September 30, 2020 |

Prepared by: Jan Lee, Assistant Director of Public Works - Utilities

Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager