MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Mital, Schlossberg, Helgeson, Brown and Carlson

FROM: Rod Price, Chief Operations Officer; Karen Kelley, Water Division Manager; Wally McCullough, Water Engineering & Planning Supervisor

DATE: 04/24/20

SUBJECT: America's Water Infrastructure Act - Risk and Resiliency Assessment

OBJECTIVE: Information Only

Issue

America's Water Infrastructure Act of 2018 (AWIA) requires that all community water systems serving populations greater than 3,300 persons conduct an all-hazards assessment of the risks to, and resilience of, its system (Risk and Resilience Assessment). The Risk and Resilience Assessment (RRA) is for official use only and exempt from public disclosure as defined under Oregon Law Statutes (ORS) 192.345 and 192.355.

Background

Vulnerability assessments (VA) of water utilities have been required since the implementation of Title IV of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act). The Bioterrorism Act amended the Safe Water Drinking Act (SWDA) by adding new sections pertaining to improving the security of the nation's drinking water infrastructure. The Bioterrorism Act specifically required each community water system serving a population greater than 3,300 persons to conduct a VA, certify completion of its assessment and submit a written copy to the EPA where it would be stored in a secure location.

AWIA builds upon the original Bioterrorism Act and required all community water systems, serving populations greater than 100,000 persons, to conduct their RRA prior to March 31th, 2020. The following components were to be included in the analysis:

- Resilience of water infrastructure system components,
- SCADA/cyber security (of automated systems),
- Monitoring practices,
- The financial infrastructure,
- Use, storage, or handling of various chemicals by the system,
- The operation and maintenance of the system, and
- Evaluation of capital and operational needs for risk and resilience management (optional).

The RRA culminates with an implementation plan for capital and operational needs for risk and resilience management of the system which must be reviewed at least every five years to determine if the assessment needs to be revised.

EWEB certified completion of the RRA, to the Administrator of the Environmental Protection Agency (EPA), on March 30th, 2020 and is now beginning development of the next required step, an Emergency Response Plan (ERP) to address the findings of the RRA. The ERP is required to be completed within 6 months of the RRA and must also be certified to the EPA.

Discussion

EWEB retained HDR Engineering who along with Launch! Consulting worked with EWEB staff to complete the RRA. This team followed the American Water Works Association (AWWA) J100, seven-step process, through a series of workshops in completing the RRA. This multistep process included an evaluation of both natural hazards and human-caused threats in the analysis and focused on developing utility resilience. Decisions regarding risk were made by EWEB project team members with City of Eugene, and County staff assisting.

The completed RRA provided EWEB with an understanding of which of its assets are most critical, the vulnerabilities that exist for these assets, and recommendations to improve resilience of the water system. For the vulnerabilities that were identified, mitigation measures were developed and documented. The planned implementation of these mitigation measures will be the focus of the upcoming ERP. The mitigation measures identified in the RRA include:

- Physical Security - Improvements to cameras, fencing, and gates, the use of industrial strength locks, signage, and lighting.
- Access Control - Developing and maintaining an access control program that includes lock and key changes and card readers on critical assets.
- General Maintenance - Including landscaping and appropriate lighting for security, good housekeeping and safety practices.
- Program Development - Developing, implementing, and training staff on an Emergency Response Plan and a Business Continuity Plan. Providing a representative to the Fusion Center (State/local security information center). Developing an internal and interagency safety and security committee. Establishing emergency exercises with local partners.
- Procedural Changes - Including written procedures for staff, display of ID badges, adoption of a security inspection checklist for staff visiting critical assets, security incident reporting, a more rigorous visitor management program and background checks for contractors and others entering EWEB property.
- Update and Develop Standard Operating Procedures (SOPs) - Conduct regular trainings for employees on SOPs and emergency action plans (include local police and fire departments when applicable).
- Training - Train at least two backup staff with proper delegation of authority for critical positions.

While vulnerabilities were identified, several positive aspects were also revealed during the assessment regarding EWEB's current operations:

- The experience of EWEB staff from past emergencies allows for better resilience in the future because staff have learned to solve issues and communicate quickly.
- Back-up generator power is provided at many of the critical assets.
- Some assets already have camera coverage and nighttime lighting.
- During improvements, EWEB routinely upgrades facilities to the current Oregon Structural specialty code and/or design code.
- EWEB staff walk the perimeter of critical assets routinely to inspect for issues.
- Good housekeeping practices are followed, and sites are generally well-maintained.

EWEB staff and consultants will be working on its Emergency Response Plan over the next 6 months. Future correspondence will be provided to the Board summarizing the ERP process.

Recommendation/Requested Board Action

None. This is an information only item. If the Board has any questions please contact Karen Kelley, Water Division Manager at 541-685-7153 or karen.kelley@eweb.org.