

CITY COUNCIL AGENDA TOPIC

Resolution adopting the 2023 Emergency Water Supply Master Plan to improve water distribution system resiliency.

Lucy Liu, Director, 452-4445

Linda De Boldt, Assistant Director of Engineering, 452-4625

Utilities Department

EXECUTIVE SUMMARY**ACTION**

Staff requests approval by Council of a resolution to adopt the Emergency Water Supply Master Plan. This Master Plan provides information on seismic vulnerability of the city's water system, recommends policies for water supply emergencies, outlines the city's emergency water supply needs, and recommends actions to meet these needs.

RECOMMENDATION

Move to adopt Resolution No. 10317

BACKGROUND/ANALYSIS

As directed by Council at the September 18, 2023 Council Study Session, this Resolution authorizes the adoption of the Emergency Water Supply Master Plan.

Bellevue's drinking water infrastructure is vulnerable to severe earthquakes that could result in significant disruptions in service to Bellevue Utilities water customers. Utilities performed a seismic vulnerability assessment and an evaluation of the likely impacts to the city's drinking water system. With Bellevue's current water infrastructure, the evaluation predicts a 2–3 month recovery period, where customers would experience water service disruption. The estimated economic loss to Bellevue, due to this disruption, is \$9.8 million per year.

To improve overall resiliency of the water distribution system, Utilities developed an Emergency Water Supply Master Plan (Master Plan). The Master Plan has the following key components:

- 1) Seismic vulnerability assessment results
- 2) Policies for water supply emergencies
- 3) Emergency water supply needs
- 4) Recommended improvements to water supply and distribution infrastructure
- 5) Financial analysis of emergency mitigation projects

At the September 18th Council study session, Utilities staff provided information and answered questions regarding the proposed Master Plan. In addition, Ken Wan, Environmental Services Commission Vice Chair, provided Council with the Commission's recommendation for adoption.

POLICY & FISCAL IMPACTS

Legal Authority:

RCW 70A.125.060 requires all public water systems to plan for and assure the availability of safe and reliable drinking water.

WAC 246-290-420(5)-(6) requires all public water systems to implement appropriate measures necessary to meet identified levels of reliability during abnormal operating conditions, which procedures shall be documented in an emergency program approved by the governing body and implemented in a timely and reasonable manner.

BCC 24.02.070 requires the Utilities Department to recommend supplements to the City's Water System Plan for council adoption as needed. The Emergency Water Supply Master Plan will supplement the City's Water System Plan.

Policy Impact:

The Emergency Water Supply Master plan will advance the following Bellevue Comprehensive Plan policy objectives:

- UT-1 Manage utility systems effectively in order to provide reliable, sustainable, quality service.
- UT-2 Build and manage city-owned utility infrastructure assets to reduce the likelihood of risks to public safety, property and environment, and disruption due to asset failure.
- UT-10 Emphasize cost effective management of city utility systems over their lifetime, including planning for their renewal and replacement, balancing risk, and maintaining desired service levels. Forecast future capital and maintenance costs and manage rates so that customer rate revenue funds the cost of ownership equitably across generations.
- UT-41 Provide reliable water service for domestic use, fire flow protection, and emergencies.

Fiscal Impact:

The Master Plan identifies future emergency mitigation projects. This plan will inform future capital improvement proposals. Decisions on specific capital project proposals and associated rate implications will be brought to Council as part of future budget packages.

OPTIONS

1. Adopt the Resolution adopting the 2023 Emergency Water Supply Master Plan to improve water distribution system resiliency.
2. Do not adopt the Resolution and provide alternative direction to staff.

ATTACHMENTS

A. Recommendation from the Environmental Services Commission

Proposed Resolution No. 10317

AVAILABLE IN COUNCIL LIBRARY

Emergency Water Supply Master Plan