



- Action
 Information
 Discussion

DATE: October 7, 2020
TO: Environmental Services Commission
FROM: Doug Lane, Senior Engineer, Utilities Department
SUBJECT: Emergency Water Supply Master Plan – Outline and Proposed Policies

Action Required at this Time

None

Fiscal Impact

Under evaluation

Policy Issues

Multiple new policies are proposed, as described below.

Background

Bellevue's drinking water infrastructure is vulnerable to potentially disruptive emergencies, including earthquakes, that could result in a significant drinking water outage for Bellevue. In an effort to improve overall resiliency of the water supply, Utilities is evaluating options for emergency sources of water and developing an Emergency Water Supply Master Plan (Master Plan). The Master Plan will summarize water supply risks and vulnerabilities, present technical analysis of emergency impacts, propose new policies specific to water supply emergencies, and recommend short- and long-term mitigation actions.

Purpose of the Master Plan

The proposed goals of the Master Plan include:

- Public awareness and consent
- Policies for disaster mitigation
- Guidance for future investment

Public input is needed in areas such as development of groundwater supplies. Bellevue's current water supply comes from surface water sources in the Cedar and Tolt watersheds. In order for Bellevue to develop local groundwater wells to augment these water supply sources, technical, policy, and legal considerations need to be assessed and weighed and policy level input obtained from the ESC and City Council. Wells are not mandated by current policies or laws, nor authorized for future capital spending. The Master Plan will facilitate this discussion and serve to document Council's concurrence or other direction to guide strategy and future investment.

Following adoption by Council, the Master Plan would be retained as a policy and planning document. It would inform CIP development and emergency preparation, and would be incorporated into the City’s next Water System Plan.

Emergency Water Supply Master Plan Content and Organization

A proposed outline for the Master Plan includes:

- Executive Summary
- Policies
- Existing Water Sources
- Hazards and Risks
- Emergency Water Needs
- Regional Coordination
- Mitigation and Alternative Supply Opportunities
- Recommendations
- Appendixes (technical reports)

This structure provides context for why emergency water supply planning is necessary, and codifies policies and future actions clearly in a dedicated document. It is based on EPA guidance for emergency water supply planning.

Proposed New Policies

New policies are proposed to establish post- event levels of service (PE-LOS), and provide a framework to guide mitigation investments. Existing utility policies provide for emergency response, but not mitigation explicitly, particularly for infrastructure such as piping, which is not governed by Code.

Proposed draft policies are summarized in Table 1, and detailed in Attachment 1. New policies are proposed for several reasons, including visibility and opportunity for public input, confirming City-wide agreement on priorities, laying the groundwork for future CIP projects, and demonstrating community support for grant applications (e.g. FEMA), permits (e.g. SEPA) and other approvals (WA Dept of Health, Dept of Ecology, etc.).

Table 1: Draft Proposed Policies

Proposed Policy	Guiding Principles
Health Care Providers	Public Safety, Regional Preparedness, Resilience
Alternative Fire Fighting Methods	Public Safety
Personal Preparedness	Public Safety, Resilience
Shelters and Points of Distribution	Social Equity
Business Continuity	Economic Vitality, Resilience
Inter-Dependent Sector Coordination	Public Safety, Economic Vitality, Regional Preparedness
Emergency Mitigation Investments	Value
Post-Event Level of Service (PE-LOS) Goals	Regional Preparedness, Resilience
Groundwater Supplies	Resilience, Resource Conservation
Well Head Protection	Public Safety, Resource Conservation

Draft policies (Attachment 1) have been developed using industry guidance (e.g. American Water Works Association), and common approaches from other local, regional and national utilities, State and Federal Government guidelines, and Bellevue’s Comprehensive Plan policies. References are provided throughout the proposed policy chapter to provide context and rationale.

The draft Post Event Level of Service (PE-LOS) policy includes the proposed language and framework, but service restoration time goals are omitted and will be the sole topic of the November ESC meeting. PE-LOS goals will be presented along with current anticipated restoration times (without any mitigation), and recommended medium- and long-term goals for target restoration times.

Attachments

A – Proposed Policies