

## Environmental Services Commission

### Policy clarification for High Pressure at Customer Points of Use

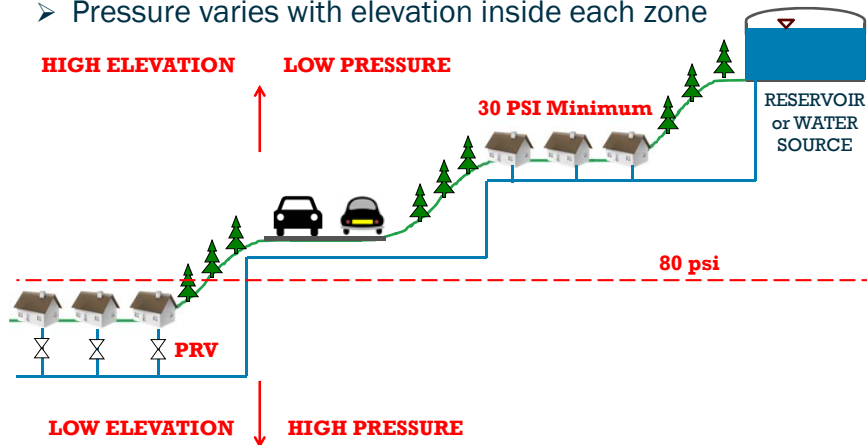
What we need from you

- Discussion and recommendation on policy guidance

Doug Lane  
September 6, 2018

## Elevation and Pressure

- Bellevue has 69 Different Pressure zones
- Pressure varies with elevation inside each zone

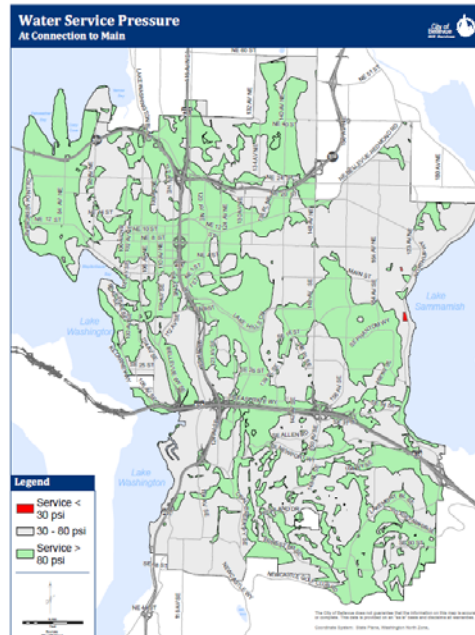


## System-Wide

Pressure exceeds 80 psi for:

- 44% of land area
- 38% of population (56,200/148,000)
- 35% of meters (14,300/40,800)

Pressure exceeds 100 psi at about 9% of meters (3,500/40,800)



## SA270 Pressure & Flow

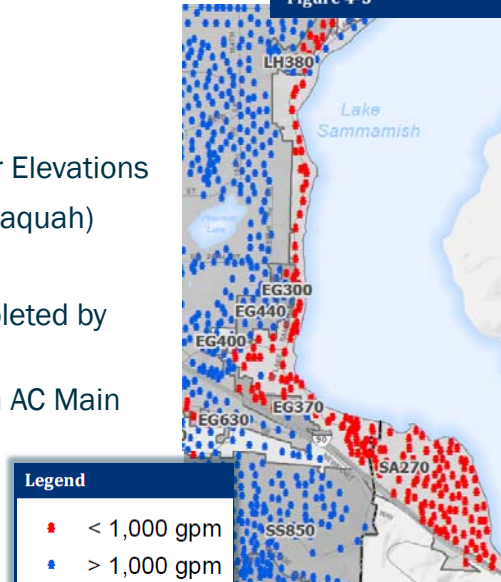
Problem in SA270 Zone:

- Very Low Fire Flow
- Low Pressure at Higher Elevations
- Multi-Jurisdictional (Issaquah)

Solution:

- South Cove PRV (Completed by Issaquah)
- Replace W Lake Samm AC Main (in Design)
- **Add Individual PRVs**
- Raise Pressure

Available Fire Flow  
Figure 4-3

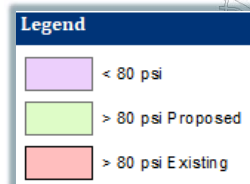


## Project Vicinity Map

SA270 zone pressure increase

Three customer categories:

- Already over 80 psi
- Will be > 80 psi after increase
- Below 80 psi after increase



## Current Law and Policy

### Law:

- Minimum 30 psi (20 psi in emergencies) in public mains
- No regulatory maximum pressure in public mains
- Universal Plumbing Code (UPC) requires buildings be equipped with a PRV when pressure exceeds 80 psi.

### City Policy:

- Minimum 30 psi (20 psi in emergencies)
- Homeowner is explicitly responsible for all aspects of individual PRVs, including “development” (construction):
  - *“Property owners shall be responsible for development, maintenance, and repair of... pressure reducing valves, pumps, and backflow prevention assemblies on the customer side of the meter.”*
- Neither Code nor Policy allow utility to build or install private assets. Code only allows utility to acquire private assets.

## Current Practice

### When Pressure Exceeds 80 psi:

- **Development / Re-Development:** Property owner installs and owns PRVs (no Utilities Dept. involvement).
- **City-Initiated (System Change):** Utilities installs private PRVs in a vault on the customer side of the meter, and then transfers ownership to the property owner. 1-year warranty
  - Why?
    - Saves Cost (vs. other alternatives)
    - Controls project implementation
    - Limits liability
    - Good customer service

## Proposed Policy

“Private property owners are solely responsible for compliance with the Uniform Plumbing Code, including installation, operation, maintenance and ownership of individual service line pressure-reducing valves. In special cases where it is mutually-beneficial to facilitate public system improvements, the Utility may choose to furnish individual PRVs for the property owner to own and maintain.”

(See memo for further explanatory text)

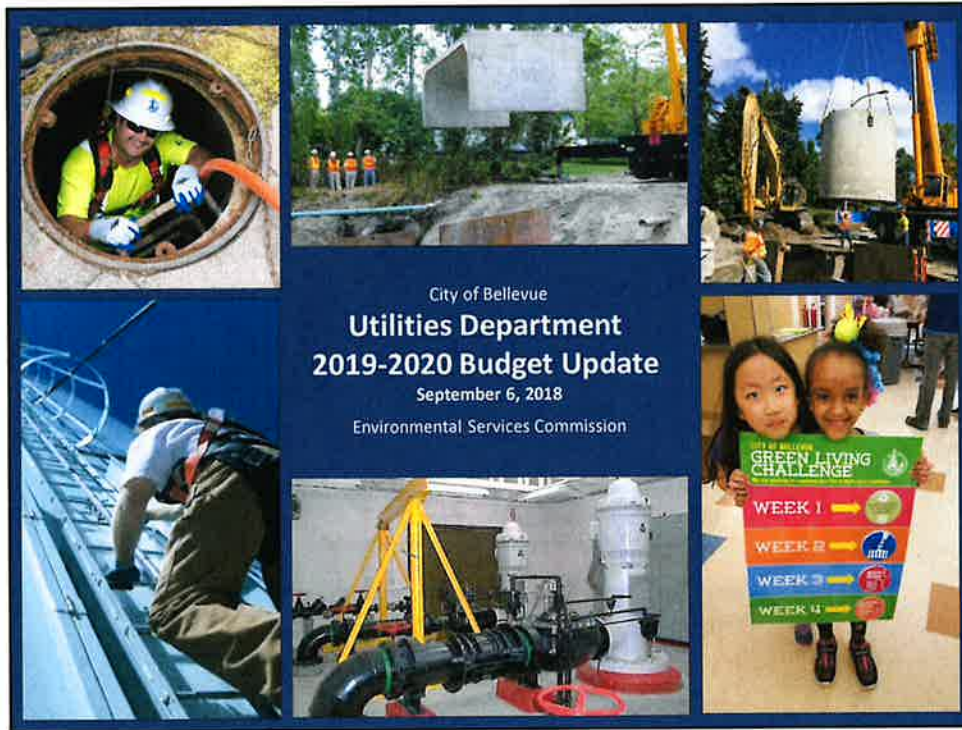
## Recommendation

### Requesting:

- Discussion of draft policy language (attached to memo)
- Approval of language or direction for modification

### What happens next?

- Incorporate into current and future projects
- Public outreach
- Incorporate into next Water System Plan



City of Bellevue  
**Utilities Department**  
**2019-2020 Budget Update**  
September 6, 2018  
Environmental Services Commission

**2019-2020  
Budget**



## Agenda

January – May: 2019 – 2025 CIP Budget Review

June 7: 2019-2020 Operating Budget Review


June 21:

- Rate Review
- ESC Budget Proposal Recommendation LT

### **September 6: Proposed Budget Update**

- CIP Budget Changes
- Operating Budget Changes
- Rate Review

2019-2020  
Budget




## CIP Project Changes

1. **West Lake Sammamish Parkway Project**
  - Increased cost of \$5 million
  - Cost increase due to project scope changes: Additional watermain elements, PRV stations, & pavement restoration

Watermain Replacement (W-16)	Small Capital Improvement Projects (W-69)
\$4.22 million	\$0.78 million
  
2. **WSDOT I-405 Widening Project**
  - Need to relocate existing watermains affected by:
    - Main Street Bridge replacement
    - Lake Washington Boulevard Bridge replacement
  - Added funding of \$2.1 million needed in Watermain Replacement Program (W-16)

3

2019-2020  
Budget

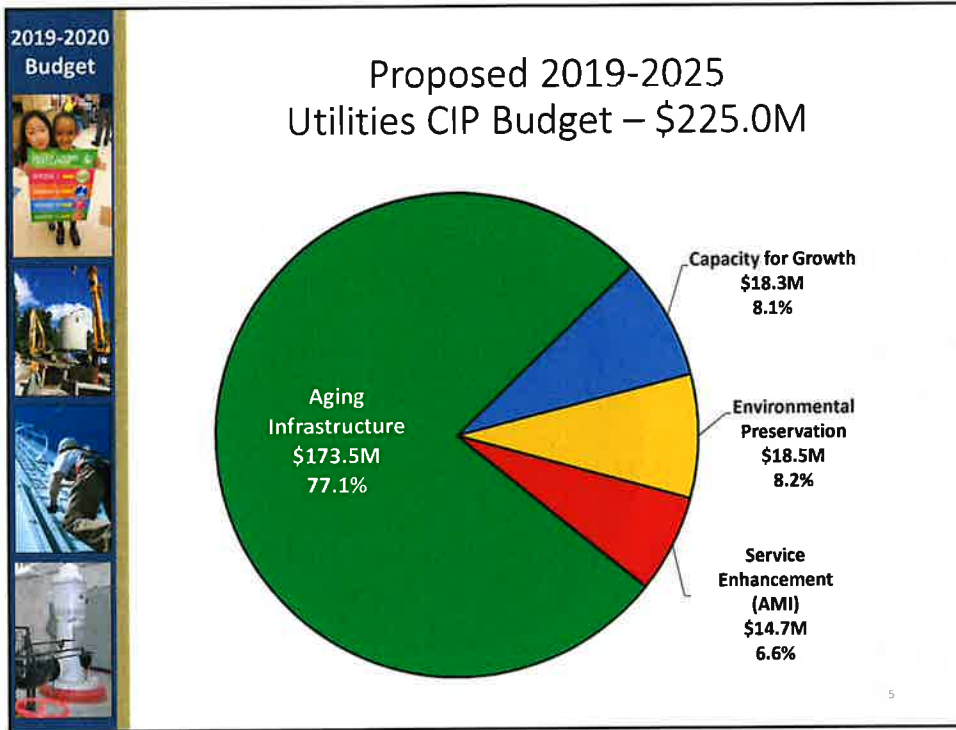


## Changes to Proposed CIP Budget

		AMOUNT
2019-2025 Proposed CIP - June		\$ 217.9M
<b>Changes:</b>		
West Lake Sammamish Parkway Project	↑	\$ 5.0M
WSDOT I-405 Widening Project	↑	\$ 2.1M
<b>2019-2020 Proposed CIP - September</b>		<b>\$ 225.0M</b>

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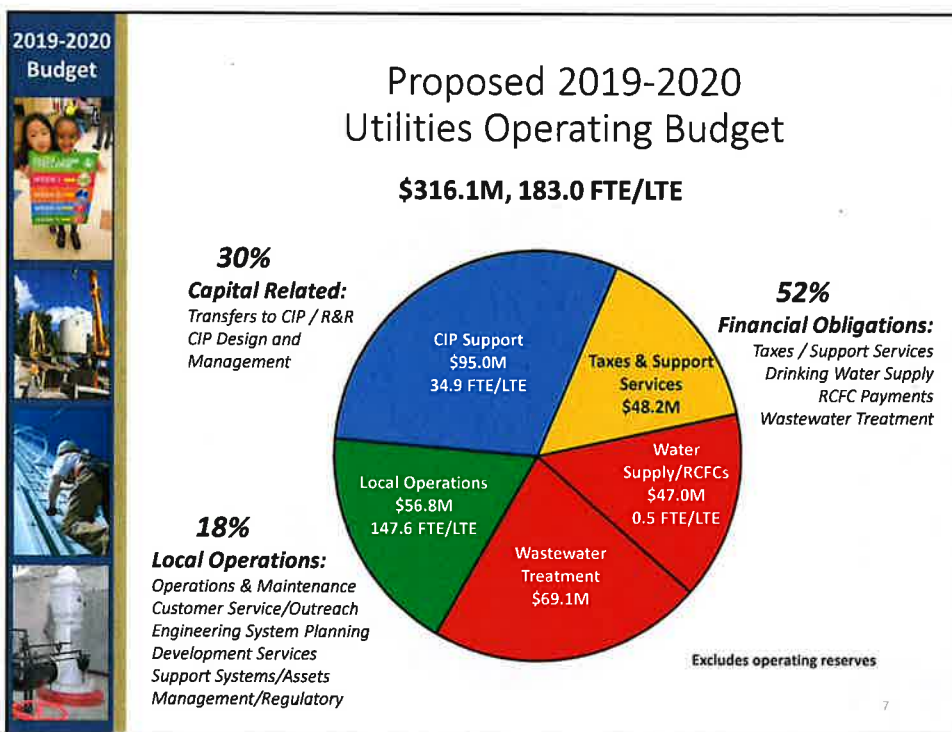


2019-2020 Budget

### Changes to Proposed Operating Budget

	AMOUNT
2019-2020 Proposed Budget - June	\$ 316.2M
<b>Changes:</b>	
Wholesale – Water Supply Cost	↓ (\$ 0.9 M)
Wholesale – Water Connection Charges	↑ \$ 0.6 M
Taxes and Support Services	↑ \$ 0.5 M
Personnel Cost	↓ (\$ 0.3 M)
<b>2019-2020 Proposed Budget - September</b>	<b>\$ 316.1 M</b>





**2019-2020 Budget**

### Proposed 2019-2020 Utility Rates September 2018

	2019	2020
<b>Water</b>		
September	3.7%	5.0%
June	5.0%	5.0%
<b>Sewer</b>		
September	3.9%	2.3%
June	3.9%	2.3%
<b>Storm</b>		
September	5.4%	5.4%
June	5.5%	5.5%
<b>Combined</b>		
September	4.0%	3.8%
June	4.6%	3.8%

2019-2020 Budget



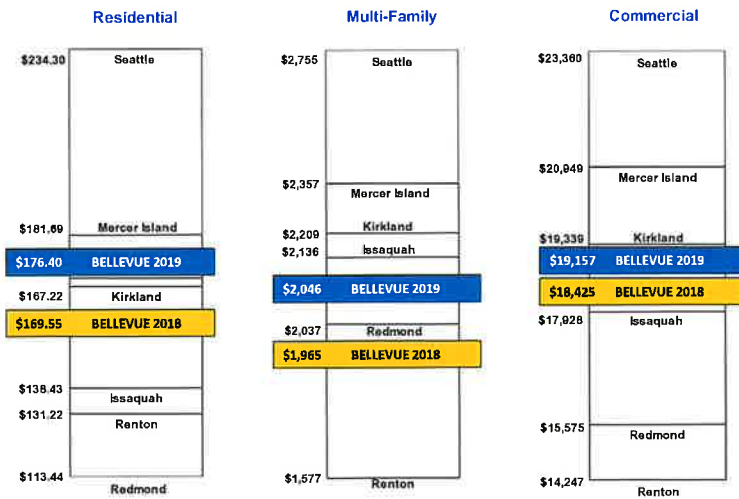
### Typical Residential Combined Water, Sewer, & Storm Utility Monthly Bill Rate Drivers

	2019 Bill		2020 Bill	
Prior Year Monthly Bill		\$169.55		\$176.40
<b>Wholesale costs</b>	1.4%	\$2.35	0.8%	\$1.33
<b>Local</b>				
CIP/R&R	1.0%	\$1.62	1.8%	\$3.22
Taxes and Interfunds	0.6%	\$1.03	0.5%	\$0.83
Operations	1.0%	\$1.85	0.7%	\$1.30
<b>Total Local</b>	<b>2.6%</b>	<b>\$4.50</b>	<b>3.0%</b>	<b>\$5.35</b>
<b>Total Increase</b>	<b>4.0%</b>	<b>\$6.85</b>	<b>3.8%</b>	<b>\$6.68</b>
<b>New Monthly Bill</b>		<b>\$176.40</b>		<b>\$183.08</b>

2019-2020 Budget



### Competitive Utility Rates with our Neighbors – 2018 Combined Water, Sewer & Storm Monthly Bill (Proposed 2019 Bill for Bellevue Only)



2019-2020  
Budget



## ESC Utilities Budget Review – Next Steps

- Public hearing – October 4
- Budget and rates recommendation to Council – November 1