

Drinking Water Line of Business

Presentation to the Customer Review Panel

October 12, 2016



Structure of Presentation for Drinking Water LOB

1. The Big Picture

- Overview Statistics
- System Map
- System Process
- Historical and Projected Water Consumption

2. Finances

- Sources and Uses of Funds
- Capital Investment Cycle

3. Customer Promises – Service Targets

4. Customer Engagement

The Big Picture:

Overview Statistics for Size, Employees, Regulators

Size

Service Territory

- City of Seattle
- Half of rest of King County
- Parts of south Snohomish County

Infrastructure

- Supply: Tolt and Cedar River Watersheds; Seattle Wellfields
- Water Quality: excellent water source protection; treatment plants on Tolt and Cedar; groundwater treatment and booster chlorination
- 193 miles transmission pipelines, 16"-96" in diameter
- 1,680 miles distribution mains, <2"-42" in diameter
- 320 million gallons treated water storage
- Seattle City Light hydro plants on Cedar and Tolt

Employees

Employees (2016 budgeted) 578

Unions 15

Regulators

- WA State Dept of Health (Safe Drinking Water Act)
- WA State Department of Ecology

* 1 ccf = 100 cubic feet = 748 gallons

The Big Picture:

Overview Statistics for Rates and Bills

Rates and Bills

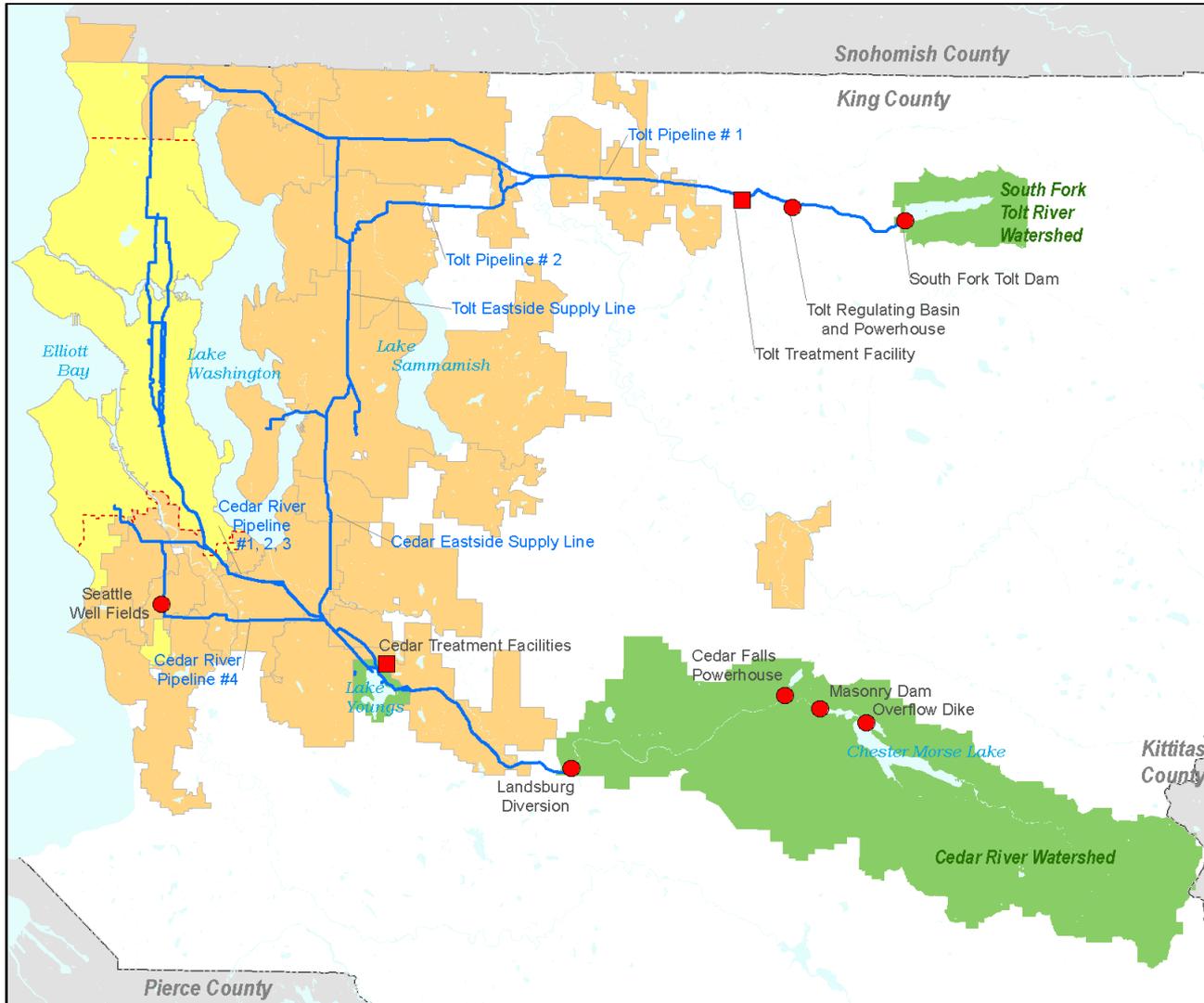
Length of Current Rate Path	3 years; 2015-2017
Billing Mechanism	Combined Utility Bill
2016 Operating Revenue	\$252 million
Number of Customer Accounts	<ul style="list-style-type: none">▪ 188,000 retail accounts▪ Water also sold to Cascade Water Alliance and 19 other wholesale customers
Rate Methodology	<ul style="list-style-type: none">▪ Retail bills based on metered water usage and meter size, with higher seasonal rates in the summer▪ Wholesale bills based on contracts and metered water use
Retail Customer Classes	Two subclasses: residential and commercial; very similar rates

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Drinking Water Goals

- Provide reliable, high-quality, aesthetically pleasing water that meets all regulatory requirements.
- Meet all environmental requirements, including instream flow requirements and other tribal and agency commitments.
- Meet requirements for system pressure and flow.
- Limit unplanned outages in the water system.
- Respond promptly to customer issues.

The Big Picture: Seattle's Regional Water System

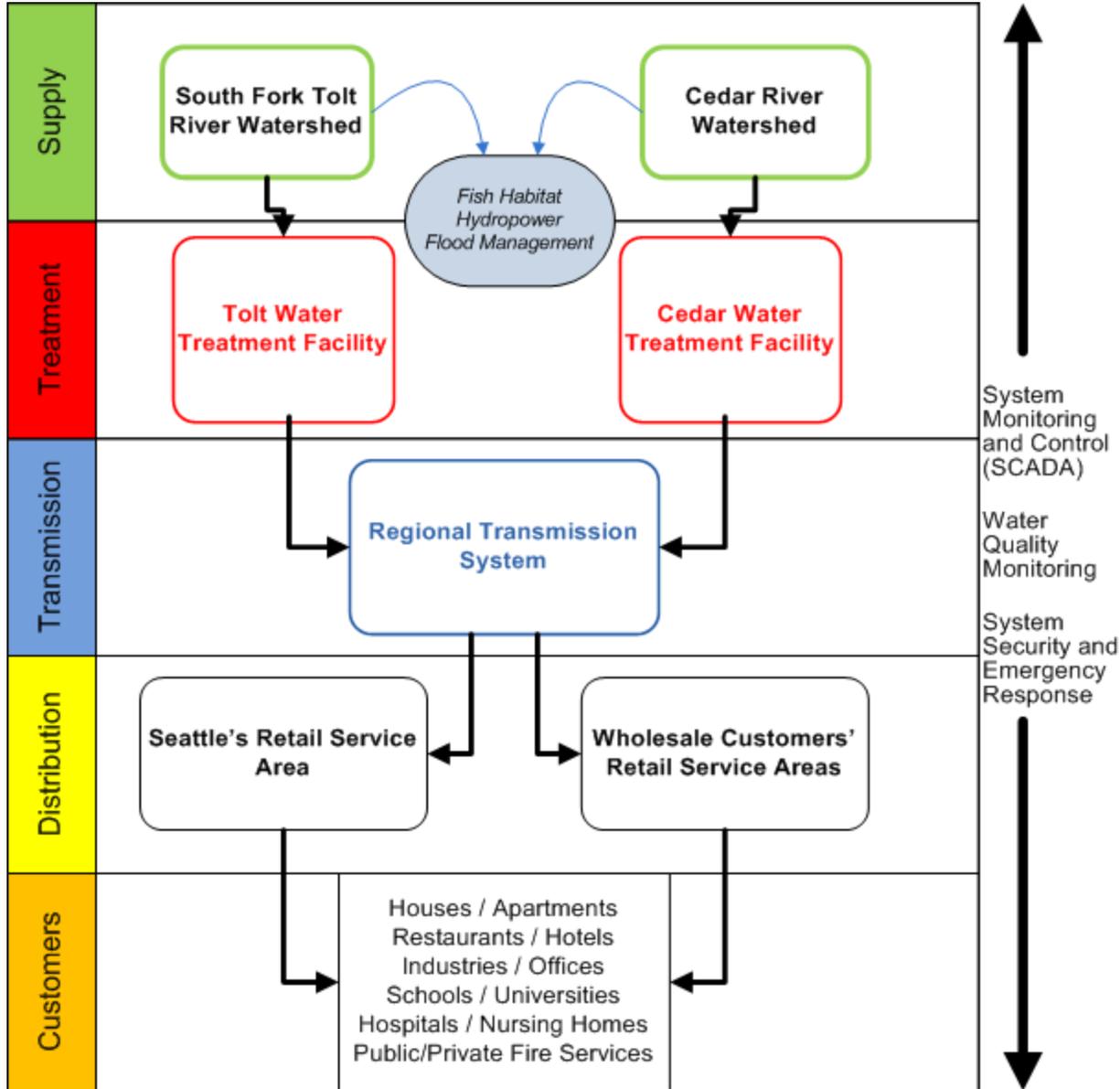


**Seattle Retail
Service Area**

**Wholesale
Customers**

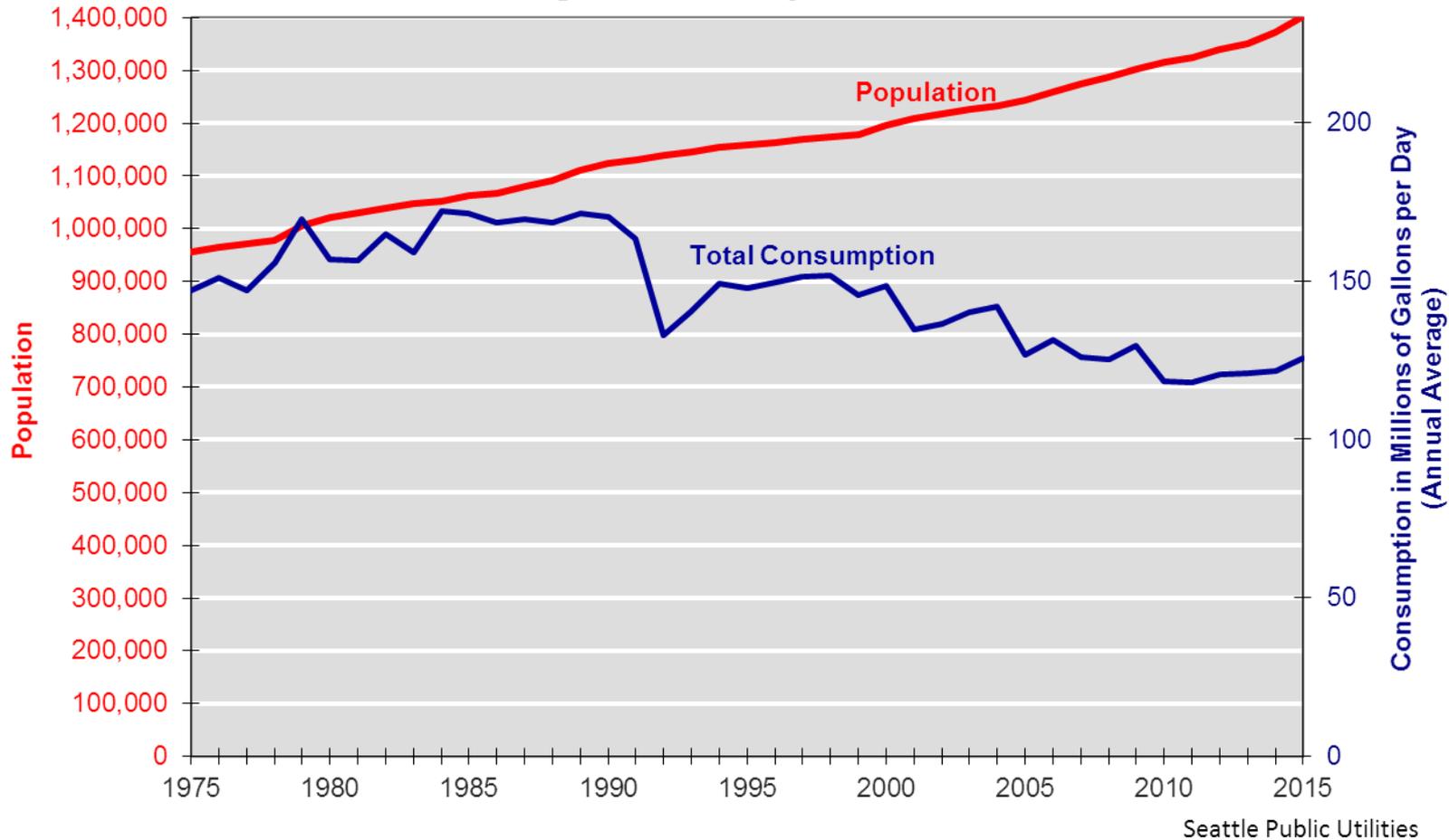
Watersheds

The Big Picture: Drinking Water Process from Source to Tap



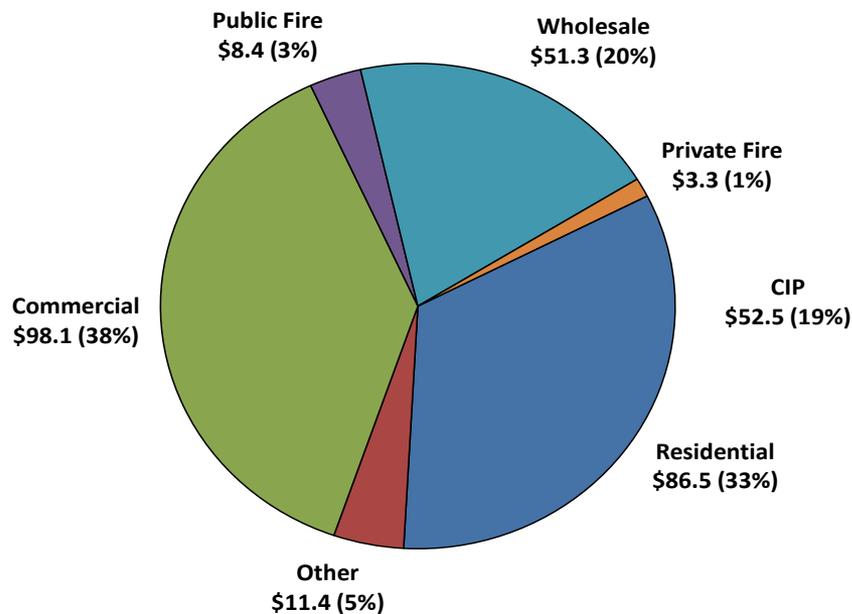
The Big Picture: Water Consumption

Growth in Population and Water Consumption
Seattle Regional Water System: 1975-2015

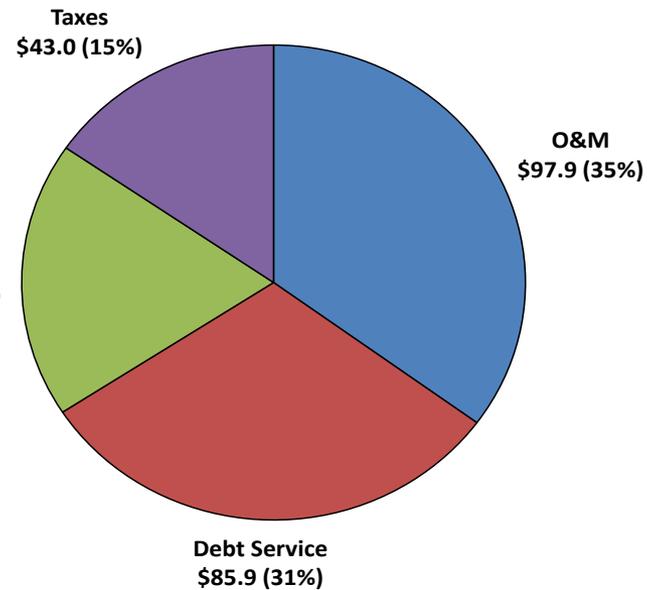


Sources and Uses of Drinking Water Funds

Water Fund Revenues and Expenses (2015, \$ in Millions)

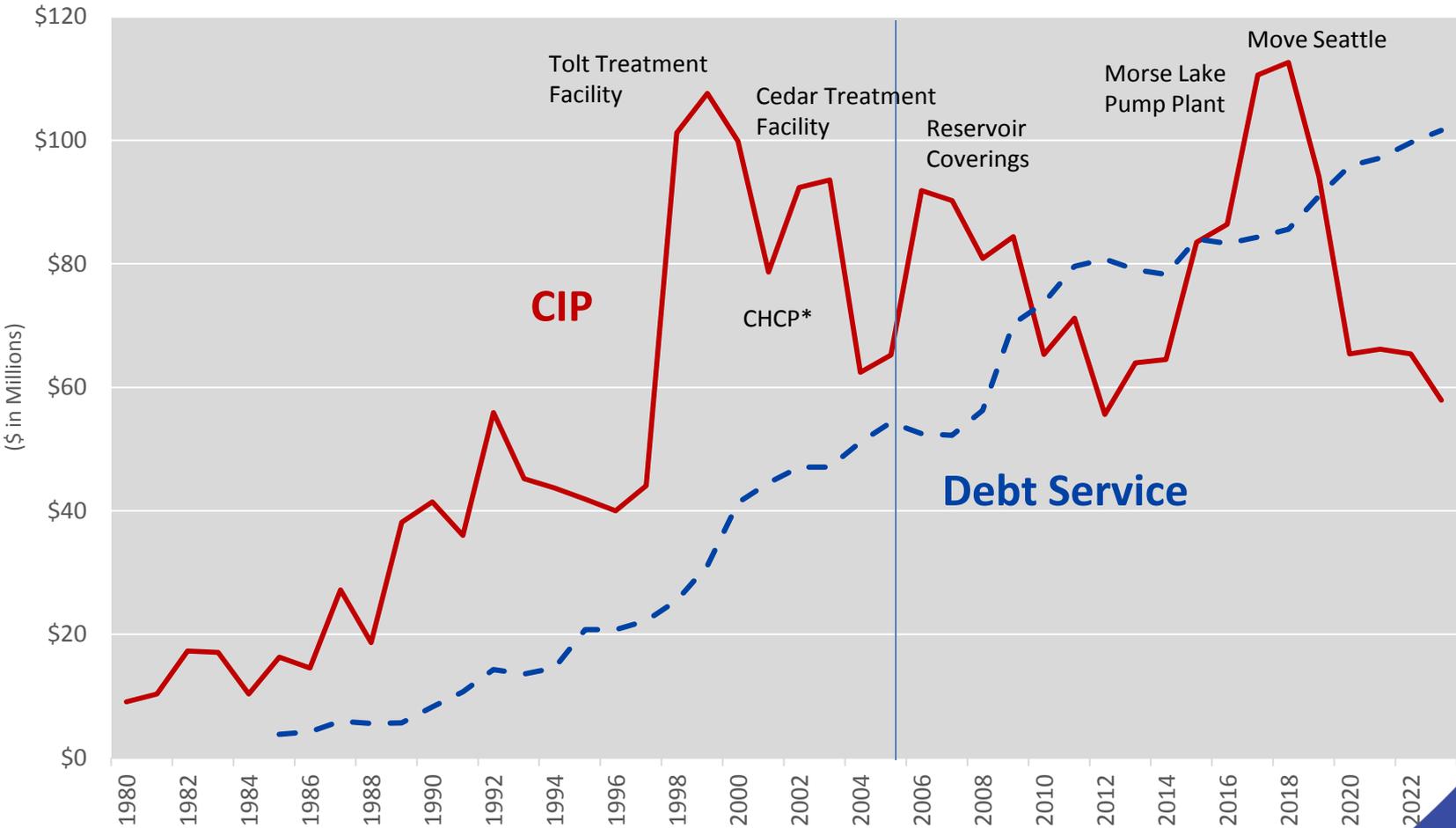


Revenues



Expenses

Where We Are in Our Capital Investments



* Cedar Habitat Conservation Plan

Our Promises to Customers

SPU uses the following service targets as key indicators of quality and success:

Regional System

- Supply drinking water that meets or exceeds Department of Health regulations
- Provide in-stream water for fish and meet other tribal, regional, state, and federal commitments
- Achieve goals for water conservation & leakage loss

Retail System

- Meet state requirements for drinking water system flow and pressure
- Respond to 90% of high priority drinking water problems within one hour
- Limit yearly drinking water outages totaling more than four hours to less than 4% of retail customers

Wholesale Customers

- Meet pressure and flow requirements of wholesale drinking water contracts
- Limit unplanned outages in the drinking water transmission system to within the maximum agreed duration

Are We Meeting Our Service Targets?

Performing Well in Most Areas

- Extremely high quality drinking water that we will continue to maintain and protect
- Abundant supply of water – enough until 2060 and beyond – for people and fish, and manage it carefully
- Transmission and distribution system that is very reliable
- Respond quickly when problems arise
- Meet our conservation and leakage loss goals

Areas for Improvement

- Resourcing for deferred valve maintenance
- Resourcing for accuracy testing of large retail water meters

Customer Engagement

Public behaviors in a number of areas have significant impacts on our ability to keep our promises and make Seattle the best place to live:

- Customer Confidence: Drinking water is the sole consumable product of SPU – customer confidence in the safety, taste, and reliability of the product is critical
- Customer Education: Our system “from source to tap,” Bottled vs tap water, Cedar Education Center
- Operating Board: Voice and vote for wholesale customers
- Saving Water Partnership: Participation in regional water conservation programs
- Water System Advisory Committee

What's Changed since 2014?

- Move Seattle levy – funding for utility impacts
- Better understanding of seismic hazards in the Puget Sound region
- Drought of 2015
- Continued study of climate change
- Increasing costs for street work
- Keeping up with growth (new taps)

Ongoing and Upcoming Challenges

- Our infrastructure continues to age - renewal and replacement schedule
- Deferred maintenance
- Focus on resiliency
 - Climate change strategies
 - Improved emergency preparedness / emergency response planning
- Customer perceptions about water quality in the face of Flint, MI and similar issues
- Keeping up with technology (billing system, accounting system, information systems)