

Water Use Efficiency Requirements

Saving Water Partnership

Operating Board
October 28, 2011

Saving Water Partnership

4 Steps to Regional 2013-18 Water Use Efficiency Requirement

**√ Water Use Efficiency Objectives 2013-2018 from
“dot exercise”**

Today

- 1. Set Water Use Efficiency Goal 2013-2018**
- 2. Direction for Water Use Efficiency Conservation Program 2013-2018**

Finally

Include in your Water System Plan

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✓ Water Use Efficiency Objectives

- Ensure core capacity is available to deliver conservation programs that prepare the utility to be resilient for curtailment events and future supply challenges from climate change, as well as help customers use water wisely
- Preserve customers' ethic of conservation as one element of stewarding our water resources and the environment
- Meet regulatory and contractual requirements

SEATTLE REGIONAL WATER CONSERVATION SERVICE AREA



SAVING WATER PARTNERSHIP:

Cedar River Water & Sewer District
City of Bothell
City of Duvall
City of Mercer Island
Coal Creek Utility District
Highline Water District
Northshore Utility District
Olympic View Water & Sewer District
Seattle Public Utilities
Shoreline Water District
Soos Creek Water & Sewer District
Water District Number 20
Water District Number 45
Water District Number 49
Water District Number 90
Water District Number 119
Water District Number 125
Woodinville Water District



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Seattle and Participating Local Water Utilities

www.savingwater.org

Renton added in 2011—not shown on map.

Excludes Cascade Water Alliance, North Bend, Lake Forest Park, Edmonds.

1. Water Use Efficiency Goal

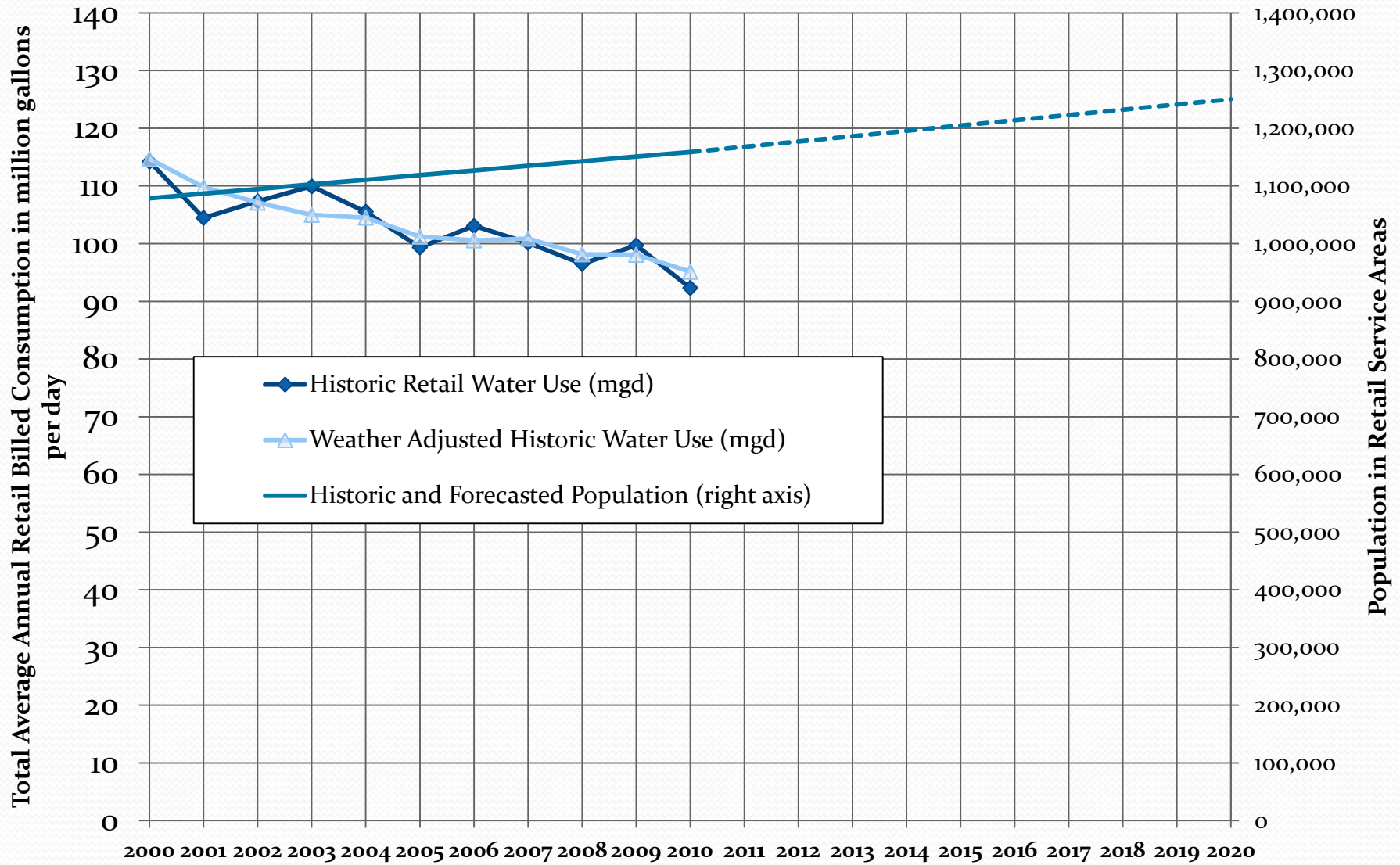
Customer goal – demand side

- Responsibility of SPU to manage for region
- Data for regional 2013-18 goal discussion is **total retail water sales** (residential, commercial, industrial) for current members of Saving Water Partnership, as they report each year in annual survey
- Data are not for demand from SPU system as metered at purveyor taps:
 - Excludes non-revenue water: firefighting, flushing, reservoir operations, leaks, etc.
 - Supply sources other than SPU are not subtracted

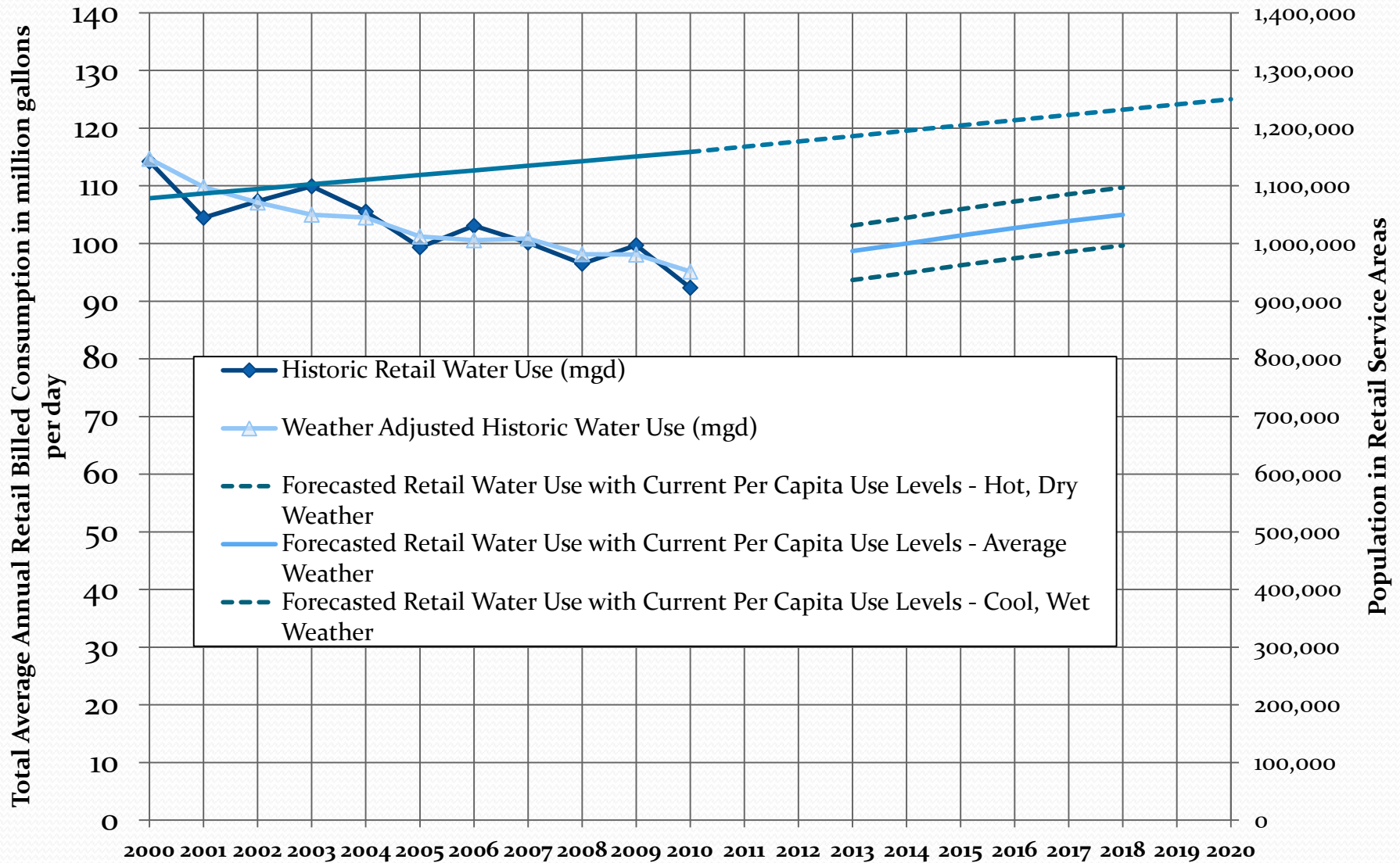
Distribution system leakage – system side

- Responsibility of each utility to manage and report
- Includes water main leaks, theft, meter errors, etc.

Retail Billed Water Consumption and Population Served by Members of the Saving Water Partnership Historic

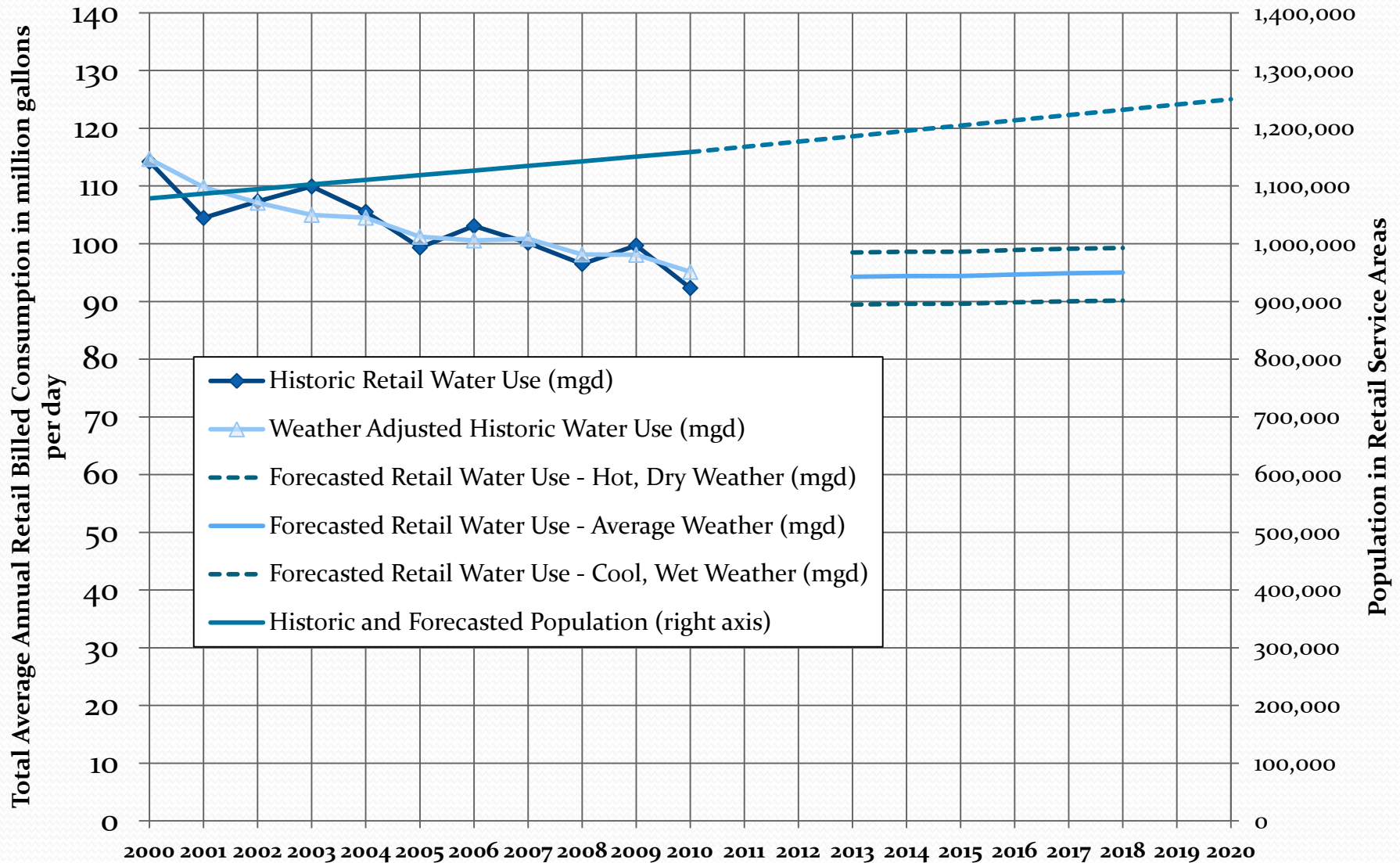


Retail Billed Water Consumption and Population Served by Members of the Saving Water Partnership Historic and Forecasted

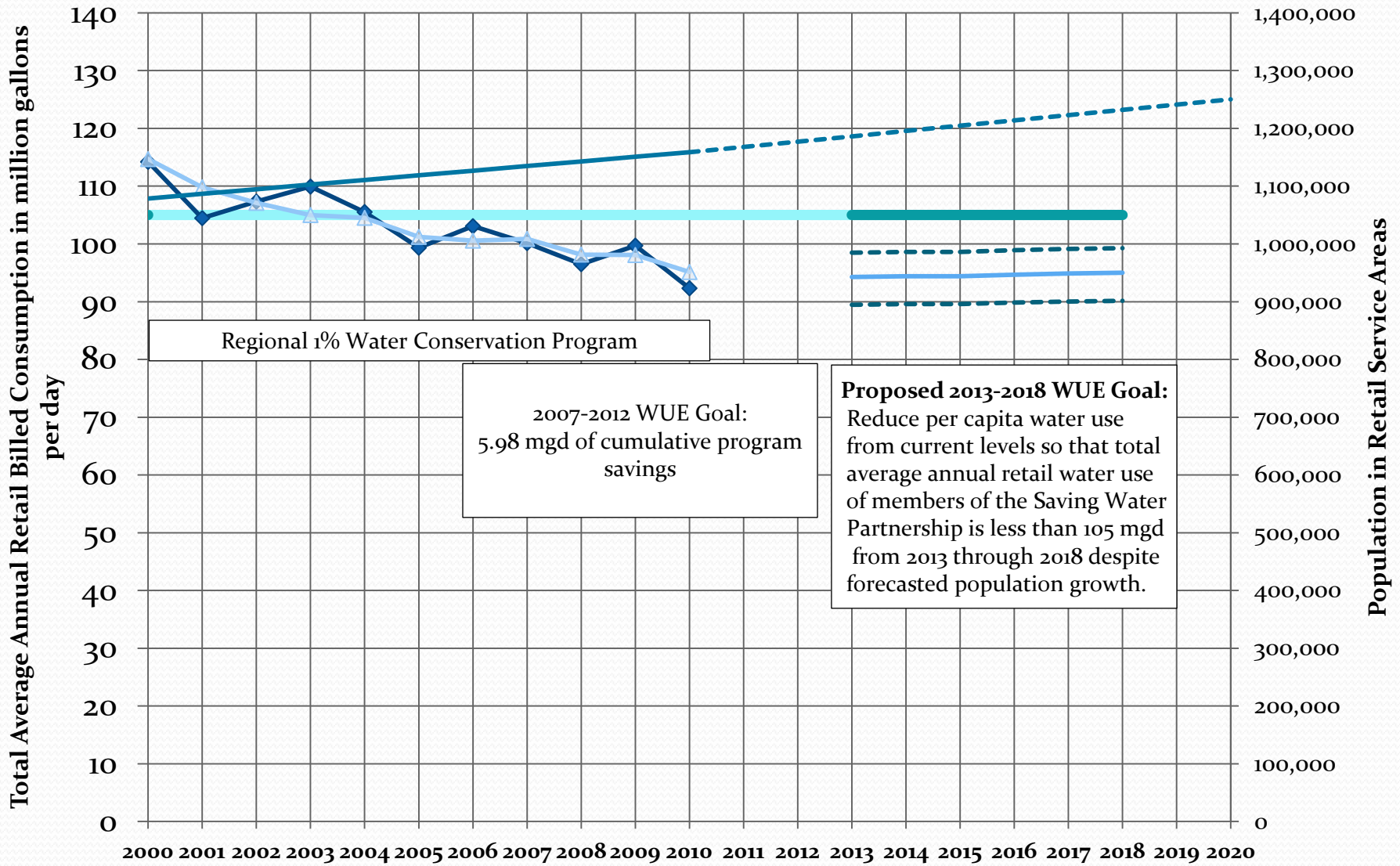


Retail Billed Water Consumption and Population Served by Members of the Saving Water Partnership

Historic and Forecasted



Retail Billed Water Consumption and Population Served by Members of the Saving Water Partnership Historic and Forecasted



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Proposed Water Use Efficiency Goal

- **Reduce per capita water use from current levels so that total average annual retail water use of members of the Saving Water Partnership is less than 105 mgd from 2013 through 2018 despite forecasted population growth**

Customer/demand side goal considerations

- Captures all customer water use reductions including conservation program, price induced savings, and passive savings
- SPU's forecast indicates the region will achieve this goal, with an allowance for hot, dry weather and faster economic recovery
- Total customer retail consumption in 2006 was 103 mgd, has been lower every year since, and is forecast to be below 100 mgd through 2018, even with hot, dry weather
- Per-capita consumption is forecasted to decline through 2018
- Simple to understand
- Easy data collection and reporting

2. Water Use Efficiency Conservation Program

Givens for 6-Year Water Use Efficiency Plan in WSP:

- Dept. of Health requires list of conservation measures, estimated water savings target (mgd), estimated \$ investment

Givens for Saving Water Partnership:

- Capital/O&M split built into rate model 2012-2014
- Some flexibility 2015-2018, although O&M will remain tight
- Given funding constraints, to “ensure core capacity” and offer a credible program translates into annual program budget of \$2.3 million and 5.5 FTE

Water Use Efficiency Conservation Program for Saving Water Partnership

Direction from Operating Board

- Increase education, especially for youth
- Decrease water saving targets (mgd)
- No financial incentives for developers

Today from Operating Board

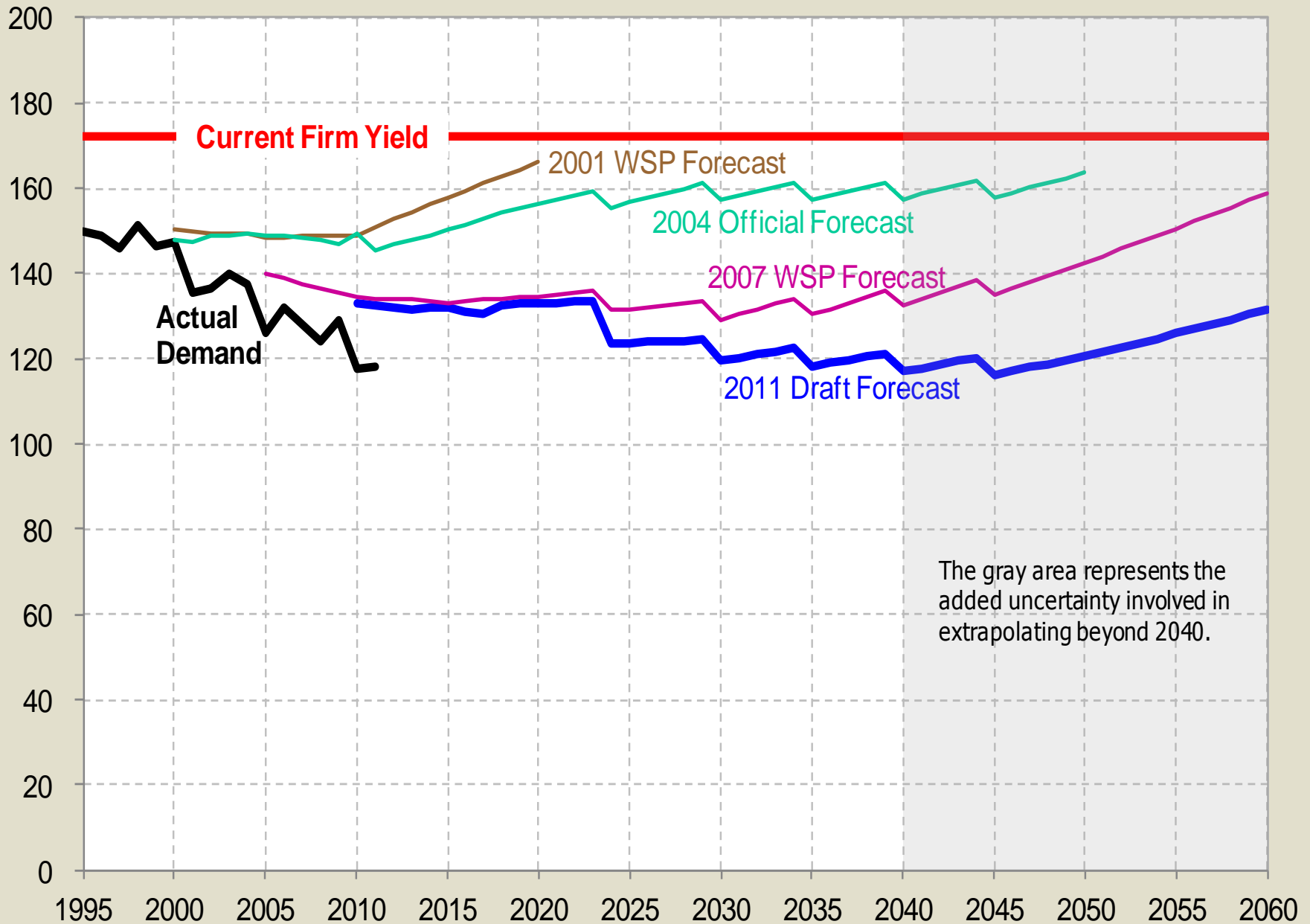
- Any changes from the conservation program measures list -- left column on handout?
- Given funding constraints, do you concur with SPU's recommendation of Program 1 or 4? Both increase education and decrease mgd savings from current levels; offer no developer incentives

2012 from Operating Board

- Review of 2013-2014 Saving Water Partnership conservation program plan and budget

- Next two slides for reference if needed

2011 Draft Forecast Compared to Earlier Forecasts



Tacoma, Everett, and Cascade Water Use Efficiency goals

- Tacoma – 2011-2017 goal is an 8.4 % reduction in total system water production, measured in gallons per capita per day
- Everett – 2007-2012 regional goal is to fund about \$600,000 a year in activities that will reduce 2012 demand for water by about 3%
- Cascade Water Alliance –2007-2013 reduction of 1 mgd annual, and 1.45 mgd peak season, by 2014

