



*Saving Water Partnership*  
Seattle and Participating Local Water Utilities

# **2019-2028 Water Conservation Program Planning Document**

**December 2018**

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# Acronyms

CEE	Consortium for Energy Efficiency
CCF	Centum Cubic Feet (100 cubic feet)
CIP	Capital Improvement Program
CPA	Conservation Potential Assessment
CTF	Conservation Technical Forum
DOH	Department of Health (Washington State)
EPA	Environmental Protection Agency (United States)
FTE	Full Time Equivalency
GPC	Gallons per Cycle
GPF	Gallons per Flush
GPH	Gallons per Hour
GPM	Gallons per Minute
HCP	Habitat Conservation Plan
MF	Multifamily
MGD	Million Gallons per Day
MIT	Muckleshoot Indian Tribe
MWL	Municipal Water Law
NR	Non-Residential
O&M	Operations and Maintenance
SF	Single Family
SPU	Seattle Public Utilities
SWP	Saving Water Partnership
WAC	Washington Administrative Code
WF	Water Factor
WSP	Water System Plan
WUE	Water Use Efficiency

# 1 Introduction

The Saving Water Partnership (SWP) is a collaboration between Seattle Public Utilities (SPU) and 18 water utility partners that purchase water from SPU. SPU staff administer a regional water conservation program on behalf of the SWP.

This introductory section explains the purpose of this document, describes the organization of the document, and provides information about the SWP including the members, the governance structure, water use characteristics, housing characteristics, and demographics.

## 1.1 Purpose

The primary purpose of this plan is to document the direction of the 2019-2028 SWP water conservation program. Additionally, this plan provides a basic primer on water conservation and some history of the SWP water conservation program.

The scope of the 2019-2028 SWP water conservation program is customer-facing, utility-sponsored programs, which is often called “programmatic conservation”. However, this plan also explains how the SWP water conservation program fits into a broader conservation context that includes rates, codes, and system efficiencies. The SWP water conservation program does not include conservation efforts by individual utilities that are above and beyond the regional program. For example, SPU’s low-income water conservation program that is only available to SPU retail customers is not included.

The 10-year period (2019-2028) for the new program matches the timeframe of SPU’s new water system plan (WSP). Because 10 years is a long time, the details of the program are more defined for earlier years and less defined for later years. Flexibility is needed for the later years due to potential changes that can occur related to conservation technologies, communication methods, demographic shifts, and other issues. The intent is to not update this document unless there are compelling reasons to do so. However, there will be an annual report each year and periodic documentation to further develop program details in future years.

## 1.2 Plan Organization

This document is organized as follows:

- **Section 1 Introduction:** This section explains the purpose of this document, describes the organization of the document, and provides information about the SWP including the members, the governance structure, water use characteristics, housing characteristics, and demographics.
- **Section 2 Water Conservation Basics:** This section provides a basic primer on water conservation including definitions, categories, regulations/commitments, and codes/standards. It is intended to provide a base level of understanding and context for the SWP water conservation program.

- **Section 3 History of the Regional Water Conservation Program:** This section provides a history of the regional water conservation program including the original reason for developing a program, conservation successes, major program milestones, and key program design criteria.
- **Section 4 2019-2028 Water Conservation Program:** This section provides details on the 2019-2028 conservation program including the development process, the current reasons for the conservation program, the conservation goal, the existing programs, intended modifications, and information on budget and staffing. **[Readers should go directly to this section if they are not interested in the background information in the other sections.]**

## 1.3 Saving Water Partnership

### 1.3.1 Member Utilities

The SWP is a collaboration between SPU and 18 water utility partners that purchase water from SPU. SPU owns and operates a regional water system that includes water sources, treatment plants, and a transmission system. Each of the individual water utilities own and operate their own distribution system and retail water to their customers. Some utilities also have their own water sources. The members of the SWP are shown in **Table 1-1**.

**Table 1-1 Saving Water Partnership Members**

1. Cedar River Water & Sewer District*	8. North City Water District	15. Water District 49
2. City of Bothell	9. Northshore Utility District	16. Water District 90*
3. City of Duval	10. Olympic View Water & Sewer District*	17. Water District 119
4. City of Mercer Island	11. Seattle Public Utilities (City of Seattle)	18. Water District 125
5. City of Renton*	12. Soos Creek Water & Sewer District	19. Woodinville Water District
6. Coal Creek Utility District	13. Water District 20	
7. Highline Water District*	14. Water District 45	

\* SPU's wholesale customers with their own water sources.

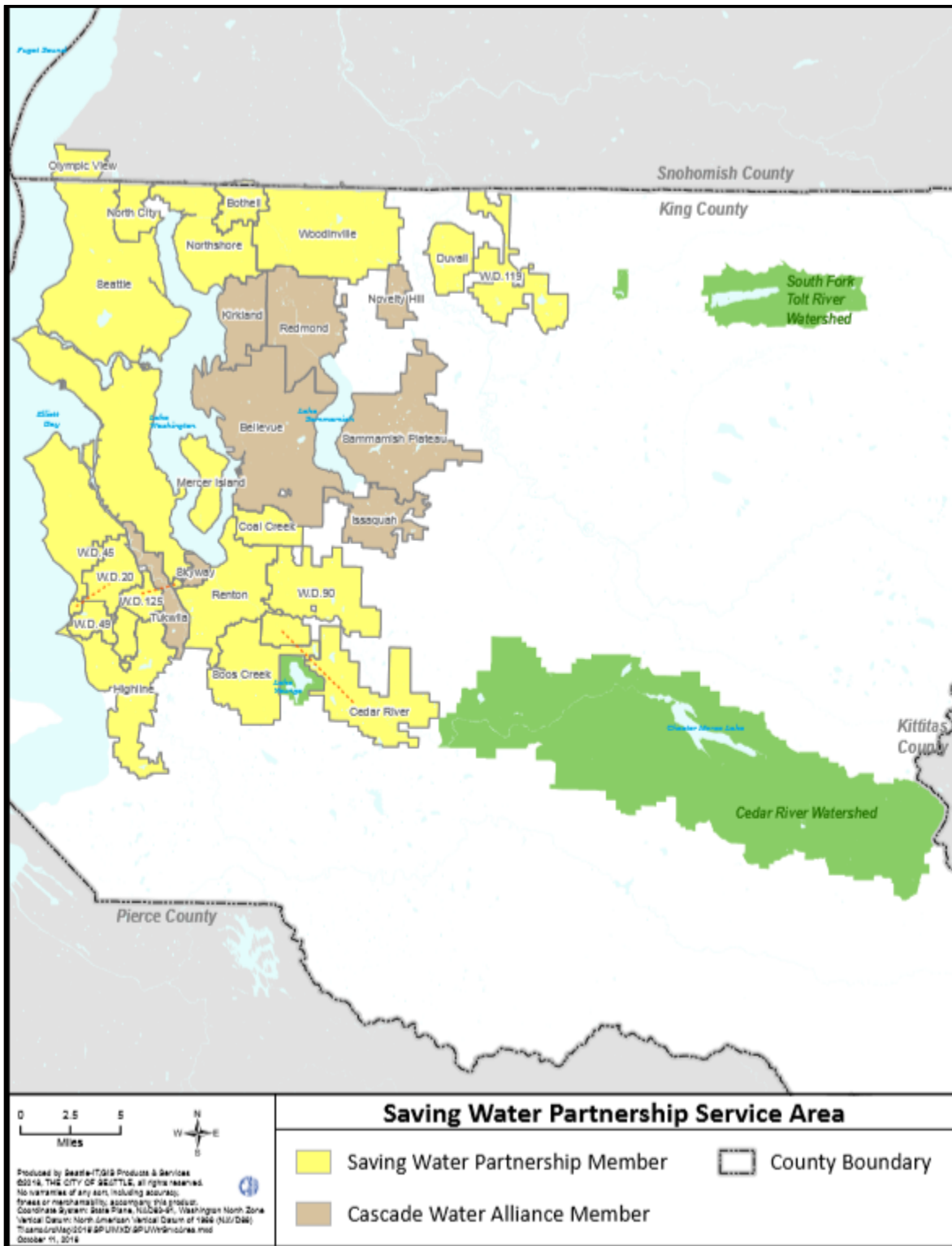
SPU also wholesales water to the Cascade Water Alliance, which is comprised of seven water utilities. The SWP does not include Cascade Water Alliance or their members; they have their own water conservation program. The members of the Cascade Water Alliance are listed in **Table 1-2**.

**Table 1-2 Cascade Water Alliance Members (Not SWP Members)**

1. City of Bellevue	4. City of Redmond	7. Skyway Water & Sewer District
2. City of Issaquah	5. City of Tukwila	
3. City of Kirkland	6. Sammamish Plateau Water	

The location of the SWP members is shown on **Figure 1-1**, which also shows, and sets apart, the Cascade Water Alliance members.

Figure 1-1 Saving Water Partnership Map



### 1.3.2 Organization and Governance Structure

A majority of the workload for planning and implementing the SWP program is done by SPU staff, under the governance and guidance of two bodies:

- **Operating Board:** The Seattle Water Supply System Operating Board (Operating Board) is comprised of management level staff from each of the 19 water utilities. It sets the strategic direction for the water conservation program, specifically the water conservation goal, the program priorities, and the budget. In short, the Operating Board determines what the water conservation program should achieve. The Operating Board also determines how conservation program costs are allocated, as authorized in the water wholesale contracts.
- **Conservation Technical Forum:** The Conservation Technical Forum (CTF) is comprised of program level staff from each of the 19 water utilities. The CTF participates in designing and implementing the SWP water conservation program, within the strategic direction parameters set by the Operating Board, by providing original ideas and providing input on ideas generated by SPU staff. In short, the CTF addresses how the SWP conservation program's goal and priorities will be achieved. Each CTF representative is also responsible for marketing the program within their retail service area.

### 1.3.3 Member Water Use Characteristics

Understanding water use characteristics of the collective SWP service area, as well as variations across the 19 members is important in designing a water conservation program that fits those characteristics. Raw data for water consumption and the number of customer accounts for each of the 19 SWP members is provided in **Table 1-3** and analysis of that raw data directly follows. The data is from the annual wholesale customer survey conducted by SPU and uses 2016 data, which was the most recent data available.



**Table 1-3 Consumption and Accounts**

Consumption & Accounts (2016; sorted alphabetically)										
Water Utility		Category	Consumption in CCF				Number of Accounts			
			Single Family	Multifamily	Non Residential	Total <sup>1</sup>	Single Family	Multifamily	Non Residential	Total
1	Bothell, City of	Wholesale - SWP	240,679	202,837	309,679	753,195	3,272	354	508	4,134
2	Cedar River WSD	Wholesale - SWP	625,446	121,071	120,966	867,483	7,391	252	367	8,010
3	Coal Creek UD	Wholesale - SWP	329,890	52,895	120,111	502,896	3,770	91	148	4,009
4	Duvall, City of	Wholesale - SWP	190,946	8,711	30,581	230,238	2,422	35	144	2,601
5	Highline WD	Wholesale - SWP	1,259,538	795,035	795,709	2,850,282	15,887	1,140	1,182	18,209
6	Mercer Island, City of	Wholesale - SWP	694,376	105,515	130,900	930,791	7,197	89	361	7,647
7	North City WD	Wholesale - SWP	508,168	145,654	100,967	754,789	7,590	319	255	8,164
8	Northshore UD	Wholesale - SWP	1,495,863	433,977	455,119	2,384,959	19,409	1,331	1,222	21,962
9	Olympic View WSD	Wholesale - SWP	389,162	101,255	106,883	597,300	4,400	207	254	4,861
10	Renton, City of	Wholesale - SWP	1,032,098	689,152	1,218,690	2,939,940	13,819	1,546	1,827	17,192
11	Seattle Public Utilities <sup>2</sup>	Seattle Retail	10,045,938	5,647,560	10,823,633	26,517,131	162,005	13,208	13,588	188,801
12	Soos Creek WSD	Wholesale - SWP	1,438,363	306,490	154,981	1,899,834	17,246	467	561	18,274
13	WD 119 <sup>3</sup>	Wholesale - SWP	127,510	0	0	127,510	1,209	0	0	1,209
14	WD 125	Wholesale - SWP	238,136	176,178	156,774	571,088	2,812	207	265	3,284
15	WD 20	Wholesale - SWP	598,889	243,657	185,974	1,028,520	8,156	510	520	9,186
16	WD 45	Wholesale - SWP	57,819	34,772	12,158	104,749	895	54	37	986
17	WD 49	Wholesale - SWP	241,967	162,419	162,511	566,897	3,198	370	540	4,108
18	WD 90	Wholesale - SWP	651,862	7,975	50,093	709,930	7,787	3	155	7,945
19	Woodinville WD	Wholesale - SWP	1,211,365	170,523	334,839	1,716,727	12,982	282	794	14,058
	Total		21,378,015	9,405,675	15,270,568	46,054,258	301,447	20,465	22,728	344,640

1. Total billed consumption for a utility is not the same as SPU sales to that utility due to non-revenue water and, in some instances, use of other water sources.

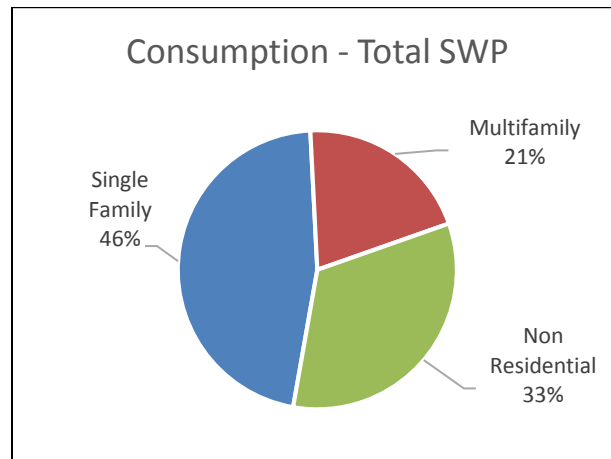
2. SPU data is from Bruce Flory, Principal Economist. It is non-weather adjusted data. The SF data backs out duplexes, which is put with MF, to better match how wholesale customers categorize SF and MF.

3. WD 119 did not submit data for 2016, therefore this data is for 2015.

Key water use characteristics are as follows:

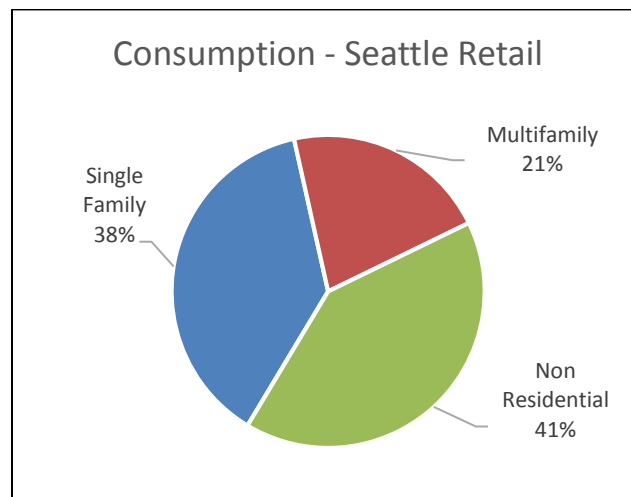
- **Sector Split for Consumption:** Water consumption for the total SWP is 46% single family (SF), 21% multifamily (MF), and 33% non-residential (NR), as shown in **Figure 1-2**. The single family sector includes residential detached homes, duplexes, and triplexes. Multifamily is defined as residential buildings with 4 units or more. The non-residential sector includes a wide variety of buildings and water use from small restaurants to large industrial complexes.

**Figure 1-2 Consumption Sector Split – Total SWP**

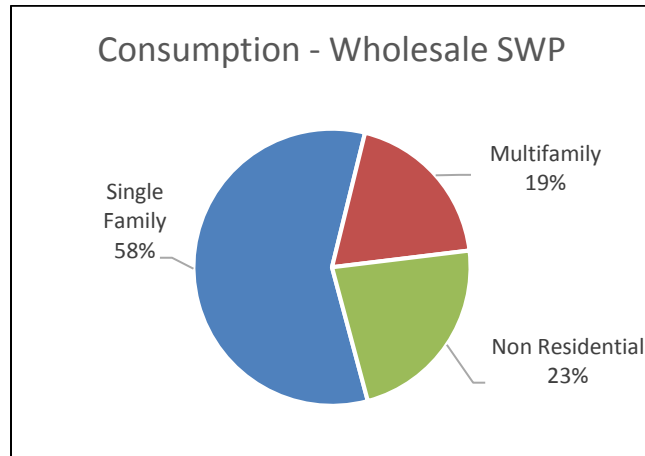


The sector split does vary between Seattle retail and wholesale SWP, with wholesale SWP having more SF and less NR consumption, as shown in **Figure 1-3** and **Figure 1-4**.

**Figure 1-3 Consumption Sector Split – Seattle Retail**

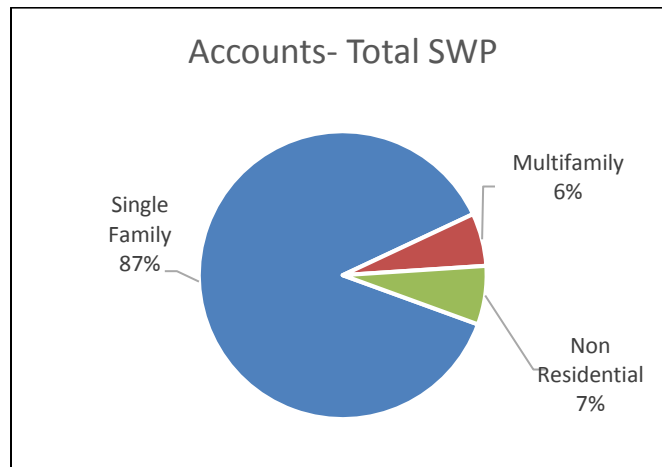


**Figure 1-4 Consumption Sector Split – Wholesale SWP**



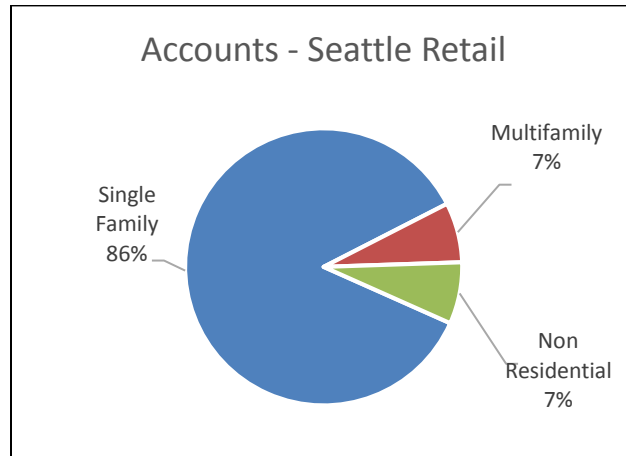
- **Sector Split for Accounts:** The number of customer accounts in each category for the total SWP it is 87% SF, 6% MF, and 7% NR, as shown in **Figure 1-5**.

**Figure 1-5 Accounts Sector Split – Total SWP**

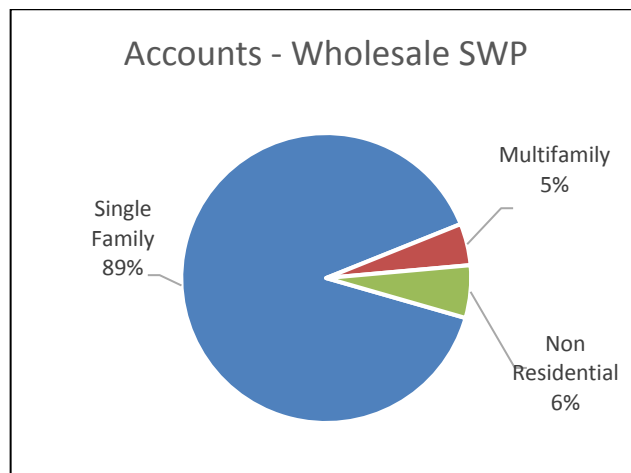


Seattle retail and wholesale SWP have a similar sector split, as shown in **Figure 1-6** and **Figure 1-7**.

**Figure 1-6 Accounts Sector Split – Seattle Retail**



**Figure 1-7 Accounts Sector Split – Wholesale SWP**



- **Single Family Sector:** Single family is a great target for the SWP water conservation program because this sector:
  - Represents the largest portion of consumption (46%) for the total SWP and thus has a large savings potential. (Note this is also true for the vast majority of individual SWP members.)
  - Represents the vast majority of accounts for the total SWP and thus provides programs for the largest number of customers. (Note this is also true for every individual SWP member.)
  - Every SWP member has an ample number of SF accounts (the minimum is approximately 900) so there are many opportunities for every individual SWP member.

- **Multifamily Sector:** Multifamily is a good target for the SWP water conservation program because this sector:
  - Represents a sizable portion of the consumption (21%) for the total SWP and thus provides a respectable savings potential. (Note this is also true for approximately half of the individual SWP members.)
  - Has a much smaller percent of accounts (6%) for the total SWP compared to the percent of consumption (21%) and thus can be cost-effective outreach. (Note this is also true for vast majority of individual SWP members.)
  - Most SWP members have a respectable number of MF accounts (13 SWP members have 200+; 5 SWP members have 500+) so there are reasonable opportunities for most SWP members.
- **Non-Residential Sector:** Non-residential is a good target for the SWP water conservation program because this sector:
  - Represents a sizable portion of the consumption (33%) for the total SWP and thus provides a respectable savings potential. (Note this is also true for approximately one-third of the individual SWP members.)
  - Has a much smaller percent of accounts (7%) for the total SWP compared to the percent of consumption (33%) and thus can be cost-effective outreach. (Note this is also true for vast majority of individual SWP members.)
  - Most SWP members have a respectable number of NR accounts (14 SWP members have 200+; 9 SWP members have 500+) so there are reasonable opportunities for most SWP members.

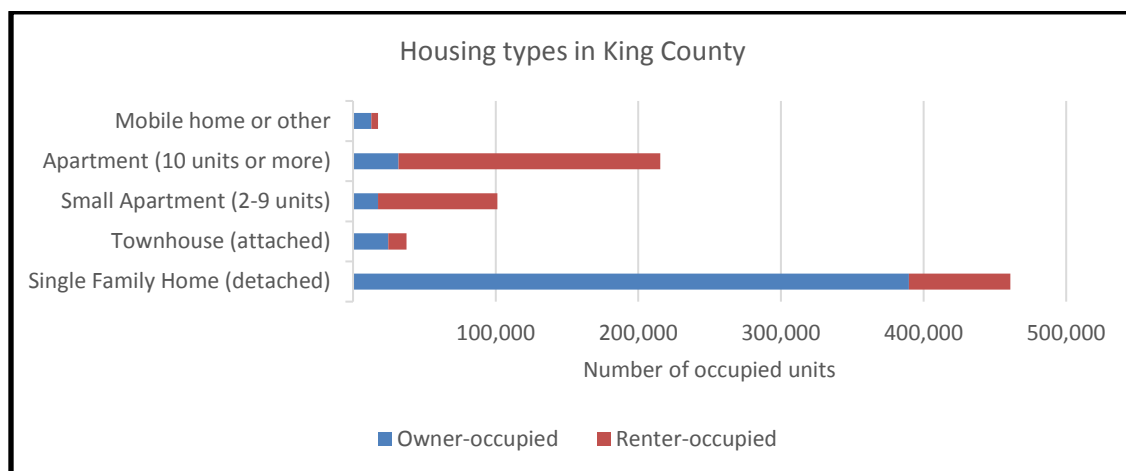
### 1.3.4 Housing Stock Characteristics

Understanding the type and age of housing in the SWP service area is important when choosing appropriate water conservation behaviors and hardware changes to promote through a water conservation program.

Information on housing type and age is provided below and is from the U.S. Census Bureau 2012-2016 American Community Survey 5-year estimates. Note that data were available only at the county level, of which approximately 75% is served by the Seattle Regional Water System and a smaller portion by the SWP service area. However, the county-level data are generally representative of the SWP service area.

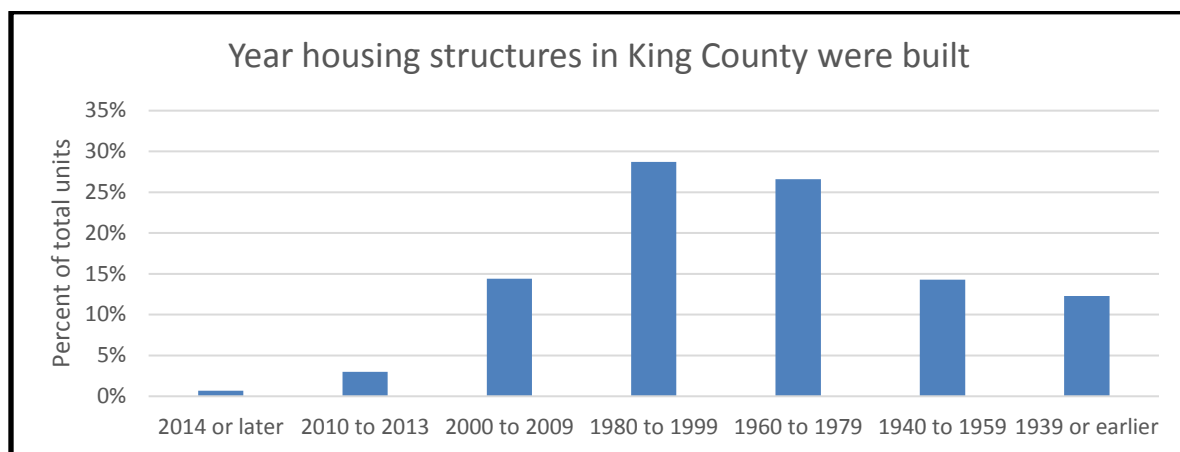
- **Housing Type:** Single family homes are the predominant housing type, followed by larger apartment buildings, and there is an approximately equal split between owner-occupied and renter-occupied units, as shown in **Figure 1-8**.

**Figure 1-8 Housing Types**



- Both single family and multifamily (i.e., apartment) sectors are good targets for the SWP water conservation program, as discussed above in Section 1.3.3 Member Water Use Characteristics
- Homeowners are more likely to have control over the hardware and fixtures installed and to pay their water bill directly. Promoting efficient hardware and behavior tips are likely successful water conservation strategies with homeowners because they have an intrinsic reason to participate.
- Renters make up approximately 50% of King County residents and are a good target for behavior tips and can help persuade building owners and managers to make changes to hardware.
- **Housing Age:** The overall housing stock is relatively old, with only approximately 20% built since 2000, as shown in **Figure 1-9**.

**Figure 1-9 Housing Age**



- Most of the existing housing stock was built before the plumbing code was updated to a higher water efficiency standard in 1994. The fixtures in some older buildings have already been updated, but many buildings still have pre-code hardware installed and are a good target for water efficiency upgrades.

### 1.3.5 Member Demographics

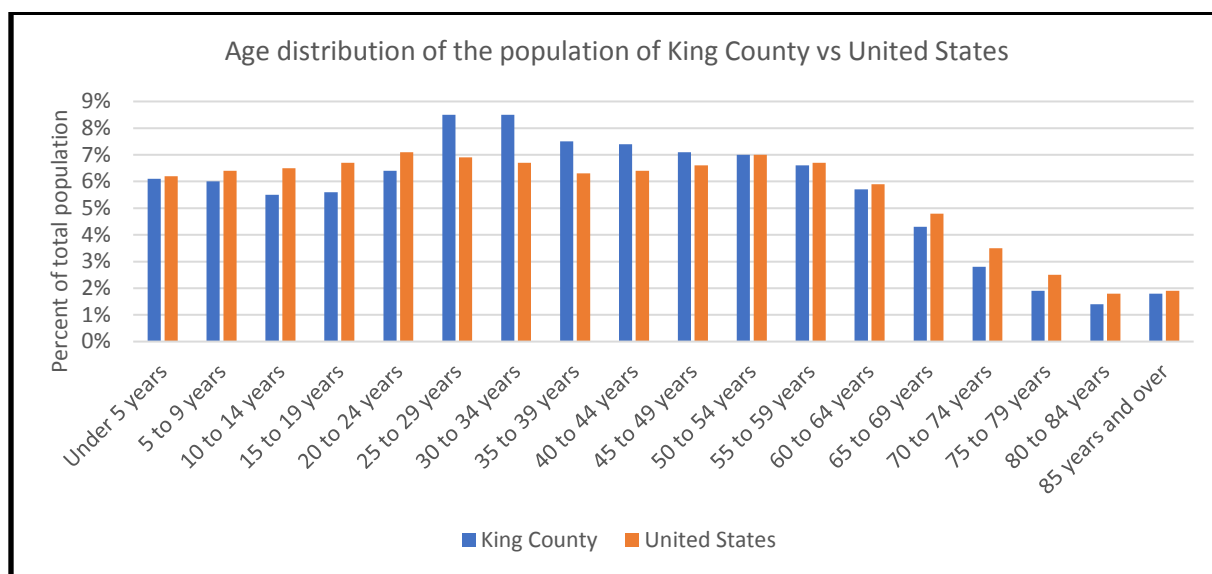
Understanding the demographics of the collective SWP service area, as well as variations across the 19 members is important to designing a water conservation program that fits those characteristics. As a region, King County is growing significantly (it's added more people since 2000 than the current combined of population of Tacoma and Everett) and its demographics are changing, especially in the suburbs.

The demographic information that follows is from the 2010 Census, American Community Surveys from 2009-2016, and the King County Office of Performance, Strategy and Budget. Note that data were available only at the county level, of which approximately 75% is served by the Seattle Regional Water System and a smaller portion by the SWP service area. However, the county-level data are generally representative of the SWP service area.

Key demographic information is as follows:

- **Age:** Compared to the United States, the population of King County skews towards middle age with a smaller proportion of both youth and seniors as shown in **Figure 1-10**.

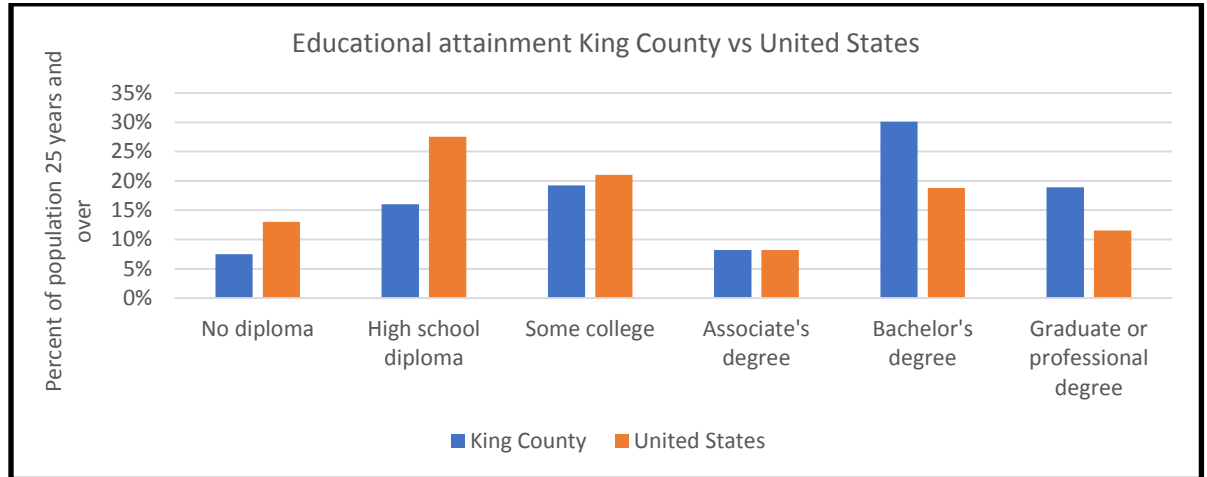
**Figure 1-10 Age Distribution**



- The SWP program should have programs available for the full range of ages so that all residents can participate.
- The millennial generation (25-34 year-olds) is a good target because they represent the largest portion of residents. Millennials and their adjacent generational cohorts are characterized by their quick adoption of new technology and extensive use of the internet.

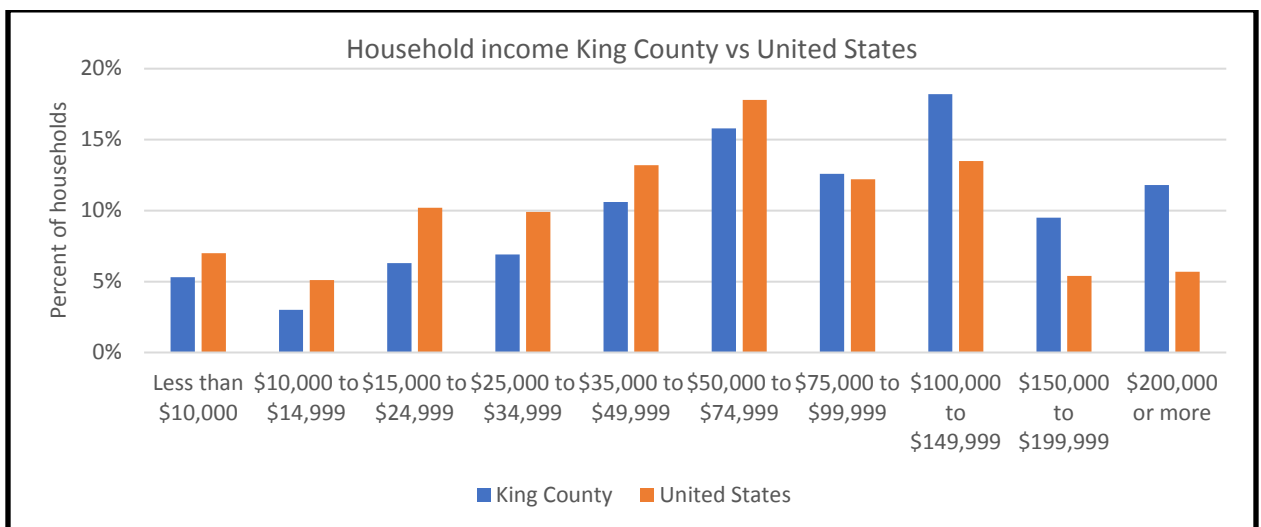
- **Educational Attainment:** King County residents have significantly higher levels of educational attainment than the United States, with almost 50% having a bachelor's degree or higher as shown in **Figure 1-11**.

**Figure 1-11 Educational Attainment**



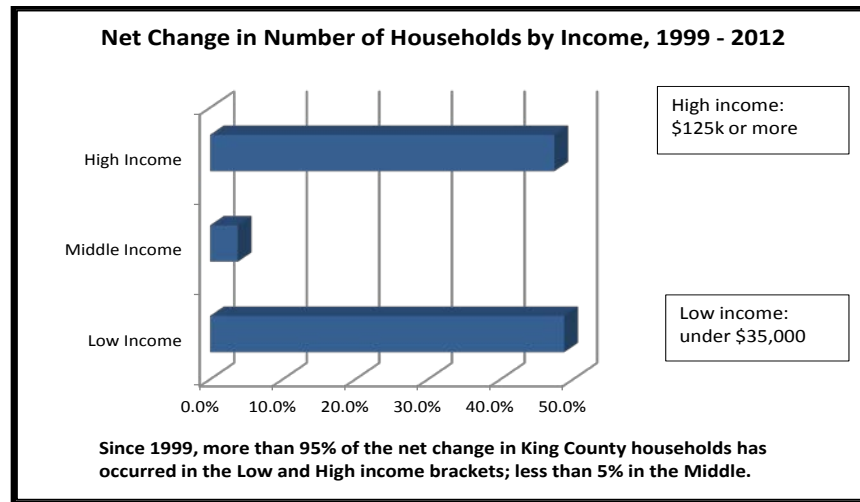
- To meet the needs of all residents, information about SWP programs should be communicated in plain language.
  - Additionally, a significant portion of the SWP customer base may desire a deeper level of information before taking action and may be skeptical about programs until detailed or technical information is provided.
- **Household Income:** The average annual household income in King County is \$106,772 compared to \$77,866 in the United States, as shown in **Figure 1-12**. While the average income in King County is high, the cost of living is also high, and the number of low-income households in the county is increasing. Regional population growth has increased the number of both low and high-income households while the number of middle income households has remained static. The number of residents below the poverty level has nearly doubled since 2000 as shown in **Figure 1-13**.

**Figure 1-12 Household Income**



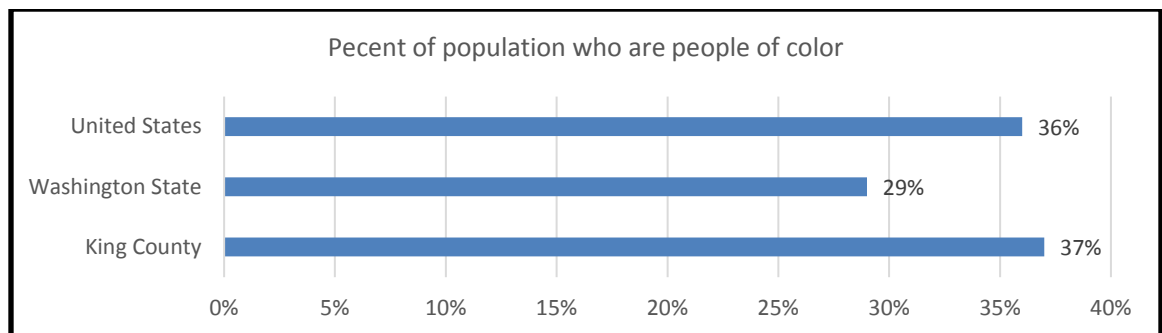


**Figure 1-13 Changes in Household by Income**



- Income plays a significant role in an individual's motivation and/or ability to participate in water conservation programming.
- The water conservation program design should take into account the unique circumstances of a growing low-income customer base, a squeezed middle class, and the growing number of high-income households that may not be as responsive to price signals. Continuing to provide both financial and technical assistance will help customers at all income levels participate in programs.
- **Race and Ethnicity:** 37% of the population in King County identify as People of Color, a higher percentage than Washington or the United States, as shown in **Figure 1-14**. Additionally, most of the net population growth in King County since 1990 has consisted of persons of color.

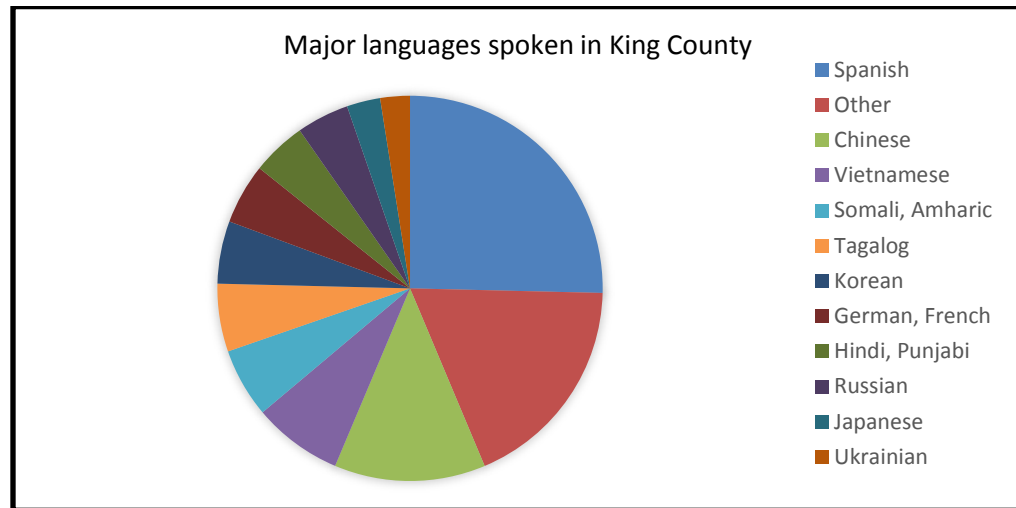
**Figure 1-14 People of Color**



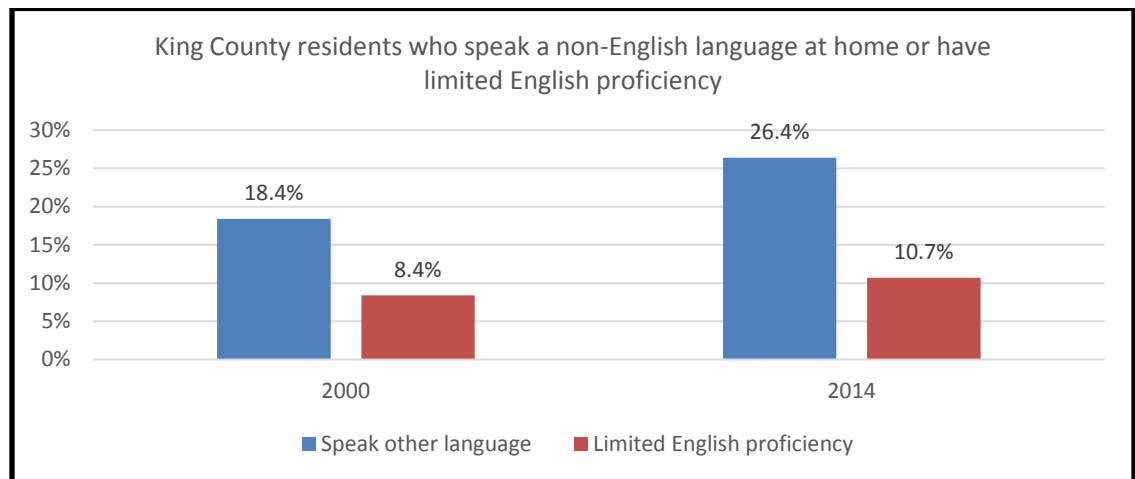
- People of color experience unique barriers accessing government and public services and are a significant and growing portion of King County residents. For SWP's water conservation programs to serve all customers, programs should be designed to meet the needs of a racially diverse region.

- **Language:** Residents of King County speak over 170 languages and more than 25% speak a language other than English at home. 10% of King County residents have limited English proficiency and the proportion of residents with limited English proficiency is growing, as shown in **Figure 1-15** and **Figure 1-16**.

**Figure 1-15 Major Languages**



**Figure 1-16 Limited English Proficiency**



- While not interchangeable, language and culture often go hand in hand—both are critical components of communication, education, and outreach.
- To serve all customers, the SWP water conservation programs should consider strategies like partnering with community-based organizations and transcreation of information to increase program accessibility to the growing proportion of limited English speakers in SWP's service area.

- **Geographic Variations:** The geographic distribution of many demographic characteristics are highly varied across the service area, as shown in **Figure 1-17**, **Figure 1-18**, **Figure 1-19** and **Figure 1-20**. The SWP water conservation program may need to be adapted to meet the needs of this varied distribution.

**Figure 1-17 Median Household Income (\$) Geographic Distribution**

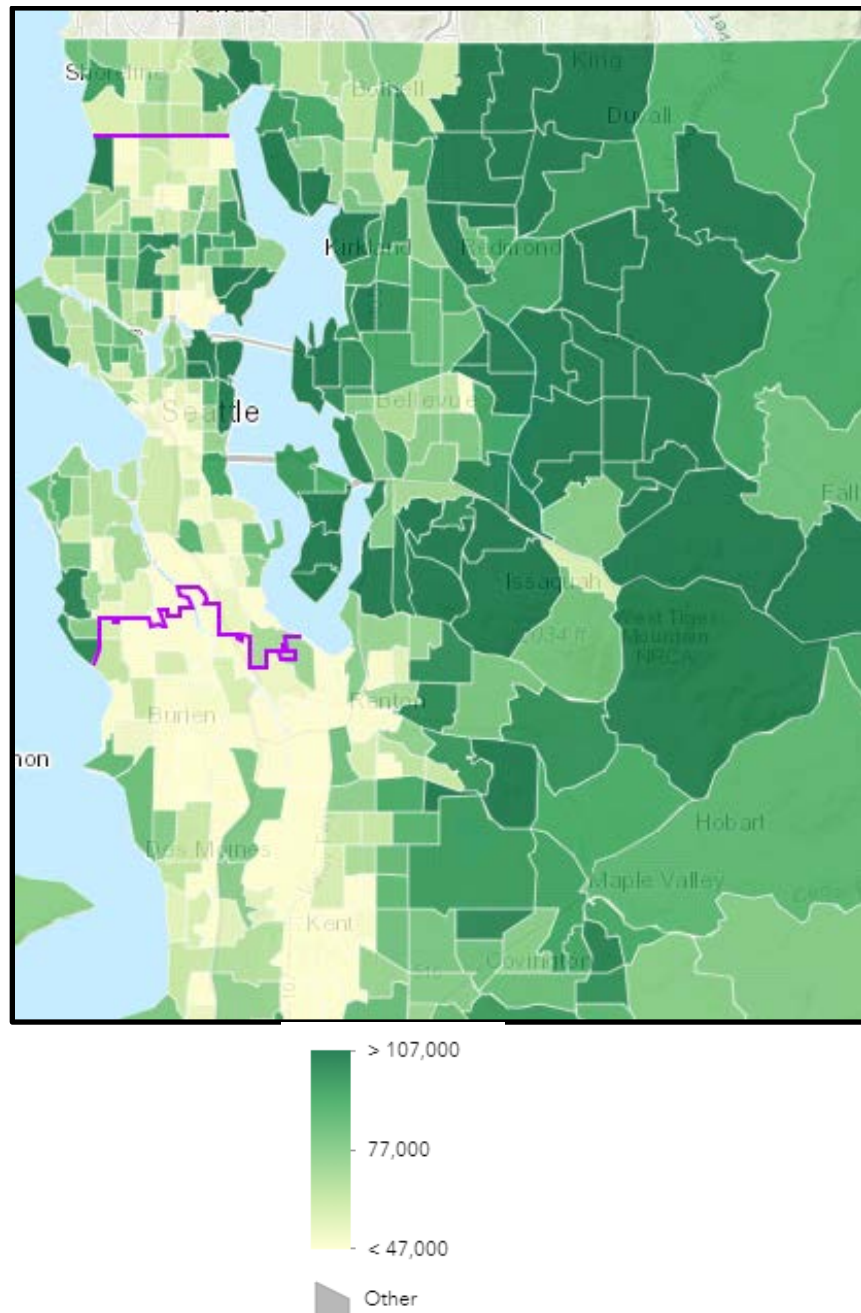
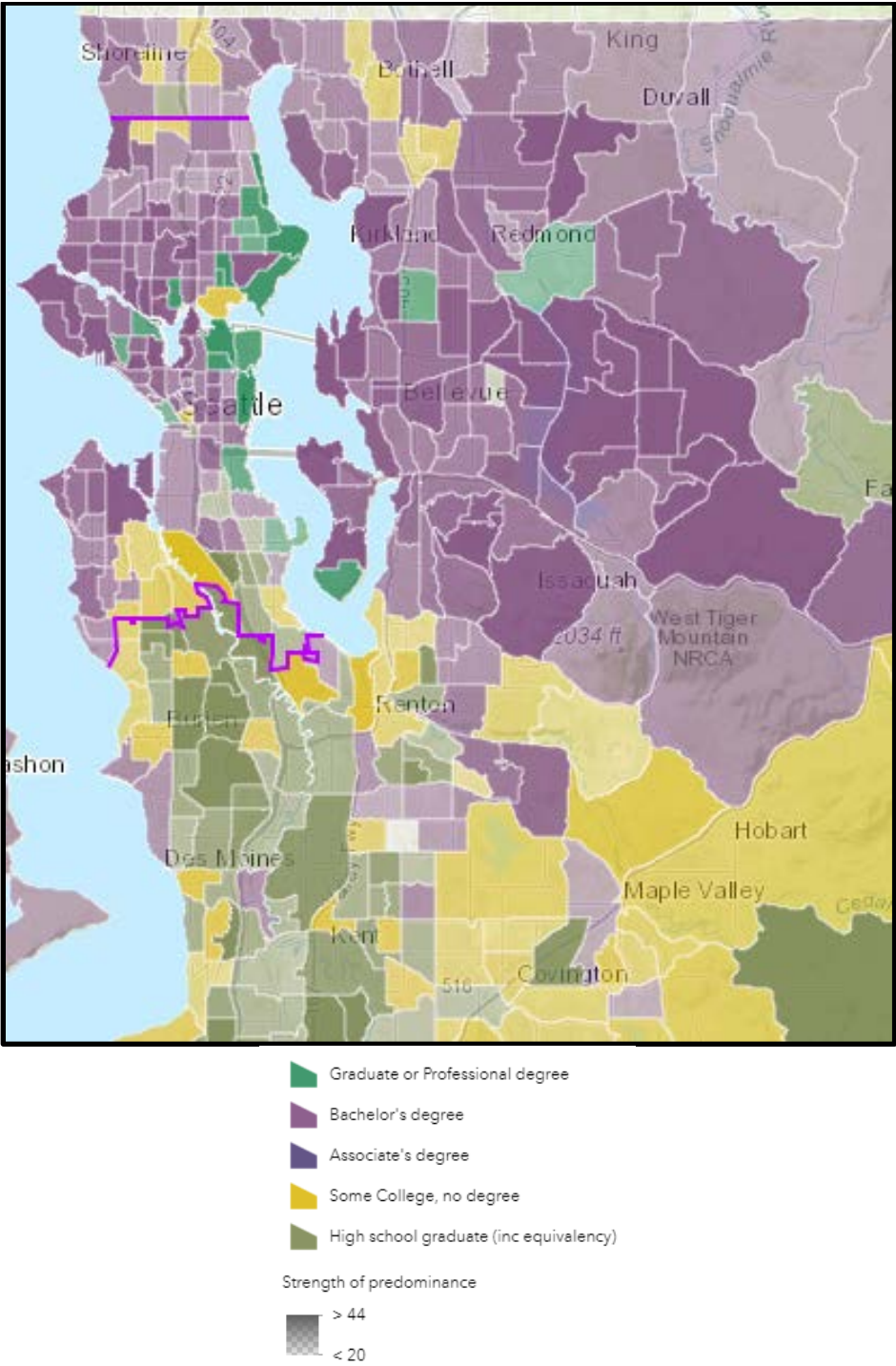
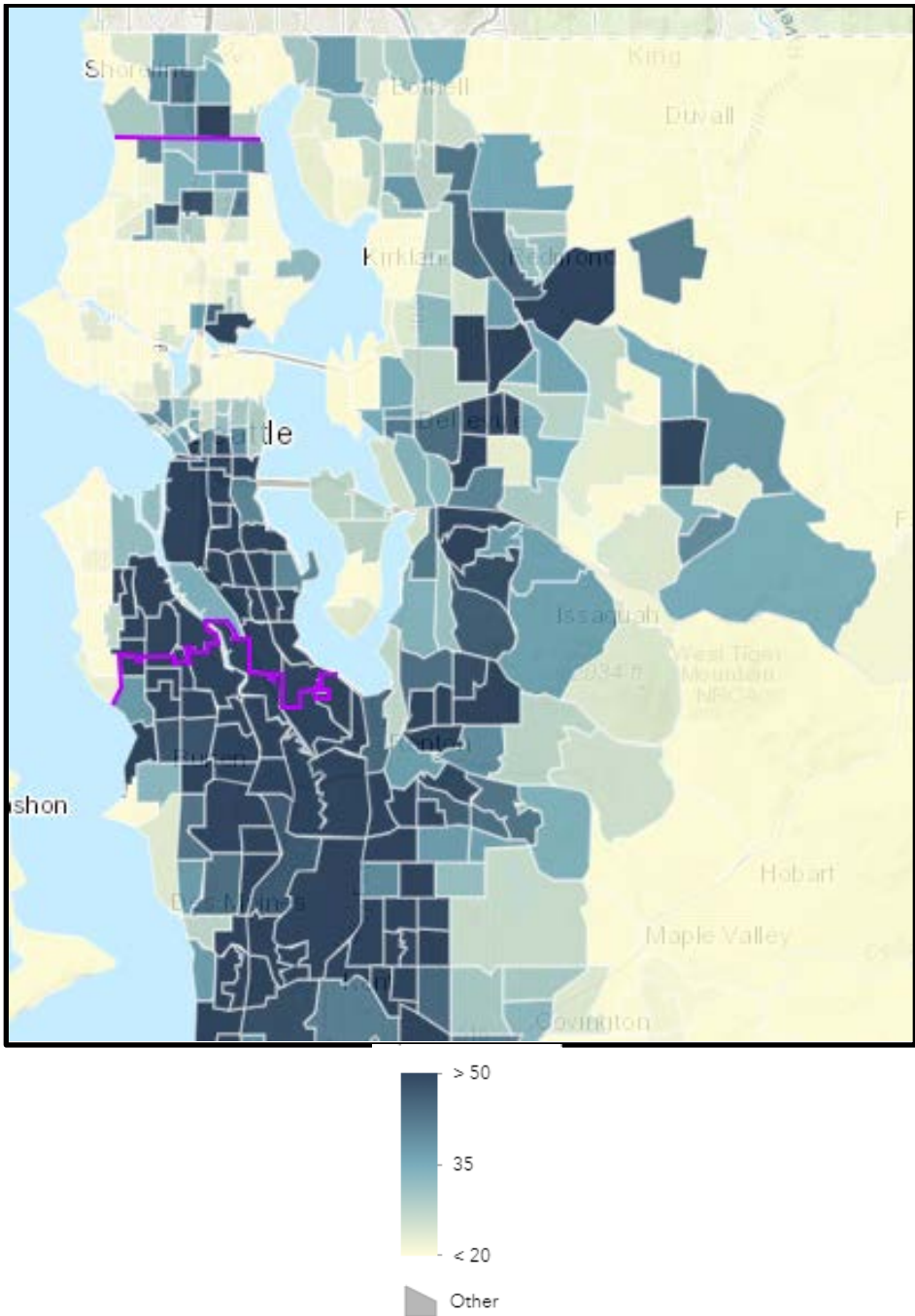


Figure 1-18 Most Common Education Attainment Geographic Distribution



### Figure 1-19 Percentage of Population Who are People of Color Geographic Distribution





Legend:

- Data not available
- Less than 50 percent
- 50 - 60 percent
- 60 - 70 percent
- 70 - 80 percent
- 80 - 90 percent
- 90 - 95 percent
- 95 - 100 percent

## 2 Water Conservation Basics

This section provides a basic primer on water conservation including definitions, categories, regulations/commitments, and codes/standards. This is intended to provide a base level of understanding and context for the SWP water conservation program.

### 2.1 Conservation Definition

It is important to define conservation because the word often gets confused in two ways:

- **Confusion #1 Conservation vs Curtailment:** It is important to distinguish between conservation and curtailment, as explained below.

**Conservation:** Long-term, sustainable management of water use which eliminates waste and maximizes efficiency of use. This has no loss of service or satisfaction by the customer.

**Curtailment:** Short-term response to a shortage or emergency such as a drought or system disruption. This can have a loss of service or satisfaction by the customer.

- **Confusion #2 Broad Conservation vs Narrow Conservation:** Conservation is used both in a broad sense and a narrow sense, as explained below.

**Broad Conservation:** This includes everything that reduces water use, both on the customer side (demand-side) and the utility side (supply-side). There are four main components:

- **Programmatic Conservation:** Utility-sponsored programs that help customers reduce their water use. This can include education, technical assistance, and/or financial assistance.
- **Plumbing Codes/Standards:** Savings that occur as customers replace older, less-efficient fixtures with new, more-efficient models that meet federal or state codes or standards. These savings are also achieved as new buildings are constructed using efficient code-compliant fixtures.
- **Rate/Price Impacts:** Rate structures that encourage customer conservation. Examples include seasonal rates (higher prices in the summer), inclining blocks (higher unit costs at higher levels of consumption), and irrigation rates that are higher than non-irrigation rates.
- **System Operation Improvements:** Improvements water utilities make to operate their systems with less water waste. Examples include reducing distribution system leakage and covering reservoirs which reduces the amount of water used to clean and overflow the reservoirs.

**Narrow Conservation:** This includes only the programmatic conservation.

The 2019-2028 SWP water conservation program is conservation in the narrow sense, since it is programmatic conservation only. Throughout this document, the phrase “conservation program” typically refers to conservation in the narrow sense, meaning programmatic conservation. Note that the background information provided in Sections 2 and 3 of this document includes the broader conservation.

One example of the importance of this distinction is that when the overall reduction in water use is attributed to “conservation”, many people mistakenly take that to mean just programmatic conservation, when it is really all conservation efforts.

## 2.2 Conservation Categories

Conservation can be divided into various categories, as shown and described below. The categories are based on a framework in the *Handbook of Water Use and Conservation* by Amy Vickers.

Measure (saves water)		Incentive (motivation to save water)		
Hardware	Behavior	Educational	Financial	Regulatory
More efficient equipment	More efficient behavior	Explain why & how to save water	Make saving water financially attractive	Require an action
<i>Example:</i> Install low flow toilets	<i>Example:</i> Take shorter showers	<i>Example:</i> Conservation tips brochure/website	<i>Example:</i> Inverted block rate structure	<i>Example:</i> Plumbing code

- **Measures:** Measures save water in and of themselves and can be categorized as follows:
  - **Hardware Measures:** Entails using more efficient equipment.
  - **Behavioral Measures:** Entails promoting behavior changes toward more efficient practices.
- **Incentives:** Incentives motivate customers to engage in a water-saving measure and can be categorized as follows:
  - **Educational Incentives:** Explains why and how to save water.
  - **Financial Incentives:** Makes saving water financially attractive.
  - **Regulatory Incentives:** Mandatory requirements for conservation actions.

It is important to understand these categories since the cost structure, longevity of savings, certainty of savings, and political impacts vary across the categories and there can be tradeoffs between them. A comprehensive conservation program will include a mix of these elements in order to take advantage of the benefits of some and mitigate against the downside of others.

- **Costs:** Hardware measures typically have direct costs to the customer, whereas behavioral measures typically have low or no direct costs to the customer. For example, upgrading a clotheswasher to a more efficient model requires paying for a new clotheswasher and installation, whereas washing full loads has no direct costs. For programmatic conservation,



the water utility has direct costs for both hardware and behavior measures. Incentives typically have no direct costs to customers, but can have costs to the water utility.

- **Longevity & Certainty:** Hardware measures are better on both accounts, compared to behavioral measures. For example, installing a low-flow showerhead (a hardware measure) has higher water saving certainty and longevity than taking shorter showers (a behavioral measure), since it is easier to backslide on the shorter shower than it is to change out the showerhead. For incentives, regulatory efforts have higher longevity and certainty than educational or financial efforts.
- **Political:** Program elements that are voluntary are often preferred by customers over mandatory elements. For example, voluntary programs that help customers improve the efficiency of their irrigation system (e.g., rebates on efficient irrigation controllers) are often preferred over regulations that restrict the amount of lawn that can be planted.

## 2.3 Regulations / Agreements / Commitments

There are several regulations, agreements, and commitments that set the requirements or expectations for a water conservation program for the SWP members and/or SPU.

### 2.3.1 State Municipal Water Law and Water Use Efficiency Rule

The Washington State Municipal Water Law (MWL) was a major milestone for water conservation in Washington. In 2003, the Washington State Legislature passed Engrossed Second Substitute House Bill 1338, better known as the Municipal Water Law, to address the increasing demand on our state's water resources. The law established that all municipal water suppliers must use water more efficiently in exchange for water right certainty and flexibility to help them meet future demand.

The Legislature directed the Washington State Department of Health (DOH) to adopt an enforceable Water Use Efficiency (WUE) Rule and program, which became effective on January 22, 2007. Any Group A community water system that serves at least 15 residential service connections must comply with the WUE Rule, whether publicly or privately owned.

WUE Rule requirements are found in WAC 246-290. The primary requirements in the WUE Rule are as follows:

- **Meters:** Water sources and customers must be 100% metered. (WAC 246-290-496)
- **Data Collection:** Certain types of data must be collected and reported. (WAC 246-290-100)
- **Leakage:** Distribution system leakage must be calculated and reported annually to the State and to customers and must be 10% or less. (WAC 246-290-820)
- **Conservation Goal:** Utilities must set a quantitative water conservation goal (using a public process) and report on it annually to the State and to customers. (WAC 246-290-830)
- **Conservation Program:** Utilities must implement (or evaluate) 1-12 conservation measures, depending on their size. (WAC 246-290-810)

- **Reporting:** Utilities must report their distribution system leakage and progress towards achieving their conservation goal annually to the State and customers. (WAC 246-290-840)

Importantly for the SWP, the State allows regional goals and programs, where each utility separately adopts the regional goal and reports to the State and to customers.

### 2.3.2 Cedar River Habitat Conservation Plan

SPU's 2000 Cedar River Habitat Conservation Plan (HCP) relates to the federal Endangered Species Act (ESA). Section 10 of the ESA allows landowners to conduct activities that would result in a "take" of endangered species, in exchange for other commitments. ("Take" is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.") SPU's HCP was developed in anticipation of Puget Sound Chinook being listed under ESA, although the HCP is an ecosystem-based plan that covers nearly 90 species. The HCP was developed by SPU and submitted to the National Marine Fisheries Service and the United States Fish and Wildlife Service.

The HCP is a 50-year agreement (thru 2050) that provides certainty for the City of Seattle's drinking water system, while it protects and restores habitat by implementing over 80 projects in the following three areas.

- **Watershed Management:** This includes decommissioning roads, stream/riparian restoration, and reforestation.
- **Landsburg Dam Mitigation:** This includes fish passage and a sockeye hatchery.
- **Instream Flow Management:** This includes guaranteed flow regimes, diversion limits, and floodplain reconnection.

With respect to water conservation, the HCP commits SPU to educate customers about the linkage between water use and salmon habitat, as well as to implement public information programs prior to reducing instream flows to critical-year levels.

### 2.3.3 Muckleshoot Indian Tribe Settlement Agreement

The 2006 Muckleshoot Indian Tribe (MIT) Settlement Agreement is an agreement between SPU and the MIT that resulted from the MIT formally challenging the National Marine Fisheries Service's approval of the HCP and the corresponding Incidental Take Permit.

The challenge was based on the MIT's longstanding assertion that the Cedar River Project has damaged fish runs in the Cedar River/Lake Washington Basin and that the Tribe is entitled to compensation and mitigation for such damage. As discussions progressed, the parties also addressed the Tribe's exercise of its treaty rights to hunt and gather in the Cedar River Municipal Watershed, the Tribe's interest in wildlife management in the watershed, and the Tribe's interest in conducting traditional activities there.

The settlement agreement resolved the Tribe's claim against the City for damages to fish runs in the Cedar River/Lake Washington Basin and impairment of treaty rights. The primary commitments in the agreement relate to instream flow requirements, diversion limits, and the fish hatchery.

With respect to water conservation, the agreement has the following commitments:

- **Existing retail customers:** Commits SPU to continue conservation efforts with its retail customers.
- **Existing wholesale customers:** Commits SPU to encourage conservation efforts from its existing wholesale water customers.
- **New wholesale customers:** Commits SPU to require that conservation measures from any new wholesale customers be substantially similar to conservation efforts from SPU's retail.

### 2.3.4 Wholesale Water Supply Contracts

The wholesale water supply contracts SPU has with the 18 wholesale customers in the SWP requires the wholesale water customers to participate in the regional conservation program.

## 2.4 Codes and Standards

There are several codes and standards that relate to water conservation as described below.

- **Federal Code:** Federal code is federal law. The primary example of this is the 1992 Federal Energy Policy Act (effective in 1994), which included maximum water use rates for toilets, showerheads, and faucet aerators.
- **WaterSense:** WaterSense is a voluntary product labeling program for water efficiency sponsored by the EPA. WaterSense labeled products are at least 20% more efficient than the federal code. The intent is to help people save water while ensuring high performance. Products with the WaterSense label have been tested by an independent laboratory to ensure both water efficiency and performance. WaterSense is primarily applicable to cold water using fixtures, such as toilets.
- **MaP Premium Toilets:** MaP (short for Maximum Performance) Premium is an effort to help customers identify toilets with strong water efficiency and flushing performance. The MaP program tests toilets against a protocol to verify maximum water use and flushing performance. The testing protocol requires toilets to use 20% less water (1.1 gpf or less) and remove 70% more solid waste, compared to regular WaterSense toilets. MaP is a joint US and Canadian effort by Gauley Associates, Ltd. and Koeller and Company. The SWP found that the general public is not familiar with the term "MaP Premium", is confused by the term, and thus the SWP has chosen to use the term "Premium toilets" instead.
- **Energy Star:** Energy Star is a voluntary product labeling program for energy efficiency sponsored by the EPA. Energy Star labeled products are more efficient than the federal code. Energy Star is primarily applicable to hot water using fixtures, such as showerheads.
- **Consortium for Energy Efficiency (CEE):** The CEE is a US and Canadian consortium of gas and electric efficiency program administrators, which works to accelerate the development and availability of energy efficient products and services. The CEE develops tiered product specifications, which are more efficient than both the federal code and Energy Star. Many utilities use the CEE specifications as equipment qualifications for their rebate programs.

The maximum water use levels by the various codes and standards are shown in **Table 2-1**.

**Table 2-1 Fixture Maximum Water Use Levels**

Fixture	Federal Code	WaterSense	Energy Star	Consortium for Energy Efficiency (CEE)
Toilets (residential/gravity)	1.6 gpf	1.28 gpf	n/a	n/a
Toilets (commercial/flushometer)	1.6 gpf	1.28 gpf	n/a	n/a
Urinals	1.0 gpf	0.5 gpf	n/a	n/a
Showerheads	2.5 gpm	2.0 gpm	n/a	n/a
Faucets (bathroom - residential)	2.2 gpm	1.5 gpm	n/a	n/a
Faucets (bathroom - commercial)	2.2 gpm Private 0.5 gpm All Others 0.25 gpc (no flow rate)	n/a	n/a	n/a
Faucets (kitchen)	2.2 gpm	n/a	n/a	n/a
Clotheswashers (residential in unit)	8.4 WF Top-loader 4.7 WF Front loader	n/a	4.3 WF Top-loader 3.7 WF Front loader	6.0 WF Tier 1 4.5 WF Tier 2 4.0 WF Tier 3
Clotheswashers (MF common area & coin op)	8.5 WF Top-loader 5.5 WF Front loader	n/a	4.5 WF	n/a
Dishwashers (residential)	5.0 gpc Standard 3.5 gpc Compact	n/a	4.25 gpc Standard 3.5 gpc Compact	4.25 gpc Standard 3.5 gpc Compact
Dishwashers (commercial)	n/a	n/a	Numerous depending on style	n/a
Ice machines	Numerous depending on style	n/a	Numerous depending on style	Numerous depending on style
Pre-rinse spray valves	1.6 gpm	1.28 gpm	n/a	n/a
Commercial steam cooker	n/a	n/a	n/a	15 gph Tier 1A 4 gph Tier 1B
Irrigation controllers	n/a	Function based	n/a	n/a

gpf = gallons per flush; gpc = gallons per cycle; gpm = gallons per minute; gph = gallons per hour

WF = Water factor, which is the number of gallons per cycle per cubic foot. The lower the water factor, the more efficient. If a clothes washer uses 30 gallons per cycle and has a tub volume of 3.0 cubic feet, then the water factor is 10.0.

## 3 History of the Regional Water Conservation Program

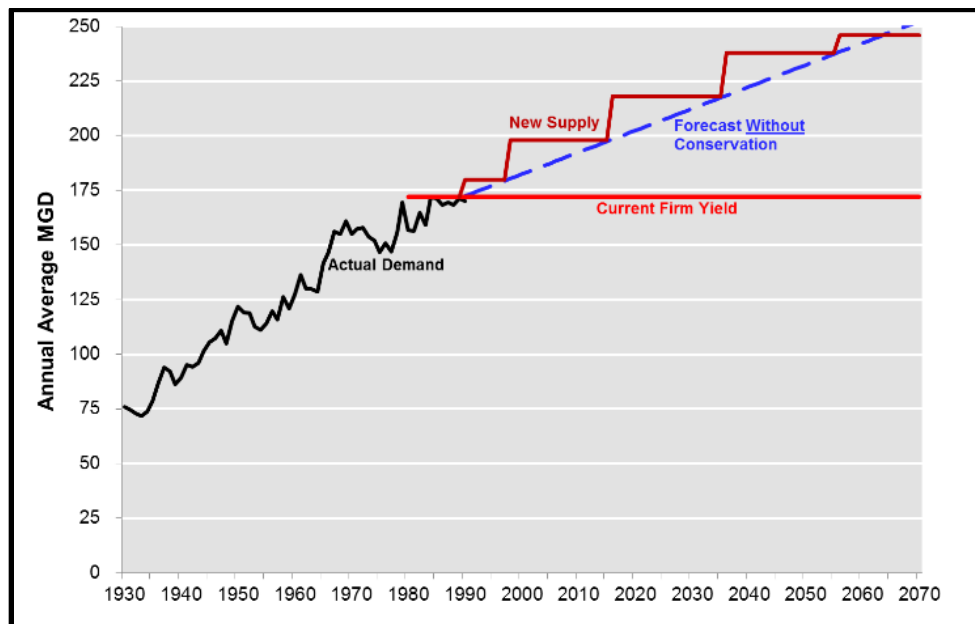
This section provides a history of the regional water conservation program including the original reason for developing a program, conservation successes, major program milestones, and key program design criteria.

### 3.1 Original Conservation Driver

The regional water conservation program began in the 1980s. The original “driver”, or reason for the program was that demand was approaching supply.

**Figure 3-1** shows how actual demand (the black line) was approaching supply or the “firm yield” (the red flat line). A demand forecast without conservation (the blue line) was developed. Options for new supply (the red stepped line) were developed to meet the demand forecast. Water conservation was one of the new supply options and was determined to be the least expensive.

**Figure 3-1 Demand Nearing Supply was Original Driver for Conservation**

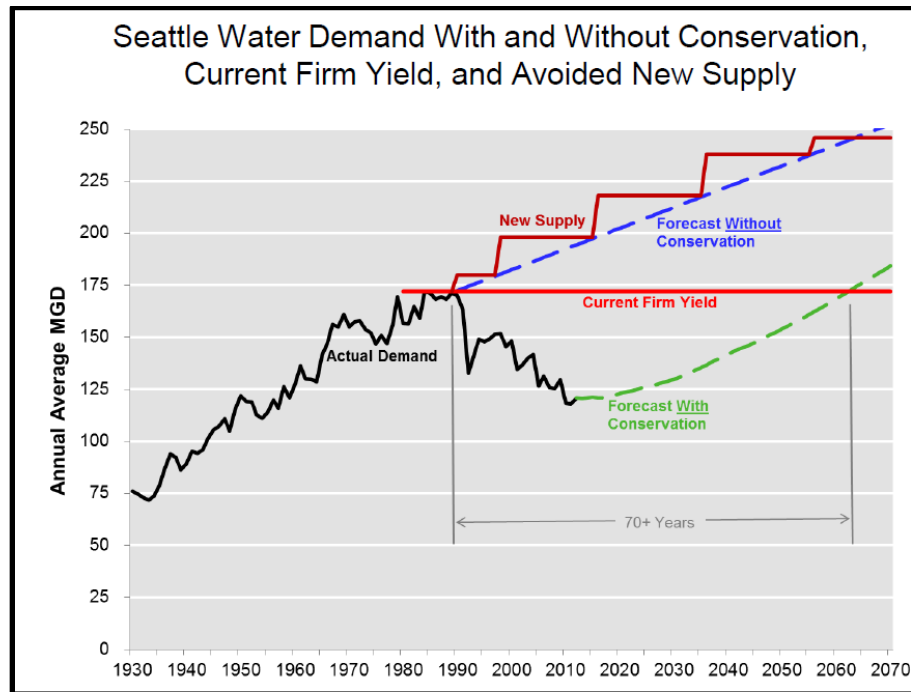


### 3.2 Conservation Success

The decision to invest in conservation was a wise one, as shown in **Figure 3-2**, which is similar to **Figure 3-1**, but with two new components. First, it shows additional years of actual demand (the black line). Second, it includes the current demand forecast with conservation (the green line) and shows that demand is anticipated to stay below supply until approximately 2065. Conservation has

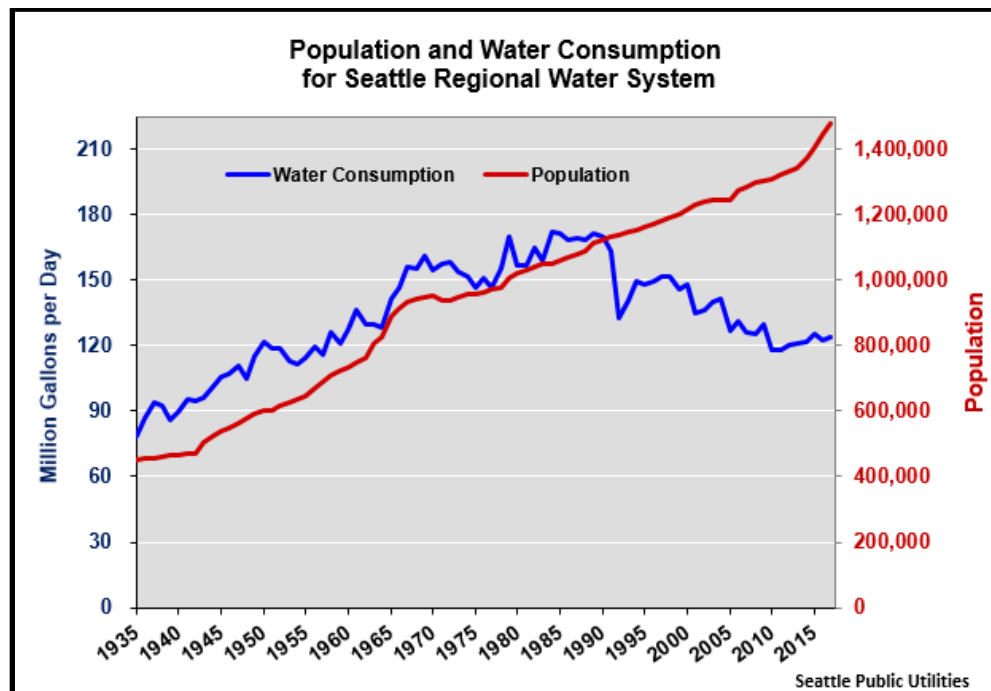
indeed been the new supply. It is important to remember this reflects conservation in the broad sense, so everything that reduces demand, not just programmatic conservation.

**Figure 3-2 Conservation Succeeds as Supply Source**



Another way of looking at this success is to compare historical water consumption and population, as shown in **Figure 3-3**. For most of Seattle's history, water consumption has increased along with its population. However, that link was broken around 1990 when consumption reached its highest levels of about 170 million gallons per day (mgd). Since then, water consumption has steadily declined due to various forms of conservation (conservation in a broad sense) despite continued population growth. Seattle and its suburban customers now use about 120 mgd. That is about as much water as Seattle and the surrounding suburbs were using in the 1950s with only half of today's population.

Figure 3-3 Population and Water Consumption Comparison

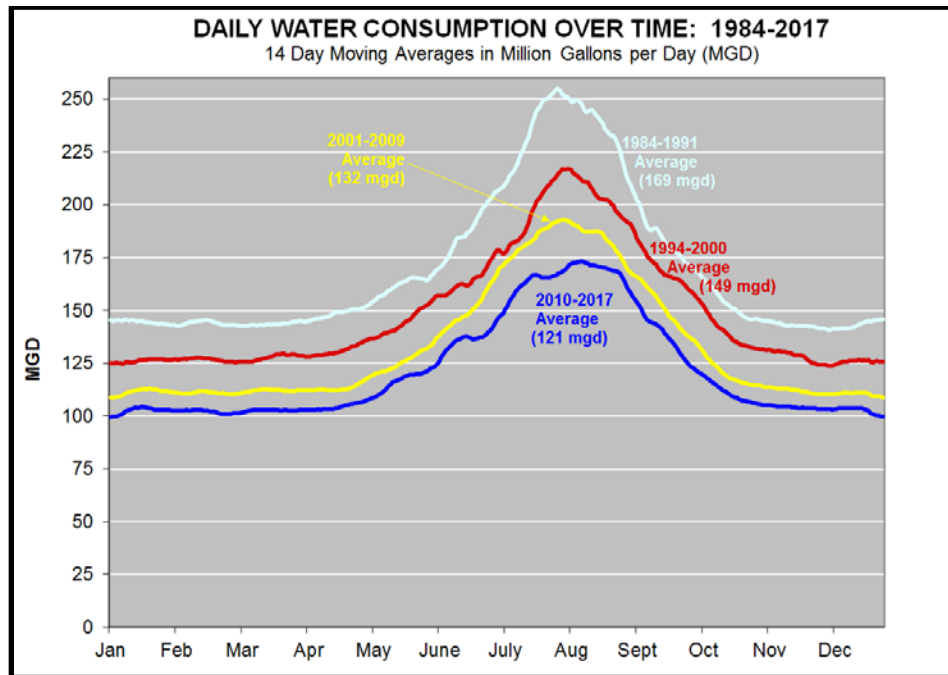


Yet another way of looking at this success is to examine changes in annual patterns of water use, as shown in **Figure 3-4**. It shows that pattern for four different time periods, with the older time periods towards the top and the more recent time periods towards the bottom. All four time periods have the classic water consumption bell curve, where water use is significantly higher in the summer months, mostly due to irrigation, although commercial use can also increase due to economic activity in the summer (e.g., tourism).

The figure shows that numerous aspects have decreased including:

- Total annual consumption
- Total summer consumption
- Summer season peaking factor (volume during summer compared to annual volume)
- Maximum day demand

Figure 3-4 Changes in Annual Patterns of Water Use



### 3.3 Major Milestones

The Seattle Regional Water System has a long history of water conservation. **Table 3-1** shows a list of key milestones of conservation efforts, most of which are efforts of the SWP, but a few are SPU-specific or national. It should be noted this is conservation in the broad sense, which includes everything, not just programmatic conservation.

**Table 3-1 Major Milestones for Regional Conservation Program**

Year	Milestone
1981	<ul style="list-style-type: none"> <li>Launched initial regional program; focus was residential education; included school programs, bill inserts, conservation kits (aerators, toilet displacement bags, leak tablets).</li> </ul>
1985	<ul style="list-style-type: none"> <li>Introduced hardware as primary tool (education as support)</li> <li>Conducted financial analysis of delaying facilities via conservation</li> </ul>
1987	<ul style="list-style-type: none"> <li>Experienced major drought with lawn watering restrictions</li> <li>Aggressive outreach (tv, newspapers, radio)</li> <li>Added engineer and technical analyst to existing education/outreach staff</li> <li>Added commercial and non-revenue water focus</li> </ul>
1989	<ul style="list-style-type: none"> <li>Implemented conservation rates (seasonal &amp; inclining block) (<i>SPU-specific</i>)</li> </ul>
1992	<ul style="list-style-type: none"> <li>Federal plumbing code set efficiency levels for toilets, showers, faucets (<i>national</i>)</li> <li>Experienced major drought; banned lawn watering; reset demand levels</li> <li>Started major supply-side efficiencies; 1980s non-revenue was 14-22%; SPU 2017 “distribution system leakage” is only 4.3%; focused on system operations, leaks, and covered open reservoirs</li> <li>Began partnering with energy utilities for showerhead &amp; aerator programs</li> <li>Began capitalizing hardware costs as part of the CIP budget</li> </ul>
1993	<ul style="list-style-type: none"> <li>Conservation officially designated as the preferred source of supply</li> <li>Introduced concept of levelized cost and 10% bonus for conservation (implement conservation up to 110% of marginal cost of supply)</li> </ul>



Year	Milestone
1994	<ul style="list-style-type: none"> <li>Launched major commercial rebate program (50% of installed cost)</li> </ul>
1995	<ul style="list-style-type: none"> <li>Launched major clotheswasher &amp; toilet rebate programs</li> </ul>
1998	<ul style="list-style-type: none"> <li>Completed first Conservation Potential Assessment (CPA) analyzing water savings &amp; costs of numerous conservation measures</li> </ul>
1999	<ul style="list-style-type: none"> <li>Residential End Use Study from Water Research Foundation published (national)</li> </ul>
2000	<ul style="list-style-type: none"> <li>Launched 1% Conservation Program; goal of saving 1% per year between 2000-2010</li> </ul>
2001	<ul style="list-style-type: none"> <li>Added Seattle-only low-income emphasis (toilets, showerheads, aerators) (SPU-specific)</li> <li>1st federal water efficiency code for clotheswashers (national)</li> </ul>
2003	<ul style="list-style-type: none"> <li>State Municipal Water Law requiring conservation programs (effective 2007) (state)</li> <li>Cascade Water Alliance formed; those members leave the SWP</li> </ul>
2006	<ul style="list-style-type: none"> <li>State Water Use Efficiency Rule detailing conservation requirements (effective 2007) (state)</li> <li>Set 1st WUE goal</li> <li>EPA launched WaterSense labeling for efficient/effective products (national)</li> <li>CPA updated</li> </ul>
2012	<ul style="list-style-type: none"> <li>Set new WUE goal &amp; program emphasis for 2013-2018</li> <li>City of Renton joins SWP</li> </ul>
2018	<ul style="list-style-type: none"> <li>Set new WUE goal &amp; program emphasis for 2019-2028</li> </ul>

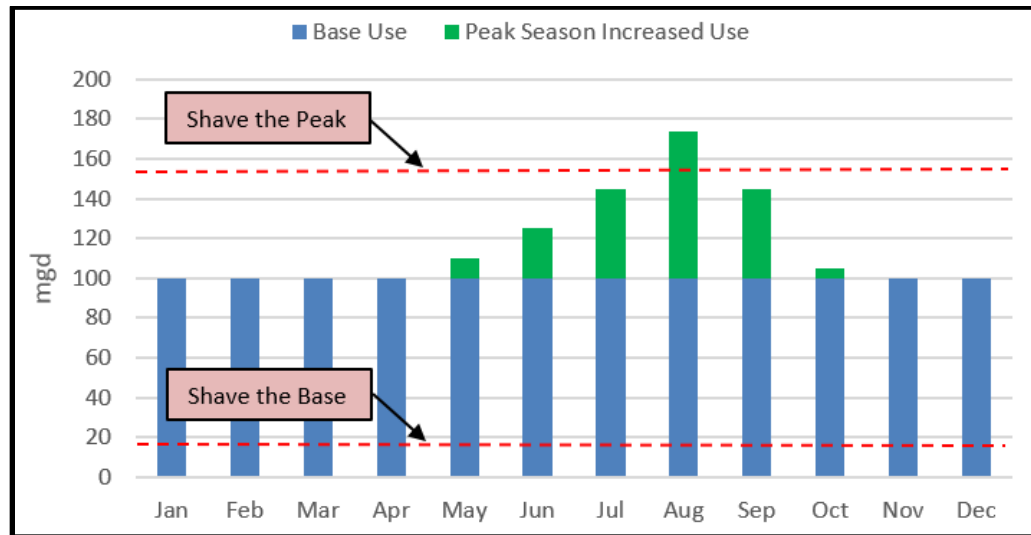
## 3.4 Program Design Criteria

There are several design criteria that have guided the regional water conservation program over time. They are described below.

- Saves Water:** Each program element should be reasonably expected to contribute to water savings, either in the near-term or in the longer-term. These expectations should be based on industry reports, program evaluations, customer research, or similar means. It is understood that some efforts are easier to document water savings (e.g., toilet rebates) than others (e.g., youth education).
- No Sacrifice:** The conservation program should maintain the lifestyle of customers and not require sacrifice.
- Voluntary & Customer Choice:** The program should be voluntary and allow for customer choice.

- **3-Prongs:** The program should include three prongs, which work in concert with each other:
  - **Education:** Educate customers on why and how to conserve water. Education is important because it forms the platform upon which the other prongs operate and many customers will take efficiency actions just based on education. Examples of education from the current program include the website and the youth education program.
  - **Technical Assistance:** Provide technical assistance to customers either in static forms (such as the website), over the phone, or in person. Technical assistance is important because some customers need it to accomplish efficiency efforts. Examples of technical assistance from the current program include videos on leak detection, on-site assessments to assess and improve irrigation system efficiency, and temporary sub-metering of water-using equipment to understanding water use and efficiency opportunities.
  - **Financial Incentives:** Financial assistance to help customers pay for efficiency improvements. Financial assistance is important because some customers will not take efficiency efforts without it. Examples of financial incentives from the current program include toilet rebates, irrigation system controller rebates, and custom rebates for other irrigation or commercial water uses.
- **Comprehensive & Well Rounded:** The program should be comprehensive and well-rounded, as follows:
  - **All Customer Classes:** The program should have offerings for all customer classes so that all customers, whether residential or non-residential, can participate.
  - **Hardware & Behavior:** The program should have offerings that target both hardware and behavior efficiencies. This is important because, as described in Section 2.2 Conservation Categories, the cost structure, longevity of savings, certainty of savings, and political impacts vary between these and it is important to obtain the benefits and mitigate for the downsides of both categories.
  - **Indoor & Outdoor:** The program should have offerings to achieve both indoor and outdoor efficiencies. Efforts that reduce indoor water use primarily impact the year-round base water use, while efforts that reduce outdoor water use target the peak season increased use. It should be noted that both indoor and outdoor efforts impact the peak season water use. **Figure 3-5** shows how the peak season water use can be impacted by either “shaving the peak” or “shaving the base”.

Figure 3-5 Shave the Peak vs Shave the Base



- **Regional:** The program should be regional in scope and have applicability across the SWP service area. However, it is recognized that the customer base varies across the regional service area and therefore the program may look somewhat different in each of the 19 SWP members' areas. For example, some of the SWP members are primarily single family in nature, while others have a balance of single family, multifamily, and non-residential customers. Another example is within the single family customer base, the lot size and irrigated area vary significantly across the regional service area.
- **Customer Cost Share:** For financial incentive programs, the customer should pay part of the cost. Historically, this has manifested in fixed rebate programs where the rebate amount is less than the cost of the fixture/equipment and custom rebates where the program only pays up to 50% of the installed cost of the project. (Note that the Seattle-only low-income program does not include a customer cost share.)
- **Beyond-Code:** The program should move customers to efficiency levels that are more efficient than the plumbing code or what is standardly available so that the program minimizes free riders and maximizes water savings. Toilet rebates are a good example of this. The plumbing code stipulates the maximum water use of a toilet is 1.6 gallons per flush (gpf) and most toilets stocked in retailers are 1.28 gpf models. The current program offers toilet rebates only for 1.1 gpf (or less) toilets, which is more efficient than both code or most stocked models.
- **Retrofits:** Financial incentive programs should focus on retrofitting existing, less-efficient fixtures/equipment, rather than on new development. The philosophy is that developers should take on the responsibility of building new development as efficiently as possible and that program dollars should be directed to upgrading existing buildings that were built with older, less efficient standards and technologies.
- **Partnerships:** The program should work to leverage partnerships that help increase participation and reduce costs. Potential partners include other water utilities, energy utilities, community-based organizations, and professional organizations.
- **Reach All Customers:** The SWP service area is economically, racially, culturally, and linguistically diverse. This reality should be embedded in program planning and

implementation including, but not limited to, tracking demographics (to the degree possible), partnering with community organizations, and creating culturally relevant outreach and education materials to ensure participation across different demographic groups.

## 4 2019-2028 Water Conservation Program

This section provides details on the 2019-2028 SWP water conservation program including the development process, the current reasons for the conservation program, the conservation goal, the existing programs, intended modifications, and information on budget and staffing.

### 4.1 Overview of Development Process

The 2019-2028 SWP water conservation program was developed by SPU staff, in partnership with the Operating Board and the Conservation Technical Forum.

The Operating Board involvement focused on drivers, priorities, budget, and the goal. That work occurred from March to November 2017 and is summarized below:

- **Drivers:** The Operating Board reassessed the drivers, or reasons, for the conservation program. The detailed results are provided in Section 4.2 Current Conservation Drivers.
- **Priorities:** The Operating Board decided on the strategic priorities, which were to increase the emphasis on education, outreach, and technical assistance and decrease the emphasis on financial assistance. The process to determine those priorities included a survey to understand Operating Board preferences, developing 10 packages to reflect different options, discussions regarding those packages, and several rounds of voting on the packages.
- **Budget:** The Operating Board set the budget level for the 10-year period. The overall budget is the same as the previous level, however with a shift to match the new priorities of more education, outreach, and technical assistance and less financial assistance. The budget was set as two pools, an Operations & Maintenance (O&M) pool which funds the education, outreach, and technical assistance work and a Capital Improvement Program (CIP) pool which funds the financial assistance work. SPU staff are given the flexibility to manage to the bottom line of each pool, which provides necessary program flexibility. The budget numbers for all 10 years are provided in Section 4.6 Budget.
- **Goal:** The Operating Board set the new 2019-2028 water conservation goal, which is required by the State's Water Use Efficiency Rule. The new goal is structured similarly to the previous goal in that it sets a demand level which the group, as a whole, should stay below. The numeric value of that demand level is slightly higher than the previous goal, to reflect a longer plan period (10-years rather than 6-years) and to hedge slightly against uncertainty. The results are provided in Section 4.3 Water Conservation Goal.
- **Operating Board Reports:** The conservation program will report back to the Operating Board every two years. The reporting will be a presentation to the Operating Board and will include details on the previous years' activities and plans for the upcoming years.

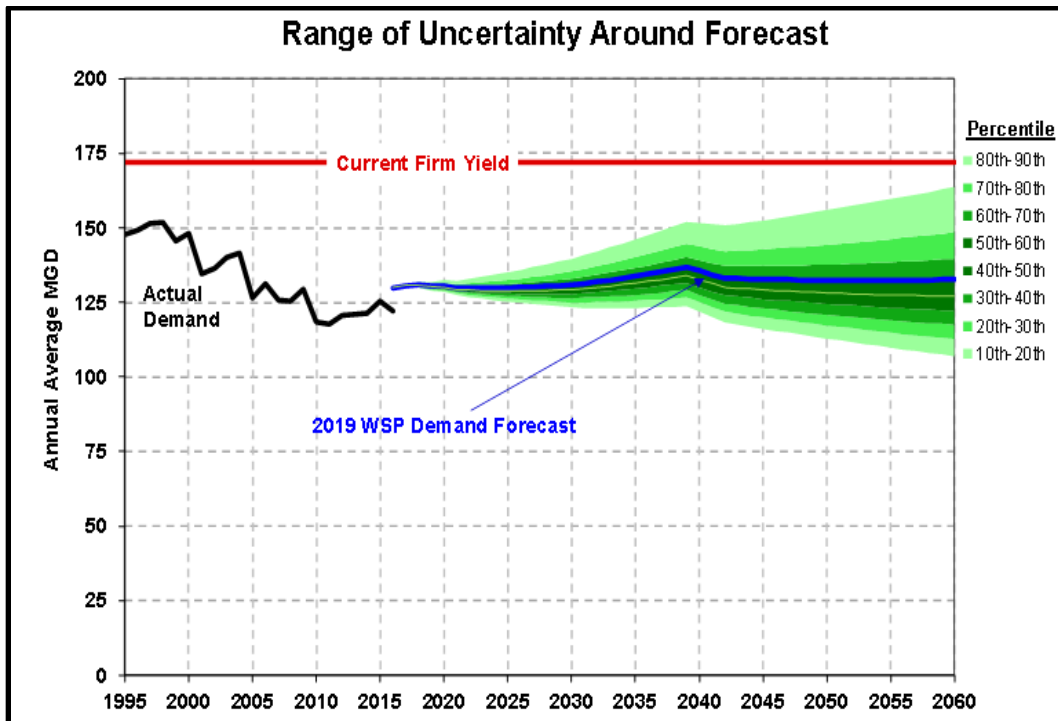
The Conservation Technical Forum was heavily involved throughout 2018 to determine how to implement the Operating Board's strategic vision, primarily increasing education, outreach, and technical assistance. That process had the following hallmarks:

- **Intensive Process:** The process was relatively intensive with monthly CTF meetings, structured to hear from all attendees, rather than the normal quarterly CTF meetings.
- **Deepened Understanding:** The process began with deepening wholesale customers' understanding of the existing programs. Wholesale customer staff's understanding of the conservation program is typically less than SPU staff, because SPU staff work on the conservation program daily, while most wholesale customer staff do not. Therefore, it was important to bring the entire CTF up to a certain level of understanding of the existing program, to make solid decisions on changes to the program.
- **Early Input:** SPU staff solicited early input from wholesale customers on their ideas to modify the existing program. SPU staff also shared their initial modification ideas and asked for wholesale customers' reactions.
- **Researched Ideas:** SPU staff researched and fleshed out the initial modification ideas, as well as added additional ideas. The more developed ideas were discussed at the monthly CTF meetings.
- **Consensus on Idea Prioritization:** The group went through a formal process to prioritize the various program modification options. Prioritization was necessary given available staff time and budget. A total of 29 modification options were generated for the education, outreach, and technical assistance program and 6 modification options were developed for the financial incentive programs. Some of the modifications were improvements to existing efforts, while others were new. Each SWP member was tasked with designating the options as either "highest", "medium", or "lowest" priority and doing so by creating three equal prioritization groups. All 19 SWP members completed this prioritization exercise. The CTF representative was responsible for submitting their utilities' prioritization and they were asked to discuss the exercise with their management so that their responses reflected the views of the utility. The responses from all the members were tallied and scored to develop a group-prioritization. The results are provided in Section 4.5 Program Modifications.

## 4.2 Current Conservation Drivers

It is important to understand the drivers, or reasons, for the conservation program since they set the foundation for the program. As described in Section 3.1 Original Conservation Driver, the original driver for the conservation program was as a near-term supply source, since demand was nearing supply. However, as shown in **Figure 4-1**, that is no longer the case and there is an adequate cushion between demand and supply.

**Figure 4-1 Demand Forecast**



\* The ranges reflect uncertainty in projected household, employment, price, and income growth; price and income elasticities; and conservation. Weather variability and climate change uncertainties are not included. Percentiles represent the probability that demand is less than the value shown. Note that the official forecast is at approximately the 60<sup>th</sup> percentile.

The current conservation drivers, as decided by the Operating Board, are as follows:

- Maintain a cushion between demand and supply
- Ensure conservation capacity (staff expertise and industry partnerships) is available to deliver conservation services, as well as to respond to droughts and supply disruptions
- Help customers use water wisely and manage their bills
- Preserve the customer water conservation ethic
- Be good stewards of our water resources and environment
- Meet regulatory, contractual, and stakeholder requirements and expectations

## 4.3 Water Conservation Goal

The new and previous water conservation goals, as decided by the Operating Board, are provided below.

- **Previous 2013-2018 Goal:**

“Reduce per capita water use from current levels so that the total average annual retail water use of the members of the Saving Water Partnership is less than 105 million gallons a day (mgd) from 2013 through 2018, despite forecasted population growth.”

- **New 2019-2028 Goal:**

“Keep the total average annual retail water use of SWP members under 110 mgd through 2028, despite forecasted population growth, by reducing per capita water use.”

Each SWP member adopts the goal individually. SPU included the new 2019-2028 goal in its 2019 Water System Plan (WSP), which was approved by the Seattle City Council in October 2018 and is expected to be approved by DOH by April 2019. Each wholesale customer should adopt the new 2019-2028 goal as soon as possible after DOH adoption, but no later than the July 1, 2020 WUE report (which reports on calendar year 2019).

Every SWP member needs to include the water conservation goal in their WSP. The timeframe of the goal matches the timeframe of SPU’s WSP, but will likely not match that of every wholesale customer’s WSP. For wholesale customers that are on a different WSP cycle than SPU, they will include the regional goal that is current at the time in their WSPs, plus a statement that they have a long-term commitment to conservation and that they plan to adopt the next regional goal once it is determined. This coordination is illustrated, using an example where a wholesale customers’ WSP cycle is two years off from SPU’s, in **Table 4-1**.



**Table 4-1 Coordination of Timeframes for Conservation Goal and Water System Plans**

Year #	Year Date	SPU & Wholesale Customers on Same WSP Cycle	Wholesale Customers on Different WSP Cycle (e.g., 2 years different)
1	2019	SWP "2019-2028" goal	Adopt the "2019-2028" goal outside of their WSP
2	2020		SWP "2019-2028" goal  +  Statement that utility has a long-term commitment to conservation and will adopt the "next" SWP goal once it is determined
3	2021		
4	2022		
5	2023		
6	2024		
7	2025		
8	2026		
9	2027		
10	2028		
11	2029	SWP "next" goal	Etc.
12	2030		
13	2031		
14	2032		
15	2033		
16	2034		
17	2035		
18	2036		
19	2037		
20	2038		

## 4.4 Existing Programs

The SWP offers a comprehensive set of programs that helps residents and businesses use water wisely. The programs include education, technical assistance, and financial incentives and are described below.

### 4.4.1 Education, Outreach & Technical Assistance

- **Youth Education**
  - **Youth Education:** 50-minute, in-classroom school programs for K-12 students. 16 different programs that support two key themes. Key Theme #1: Importance of water conservation and specific water conservation strategies. Key Theme #2: Water is an important shared resource and we are all responsible for making smart choices in managing it (including water conservation). Implemented by local non-profit Nature Vision.

- **General**

- **SWP Website:** Comprehensive website that serves as the main customer clearinghouse of information regarding the regional water conservation program. Six main topic areas: 1) home, 2) lawn/garden, 3) indoors, 4) businesses, 5) students/teachers, 6) rebates. [www.savingwater.org](http://www.savingwater.org)
- **Phone Hotline:** Recorded phone tree message giving customers a little information about the program and the ability to be connected to the appropriate program manager. Three main trunks: 1) landscape/gardening, 2) single family and multifamily indoor, and 3) business indoor. 206-684-SAVE (7283).
- **How-to-Videos (Leaks):** Short 2-minute videos to help customers identify, fix, and prevent leaks. Five topics: 1) how to fix a leaky toilet, 2) how to fix a leaky indoor faucet, 3) how to fix a leaky outdoor faucet, 4) how to use your meter to find a leak, and 5) how to protect outdoor spigots from freezing.
- **Table Top Display:** 3-panel, table-top display board with interchangeable panels on various topics that can be used in SWP member lobbies, at events, etc.
- **Community Festivals/Events:** Providing materials and/or staff for a booth at community events/festivals to promote the water conservation program. Some events are utility-specific (e.g., WD 90 customer appreciation event, Celebrate Mercer Island) while others are more regional (e.g., International District Dragon Fest in Seattle).
- **Giveaways:** Various items to give away to customers at customer service desks, events, or via other methods. Items include toilet leak detection dye strips, toilet leak detection kit (dye strip in small brochure; customized w/ SWP member name), flow-rate bags (to estimate efficiency of showerheads and faucets), hose washers (to fix/prevent leaky hose), Shared Waters kids activity book, rulers for kids (conservation tips, leak volume estimates, water use by fixture pie chart), faucet aerators (1.0 gpm), and showerheads (2.0 gpm).
- **Language Line:** On-demand, over-the-phone interpretation for customers who are not proficient in English. 200+ languages available. The service is free to customers.
- **Messaging “Media Kit”:** Provide text and image content for use on various print, electronic, and social media communications to help SWP members easily promote conservation messages/programs to their retail customers. Content is appropriate for websites, bill inserts, newsletters, bill messages, Facebook, Twitter and NextDoor. Message content is coordinated with the SWP website homepage content.
- **Image Bank:** Electronic site where conservation-related images (mostly pictures) are stored to help SWP members have easy access to high-quality images for marketing, reporting, etc. There are eleven folders: 1) commercial, 2) indoor, 3) landscape, 4) logos, 5) marketing kits, 6) SWP events and outreach, 7) water and nature, 8) water and people, 9) water system, 10) youth education, and 11) miscellaneous.
- **Water System Map:** Currently two versions. Version #1 is a basic graphic on the website showing the location of each of the 19 SWP members. Version #2 is a poster (approx. 2' x 3') showing the Seattle Regional Water System and has been used in school programs and at utilities' offices. The original version of the poster had cartoonish graphics and the current version is less-cartoonish.

- **Non-Residential**

- **Equipment Submetering:** SPU staff (or consultant) puts a temporary meter on a piece of equipment to determine its water use and potential water savings if modified or replaced. This service is often used in conjunction with the custom and fixed rebate programs.

- **Landscaping**

- **Garden Hotline:** A phone hotline and website where the general public and landscape professionals can ask landscaping and gardening questions. Topics include irrigation, soils, compost, mulch, plants, pests of all kinds, and fertilizers. The website is a repository of information, including videos. This is managed by Tilth Alliance and funded by SPU, SWP, Cascade Water Alliance, Seattle and King County's Rainwise Program, and the Local Hazardous Waste Management Program (LHWMP) in King County. 206-633-0224 Mon–Sat 9am-5pm; [www.gardenhotline.org](http://www.gardenhotline.org); [help@gardenhotline.org](mailto:help@gardenhotline.org).
- **Natural Yard Care Publications:** Publications (brochures or flyers) to help customers create a healthy landscape naturally, including water-efficient strategies. The brochures are: 1) *Natural Yard Care Guide (English & Spanish versions)*; 2) *Smart Watering Guide*; 3) *Growing Healthy Soil Guide*; 4) *Composting At Home Guide*; 5) *Choosing The Right Plants Guide*; 6) *Natural Pest, Weed, & Disease Control Guide*; 7) *Natural Lawn Care Guide*; 8) *Growing Food In The City Guide*; 9) *How To Water New Plants*; 10) *Right Plant, Right Place*.
- **How-to-Videos (Landscaping):** Short 3-5 minute videos to help customers and landscape professionals with water-efficient landscaping practices. Four topics: 1) using mulch, 2) installing soaker hoses, 3) natural lawn care, and 4) how to plant in the fall.
- **Savvy Gardener Classes:** Classes to help customers with water-efficient landscaping practices, taught by local landscape professionals. SPU staff provides a turnkey program administration kit (list of classes, PR materials, class evaluation forms, etc.). Individual SWP members are responsible for contacting the instructor and implementation.
- **Training for Landscape Professionals:** Trainings for landscape professionals related to water-efficient landscaping practices. Topics include irrigation timer settings, design, maintenance, etc. Trainings are typically all-day events.
- **On-Site Irrigation System Assessments:** Comprehensive on-site assessments to identify where water is being wasted in the landscape. Assessments include evaluating each irrigation zone for water efficiency, looking for leaks at the meter, inspecting controller settings, and examining root depth and soil texture.

#### 4.4.2 Financial Incentives

- **Residential**
  - **Single Family Toilet Rebates:** Rebates to replace older, less-efficient toilets with Premium 1.1 gpf (or less) models, which are more efficient than both the plumbing code (1.6 gpf) and WaterSense (1.28 gpf).
  - **Multifamily Toilet Rebates:** Rebates to replace older, less-efficient toilets with Premium 1.1 gpf (or less) models, which are more efficient than both the plumbing code (1.6 gpf) and WaterSense (1.28 gpf).
- **Non-Residential**
  - **Non-Residential Fixed Rebates:** Rebates to replace older, less-efficient water using fixtures and equipment with more efficient models. Eligible fixtures/equipment include toilets, urinals, coin-operated clotheswashers, ice machines, commercial dishwashers, and food steamers.
  - **Non-Residential Custom Rebates:** Rebates where the dollar amount is based on the estimated water savings of replacing/upgrading existing water-using equipment with more efficient equipment. Types of projects have included converting single pass water use to recirculating systems, refrigeration equipment, compressors, and more.
- **Landscaping**
  - **Irrigation Timer Rebates:** Rebates to upgrade older, less-efficient sprinkler timers (a.k.a., irrigation controllers) with more water-efficient (WaterSense) models. WaterSense labeled sprinkler timers modify the sprinkler runtimes from day to day based on weather data collected either from the internet via wi-fi connection or from a small onsite weather station. Almost exclusively single family customers.
  - **Custom Irrigation Rebates:** Rebates where the dollar amount is based on the estimated water savings of retrofitting an existing irrigation system with more efficient components. Potential retrofits include sprinkler nozzles, pressure reducers, WaterSense controllers, replacing overhead irrigation with drip irrigation, and check valves.

### 4.5 Program Modifications

#### 4.5.1 Options

As described in Section 4.1 Development Process, modifications to the existing program were identified. The potential modifications include both strengthening existing program offerings and adding new program offerings. A summary of the 29 modification options to the education, outreach, and technical assistance programs and the 6 modification options to the financial assistance programs are provided in **Table 4-2** and **Table 4-3**, respectively. More detailed descriptions of each program modification option are provided in Appendix A.

**Table 4-2 Education, Outreach & Technical Assistance Modifications**

#	Program Element
1	Improve the SWP website text and reach
2	Refresh the SWP brand identity
3	Improve the regional map
4	Add water utility lookup tool to website
5	Add water audit calculator to website
6	Improve use of Garden Hotline
7	Improve/expand videos
8	Improve leak videos
9	Add “foundational” video
10	Add “conservation 101” brochure
11	Simplify landscape brochure offerings
12	Add commercial brochure
13	Add leak publication(s)
14	Improve youth education
15	Improve/expand landscape classes for public
16	Add leaks class
17	Improve/expand trainings for landscape professionals
18	Add trainings for commercial indoor professionals
19	Improve display board
20	Improve/expand community events
21	Improve giveaways
22	Add interpretive signage
23	Strengthen Fix-a-Leak Week connection
24	Strengthen commercial indoor strategic partnerships
25	Strengthen landscape strategic partnerships
26	Expand commercial indoor audits
27	Expand landscape audits
28	Improve marketing for individual SWP members
29	Improve image bank

**Table 4-3 Financial Assistance Modifications**

#	Program Element
1	Improve residential toilet rebates
2	Add new residential indoor rebates
3	Improve commercial indoor fixed rebates
4	Improve commercial indoor custom rebates
5	Improve landscape fixed rebates
6	Improve landscape custom rebates

#### 4.5.2 Modification Prioritization Results

The results from the modification prioritization process described in Section 4.1 Development Process are shown in **Table 4-4** and **Table 4-5**. The tables show the prioritization counts and the scores for each modification option. The tables are sorted by the total score (2<sup>nd</sup> column from the right; highlighted in blue) from highest to lowest. The “#” (the 1<sup>st</sup> column) refers to the number in previous tables so the tables can be cross referenced.

**Table 4-4 Education, Outreach & Technical Assistance Modifications – Sorted by Score**

#	Education, Outreach & Technical Assistance Modifications	Collective SWP - Counts					Collective SWP - Scores				Group Priority
		Priority			Optional Designation		Priority				
		Highest	Medium	Lowest	Critical	No Interest	Highest	Medium	Lowest	Total	
							3	2	1		
3	Improve the regional map	13	5	1	6	0	39	10	1	50	Highest
8	Improve leak videos	13	5	1	3	0	39	10	1	50	Highest
14	Improve youth education	14	3	2	4	1	42	6	2	50	Highest
13	Add leak publication(s)	13	4	2	4	0	39	8	2	49	Highest
1	Improve the SWP website text and reach	13	3	3	6	0	39	6	3	48	Highest
10	Add “conservation 101” brochure	11	6	2	4	0	33	12	2	47	Highest
5	Add water audit calculator to website	10	7	2	4	0	30	14	2	46	Highest
21	Improve giveaways	8	11	0	2	0	24	22	0	46	Highest
28	Improve marketing for individual SWP members	11	5	3	2	1	33	10	3	46	Highest
29	Improve image bank	11	3	5	1	0	33	6	5	44	Highest
7	Improve/expand videos	6	10	3	0	0	18	20	3	41	Medium
16	Add leaks class	9	4	6	2	1	27	8	6	41	Medium
20	Improve/expand community events	6	9	4	1	1	18	18	4	40	Medium
9	Add “foundational” video	3	13	3	0	1	9	26	3	38	Medium
11	Simplify landscape brochure offerings	7	4	8	1	1	21	8	8	37	Medium
4	Add water utility lookup tool to website	7	3	9	1	1	21	6	9	36	Medium
27	Expand landscape audits	4	9	6	2	0	12	18	6	36	Medium
23	Strengthen Fix-a-Leak Week connection	6	4	9	1	2	18	8	9	35	Medium
24	Strengthen commercial indoor strategic partnerships	3	8	8	0	2	9	16	8	33	Medium
25	Strengthen landscape strategic partnerships	2	10	7	0	0	6	20	7	33	Medium
2	Refresh the SWP brand identity	4	5	10	0	1	12	10	10	32	Lowest
17	Improve/expand trainings for landscape professionals	2	9	8	0	1	6	18	8	32	Lowest
12	Add commercial brochure	2	8	9	0	1	6	16	9	31	Lowest
15	Improve/expand landscape classes for public	2	8	9	1	1	6	16	9	31	Lowest
26	Expand commercial indoor audits	1	10	8	0	2	3	20	8	31	Lowest
6	Improve use of Garden Hotline	2	6	11	0	1	6	12	11	29	Lowest
19	Improve display board	2	6	11	2	0	6	12	11	29	Lowest
22	Add interpretive signage	1	4	14	0	2	3	8	14	25	Lowest
18	Add trainings for commercial indoor professionals	0	5	14	0	3	0	10	14	24	Lowest

**Table 4-5 Financial Assistance Modifications – Sorted by Score**

#	Financial Assistance Modifications	Collective SWP - Counts					Collective SWP - Scores				Group Priority
		Priority			Optional Designation		Priority				
		Highest	Medium	Lowest	Critical	No Interest	Highest	Medium	Lowest	Total	
							3	2	1		
1	Improve residential toilet rebates	15	3	1	3	0	45	6	1	52	Highest
2	Add new residential indoor rebates	13	3	3	3	0	39	6	3	48	Highest
3	Improve commercial indoor fixed rebates	2	14	3	0	1	6	28	3	37	Medium
5	Improve landscape fixed rebates	4	9	6	1	0	12	18	6	36	Medium
6	Improve landscape custom rebates	4	4	11	0	1	12	8	11	31	Lowest
4	Improve commercial indoor custom rebates	0	5	14	0	2	0	10	14	24	Lowest

The program modification priorities are as follows:

- **Highest:** The top third are the “highest” priority and where SPU staff will spend the majority of their time and budget in the near term (in addition to continue running the existing program).
- **Middle:** The middle third are the “medium” priority. Time and budget might be expended for a few of these in the near term, if it does not distract significantly from delivering the “highest” priorities.
- **Lowest:** The bottom third are the “lowest” priority. Time and budget might be expended for a few of these in the near term, if it does not distract significantly from delivering the “highest” priorities.

The “highest” priorities for modifying the education, outreach, and technical assistance programs were grouped into five themes, as shown in **Table 4-6**, which is a helpful framework.

**Table 4-6 Themes for Highest Priority Education, Outreach & Technical Assistance Modifications**

#	Theme	Program Elements	Effort
1	The Future	▪ Youth education (improve)	Significant
2	Fundamental Tools to Help Customers Conserve	▪ Website (improve) ▪ Conservation 101 brochure (add) ▪ Regional map (improve) ▪ Image bank (improve) ▪ Water audit/calculator (add)	Significant
3	Baseline Efficiency	▪ Leak publications (add) ▪ Leak videos (improve)	Moderate
4	Conservation Marketing Tools for SWP Members	▪ Marketing kit (improve) ▪ Image bank (repeat) (improve)	Minor
5	Quick Wins/Tools	▪ Giveaways (improve)	Minor

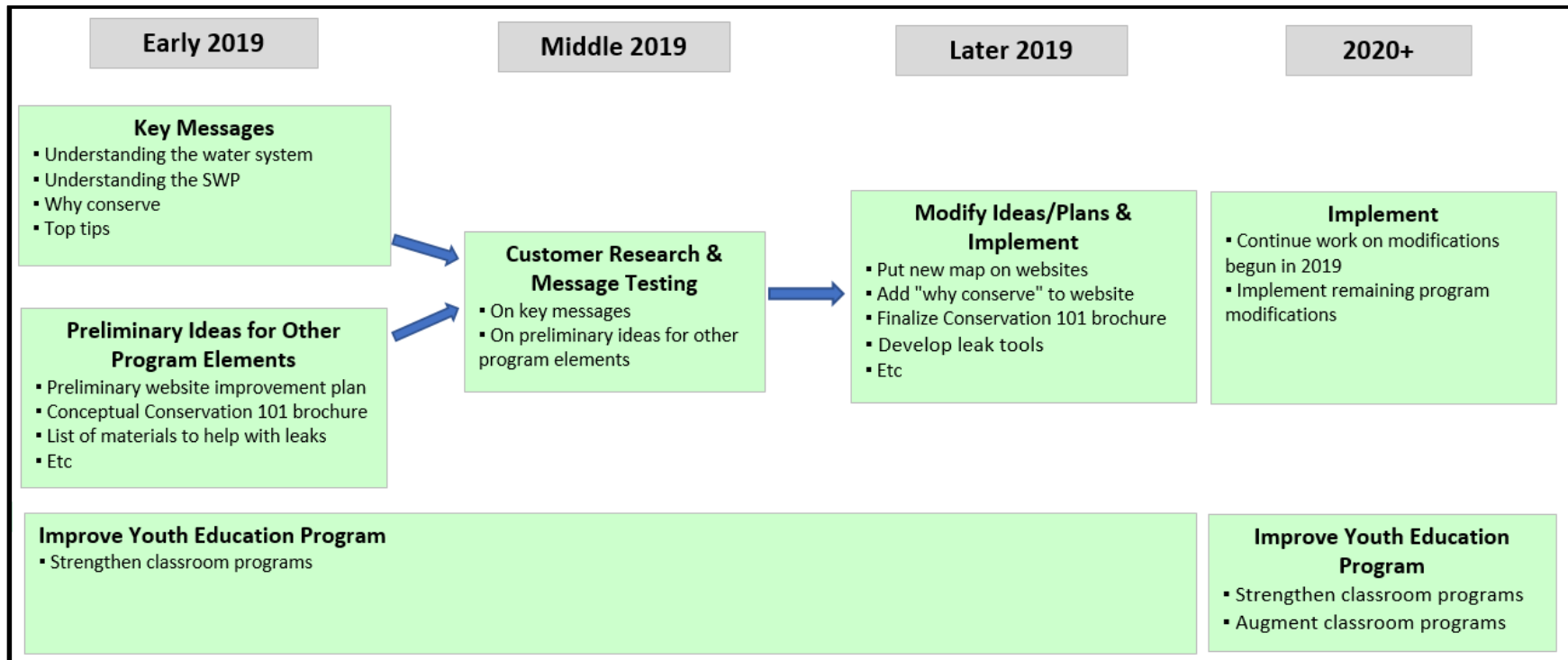
#### 4.5.3 Implementation Schedule

Implementing the program modifications will occur over time. In the near term, the focus will be on administering the existing program elements and beginning to implement the “highest” priority program modifications. Existing programs will remain as-is, unless or until, the program modifications impact them. The wholesale customers will stay actively involved in implementation of the program through the CTF, which will meet every other month in the near term.

**Figure 4-2** provides an overview of the implementation schedule for the program modifications, with an emphasis on 2019. Early 2019 will focus on developing key messages and preliminary ideas for other “highest” priority modifications. The middle of 2019 will focus on conducting customer research and message testing regarding the key messages and the preliminary modification ideas, as well as assessing general water conservation awareness, attitudes, and behaviors. It is possible that the customer research could result in adjusting modification priorities. Late 2019 will focus on modifying the key messages and preliminary modification ideas, as appropriate based on the customer research, and implementing them. The years 2020 and beyond will focus on continuing any modifications begun, but not completed in 2019, as well as implementing the remaining program modifications.



Figure 4-2 Implementation Schedule for Program Modifications



## 4.6 Budget

The annual budgets for the 10-year program are shown in **Table 4-7** and incorporate a 2.5% annual inflation rate.

The budget is divided into two categories: CIP and O&M. The CIP budget pays for the rebate programs and is funded by facility charges. The O&M budget pays for education, outreach, and technical assistance programs and is funded by wholesale rates.

As noted in Section 4.1 Overview of Development Process, the budget was shifted from previous years to match the new priorities of more education, outreach, and technical assistance and less financial assistance. The CIP budget was decreased from \$1.4M in 2018 to \$1.1M in 2019. The O&M budget was increased from \$540,000 in 2018 to \$871,000 in 2019.

The budget is all-inclusive and pays for SPU staff time, rebates to customers, contractors (e.g., Nature Vision for the youth education program), marketing, and all other expenses.

**Table 4-7 Budget for 2019-2028 Water Conservation Program**

Year	CIP (rebates)	O&M (education, outreach, and technical assistance)	Total
2019	\$1,098,000	\$871,000	\$1,969,000
2020	\$1,126,000	\$893,000	\$2,019,000
2021	\$1,154,000	\$915,000	\$2,069,000
2022	\$1,183,000	\$938,000	\$2,121,000
2023	\$1,212,000	\$961,000	\$2,173,000
2024	\$1,243,000	\$985,000	\$2,228,000
2025	\$1,274,000	\$1,010,000	\$2,284,000
2026	\$1,306,000	\$1,035,000	\$2,341,000
2027	\$1,338,000	\$1,061,000	\$2,399,000
2028	\$1,372,000	\$1,088,000	\$2,460,000

## 4.7 Staffing

SPU employees implement the SWP water conservation program on behalf of wholesale customers. SPU has six staff assigned to the program. Those six staff translate to slightly less than five Full Time Equivalents (FTEs) because two staff are part time and also work on SPU's Seattle-only low-income water conservation program, which is operated and funded separately from the SWP program. The SPU staff positions are shown in **Table 4-8**.

**Table 4-8 SPU Conservation Staff Positions**

#	Title	Person
1	Water Conservation Manager	Kelly O'Rourke
2	Community Outreach Program Manager	Anna Dyer
3	Residential Program Manager	Melissa Levo (part-time)
4	Commercial Program Manager	Arece Hampton
5	Landscape Program Manager	Mark Guthrie
6	Evaluation, Reporting, CTF Liaison Program Manager	Mialee Jose (part-time)

## Appendix A – Detailed Descriptions of Program Modification Options

#	Education, Outreach & Technical Assistance Program Elements
1	<p><b>IMPROVE SWP WEBSITE TEXT &amp; REACH</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Simplify &amp; condense existing content to make more user/mobile friendly</li> <li>▪ Have top tips for every sector</li> <li>▪ Expand content on regional water system</li> <li>▪ Add "why conserve" content</li> <li>▪ Add participant of the month to the homepage to make it less static</li> <li>▪ Improve referrals from individual SWP members' websites</li> <li>▪ Additional SWP online presence (e.g. social media, E-news, online ads)</li> </ul> <p><i>Cost: Main cost SPU staff time; other costs (e.g. graphic design) tbd</i></p>
2	<p><b>REFRESH THE SWP BRAND IDENTITY</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Update the logo</li> <li>▪ Add a tag line</li> <li>▪ Develop key messages</li> <li>▪ Reassess co-branding standards</li> </ul> <p><i>Cost: tbd</i></p>
3	<p><b>IMPROVE THE REGIONAL MAP</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Create a new static map (for website, publications, videos, display board, etc). Likely will have 20 versions so each SWP member has a version (if only title and explanation text) that leads with their utility name, plus a full SWP version.</li> <li>▪ Create a new interactive map (for website). When user scrolls over each SWP member certain stats (e.g., population served) show up, similar to <a href="http://waswdmap.org">http://waswdmap.org</a>. Could also have stats on the physical elements (e.g., watershed, treatment, storage).</li> <li>▪ Create a new fun poster-sized map (for wall display)</li> <li>▪ Create new 3D model (for community events)</li> </ul> <p><i>Cost: tbd</i></p>
4	<p><b>ADD WATER UTILITY LOOKUP TOOL TO WEBSITE</b></p> <ul style="list-style-type: none"> <li>▪ Develop a lookup tool for the SWP website that allows customers to identify their water utility by providing their address</li> </ul> <p><i>Cost: Likely no cost beyond SPU staff time</i></p>
5	<p><b>ADD WATER AUDIT/CALCULATOR TO WEBSITE</b></p> <p>Develop a water audit/calculator for the SWP website that allows customers to:</p> <ul style="list-style-type: none"> <li>▪ Understand how much water various fixtures use</li> <li>▪ Understand how much water can be saved by switching from inefficient to efficient fixtures</li> <li>▪ Connect to SWP conservation programs</li> <li>▪ Understand how much water their household uses compared to an average SWP household</li> </ul> <p><i>Cost: tbd</i></p>

#	Education, Outreach & Technical Assistance Program Elements
6	<b>IMPROVE USE OF GARDEN HOTLINE</b> <ul style="list-style-type: none"> <li>▪ Work to "right size" how we utilize the Garden Hotline website and phone number, compared to landscape info on the SWP website and assistance provided by the SPU Landscape Water Conservation Program Manager.</li> </ul> <i>Cost: SWP currently contributes \$20,000 annually</i>
7	<b>IMPROVE/EXPAND VIDEOS</b> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Cover common efficiency strategies for fixture/behavior, indoor/outdoor, all sectors.</li> <li>▪ Update case study videos highlighting conservation projects</li> <li>▪ Likely include special focus on leaks</li> <li>▪ Test using marketing &amp; promotion dollars to improve utilization of video</li> </ul> <i>Cost: tbd</i>
8	<b>IMPROVE LEAK VIDEOS</b> <ul style="list-style-type: none"> <li>▪ Update video on using meters to detect leaks (more types of meters including AMI, expand language from "high water use" to "continuous use"; include a "Meter 101")</li> <li>▪ Update toilet leak video to reflect newer technology (e.g. siphon-valves)</li> </ul> <i>Cost: tbd</i>
9	<b>ADD "FOUNDATIONAL" VIDEO</b> <ul style="list-style-type: none"> <li>▪ Develop a video highlighting the regional water system, who is the SWP, why conservation is important in our area, and overview of services available (ed, tech asst, rebates)</li> </ul> <i>Cost: tbd</i>
10	<b>ADD "CONSERVATION 101" BROCHURE</b> <ul style="list-style-type: none"> <li>▪ Develop a "conservation 101" brochure highlighting the regional water system, who is the SWP, why conservation is important in our area, top indoor/outdoor tips, and overview of services available (ed, tech asst, rebates).</li> </ul> <i>Cost: tbd</i>
11	<b>SIMPLIFY LANDSCAPE BROCHURE OFFERINGS</b> <ul style="list-style-type: none"> <li>▪ Simplify/streamline the existing 7 brochures into 1 entry/mid-level landscaping publication</li> </ul> <i>Cost: tbd</i>
12	<b>ADD COMMERCIAL BROCHURE</b> <ul style="list-style-type: none"> <li>▪ Develop an overview brochure for businesses highlighting the reasons to conserve and overview of our commercial conservation services available (ed, tech asst, rebates).</li> </ul> <i>Cost: tbd</i>
13	<b>ADD LEAKS PUBLICATION(S)</b> <ul style="list-style-type: none"> <li>▪ Develop leak detection and repair materials that SWP members can use with their customers. Examples include: <ul style="list-style-type: none"> <li>▫ Stand-alone brochure on high consumption/leaks</li> <li>▫ Materials to help MF owners/mgr work with their tenants to check for, and report, leaks.</li> <li>▫ Info on tenants' rights &amp; responsibilities regarding leaks.</li> <li>▫ Door hanger</li> </ul> </li> <li>▪ Include leak content in "conservation 101" brochure (if that brochure moves forward)</li> </ul> <i>Cost: tbd</i>

#	Education, Outreach & Technical Assistance Program Elements
14	<p><b>IMPROVE YOUTH EDUCATION</b></p> <ul style="list-style-type: none"> <li>▪ Classroom Programs - Phase I <ul style="list-style-type: none"> <li>▫ Strengthen conservation connection in each program</li> <li>▫ Reduce program topics to improve relevancy</li> <li>▫ Potentially add new program topics</li> </ul> </li> <li>▪ Classroom Programs - Phase II <ul style="list-style-type: none"> <li>▫ Scale number of programs delivered, based on outcome of Phase I</li> </ul> </li> <li>▪ Non-Classroom Programs <ul style="list-style-type: none"> <li>▫ Pilot new school-based area (e.g. science fair, green teams, water festivals, field trips, teacher trainings, explore getting conservation into district curriculum)</li> <li>▫ Pilot non school-based area (e.g. summer camp, scouts, after-school program, community center)</li> </ul> </li> </ul> <p><i>Cost: Current Nature Vision contract is approx. \$85,000 yr. for 500 programs; future costs tbd</i></p>
15	<p><b>IMPROVE/EXPAND LANDSCAPE CLASSES FOR PUBLIC</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Help SWP members advertise classes better</li> <li>▪ Target market to presumed inefficient irrigators</li> <li>▪ Use the new "conservation 101" video (assuming that is created)</li> <li>▪ Use the new "conservation 101" brochure (assuming that is created)</li> </ul> <p><i>Cost: Presenters are currently paid \$250-\$650</i></p>
16	<p><b>ADD LEAKS CLASS</b></p> <ul style="list-style-type: none"> <li>▪ Add a leak detection and repair class for homeowners</li> </ul> <p><i>Cost: tbd</i></p>
17	<p><b>IMPROVE/EXPAND TRAININGS FOR LANDSCAPE PROFESSIONALS</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Seek opportunities to offer more training.</li> <li>▪ Coordinate with SWP backflow staff and backflow testing companies</li> </ul> <p><i>Cost: SWP typically pays \$5,000 per training</i></p>
18	<p><b>ADD TRAININGS FOR COMMERCIAL INDOOR PROFESSIONALS</b></p> <ul style="list-style-type: none"> <li>▪ Develop efficient trainings for key commercial water uses (e.g. cooling towers)</li> </ul> <p><i>Cost: tbd</i></p>
19	<p><b>IMPROVE DISPLAY BOARD</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Improve existing display content, including making it more interactive</li> <li>▪ Add new display content, including regional map</li> <li>▪ Improve display board so it doesn't tip over</li> <li>▪ Develop display board that uses less space</li> </ul> <p><i>Cost: tbd</i></p>
20	<p><b>IMPROVE/EXPAND COMMUNITY EVENTS</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Develop an engaging booth "hook" to draw in attendees and communicate the conservation message</li> <li>▪ Determine what materials to provide to the public (giveaways, brochures)</li> <li>▪ Determine balance of support by individual member staff and SPU staff</li> </ul> <p><i>Cost: tbd</i></p>

#	Education, Outreach & Technical Assistance Program Elements
21	<p><b>IMPROVE GIVEAWAYS</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Update suite of giveaways based on appropriate criteria (e.g. useful, cost-effective)</li> <li>▪ Develop companion piece that: 1) explains how to use &amp; appropriateness for them (e.g. only if have less efficient fixture), 2) provides context (why we have a conservation program), 3) markets other program elements.</li> <li>▪ Promote availability of items on SWP website</li> <li>▪ Ask for a commitment to receive the giveaway</li> <li>▪ Determine whether to provide individual items or kit(s)</li> <li>▪ Develop videos on how to use the items</li> </ul> <p><i>Cost: tbd</i></p>
22	<p><b>ADD INTERPRETIVE SIGNAGE</b></p> <ul style="list-style-type: none"> <li>▪ Add permanent interpretive signage at regional/local water system infrastructure (e.g. reservoirs)</li> </ul> <p><i>Cost: tbd</i></p>
23	<p><b>STRENGTHEN FIX-A-LEAK WEEK CONNECTION</b></p> <p>Develop stronger connections to EPA's Fix-A-Leak Week. Examples include:</p> <ul style="list-style-type: none"> <li>▪ Stronger presence on SWP &amp; SWP members' websites</li> <li>▪ Promotion by SWP members in their bill inserts, newsletters, etc</li> <li>▪ Annual mailing of toilet leak detection dye strips</li> </ul> <p><i>Cost: tbd</i></p>
24	<p><b>STRENGTHEN COMMERCIAL INDOOR STRATEGIC PARTNERSHIPS</b></p> <ul style="list-style-type: none"> <li>▪ Strengthen existing relationships with key commercial professional organizations (e.g. WA Hospitality Assoc. &amp; chambers of commerce) to leverage their help in marketing our commercial programs</li> <li>▪ Build new relationships with other key commercial professional organizations</li> </ul> <p><i>Cost: Membership fees for some</i></p>
25	<p><b>STRENGTHEN LANDSCAPE STRATEGIC PARTNERSHIPS</b></p> <ul style="list-style-type: none"> <li>▪ Strengthen existing relationships with key landscape professional organizations (e.g. WA Assoc. of Landscape Professionals; WA State Nursery &amp; Landscape Assoc.) to leverage their help in marketing our landscape programs. This could include more aggressively promoting Smart Watering Month (July).</li> </ul> <p><i>Cost: Membership fees for some</i></p>
26	<p><b>EXPAND COMMERCIAL INDOOR AUDITS</b></p> <ul style="list-style-type: none"> <li>▪ Improve and then expand the use of facility water use audits to help commercial customers understand and implement water efficiency fixture and behavior strategies.</li> </ul> <p><i>Cost: tbd</i></p>
27	<p><b>EXPAND LANDSCAPE AUDITS</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Loosen restriction of having 1+ acre irrigated area</li> <li>▪ Include ability to adjust timer at end of audit</li> <li>▪ Target presumed inefficient irrigators</li> <li>▪ Add performing via Skype</li> <li>▪ Develop how-to video for self-assessments</li> </ul> <p><i>Cost: Likely no cost beyond SPU staff time</i></p>

#	Education, Outreach & Technical Assistance Program Elements
28	<p><b>IMPROVE MARKETING FOR INDIVIDUAL SWP MEMBERS</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Create suite of "evergreen" content that SWP members can use in their own marketing channels (e.g. bill inserts, newsletters, website, social media) to marketing efficient fixtures/behaviors and the SWP programs.</li> <li>▪ Store on the Image Bank for ongoing access</li> <li>▪ Also add section for content that SWP members have written that could be used by others.</li> <li>▪ Provide training to SWP member staff on Next Door and other social media tools</li> <li>▪ Create and share an annual editorial calendar with SWP members so they can plan ahead for tie-ins with their own marketing (utility websites, bill inserts, etc)</li> </ul> <p><i>Cost: Likely no cost beyond SPU staff time</i></p>
29	<p><b>IMPROVE IMAGE BANK</b></p> <ul style="list-style-type: none"> <li>▪ Add new high quality photos and other images for all program areas</li> <li>▪ Add captions and labeling for all images</li> </ul> <p><i>Cost: tbd</i></p>

#	Financial Assistance Program Elements
1	<p><b>IMPROVE RESIDENTIAL TOILET REBATES</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Target market to older homes</li> <li>▪ Improve ID of eligible toilets (e.g. filterable/searchable toilet list)</li> <li>▪ Improve application submittal process (e.g. apply online)</li> <li>▪ Improve recycling options</li> <li>▪ Investigate how to offer more assistance to low-income</li> <li>▪ Continue to reduce or phase out over time</li> </ul> <p><i>Cost: Currently \$100 per toilet rebate</i></p>
2	<p><b>ADD NEW RESIDENTIAL INDOOR REBATES</b></p> <ul style="list-style-type: none"> <li>▪ Investigate opportunities to offer rebates for other indoor water uses such as water use monitoring technology or building system controls for multifamily.</li> </ul> <p><i>Cost: tbd</i></p>
3	<p><b>IMPROVE COMMERCIAL INDOOR FIXED REBATES</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Improve marketing to increase overall cost-effectiveness</li> </ul> <p><i>Cost: Currently ranges \$100-\$1,500 per fixture</i></p>
4	<p><b>IMPROVE COMMERCIAL INDOOR CUSTOM REBATES</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Improve marketing to increase overall cost-effectiveness</li> </ul> <p><i>Cost: Currently up to 50% of installed cost</i></p>
5	<p><b>IMPROVE LANDSCAPE FIXED REBATES</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Only allow when analysis shows would reduce water use</li> <li>▪ Investigate methods to reduce free riders</li> <li>▪ Add education materials to enhance savings</li> </ul> <p><i>Cost: Currently \$100 per timer</i></p>

#	Financial Assistance Program Elements
6	<p><b>IMPROVE LANDSCAPE CUSTOM REBATES</b></p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>▪ Loosen requirement to have 1+ acre irrigated area</li> </ul> <p><i>Cost: Currently up to 50% of installed cost; indiv. rebates ranged \$500-\$40,000 last 3 yrs.</i></p>