



Water Use Efficiency Program Goals 2020-2025

Goals of Existing 2014 – 2019 WUE Program

1. Reduce residential customer demand by 2% over 6 years
2. Reduce all distribution systems leakage to 10 percent standard.
3. Reduce state and local governmental demand by 2% over 6 years.
4. Improve backwash, flushing and fire hydrant accounting.
5. Distribute remaining conservation products.

Estimated Savings Achieved by 2014-2019 WUE Program

Measure	Estimated Average Annual Savings (in gallons)					
	2014	2015	2016	2017	2018	2019
Public Outreach	N/Q	N/Q	N/Q	N/Q	N/Q	N/Q
In-store rebates	266,575	1,162,819	363,093	914,629	657,245	45,961
Distribution of conservation kits	N/Q	N/Q	N/Q	N/Q	N/Q	N/Q
Distribution and installation of water-saving fixtures in-office and fairs/events	28,598	1,183,247	-	-	-	-
High water use (potential leak) notification	N/Q	N/Q	N/Q	N/Q	N/Q	N/Q
Tiered rate structure	N/A	N/A	N/A	N/A	N/A	N/A
System Leak Detection & Repair	N/Q	N/Q	N/Q	N/Q	N/Q	N/Q
Bill Showing Consumption History	N/Q	N/Q	N/Q	N/Q	N/Q	N/Q
Annual Total	295,173	2,346,066	363,093	914,629	657,245	45,961
Cumulative Total	--	--	--	--	--	4,576,206

*N/Q = Not Quantifiable

*N/A = Not applicable. Program not completed in calendar year.

2014-2019 WUE Program Measure Assumptions

- Public Outreach activities included conservation tips on PUD website, newsletter articles, presentation to WSU Extension Beachwatcher and realtor association meetings, fairs and events.
- In-store showerhead rebates started in 2014, in conjunction with electric rebates
- 2014-2020 – showerheads in-store program will sunset September 30, 2020.
- 90% implementation rate for in-store rate/70% implementation rate for in-office and fairs/event giveaway
- Household use based on 2.1 people/household (From 2018 Comprehensive Plan Port Hadlock UGA number)
- Shower times based on national average of 8.2 minutes/shower
- Showerhead/faucet flows rates multiplied by .675 to obtain average actual flow rates
- Showerheads/faucets, post-1994 rated at 2.5 gallons/minute
- Fourth tiered rate not applicable at this time due to timing of WUE reporting and the start of the fourth tiered rate.

1. Reduce consumption per Equivalent Residential Units by 2% per water system.

Outcome: 6 out of the 8 water systems meet this requirement. NOTE: Coyle water system was not part of the 2011 water system plan.



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2. Reduce all distribution system leakage to 10 percent standard.

Outcome: 5 of the 9 water systems are currently within the 10 percent standard for the 3-Year DSL percentage average (2017, 2018 and 2019).

3. Reduce state and local governmental demand by 2% over 6 years.

Outcome: This goal was cumulatively achieved. The purpose was to reduce the irrigation usage.

Recommended 2020-2025 WUE Program

1. Supply Side - Maintain distribution systems leak (DSL) percentage at or below 10 percent of system production as calculated on a 3-year average.
2. Supply Side - Water systems not at or below DSL of 10 percent, reduce DSL by 10 percent in the next 3 years (Note: Baseline 3-year average from 2019, 2018 & 2017)
3. Supply Side - Maintain water production at or below the 3-year mean average in non-expanding systems.
4. Demand Side – Maintain gallons per day per connection at 3 year mean average.

Supply Side Conservation Measure	Schedule	Budget	Comments
General leak identification and repair	Ongoing	Staff time	Requires staff time for identification. Depending on the size, costs go to part of Expense or Capital budgets
Fire district reporting	Monthly	None	Need to outreach to all fire districts within our service areas
Professional leak detection services	As needed basis		
Hydrant station (maintain one in Quimper)	Ongoing	TDB TBD?	May move to 310 Four Corners when new building complete. Also look into an electronic system for billing and access.
Source meter installation	As needed basis	None	When new water systems are acquired then a source meter is added

Demand (Customer) Side Conservation Measure			
Water use efficiency report	Once Annually (2 nd Quarter)	Mailing and printing cost	
Customer meter installation	All Year		At time of connection
Comparative water use data on bills	Monthly		Annual NISC maintenance fee
Four-tiered conservation rate	All Year	None	Will evaluate annually through WUE reporting and budget process
High water use flagging and notification	Ongoing	Staff time	Continue coordinated effort between billing and water crew
Fair/event giveaways	Ongoing	\$3,500	Roughly 2,333 items \$1.50 or cheaper (toilet tablets, etc.)



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Low flow showerhead rebates/distribution	Ongoing	\$1,500	If the rebate program goes away, then the low flow showerheads are in the conservation kits. Goal is to make program consistent, therefore estimating an annual budget.
Distribution of water/electric conservation kits	Ongoing	\$5,000	If the rebate program goes away, then the conservation kits needs to be budgeted. Goal is to make program consistent.
Distribution of outdoor water conservation kits	Ongoing	\$3,500	Roughly 300 kits at \$11.00/kit
Conservation info on website	All Year	Staff time	
Newsletter articles	Monthly	Staff time	
State declared drought insert	If declared, send	Staff time	
Public Outreach	All Year	TBD once implementation plan created	PUD staff will put together a Public Outreach Implementation Plan