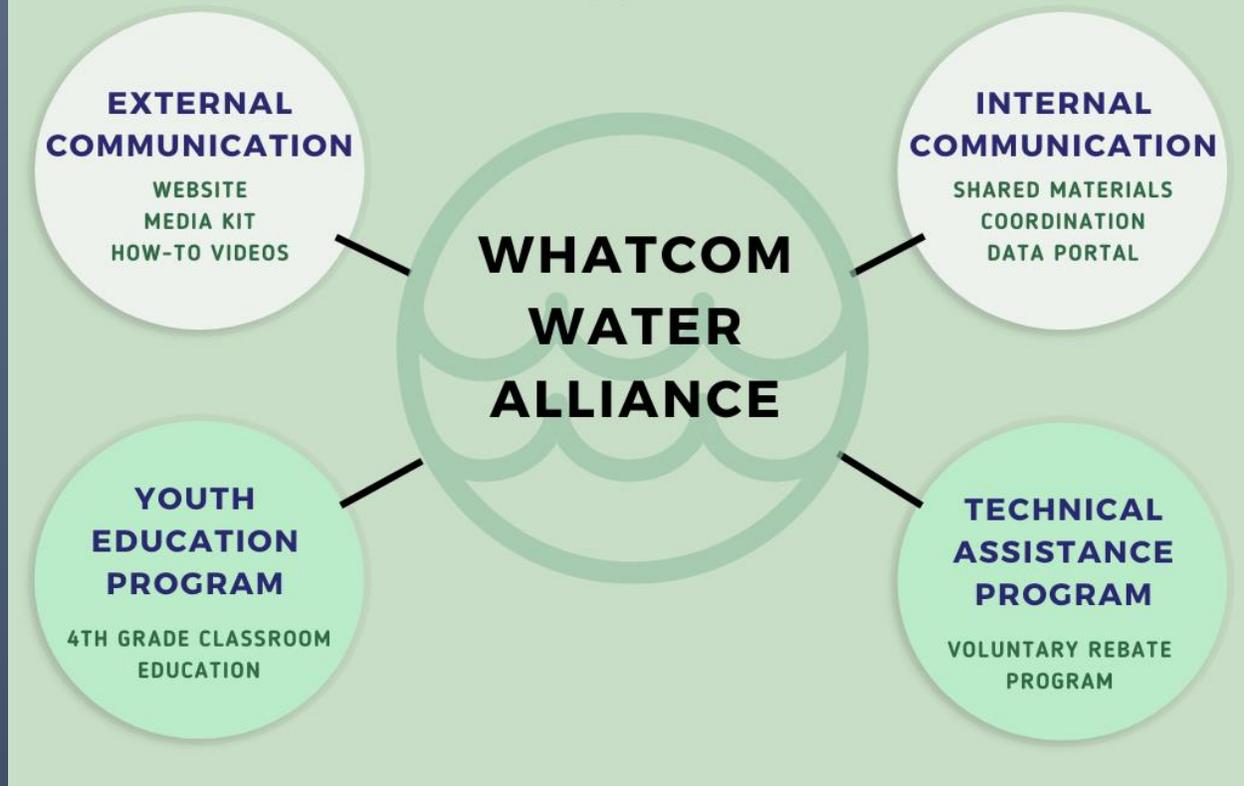


ENHANCED WHATCOM WATER ALLIANCE PROGRAM



Enhanced Whatcom Water Alliance

PROGRAM PLAN AND IMPLEMENTATION STRATEGY FOR DOMESTIC WATER USE EFFICIENCY IN WHATCOM COUNTY

Created by:

Aneka Sweeney M.Ed.

Outreach and Education Coordinator

Whatcom Conservation District

October 2020

In partnership with the Whatcom Water Alliance.

Overview:

The primary purpose of this plan is to document the direction of the 2021-2023 Enhanced Whatcom Water Alliance (EWWA) water conservation program. The goal is to increase consistency and impact of water conservation messaging and activities across jurisdictions that demonstrate a regional focus and coordination. This program will increase opportunities and benefits for smaller water utilities through collaboration and resource sharing. It will also identify conservation measures that will be applicable to residences and businesses that get water service from a large or small utility as well as those using individual private water sources.

The program builds on the existing Whatcom Water Alliance (WWA), a regional water conservation group comprised of municipalities and public water utilities in Whatcom County that has been collaborating successfully since 2008.

The goals of the Enhanced Whatcom Water Alliance Program are to:

- Improve coordination, collaboration and communication among public water utilities in Whatcom County to achieve greater efficiency and effectiveness in delivering retail water services.
- Promote common water conservation messaging to enhance the effectiveness of outreach strategies in reaching the broadest possible audience through robust and diverse communication outlets.
- Build a unified and comprehensive website, multi-media library, and data portal.
- Deliver standard-driven water use efficiency curriculum to all school districts in Whatcom County.
- Offer water use efficiency rebates and decision support tools to all residents of Whatcom County.

Water Use Efficiency Background:

In 2003 the Washington State Legislature passed Engrossed Substitute House Bill 1338, known as the Municipal Water Law (MWL) to address increasing demand on our state's water resources. The Department of Health (DOH) was directed to oversee and enforce a Water Use Efficiency Program (WUE) to help support the collective goal of ensuring a safe and reliable drinking water supply.

The WUE seeks to support this goal in the following ways:

- Contribute to long-term water supply reliability and public health protection
- Promote good stewardship of the state's water resources
- Ensure efficient operation and management of water systems

As part of the Planning Requirements of the WUE, municipal water suppliers are required to collect data, forecast demand, evaluate WUE measures, calculate distribution leakage and implement a WUE program to meet their goals.

Locally, improving WUE represents an important and largely underutilized suite of options to increase stream flows in WRIA 1 watersheds. Generally, these options can cost-effectively and flexibly meet the above MWL requirements as well as those of ESSB 6091 to directly offset (water-for-water, in time, and in place) the consumptive water use from residential homes.

Whatcom Water Alliance History:

Established in 2008, the Whatcom Water Alliance (WWA) is a regional water conservation group comprised of municipalities and public water utilities in Whatcom County, Washington who recognize that regular coordination, collaboration and communication can holistically improve management of local and regional water resources. Partnering with other water systems is viewed as a cost-effective way to develop and implement public education programs while sharing operational information and expertise.

WWA partners share a common responsibility for providing clean drinking water which is safe for human consumption.

The goals of the WWA are to:

- Improve coordination, collaboration and communication among public water utilities in Whatcom County to achieve greater efficiency and effectiveness in delivering retail water services.
- Develop and promote common water conservation programs to enhance the effectiveness of public outreach campaigns in reaching the broadest possible audience.

Alliance members include the cities of Bellingham, Blaine, Everson, Ferndale, Lynden and Sumas, as well as Birch Bay Water and Sewer District, Evergreen Water District, Lake Whatcom Water and Sewer District, Point Roberts Water District, Columbia Valley Water District, Whatcom County Water District #2, #7 and #15. Partners include Whatcom Conservation District and Whatcom County.

All members must comply with the Washington State Municipal Water Law (MLW) and Water Use Efficiency (WUE) Rule, as required under Washington Administrative Code (WAC) Chapter 246-290.

Enhanced Whatcom Water Alliance Program Elements:

- **Coordinated Website:** Customer-facing water conservation information portal. This will serve as the go-to link for all WWA members and house the login access to the data portal. The website will be the nexus for all Whatcom County water use efficiency information, a hub for all ages and audiences to access best available science, tools and resources.
- **Data Portal:** WWA members will be able to access a water use efficiency media kit where they may download photos, infographics, social media content, and/or mailer templates to be adapted and distributed as needed. Additionally, the portal will serve to support water use efficiency rule reporting, including guidance and templates tailored to Whatcom County water purveyors. The ability for members to access and enter information in a consistent manner will aid in calculating the collective impact of the EWWA program on domestic water use efficiency.
- **Coordinated Outreach Strategy:** Historically in Whatcom county each water purveyor, municipality or district has created their own unique WUE outreach strategy. With this Enhanced WWA program, these efforts, funding and time, can be leveraged for the county as a whole. This comprehensive and robust program reinforce messaging and reach a broader and more diverse audience. Although the benefits of such programs are hard to measure, they are inexpensive and lay the groundwork for future actions to promote WUE.

1. **Hands-on Education:** Offer workshops (in-person and virtually as conditions allow) on efficient indoor and outdoor water saving techniques and equipment. These

programs will be conducted with WWA members, rural water associations and districts, homeowners associations and other community based groups, building on their existing programming.

2. **Multi-media Campaigns:** Planned programming that uses a variety of media forms to influence behavior of a target audience. A diverse output of print, television, radio and social media content will be developed based on audience research, membership focus groups, and existing successful models of WUE outreach nationwide. The focus will be on seasonally appropriate messaging with the highest likelihood of behavior adoption.
- **Technical and Financial Assistance:** Provide incentives to encourage WUE adoption in and outside existing residential homes. Offer financial assistance to help pay for more efficient residential water-using fixtures and equipment in existing rural homes. A centralized rebate program that is available to all County residents would be created. The rebate program will include water efficient residential and commercial appliances and/or fixtures and a mechanism for tracking rebate program metrics.
 1. Rebate budgets will be established based on staff time to administer the program, survey data from the public regarding rebate amount, research from other regional municipalities offering a similar program, and the level of participation from customers. City of Bellingham is a primary partner in this effort and has a proven record of successful implementation of WUE programs, including financial assistance.
 2. Technical assistance on leak detection, water use efficiency audits and rainwater catchment will be provided.
 - **Networking Facilitation:** Improve coordination, collaboration and communication among public water utilities in Whatcom County to achieve greater efficiency and effectiveness in delivering retail water services. Quarterly facilitated meetings with guest speakers will be held to ensure an engaged membership and recruitment of new members.
 - **Youth Enrichment Program:** This is a primary element of any successful behavior change program as it will provide environmental education that offers factual, balanced information about water resources in order to foster responsible action and stewardship. This program will be built for implementation in local school districts throughout Whatcom County. Curriculum will be built to meet Next Generation Science Standards (NGSS), K–12 science content standards, which set the expectations for what students should know and be able to do. The NGSS were developed by states to improve science education for all students. Programming will be developed in partnership with Whatcom Coalition for Environmental Education (WCEE), which is a network of collaborators across sectors — including community organizations, businesses, tribal institutions, agencies and schools- committed to expanding and deepening access to high-quality culturally responsive environmental education for every child across Whatcom County.

Implementation Timeline:

- **Year 1 (2021)** serves to build the foundation for the EWWA program. Development and launch of the website, data portal and comprehensive outreach strategy will be the primary components of 2021. Audience research will hone the programming, and outreach evaluation

will guide future years of programming. Also during that time, WWA member facilitation and recruitment of additional members will provide the feedback and structure to create the most user-friendly and effective program. The technical assistance and rebate program will be in development to ensure a 2022 roll out with the best marketing tools and cost effective technology available.

- **Year 2 (2022)** will build off of 2021’s foundation. Outreach strategies will be adapted based on audience research and program evaluation. Core components of the website, data portal and membership facilitation will be improved and maintained. The technical assistance and rebate program elements will be launched and the youth enrichment program for local school districts will be developed.
- **Year 3 (2023)** Flexibility and adaptive management is needed for the later years due to potential changes that can occur related to conservation technologies, communication methods, demographic shifts, and other issues. This is the year of full scale implementation of the youth enrichment programming throughout Whatcom County.



Enhanced Whatcom Water Alliance Program Timeline

PROGRAM ELEMENTS	2021	→ 2022	→ 2023
WEBSITE	DEVELOP/LAUNCH	MAINTAIN	MAINTAIN
DATA PORTAL	DEVELOP/LAUNCH	MAINTAIN	MAINTAIN
MEMBER FACILITATION	MAINTAIN	MAINTAIN	MAINTAIN
OUTREACH STRATEGY	DEVELOP/LAUNCH	IMPROVE/ADAPT	MAINTAIN
REBATE PROGRAM	DEVELOP	LAUNCH	IMPROVE/ADAPT
YOUTH ENRICHMENT	RESEARCH	DEVELOP	LAUNCH

Figure 1. Enhanced Whatcom Water Alliance Implementation Timeline

Implementation Budget:

The EWWA program budget below shows foundational funding during year 1 from Whatcom County, then each subsequent year members of the Whatcom Water Alliance will contribute \$0.30 per connection in 2022 and \$0.40 per connection in 2023. The budget by year is depicted in Figure 2. Membership contributions, based upon 2020 connections are included in Appendix A. Only current active members of WWA and those systems with >500 connections are included in the budget. These contributions will be directed toward the pool of funding set aside for county-wide rebates. City of Bellingham will not be expected to contribute as they are serving as a model for the program implementation, and providing their own technical assistance and rebate program.



Enhanced Whatcom Water Alliance Program Budget

PROGRAM ELEMENTS	2021	→ 2022	→ 2023
WEBSITE	\$12,000	\$4,000	\$2,000
DATA PORTAL	\$7,000	\$2,000	\$1,000
MEMBER FACILITATION	\$4,500	\$4,000	\$4,000
OUTREACH STRATEGY	\$22,500	\$20,000	\$13,000
REBATE PROGRAM	\$4,000	\$17,000	\$18,000
YOUTH ENRICHMENT	-	\$3,000	\$12,000
TOTAL	\$50,000	\$50,000	\$50,000
FUNDING SOURCE	WHATCOM COUNTY	WC+WWA WWA \$.30/CONNECTION WC \$40,000	WC+WWA WWA \$.40/CONNECTION WC \$30,000

Figure 2. Enhanced Whatcom Water Alliance Implementation Budget

Appendix A:

Enhanced Whatcom Water Alliance Member Contributions

Info collected from:

<https://fortress.wa.gov/doh/eh/portal/odw/si/ListMultiWaterSystems.aspx>

Accessed July 28, 2020

WWA Members	# Connections	rate @ \$0.30 per connection	rate @ \$0.40 per connection	rate @ \$0.50 per connection	rate @ \$0.60 per connection
City of Bellingham	24,978	in-kind	in-kind	in-kind	in-kind
Birch Bay Water & Sewer District	6,306	\$ 1,892	\$ 2,522	\$ 3,153	\$ 3,784
City of Blaine	2,634	\$ 790	\$ 1,054	\$ 1,317	\$ 1,580
City of Everson	981	\$ 294	\$ 392	\$ 491	\$ 589
City of Ferndale	6,152	\$ 1,846	\$ 2,461	\$ 3,076	\$ 3,691
City of Lynden	6,567	\$ 1,970	\$ 2,627	\$ 3,284	\$ 3,940
City of Sumas	622	\$ 187	\$ 249	\$ 311	\$ 373
Columbia Valley	1,579	\$ 474	\$ 632	\$ 790	\$ 947
Lake Whatcom Water & Sewer	4,903	\$ 1,471	\$ 1,961	\$ 2,452	\$ 2,942
Pole Road Water Assoc.	761	\$ 228	\$ 304	\$ 381	\$ 457
Water District #2	566	\$ 170	\$ 226	\$ 283	\$ 340
Water District #7	665	\$ 200	\$ 266	\$ 333	\$ 399
Water District #13	386	\$ 116	\$ 154	\$ 193	\$ 232
	Total	\$ 9,637	\$ 12,849	\$ 16,061	\$ 19,273
Additional Systems >500 connections	# Connections	rate @ \$0.30 per connection	rate @ \$0.40 per connection	rate @ \$0.50 per connection	rate @ \$0.60 per connection
BLACK MOUNTAIN RANCH	1033	\$ 310	\$ 413	\$ 517	\$ 620
DEER CREEK WATER ASSOC.	525	\$ 158	\$ 210	\$ 263	\$ 315
GLENHAVEN LAKES CLUB	732	\$ 220	\$ 293	\$ 366	\$ 439
NOOKSACK WATER DEPT	524	\$ 157	\$ 210	\$ 262	\$ 314
SANDY POINT IMPROVEMENT CO	847	\$ 254	\$ 339	\$ 424	\$ 508
GLEN COMMUNITY ASSOCIATION	1221	\$ 366	\$ 488	\$ 611	\$ 733
POINT ROBERTS WATER DISTRICT NO 4	2290	\$ 687	\$ 916	\$ 1,145	\$ 1,374
GLACIER WATER DISTRICT	1152	\$ 346	\$ 461	\$ 576	\$ 691
WHATCOM MEADOWS	588	\$ 176	\$ 235	\$ 294	\$ 353
GLACIER RANGER STATION	1100	\$ 330	\$ 440	\$ 550	\$ 660
	Total	\$ 3,004	\$ 4,005	\$ 5,006	\$ 6,007

Appendix B:

Enhanced Whatcom Water Alliance Logic Model

The figure below serves as a graphic depiction or road map that presents the shared relationships among the community needs, various audiences, activities/outputs, outcomes, and impact.

RISKS or NEEDS	AUDIENCE	OUTPUTS	OUTPUT MEASURES	OUTCOMES	
				Short-term (2022)	Long-term (2023+)
Climate Change	General Public	Website: Coordinated messaging How-To Videos	Website created # of video created	Website engagement, Video views	Increased participation in WUE activities
Reduced Salmon Fisheries	WWA members	Data Portal: Media Bank (photos, memes, infographics) Report templates AWUE membership	# of templates created # of media created	Templates used, media used by WWA members	# of participants from partnership programs participating in WUE activities
Other impacted fish and wildlife habitat	Property managers & owners	Outreach Strategy: Audience Research Radio Content Social Media Print Ads	# focus groups/surveys # Radio ads # social media post # print ads # bus ads	Social media engagement, research participation,	Water Savings
Washington State Municipal Water Law (MLW)	Other Water Systems	Networking and Member Support	# meetings per year # members engaged # members using WWA logo and website	Increase engagement of water suppliers	Contributing to meeting WUE goals for members
Water Use Efficiency (WUE) Rule	Well Owners	Rebate Program	# of water assessments completed	Residential & Irrigation water users become aware of rebates	# of fixture retrofit rebates processed
WUE Goals by WWA members	Landscape professionals	School Based Program	Curriculum Developed # Schools enrolled	Conservation pledges received	Increased participation in WUE activities
Hirst decision Streamflow Restoration Law RCW 90.94.020	Small Businesses School age Children	Evaluate and Adaptively Manage Yearly			