



Department of Health
2023-25 Regular Budget Session
Policy Level - EJ - Options for Tainted Drinking Water

Agency Recommendation Summary

The Department of Health requests funds to address homes and businesses on individual wells or served by small public water systems that rely on contaminated groundwater. Aquifers in Washington are becoming more widely contaminated from both natural and man-made impacts like PFAS, nitrate, industrial, commercial, or agricultural influences, as well as arsenic and uranium. This proposal will provide opportunities for communities with contaminated water supplies to access safe and reliable drinking water through testing and treatment for a short time while state and federal agencies seek long-term solutions through studies and remediation efforts.

Fiscal Summary

Fiscal Summary <i>Dollars in Thousands</i>	Fiscal Years		Biennial	Fiscal Years		Biennial
	2024	2025	2023-25	2026	2027	2025-27
Staffing						
FTEs	0.8	0.8	0.8	0.8	0.8	0.8
Operating Expenditures						
Fund 001 - 1	\$813	\$811	\$1,624	\$811	\$811	\$1,622
Total Expenditures	\$813	\$811	\$1,624	\$811	\$811	\$1,622

Decision Package Description

Problem:

Contaminated groundwater is becoming more of a concern for individual well owners and Group B public water systems (smaller community systems with approximately 3-10 connections) that rely on these sources for a safe and reliable water supply. There are multiple areas in the state with contaminated groundwater/aquifers, derived from natural occurring contaminants such as arsenic and uranium. Other areas of the state have contaminated aquifers derived from external/man made contaminants such as perfluoroalkyl or polyfluoroalkyl substances (PFAS) and nitrate.

Example areas of concern include: the Lower Yakima Valley Groundwater Management Area (GWMA) and areas in Whatcom County that are impacted by nitrate contamination; areas of Cowlitz, Clark and Skamania counties with high levels of natural arsenic; areas near federal Department of Defense (DOD) facilities with PFAS; and northeastern portions of the state with natural uranium deposits. Understanding the contamination and impacts to groundwater supplies, which includes individual well owners and Group B well owners, requires monitoring and testing to assess where the contamination impacts public and private domestic wells.

Climate change impacts to groundwater resources include:

- Increased demand on groundwater due to higher temperatures.

- Greater concentrations of contaminants often found at lower water/aquifer levels and by pulling in contaminants from nearby areas due to increased pumping.

- Changes in expected rainfall which causes an increase in rate of nitrates leaching into groundwater.

Individual well owners and homes served by Group B water systems often don't have the tools or funding options necessary to test and treat their drinking water. They also have limited support for treatment or alternative supplies while state and federal agencies attempt to address the contamination source and causes through studies and project remediation efforts.

Proposal:

Creating a seamless process for individuals to test and treat water is one step toward ensuring residents have safe and reliable drinking water regardless of their income or ethnicity. Recognizing the need and providing funding for interim activities such as provision of alternative potable water supply allows for safe drinking water while actions are taken to find solutions.

Office of Drinking Water (ODW) proposes to develop a program and requests funding for individual well owners and Group B water systems impacted by water source contaminants of concern. We recognize initial need will be for immediate relief for clean water supply, testing to confirm contaminant levels, and long-term remediation, treatment or well repair. Based on the varied cost of certified laboratory analysis and treatment methods, we are requesting \$813,000 for FY 24 and \$811,000 for FY 25 and ongoing. Costs will vary by location, contamination, and treatment methods available.

The program would be administered by the ODW at the Department of Health. To administer this new program, ODW would need to hire 0.7 additional FTE to develop education and outreach tools and manage multiple contracts associated with the program. The program would contract with:

- laboratories to offer individual well users and Group B water systems test kits or testing options to assess the contamination
- water treatment service providers to provide point of use or point of entry treatment
- maintenance and water distributors to deliver potable water.

ODW would seek contract opportunities with local health or county governments to reduce workloads. ODW would use this position for planning and community engagement to assess needs as well as management of project work. ODW will partner with state and local agencies serving the recipients of this funding in effort to maximize services and awareness of impacts and collaborate on solutions.

The outcome of this program is to provide safe and reliable drinking water to Group B and individual well users impacted by groundwater contamination. ODW proposes to promote health equity and reduce environmental health disparities by providing a remedy for safe drinking water regardless of the income and health literacy of those impacted. This will mitigate unsafe exposure to residents while coordinating with partnering agencies to develop long term clean-up/remediation options.

Alternative:

Limited funding options exist for individual well owners and Group B water systems impacted by groundwater contamination. State Revolving Funds cannot be used for individual users or Group B water systems. Foundational Public Health Services cannot be used for purchase of goods and services under current criteria.

Assumptions and Calculations

Expansion, Reduction, Elimination or Alteration of a current program or service:

This is a new program within ODW. ODW assumes that delivery of bottled water to impacted water systems will be approximately 2.5 gallons of water per person per day for 75 homes for the first year (with more homes participating in subsequent years of the program). In the second and third years, the affected water system would be provided water filters at a cost of \$200,000 per year. By year four (4) the affected water system's issues would have been corrected or resolved based on the presumption that remediation and/or treatment of contaminants can occur within four years. On average, four years is sufficient for testing, treatment, and long-term solutions, although there may be scenarios where long-term solutions require additional research and cost for alternative water supply, testing and treatment. An example of this exists with the Lower Yakima Valley Groundwater Management Area that is under planning and implementation in its 12th year.

The need for support for an alternative water supply program including testing, sampling, remediation and treatment for various contaminated individual or group B water sources will vary significantly based on the type of contamination, method of analysis, method of treatment and time required for remediation. Example of variation of analysis is nitrate lab analysis is less than \$50 while PFAS lab analysis is \$500. Both chemicals require repeat analysis for determination of remediation as well as for quantification for water treatment at point of use or point of entry filtration systems.

We believe the program will provide the needs for residents' safe and reliable drinking water within the cost of \$725,000.

We recognize that those utilizing the funding will experience a temporary solution as limited funding doesn't address the long-term needs for remediation. We will continue to work with partnering agencies and funding sources to continue long-standing solutions for residents often left out of federal and state funding, due to lack of access, representation, or location of communities.

Detailed Assumptions and Calculations:

0.7 FTE PHA-4 project and contract manager.

This position will create education and outreach materials associated with known contamination of individual and small group B wells. This staff will lead work with local and state partners to develop testing options and alternative water supply. This may include managing multiple contracts for both sampling, bottled water provisions, and treatment installations.

In effort to include local and state partners, this staff person will facilitate joint meetings with stakeholders and residents impacted by man-made and natural contaminants, keeping DOH leadership and residents informed of activities and outcomes.

Activities will incorporate environmental justice principles, while building resilience against the health and social impacts of climate change and other environmental challenges.

Workforce Assumptions:

Workforce Assumptions FY24 Projections Only					
FTE	Job Classification	Salary	Benefits	Startup Costs	FTE Related Costs
0.5	PUBLIC HEALTH ADVISOR 4	\$41,000.00	\$16,000.00	\$2,000.00	\$4,000.00
0.2	FISCAL ANALYST 2	\$10,000.00	\$5,000.00	\$0.00	\$0.00
0.1	HEALTH SERVICES CONSULTANT 1	\$4,000.00	\$2,000.00	\$0.00	\$0.00
0.8		\$55,000.00	\$23,000.00	\$2,000.00	\$4,000.00

Estimated expenditures include salary, benefit, and related costs to assist with administrative workload activities. These activities include policy and legislative relations; information technology; budget and accounting services; human resources; contracts; procurement; risk management, and facilities management.

Strategic and Performance Outcomes

Strategic Framework:

This package directly pertains to Goal 4 of the Governor's Results Washington **Health and safe communities**: Fostering the health of Washingtonians from a healthy start to safe and supported future. Safe drinking water is one of the most important things to ensure the health of Washingtonians.

Our agency vision is that Washingtonians will thrive in a broad range of healthy environments - natural, built, and social. This request directly integrates the DOH **Transformational Plan's priorities of: I. Health and Wellness, III. Environmental Health, and IV. Emergency Response and Resilience.**

We will lead broad efforts that address external factors impacting health, safety, and well-being, recognize the intersection of people, animals, and environment, and incorporate principles of environmental justice and shared responsibility for community health. This proposal addresses external impacts to individuals and communities through support for reliable and safe drinking water alternatives and access to testing and treatment.

Additionally, providing alternative water supply options for testing, treatment, education, and long-term remediation alternatives, incorporates these key agency strategies:

1. Support systems and policies that promote optimal individual and community health by investing in proactive efforts to advance a broad range of healthy environments and interactions where people live, learn, work, worship, and play.
2. Ensure our policies, planning, and programming incorporate environmental justice principles with the goal of reducing health inequities and promoting community well-being.
3. Incorporate data-driven approaches and community engagement strategies, assets, and strengths, into public health and response planning efforts aimed at building resilience against the health and social impacts of climate change and other environmental challenges.
4. Ensure communities likely to bear the worst climate-related and environmental health impacts have resources and support to foster resilient communities that promote true health and well-being.

Performance Outcomes:

Providing the testing and an alternative water source for individuals with contaminated water supply will reduce health disparities and ensure a safe and reliable water source.

This proposal minimizes the equity gap between water systems with access to federal funds and grant funds and individual well users that do not qualify for existing federal funds.

Performance will be measured by:

Identifying individuals impacted by various contaminants to their individual wells and group B water systems.

Number of laboratory tests provided.

Number of residents receiving safe and reliable water during research and remediation activities.

As this project proceeds, ODW intends to use community engagement and data-driven approaches to expand and develop resources to address contaminants. Performance measures will be adapted to measure the activities related to education and outreach, community concerns and requests, and engagement with local and state partners.

Equity Impacts

Community outreach and engagement:

Individuals relying on well water are often disproportionately impacted by environmental contamination and reduced access to municipal utility services. By working with local health partners and community organizations, this funding can be targeted to address disadvantaged communities. Municipal water systems have dedicated federal funding and state grant and loan options not available to individual well users and smaller water systems.

A 6-month pilot project in the Lower Yakima Valley GWMA is providing alternative water supply to residents impacted by high levels of nitrate. This is helping 42 homes and nearly 180 residents. Unfortunately, funding for this pilot project will cease after December 2022. One third of the homes impacted by high level of nitrates in this area requested but did not receive bottled water services due to limited funding. This demonstrates the need for additional funding for this and many other areas of Washington state.

Disproportional Impact Considerations:

This proposal minimizes the equity gap between water systems with access to federal funds and grant funds and individual well users that do not qualify for existing federal funds. In general, ODW will prioritize residents/households in rural areas experiencing health disparities and will partner with those communities impacted to ensure accessible community engagement especially for non-English speaking populations.

Target Populations or Communities:

The proposal promotes health equity and reduces environmental health disparities by providing a remedy for safe drinking water regardless of the income and health literacy of those impacted. Many of the residents using individual wells in areas with groundwater contamination are low income or minority populations. This proposal targets Washingtonian's that are served by individual private drinking water sources to ensure they have access to safe and reliable drinking water.

Other Collateral Connections

Puget Sound Recovery:

NA

State Workforce Impacts:

None

Intergovernmental:

Individual well users within tribal properties may also benefit from this service, providing well testing is conducted to prove the existence of contaminated groundwater. Contamination of groundwater knows no boundaries and therefore can impact agricultural communities, tribal communities, and residents throughout the state.

Partner	Anticipated Position (Support, Neutral, Oppose)
Yakima Health District	Support
Yakima County	Support
Washington State Department of Ecology	Support
Tribal Entities	Support
Office of Environmental Public Health Sciences	Support
Washington State Department of Agriculture	Support

Stakeholder Response:

Partner	Anticipated Position (Support, Neutral, Oppose)
Residents within the Lower Yakima Valley Groundwater Management Area involved in Ecology’s pilot well monitoring program	Support
Residents near the Lower Yakima Valley Groundwater Management Area not currently involved in the well monitoring program	Support
Residents near the Yakima Training Center with confirmed contamination of PFAS greater than the State Action Level, but less than the PFAS limit determined to be of significance to receive alternative water supply from the Yakima Training Center	Support
Washington state residents impacted by chemical and biological contaminants from activities outside of their control.	Support

State Facilities Impacts:

No impact to state facilities.

Changes from Current Law:

None

Legal or Administrative Mandates:

NA

Reference Documents

- [FINAL - ODW - Alternative DW Sources or Treatment_FNCaI_submitted to CBO \(1\) \(1\).xlsm](#)
- [ODW - Alternative Drinking Water Sources or Treatment - Staffing Justification.docx](#)

IT Addendum

Does this Decision Package include funding for any IT-related costs, including hardware, software, (including cloud-based services), contracts or IT staff?

No

Objects of Expenditure

Objects of Expenditure <i>Dollars in Thousands</i>	Fiscal Years		Biennial	Fiscal Years		Biennial
	2024	2025	2023-25	2026	2027	2025-27
Obj. A	\$55	\$55	\$110	\$55	\$55	\$110
Obj. B	\$23	\$23	\$46	\$23	\$23	\$46
Obj. C	\$725	\$725	\$1,450	\$725	\$725	\$1,450
Obj. E	\$4	\$4	\$8	\$4	\$4	\$8
Obj. J	\$2	\$0	\$2	\$0	\$0	\$0
Obj. T	\$4	\$4	\$8	\$4	\$4	\$8

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