



Department of Health
2023-25 First Supplemental Budget Session
Policy Level - WR - Water Reuse in Buildings

Agency Recommendation Summary

Funding is to implement newly passed legislation to create standards for developers seeking to reuse wastewater within buildings. This funding will be directed towards building the program, which will eventually be partially fee supported.

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	1.2	1.8	1.5	2.3	2.3	2.3
Operating Expenditures						
Fund 001 - 1	\$151	\$277	\$428	\$277	\$277	\$554
Total Expenditures	\$151	\$277	\$428	\$277	\$277	\$554

Decision Package Description

Background/Context:

Onsite non-potable water systems (ONWS) capture and treat water sources generated from a building, such as wastewater, greywater, stormwater, or roof-collected rainwater. The treated water is then reused at the same building for non-potable purposes such as toilet flushing or irrigation for landscaping. All potable water supply for the building comes from a municipal water system or private well. While most water is treated for reuse, the building remains connected to the sanitary sewer system.

We estimate that there are about 15 buildings across Washington using onsite non-potable water systems, but that actual number is unknown. These buildings have been permitted through the local building code, often using waivers. There are currently no state standards that provide long-term public health protection. However, in 2021 the Legislature passed ESHB 1184, ON-SITE NONPOTABLE WATER SYSTEMS—RISK-BASED WATER QUALITY STANDARDS. The bill required DOH to adopt rules for the use of onsite non-potable water systems, including water quality and construction standards. The rule is currently under development. Rule adoption is expected in late 2023.

DOH expects the demand for onsite non-potable water reuse systems to increase as the state population continues to grow, cost savings from water conservation are realized, LEED certification (and other green building incentives) becomes more attractive, and the impacts from climate change increase. Effective water reuse, coupled with health and safety regulations, provide resilience to drought and other extreme climate events.

Problem:

DOH needs funding to provide staff to stand up the onsite non-potable water system permitting program. Initial assumptions relied on local building/health departments to handle permitting, engineering support, and approval of onsite non-potable water reuse systems. As we worked with the onsite non-potable water reuse systems rule advisory committee, we learned that the local building and health departments did not currently have capacity to permit and regulate these systems and that DOH would need to serve this role if this program was to succeed. There is limited capacity for DOH to implement this new rule without an additional 1.5 FTEs of program support.

Proposed Solution/Supporting Evidence for Solution:

Providing \$278,000 of GFS funding for 1.5 FTEs in the Wastewater Management Section will allow DOH to implement the new rule while ensuring public health is protected. The 1.5 FTE will provide planning personnel for program development, promotion, and community engagement and engineering support personnel for operational support and statewide permitting for onsite non-potable water systems.

Timing and Why Now?

ESHB 1184 required DOH to adopt rules that would take effect by December 31, 2022. Due to the complexity of the issues for operator

certification, local implementation, and statewide consistency, DOH has been delayed in adopting the rule. The current timeline anticipates adoption of the rule by the end of 2023, making this decision package more appropriate for 2024 rather than 2025. ESHB 1184 also specifies that if any on-site treated non-potable water systems are in operation before January 1, 2022, then such systems must follow the new rules developed by DOH.

The rule adoption is already one year behind so the urgency to get funding to fill this gap is greatly needed. If not funded, DOH will not be able to issue permits related to onsite non-potable water or be able to enforce safety standards for existing systems.

This funding package will fund 1.5 FTEs in the Wastewater Management Section to implement the new rule while ensuring public health is protected. The 1.5 FTE will provide planning personnel for program development, promotion, and community engagement and engineering personnel for operational support and statewide permitting for onsite non-potable water systems.

Statewide consistency is needed to make sure all local jurisdictions meet similar state standards and all communities using these systems are afforded the equal opportunity and protection. Without a state regulatory standard, water re-use will lack state oversight for engineering and safety standards. Because the rule is optional, there is no cost or impact to any persons or entities that do not choose to construct an on-site non-potable water reuse system.

Assumptions and Calculations

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

This is not an expansion, reduction, elimination, or alteration of a current program. DOH will establish a new program to implement this proposed rule. This work is predicated by the legislation which requires DOH to adopt rules for onsite non-potable water systems, including water quality and construction standards.

Detailed Assumptions and Calculations:

DOH will establish a new program to implement the onsite non-potable water system rule including water quality and construction standards per the legislation.

FY24 \$150,000, FY25 \$ 248,000 and on-going

ENVIRONMENTAL ENGINEER 3 - .80 FTE
ENVIRONMENTAL PLANNER 3 - .80 FTE

Workforce Assumptions:

Environmental Planner 3 (.80 FTE)
Classification: Environmental Planner 3
Annual Salary: \$84,192 per FTE
Benefits: \$30,309
Start-up costs: \$4,857

Environmental Engineer 3 (.80 FTE)
Classification: Environmental Engineer 3
Annual Salary: \$102,540 per FTE
Benefits: \$36,914
Start-up costs: \$4,857

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:

How this supports the agency's transformational plan:

Environmental Health:

Non-potable water reuse systems bring many environmental benefits and health benefits by conserving water and ensuring users of the system are protected from diseases and contaminants found in wastewater before it is treated for reuse. Water reuse can provide alternatives to existing water supplies and be used to enhance water security, sustainability, and resilience for communities. Providing a regulation around engineering and safety requirements also helps ensure environmental health is prioritized by setting a clear path for project proponents to follow.

Emergency Response and Resilience Onsite non-potable water reuse policies and regulation are becoming more critical as populations rise and as climate impacts are realized. Drought prone states such as California and Colorado are already pursuing water reuse policies at both state and local levels. Non-potable water re-use systems are seen as an essential strategy for building resilient communities and businesses in the face of climate change and extreme weather events. Building up this infrastructure allows for an improved ability to respond to disruptions in service delivery that may come from droughts, increased storm events, or other impacts of climate change.

One Health and OneWater:

Onsite non-potable water reuse systems align with Global and OneHealth initiatives. OneWater, a concept that stems from OneHealth, is a transformative way of viewing, valuing, and managing water. Onsite non-potable water reuse systems are one element of the OneWater framework gaining ground both nationally and internationally. Across the country and internationally, water, wastewater, and stormwater managers are relying on water reuse as a central feature in innovative, integrated approaches to solve unique water management challenges.

Funding:

This proposal will impact agency funding by providing 1.5 FTE from GFS dollars.

Performance Outcomes:

Every existing and proposed on-site non-potable water reuse system will receive engineering and permitting support in a timely manner. Providing the needed support for this program will allow the state to permit and regulate all non-potable water systems as they are planned, built, and come online. We will be able to provide operational assistance for new and existing non-potable water systems to help them meet the requirements of the new rule. Providing this support and regulatory structure will also encourage other entities to pursue water reuse in the present and future.

As we develop organizational knowledge around implementing this program, we expect to develop performance measures around:

- Community engagement
- Compliance with standards
- Water conserved
- Permit timeliness

Equity Impacts

Community outreach and engagement:

The Wastewater Management Section used the rule advisory committee to develop the rule and provide outreach. The committee was made up of representatives of permitting agencies and local governments, Seattle-King County, County officials from Western and Eastern Washington, and plumbing associations.

The EP3 under this decision package would be responsible for additional community engagement and outreach regarding the use of non-potable water systems in Washington State.

Disproportional Impact Considerations:

Many Local Health Jurisdictions (LHJs) lack the expertise to implement the proposed rule. If the state does not implement the rule, there will not be access to the program in those counties. Many of the counties that stand to benefit the most from this program are arid counties in the central region of the state that also lack the capacity to implement the rule.

Statewide consistency is needed to make sure all local jurisdictions meet similar state standards and all communities using these systems are afforded the equal opportunity and protection. Without a state regulatory standard, water re-use will lack state oversight for engineering and safety standards. Because the rule is optional, there is no cost or impact to any persons or entities that do not choose to construct an on-site non-potable water reuse system.

Target Populations or Communities:

Early adopters of this program are expected to primarily be developers of large new buildings in urban centers. These may be residential, commercial, or mixed-use buildings. The users of the on-site non-potable water reuse systems will be the inhabitants of these buildings.

As the program becomes established, and our understanding of the technologies and operations matures, it is anticipated that a broader range of entities and communities will pursue non-potable water reuse.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

This would impact regional, county, or city governments that wish to pursue water reuse for on-site non-potable uses. The department will implement the new rule until cities and counties develop the capacity to implement the rule and request permitting authority from the department.

Tribal systems do not fall under the authority of this rule. However, this rule has the strong potential to provide a framework for safe implementation of similar systems on Tribal Lands.

Stakeholder Response:

Developers, home and business owners, and community environmental groups will benefit from this rule as it allows for an environmentally conscientious person or group to operate a building with less water, and less impact on the environment. Because this is an optional rule, no additional cost or impact would be associated with any person or entity who does not wish to construct such a treatment system.

State Facilities Impacts:

N/A

Changes from Current Law:

New rules are being developed related to this funding request.

Legal or Administrative Mandates:

This proposal is in response to rulemaking related to on-site non-potable water reuse systems.

HEAL Act Agencies Supplemental Questions

1. Please describe specific likely or probable environmental harms and/or benefits and their associated health impacts to overburdened communities and vulnerable populations.

This proposal is likely to result in environmental benefits as more buildings choose to invest in onsite non-potable water reuse the demand for potable water use will decline. All communities and populations benefit when water resources are used more effectively and efficiently.

2. Please describe any potential significant impacts to Indian tribes' rights and interest in their tribal lands.

No significant impact. Regulating and funding water re-use for buildings opens the door for Tribes to utilize this technology in the future. Early adopters of this program are predicted to be owners of large commercial buildings and facilities.

3. Describe how your agency engaged with Tribes in developing this proposal, including offers for tribal consultation, and any direction provided by Tribes through this engagement.

A rule advisory committee was established that provided broad outreach to the rulemaking that is related to this decision package. Tribal specific engagement was not conducted, but the Dear Tribal Leader letter process was followed.

4. Has an Environmental Justice Assessment been completed? If so, please submit the assessment as an attachment in ABS.

No

5. Describe how your agency used the Environmental Justice Assessment process to eliminate, reduce, or mitigate environmental harms and equitably distribute environmental benefits? If your agency determined that you were unable to eliminate, reduce, or mitigate environmental harms and equitably distribute environmental benefits, please provide a justification for not doing so.

Not applicable since an EJ Assessment wasn't completed.

Reference Documents

[REVISED_OEHS_WaterReUse_ver24.7__7.18.23.xlsm](#)

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	\$98	\$185	\$283	\$185	\$185	\$370
Obj. B	\$36	\$70	\$106	\$70	\$70	\$140
Obj. E	\$2	\$2	\$4	\$2	\$2	\$4
Obj. G	\$2	\$6	\$8	\$6	\$6	\$12
Obj. J	\$6	\$0	\$6	\$0	\$0	\$0
Obj. T	\$7	\$14	\$21	\$14	\$14	\$28

Agency Contact Information

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