DEPARTMENT OF ECOLOGY
State of Washington

Washington Department of Ecology

2022 Supplemental Operating Budget

September 13, 2021

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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
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September 13, 2021

TO: David Schumacher, Director
Office of Financial Management (OFM)

FROM: Laura Watson, Director

SUBJECT: Ecology's 2022 Supplemental Operating Budget Request

As the state's lead environmental agency, the mission of the Washington State Department of Ecology (Ecology) is to protect and preserve the environment for current and future generations, while valuing and supporting Washington's economic success. We're tackling challenges that are unique to our times and require us to take a broad and holistic approach to our work that focuses on not only *what* we do, but also *how* we do it.

Ecology's strategic goals are to:

- Support and engage our communities, customers, and employees.
- Reduce and prepare for climate change impacts.
- Prevent and reduce toxic threats and pollution.
- Protect and manage our state's waters.
- Protect and restore Puget Sound.

Our agency's deep commitment to environmental justice is tied to each of our strategic goals and guides the ways in which we work to accomplish those goals.

Attached is Ecology's $3.8 million 2022 Supplemental Operating Budget request. It balances a recovering economy with the understanding that the COVID-19 pandemic is still very much a part of our daily lives, and aims to help support our communities during this time, while continuing to protect environmental and public health through a focus on equity and environmental justice. This operating budget request is needed to:

- Effectively implement enacted legislation, budget provisos, and directives from the 2020 and 2021 sessions aimed at reducing carbon pollution to achieve greenhouse gas limits, ensuring companies have sufficient financial resources to cover the costs of oil spills to Washington waters, and developing water banks to preserve the state's agricultural water supply and protect environmental interests.
- Support our communities by providing expanded pollution prevention assistance and Washington Conservation Corps services to help meet the state's environmental justice

goals; reduce contaminants in drinking water; and redevelop contaminated sites for reuse as affordable housing, commercial property, or recreational facilities.
- Support recommendations from the State/Tribal Riparian Protection & Restoration Workgroup needed to better monitor the health of our riparian buffers and protect salmon.
- Improve water quality by implementing nutrient controls in Puget Sound and addressing toxic chemicals in stormwater runoff from industrial and contaminated sites.
- Address the backlog of contaminated sites that need to be cleaned up across the state, including former orchard lands and abandoned mine sites.
- Meet federal and state inspection/audit requirements for underground storage tanks, drinking water laboratories, and Hanford dangerous waste facilities.
- Fund key information technology enhancements needed to improve collection and reporting of data on water quality permits, generated hazardous waste, and toxic chemicals in consumer products.
- Ensure we have the resources needed to safely and effectively respond to spills of oil or other hazardous materials across the state.

These requests are supported primarily by dedicated environmental funds and direct charges to customers for services provided.

Implementing the Climate Commitment Act

Changes in climate pose serious threats to Washington's economy, public health, natural resources, and environment. In response to these threats, and supported by the Governor's commitment to achieving bold, science-based limits on the state's greenhouse gas (GHG) emissions, the 2021 Legislature passed Engrossed Second Substitute Senate Bill (E2SSB PL) 5126 – Climate Commitment Act (CCA), which establishes a comprehensive program to reduce carbon pollution and achieve the GHG limits set in state law. This new law caps and reduces GHG emissions from the state's largest emitting sources and industries, allowing businesses to find the most efficient path to lower carbon emissions.

The CCA directs Ecology to develop rules to implement a cap on carbon emissions, including mechanisms for the sale and tracking of tradable emissions allowances, along with compliance and accountability measures. Ecology is also required to design and adopt rules to allow for linking the program with similar programs in other jurisdictions.

Under the new law, Ecology will create a cap-and-invest program, starting January 1, 2023, by setting emissions allowance budgets that meet the GHG limits in RCW 70A.45.020. Initially, the cap-and-invest program will cover industrial facilities, certain fuel suppliers, in-state electricity generators, electricity importers, and natural gas distributors with annual GHG emissions above 25,000 metric tons of carbon dioxide equivalent. The program will expand to add waste-to-energy facilities on January 1, 2027, and certain landfills and railroad companies on January1, 2031.

Covered entities must either reduce their emissions or obtain allowances to cover any remaining emissions. Some utilities and industries will be issued free allowances, while other allowances will be auctioned. Proceeds from the auction of allowances must be used for clean energy transition and assistance; clean transportation; and climate resiliency projects that promote climate justice, including dedicating a minimum of 35 percent of funds toward overburdened communities, and a minimum of 10 percent toward Tribal projects.

The CCA puts environmental justice and equity at the center of climate policy, ensuring communities that bear the greatest burdens from air pollution today see cleaner, healthier air as the state cuts emissions of GHGs and criteria pollutants. Funds from the auction of emission allowances will support new investments in climate resiliency programs, clean transportation, and addressing health disparities across the state.

Ecology is requesting the funding and FTE authority needed to fully begin implementing this new law in 2021-23, consistent with our final fiscal note for the version of the bill that was passed by the Legislature.

State/Tribal Riparian Protection & Restoration

Riparian zones (the areas along streams, rivers, and other waterbodies) play a significant role in supporting water quality, along with the health and diversity of aquatic and terrestrial species throughout Washington. Transforming the state's riparian protection and restoration policies is essential to our rivers, streams, and shorelines, as well as to sustain salmon and orcas, Tribal treaty rights, and our quality of life.

As acknowledged by Governor Inslee and Tribal leaders at the November 2019 Annual Centennial Accord Meeting, growing and protecting trees along the lengths of the state's rivers and streams safeguards our water and builds resilience for our communities. Coming out of the Centennial Accord, the Governor directed his office to convene state agencies before the end of 2019, and then to work with the Tribes to establish a State/Tribal Riparian Protection & Restoration Workgroup to develop recommendations for leadership before the next Centennial Accord meeting.

This state and tribal partnership is currently working to identify the challenges and opportunities around riparian protection and restoration, while also developing recommendations on bold actions that can result in fully functioning riparian ecosystems statewide.

However, to better monitor the health of our riparian buffers, the state must first significantly improve the accuracy of how our streams are mapped. Ecology is requesting funding in the 2022 Supplemental Operating Budget to support a two-year pilot project to identify the technologies, methodologies, datasets, and resources needed to refine and maintain the accuracy of the National Hydrography Dataset for Washington. This need was identified by the Workgroup's

Monitoring and Adaptive Management Team as a top priority for addressing stream-mapping inaccuracies that currently prohibit a statewide riparian assessment and monitoring program.

Placeholders

2021 Drought Declaration

A historically dry spring, followed by a record-breaking heat wave in late June, affected water supplies across Washington this summer. Farmers and ranchers without irrigation in Eastern Washington were among the first to feel the effects of the drought, with some reporting up to a 50 percent loss of wheat crops and difficulty finding feed for livestock. Rising water temperatures in the lower Yakima, Okanogan, and Snake rivers also reached levels lethal to some fish, including threatened salmon species.

In early July, the state's Executive Water Emergency Committee recommended to Governor Inslee that a full emergency drought declaration be issued for the vast majority of the state, and Ecology issued that drought emergency order on July 14, 2021. The order declared drought conditions under Chapter 43.83B RCW and authorized Ecology to expedite emergency water permits and pass-through funds to public bodies to alleviate drought hardships. The drought emergency order remains in effect until June 1, 2022.

Due to the late and rapid onset of drought conditions this year, Ecology was not able to request funding from the Legislature during the 2021 session to support needed drought response, as we normally would have, and have done so in the past, when drought conditions have manifested earlier in the year. Consequently, Ecology does not have dedicated funding within its base operating or capital budgets to respond to this year's drought.

However, in response to this emergency need, Ecology was able to identify and repurpose, temporarily, a limited amount of funding within its current budgets to help alleviate the impacts on our communities and natural resources. Total funding available for this year's drought response is $750,000 ($204,000 operating and $546,000 capital) from the Drought Preparedness and Response Account, and roughly $410,000 in General Fund-State funding from anticipated vacancy savings within the Water Resources Program during fiscal year 2022.

On July 28, 2021, Ecology adopted an emergency rule—Chapter 173-167 WAC – Emergency Drought Funding—which makes the limited funding we have available to respond to emergencies caused by drought conditions. Emergency rules are limited to 120 days duration, and this emergency drought funding rule expires November 25, 2021.

To respond as efficiently and effectively as possible, all currently available funds are being distributed to other state agencies best equipped to respond to emergency drought situations involving human health, fish health, and agriculture emergencies. Funding is being provided to the Washington State Department of Health (drinking water emergencies), the Washington State Department of Fish and Wildlife (fish health and streamflow impacts to fish), and the State Conservation Commission (loss of crops and/or livestock issues) for projects such as trucking

water to local entities that have lost supply; moisture sensors to monitor soil water content for crops; and temporary pools to lower water temperature to protect fish instream.

Ecology anticipates being able to provide an estimate on any backfill or additional funding needs related to this drought response by November 30, 2021, so that those can be considered for the Governor's supplemental budget proposals. Ecology will then provide an update on those needs to the Legislature in January 2022.

Please note, of equal concern to this year's drought is the possibility that drought conditions may continue through the spring and summer of 2022. Oftentimes, drought can be a multi-year event, where the second year has equal or worse impacts on the state. Ecology will continue to convene the Washington Water Supply Availability Committee to monitor conditions through the winter to assess snow pack, climate forecasts, and other conditions to determine the likelihood of a back-to-back drought occurring in 2022.

Ecology will be able to provide an initial assessment of such conditions and forecasts by January 2022. However, the water year begins November 1 of each year, and conditions can change rapidly throughout the winter and spring, which means a decision on drought and its severity may not be made until early April.

Ecology anticipates the Drought Preparedness and Response Account will be depleted after meeting the 2021 drought needs, and funding drought response with staff vacancies is not sustainable. If a drought is projected again, Ecology will submit a request for funding during the 2022 legislative session to address those needs. This potential need is normally highlighted in Ecology's budget submittal, as, again, no base appropriations exist in the agency budget to implement drought response activities.

One Washington Project

While not a placeholder, please note that, per the OFM Budget Instructions for the 2022 Supplemental Budget, Ecology did submit required information to One Washington on August 20, 2021, outlining our resource needs for the 2022 Supplemental Operating Budget, so they could be integrated into a single, consolidated, enterprise-wide decision package.

Thank you for considering Ecology's 2022 Supplemental Operating Budget request. We will work with our assigned OFM operating budget analysts as they review this request in detail. Please let us know if you have questions.

Attachment

Distribution to:

JT Austin, Senior Policy Advisor, Natural Resources, Office of the Governor
Myra Baldini, Budget Assistant to the Governor, OFM
Jim Baumgart, Senior Policy Advisor, Military & Housing, Office of the Governor
Michael Bezanson, Capital Budget Coordinator, Senate Ways and Means Committee

Lisa Borkowski, Budget Assistant to the Governor, OFM
Jim Cahill, Senior Budget Assistant to the Governor, OFM
Denise Clifford, Governmental Affairs Director, Department of Ecology
Erik Fairchild, Chief Financial Officer, Department of Ecology
Richelle Geiger, Fiscal Analyst, House Capital Budget Committee
Jennifer Hennessey, Senior Policy Advisor, Environment/Water, Office of the Governor
Jed Herman, Senior Fiscal Analyst, Senate Ways & Means Committee
Dan Jones, Fiscal Analyst, House Appropriations/Natural Resources Committee
Kelci Karl-Robinson, Capital Budget Coordinator, House Capital Budget Committee
Becky Kelley, Senior Policy Advisor, Climate, Office of the Governor
Jennifer Masterson, Senior Budget Assistant to the Governor, OFM
Keith Phillips, Executive Director of Policy, Office of the Governor
Garret Ward, Budget Policy Manager, Department of Ecology

Washington Department of Ecology
2022 Supplemental
Operating Budget

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2022 Supplemental Operating Budget
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DEPARTMENT OF ECOLOGY
State of Washington

Department of Ecology – Executive Leadership

Director
Laura Watson
360-407-7001

Deputy Director
Heather Bartlett
360-407-7011

Office of Attorney General
Andy Fitz
360-586-6752

Confidential Secretary
Teri North
360-407-7009

Manager, Office of Equity & Environmental Justice
Millie Piazza
360-407-6177

Confidential Secretary
Judy Decker
360-407-7014

Administrative Directors

Administrative Services
Jim Pendowski
360-407-6829

Communications
Dustin Terpening
360-407-7004

Executive Advisor for Tribal Affairs
Tyson Oreiro
360-407-7017

Financial Services
Erik Fairchild
360-407-7005

Governmental Relations
Denise Clifford
360-407-7003

Human Resources
Sandi Stewart
360-407-6218

Information Tech. Services
Cristie Fredrickson
360-407-7048

Office of Chehalis Basin
Andrea McNamara Doyle
360-407-6548

Office of Columbia River
Tom Tebb
509-574-3989

Special Asst. to the Director
Stu Clark
360-407-7600

Special Asst. to the Director
Sharlett Mena
360-407-7012

Regional Directors

Central Region
Sage Park
509-457-7120

Eastern Region
Brook Beeler
509-329-3478

Northwest Region
Thomas Buroker
425-649-7010

Southwest Region
Rich Doenges
360-407-6307

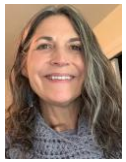
Environmental Program Managers

Air Quality
Kathy Taylor
360-407-6880

Environmental Assessment
Annette Hoffmann
360-407-6699

Hazardous Waste & Toxics Reduction
Darin Rice
360-407-6702

Nuclear Waste
David Bowen
509-372-7905



Shorelands & Env. Assistance
Joenne McGerr
360-407-6977

Solid Waste Management
Laurie Davies
360-407-6103

Spill Prevention, Preparedness & Response
Carlos Clements
360-407-7455

Toxics Cleanup
Brock Milliern
360-407-7177

Water Quality
Vince McGowan
360-407-6405

Water Resources
Mary Verner
360-407-6672

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2021-2023 **Strategic Plan**

DEPARTMENT OF ECOLOGY
State of Washington

Vision

Our innovative partnerships protect and sustain healthy land, air, and water in harmony with a strong economy.

Mission

To protect, preserve, and enhance Washington's environment for current and future generations.

Values

- Environmental stewardship
- Environmental justice
- Public health, safety, and welfare
- Diversity, equity, and inclusion
- Problem solving and innovation
- Continuous improvement
- Collaborative and respectful relations

Goals

Support and engage our communities, customers, and employees

Reduce and prepare for climate impacts

Prevent and reduce toxic threats and pollution

Protect and manage our state's waters

Protect and restore Puget Sound

Principles of our work

Work in partnerships with communities, businesses, interest groups, and local, state, and federal agencies to protect the environment.

Engage in meaningful tribal consultation.

Communicate clearly, strengthen engagement, and eliminate public involvement barriers.

Strive to eliminate environmental and health disparities by prioritizing communities with environmental justice considerations.

Support our commitment to sustainability by understanding the results of our actions and acknowledging that people, economies, and all life depend on healthy, functioning ecosystems.

Award and manage grants and loans as financial partners to maximize environmental, public health, and economic benefits in local communities.

Recognize and value how every employee's work and expertise contributes to our mission.

Create and support opportunities for integrated cross-program work (One Ecology).

Make transparent, defensible decisions using accurate and reliable data with quality science.

GOAL 1

Support and engage our communities, customers, and employees

We strive to equitably deliver our services and resources, embrace innovation and new technology, and work to continually improve our performance. We foster a diverse, well-trained, and friendly workforce that operates with excellence and professionalism. Our leadership teams are committed to all employees, modeling our commitment to communities, customers, and one another.

Strategies

1.1 Integrate Title VI (Civil Rights Act) nondiscrimination compliance, Americans with Disabilities Act compliance, and support environmental justice work throughout Ecology's programs and activities to ensure equitable service delivery.

1.2 Engage proactively with our customers and communities to seek and use feedback to improve our work and assess meaningful involvement.

1.3 Foster a diverse, equitable, inclusive, and respectful workplace by:

- Seeking qualified candidates for employment.
- Paying equitably.
- Evaluating and reducing barriers to work-related opportunities advancement throughout Ecology.
- Providing a work environment that promotes appreciation, understanding, and respect for individual differences.

The Environmental Protection Agency (EPA) defines **environmental justice** as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

For Ecology this means:

- Evaluating and implementing service equity in our programs and decision-making, assessing and mitigating impacts to overburdened and underserved populations, and creating accountability measures to eliminate environmental and health disparities.
- Being mindful of inclusivity and access, planning for and engaging in meaningful public involvement, and ensuring potentially affected populations have an opportunity to learn about, participate in, and influence decisions and actions.

We view diversity, equity, inclusion, and respect through a broad lens including:

- Race
- Ethnicity
- Class
- Age
- Religion
- Sexual orientation
- Gender identity
- Immigration status
- Military background
- Language
- Education
- Life experience
- Physical disability
- Neurodiversity
- Intersectional identities

For Ecology this means a workplace that embraces humble inquiry, courage, cultural humility, and caring. A workplace where individuals are heard and honored in meaningful, substantive ways and guaranteed opportunity for advancement, access, and fair treatment. These principles are foundational to Ecology's work and guide our actions with purpose and intention.

GOAL 1 CONTINUED

Support and engage our communities, customers, and employees

Strategies (continued)

1.4 Commit our leaders and employees to:

- Initiating change.
- Actively listening.
- Fostering inclusive collaboration.
- Communicating frequently, consistently, and transparently.
- Encouraging the sharing of expertise.
- Providing opportunities for growth and development in our employees.

1.5 Invest in our employees by:

- Hiring and retaining talented and diverse people.
- Recognizing their expertise.
- Sharing knowledge.
- Building their skills and leadership capacity through learning opportunities.
- Using effective mentoring and coaching.
- Integrating their feedback to improve our work.

1.6 Leverage technology solutions that support a modern, mobile workforce to allow us to be more adaptive and responsive to communities, customers, and employees.

1.7 Measure Ecology's success through a performance management system based on our goals and measures, using continuous improvement and risk management.

1.8 Lead proactive, innovative communications to share Ecology's work and why it matters with our diverse audiences.

1.9 Manage Ecology's financial resources responsibly and ensure our long-term financial health so we have funding to accomplish our mission.

1.10 Provide secure and sustainable infrastructure, access to public records, and operational support to help Ecology conduct our work to protect, preserve, and enhance the environment.

GOAL 2

Reduce and prepare for climate impacts

Ecology is preparing for the future by understanding and reducing the effects of climate change on our communities, environment, and economy. We will reduce greenhouse gas emissions, promote community resilience, and prevent and remediate negative impacts with an emphasis on historically underserved and overburdened communities.

Strategies

2.1 Understand and share information about climate change and the associated impacts, especially with communities that are disproportionately affected.

2.2 Reduce and prevent greenhouse gas emissions, keeping in mind communities that are most impacted by climate change.

2.3 Support communities and partners — prioritizing the most vulnerable and sensitive populations — in preparing for and adjusting to climate change.

2.4 Consider climate impacts throughout our decision-making while ensuring meaningful engagement with communities with environmental justice considerations.

GOAL 3
Prevent and reduce toxic threats and pollution

We work to prevent and reduce toxic threats and pollution and manage legacy contamination. We make strategic efforts to eliminate the disproportionate impacts on communities of color, indigenous communities, and low-income populations across Washington.

Toxic threats and pollution come from many sources, including consumer products and business processes, and can end up as pollution in the air, water, and land, or accumulate in our bodies.

Inappropriate management or disposal of chemicals or waste can result in long-lasting contamination and economic, social, and environmental impacts. To protect against ongoing toxic threats and pollution, we:

- Prevent and reduce use in the first place.
- Ensure recycling/reuse of appropriate materials.
- Regulate final disposal.
- Manage cleanup.

Strategies

3.1 Prevent toxic substances from becoming threats or pollution by:

- Identifying the most harmful chemicals or products.
- Measuring and understanding their impacts to the environment, public health, and communities with environmental justice concerns.
- Reducing their use by promoting safer alternatives and implementing restrictions or other requirements.

3.2 Prevent and reduce the release and impacts of toxic chemicals and pollution by:

- Providing technical assistance.
- Promoting proper management.
- Gathering data.
- Implementing regulatory, permitting, and compliance work.

We prioritize this work in overburdened and underserved communities.

3.3 Ensure that pollution and contaminated sites, including legacy environmental contamination, are managed and cleaned up while taking into consideration environmental justice, environmental and human health, community needs, and economic vitality.

GOAL 4

Protect and manage our state's waters

We provide a coordinated and collaborative approach to protecting and managing water. Ecology's work ensures Washington has high-quality water supplies that support thriving ecological systems, as well as meet current and future tribal, agricultural, and community needs.

Strategies

4.1 Develop water resource solutions that consider legal and historical context, impacts of climate change, population growth, impacts to fish, and other resource constraints while balancing the needs of people and communities, contributing to a robust economy, and protecting the natural environment.

4.2 Use innovative solutions that align with regulatory requirements and environmental justice considerations to:

- Address long-term water project investment, monitoring, and funding needs.
- Develop and implement water quality and sediment cleanup plans.
- Write and enforce permits.
- Encourage the use of reclaimed water.
- Restore and manage floodplains.

4.3 Support local government, communities, and businesses, while prioritizing underserved and underinvested areas or populations, to reduce the risks of surface and groundwater pollution by providing:

- Waste, pollution, and toxics related technical assistance.
- Product replacement opportunities.

GOAL 5

Protect and restore Puget Sound

Puget Sound requires our continued attention. We are building partnerships and making investments to restore, protect, and preserve the health of Puget Sound, now and for future generations. We commit to partnering and meaningful engagement with tribal governments and our customers, including communities with environmental justice considerations.

Strategies

5.1 Monitor Puget Sound health and restoration to address environmental impacts, including those that affect tribes and underserved communities.

5.2 Accelerate innovative solutions for toxic reduction strategies to protect orca, salmon, and shellfish in Puget Sound waters, working in partnership with communities and consulting with tribes.

5.3 Support the recovery of salmon and shellfish and improve water quality by managing stormwater, reducing excess nutrients, preventing pollution, and cleaning up contaminated sites, while prioritizing environmentally overburdened and underinvested communities.

5.4 Prevent oil spills and enhance our oil and hazardous materials response capacity, focusing on areas underserved and at highest environmental risk.

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Department of Ecology
2021-23 Agency Activity Inventory Descriptions

September 5, 2021

Activity	Activity Title	Description
A002	Administration	The administration activity supports agency functions by providing leadership, cross-program support, and staff presence throughout the state. Administration manages the agency's long-term financial health and provides information to support sound decision-making and resource management by managers. Communication, education, and outreach tools play a major role in protecting and improving the environment. Administration staff serve as liaisons to Congress, the state Legislature, local governments, businesses, Indian tribes, and environmental and citizen groups. Administration helps managers and employees create a safe, supportive, and diverse work environment by providing comprehensive human resource services. It also oversees information management (desktop and network services, application development, and data administration) and facility and vehicle management; maintains the agency's centralized records and library resources; responds to public records requests; and provides mail services.
A003	Implementing Integrated Solutions to Protect Instream Resources	Ecology staff seeks to meet increasing water demands from population growth, while protecting limited instream resources and adapting to climate change. Actions include: • Instream flow rules - Work with local stakeholders to implement and update, as needed, instream flow rules for fish and wildlife, recreation, and other instream resources. Evaluate regions of the state that are experiencing conflict over water, as potential areas for adjudication. • Streamflow Restoration - Work with watershed groups to establish or revise a streamflow restoration plan to mitigate the impacts of new domestic water use. • Section 401 federal licensing of dams - Collaborate with local governments, tribes, and other stakeholders to develop permit conditions for hydropower facilities that ensure minimum instream flows are met and that stream flows are adjusted to adapt to water supply conditions during the 50 year license period. • Water acquisition - Acquire senior water rights to restore and protect stream flows. Review municipal and industrial reclaimed water projects and water system plans to ensure new uses of water do not impair senior rights. Monitor water supply conditions that may impact water rights and the environment, and respond when water supplies are impacted by drought.
A005	Clean up the Most Contaminated Sites First (Upland and Aquatic)	Ecology protects public health and natural resources by cleaning up and managing contaminated upland sites and contaminated sediments in the aquatic environment. Resources are first focused on cleaning up contaminated sites that pose the greatest risk to public health and the environment. These include sites where contamination threatens drinking water, exists in a large quantity, is very toxic, may affect a waterbody or the environmental health of sediments, or may affect people that are living, working, or recreating near the site. Contamination may be in the soil, sediments, underground water, air, drinking water, or surface water. Ecology also manages multi-agency upland and sediment cleanup projects. Cleaning up these sites protects public health, safeguards the environment, and promotes local economic development by making land available for new Industries and other beneficial uses.

Activity	Activity Title	Description
A006	Clean Up Polluted Waters	The federal Clean Water Act requires the agency to develop water quality standards and to identify water bodies that fail to meet those standards. The agency does this by reviewing thousands of water quality data samples and publishing an integrated water quality assessment report. This report lists the water bodies that do not meet standards. Ecology then works with local interests to prepare water quality improvement reports to reduce pollution, establish conditions in discharge permits and nonpoint-source management plans, and monitor the effectiveness of the improvement report.
A007	Conduct Environmental Studies for Pollution Source Identification and Control	Ecology conducts pollution studies to address known or suspected problems at specific sites and across regional areas. These studies support our efforts under the federal Clean Water Act, as well as the state Water Pollution Control and Model Toxics Control Acts. Studies range from simple water quality sampling for bacteria or dissolved oxygen, to very complex projects measuring toxic contaminants in fish tissues or pesticides in groundwater. Many projects support development of water quality improvement plans or Total Maximum Daily Load (TMDL) to assess how much of a pollutant a waterbody can absorb without exceeding water quality standards.
A008	Control Stormwater Pollution	Ecology prepares tools, provides assistance, and offers compliance strategies to control the quantity and quality of stormwater runoff from development and industrial activities. The agency currently Provides training and assistance to communities and industries on stormwater manuals and the Western Washington hydrology model. Ecology works with local governments and other stakeholders to implement a municipal stormwater program and permitting system.
A009	Eliminate Waste and Promote Material Reuse	The Department of Ecology: • Provides technical assistance to local governments for waste reduction, and recycling, including focus on reducing contamination, addressing plastic packaging, and developing marketing programs for recycled commodities. • Reduces wasted food through a state food waste reduction and diversion plan. • Provides technical assistance to promote reuse of organic materials. • Ensures an environmentally compliant biosolids program in the state. • Advises state and local governments on how to promote environmentally preferred purchasing. • Oversees producer managed recycling programs.
A010	Prevent and Pick Up Litter	The Department of Ecology collaborates with residents, businesses, local governments and state agency partners, to maximize efforts to prevent and pick up litter to keep Washington clean for residents and visitors. Ecology also sponsors youth employment programs for litter pick up.

Activity	Activity Title	Description
A011	Ensure Dam Safety	This activity protects life, property, and the environment by overseeing the safety of Washington's dams. This includes inspecting the structural integrity and flood and earthquake safety of existing state dams not managed by the federal government; approving and inspecting new dam construction and repairs; and taking compliance and emergency actions.
A012	Ensure Environmental Laboratories Provide Quality Data	Ecology accredits environmental laboratories that submit data to the agency and to the Department of Health. The accreditation program covers analyses in all typical environmental matrices (air, water, soil, sediment, tissue), and drinking water. Accreditation ensures environmental laboratories have the demonstrated capability to provide accurate and defensible data. Ecology's laboratory accreditation program is the primary method of performance monitoring for over 400 laboratories in the accreditation program. Ecology will start accrediting cannabis laboratories in 2024. To prepare for this role, Ecology is leading the Cannabis Science Task Force to recommend lab quality standards for cannabis laboratories.
A013	Provide Planning and Financial Assistance to Manage and Reduce Waste	The Department of Ecology provides planning assistance to local governments and financial assistance through three grant programs: • Local Solid Waste Financial Assistance grants to local governments for solid waste planning, waste reduction (including food waste), recycling (including contamination reduction), household hazardous waste, and enforcement. • Public Participation Grants (PPG) to interest groups for informing residents about cleanups in their local area and educating the public about waste reduction efforts. • Waste Reduction and Recycling Education grants to local governments and non profit organizations to educate the public about litter control, waste reduction (including food waste), recycling (including contamination reduction), and composting.
A014	Restore the Air, Soil, and Water Contaminated from Past Activities at Hanford	The agency protects public health and natural resources by working to restore the public use of air, soil, and water at the Hanford Nuclear Reservation by cleaning up contaminated sites from past activities. Radioactive and hazardous contaminants are removed, residual contaminants are contained and monitored, and mitigation of natural resource damage on Hanford occurs.
A015	Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford	The agency oversees the decommissioning of the large, complex, and high-risk facilities throughout the Hanford Nuclear Reservation, including nuclear reactors and chemical processing facilities used for nuclear weapons material production. Transition of these facilities to safe and stable conditions requires coordination of multiple regulatory and technical requirements. The agency is also responsible for regulatory oversight of waste management activities at four facilities not under the management of the U.S. Department of Energy (Energy Northwest, AREVA, Perma-Fix Northwest, and the U.S. Navy's Puget Sound Naval Shipyard).

Activity	Activity Title	Description
A016	Treat and Dispose of Hanford's High-Level Radioactive Tank Waste	The agency protects public health and natural resources by providing regulatory oversight for the treatment and removal of highly radioactive tank waste at the Hanford Nuclear Reservation. This activity is focused on the design, permitting, construction, and operation of the Hanford Waste Treatment Plant, the Integrated Disposal Facility (a mixed, low-level waste landfill), and immobilized high-level waste storage facility.
A017	Ensure Safe Tank Operations, Storage of Tank Wastes, & Closure of the Waste Storage Tanks at Hanford	The agency protects public health and natural resources by ensuring the safe storage and management of 53 million gallons of high-level radioactive tank waste at the Hanford Nuclear Reservation. The Hanford Tank Waste Project is focused on permitting the double-shelled tank waste storage system, removing liquid wastes from the single-shelled tanks, and beginning to close portions of the tank waste storage system. In coordination with the Hanford Tank Waste Disposal Project, the tank waste will be removed and treated, leading to eventual closure of all 177 Hanford tanks by 2028.
A018	Ensure the Safe Management of Radioactive Mixed Waste at Hanford	The agency provides regulatory oversight for the safe storage, treatment, and disposal of liquid and solid dangerous and radioactive mixed wastes at the Hanford Nuclear Reservation, as well as at radioactive mixed-waste sites throughout the state. This activity regulates the management of this historic and ongoing waste stream, and ensures the retrieval, treatment, and safe disposal of high-risk transuranic and high activity wastes currently buried in shallow, unlined trenches.
A019	Improve Community Access to Hazardous Substance and Waste Information	Ecology provides the public and local governments with information about the type, location, and source of hazardous substances in local communities. Ecology uses automated data systems to: • Track compliance and technical assistance visits. • Measure pollution prevention and compliance progress. • Track amounts of dangerous waste generated each year as well as its transport, treatment, and/or disposal. • Identify toxic chemicals released and stored by businesses. • Track information on facilities that prepare pollution prevention plans. • Prepare informational publications, such as Shoptalk, a newsletter for hazardous waste generators. According to federal and state community right-to-know laws, Ecology also responds to public inquiries about toxic chemicals and provides a web site for this purpose.
A020	Improve Quality of Data Used for Environmental Decision Making	To ensure the reliability and integrity of data Ecology generates, agency staff: • Provide guidance and training on developing quality assurance project plans. • Review project proposals. • Consult on sampling design requirements and interpretation of results. This quality assurance work is required by the Environmental Protection Agency for entities (including Ecology) that receive funding for work involving environmental data. In addition, Ecology scientists, modelers, statisticians, chemists, and other specialists: • Interpret technical data. • Review grantee monitoring plans. • Supply information for policy decisions to support agency mandates

Activity	Activity Title	Description
A021	Increase Compliance and Act on Environmental Threats from Hazardous Waste	The agency annually conducts formal compliance enforcement inspections at large and medium quantity generators and hazardous waste management facilities to ensure compliance with state and federal regulations. A credible, formal enforcement capability is essential to preserving the effectiveness of technical assistance and informal enforcement efforts. While staff undertake formal enforcement infrequently, repeated refusal or inability of a facility to correct violations and comply with the regulations will escalate to formal enforcement actions. When possible, a streamlined enforcement and settlement approach is used. This frees up inspectors to do more inspections instead of spending excess time with legal proceedings. The state also periodically amends the Dangerous Waste Regulations to keep our rules current with the federal program and maintain state authorization.
A022	Increase Safe Hazardous Waste Management	Ecology provides education and technical assistance to thousands of businesses on safe hazardous waste management. Safe management of hazardous waste protects the public and the environment, and enables the state to avoid significant clean-up costs. Although formal enforcement work is essential to maintaining compliance with hazardous waste regulations, training and technical assistance visits also can help bring facilities into regulatory compliance using fewer resources. Even small amounts of mismanaged toxic chemicals can create contaminated sites and pollute stormwater. To address environmental threats from small businesses, Ecology also oversees performance contracts with 9 Puget Sound counties (in addition to Spokane County). These contracts provide for Local Source Control Specialists to conduct technical assistance visits to small businesses.
A023	Manage Underground Storage Tanks to Minimize Releases	Ecology currently regulates over 10,000 active tanks on over 3,600 different properties, including gas stations, industries, commercial properties, and governmental entities. We ensure tanks are installed, managed, and monitored according to federal standards and in a way that prevents releases into the environment. This is done through compliance inspections and providing technical assistance to tank owners and operators. Properly managing such tanks saves millions of dollars in cleanup costs and prevents contamination of limited drinking water and other groundwater resources.
A024	Manage Water Rights	The agency allocates surface and ground water to meet the state's many water supply needs. Ecology staff makes decisions on applications for new water rights, changes to existing water rights, and by participating in water rights adjudications in areas where additional certainty is needed.

Activity	Activity Title	Description
A025	Measure Air Pollution Levels and Emissions	To make sound air quality management decisions, Ecology needs reliable information on the amount and sources of pollution and how it moves in the air. We do three primary activities to collect data: • Monitor air quality to assess trends; focus on compliance; and assess control strategies, health effects, and environmental damage. • Develop emission inventories to quantify pollution released by air pollution sources. • Meteorological and dispersion modeling to forecast movement and concentration of air pollutants, carrying capacity of airsheds, interactions of pollutants, and point of maximum impact of pollution.
A026	Measure Contaminants in the Environment by Performing Laboratory Analyses	The Manchester Environmental Laboratory is a full service environmental laboratory. The lab provides technical, analytical, and sampling support for chemistry and microbiology for multiple Ecology programs, and supports work conducted under the federal Clean Water Act, as well as the state Water Pollution Control, Puget Sound Water Quality Protection, Children's Safe Products and Model Toxics Control Acts.
A027	Monitor the Quality of State Waters and Measure Stream Flows Statewide	Ecology operates a statewide environmental monitoring network to: • Assess the status of major waterbodies. • Identify threatened or impaired waters. • Evaluate changes and trends in water quality over time. This network includes sampling stations in rivers, streams, and marine waters (Puget Sound and the major coastal estuaries). Ecology measures statewide biological, chemical, and habitat conditions to provide information on the health of watersheds on a regional scale. Ecology also measures stream flows in salmon critical basins and key watersheds statewide.
A028	Improve Environmental Compliance at State's Largest Industrial Facilities	The Department of Ecology provides a single point of contact for compliance reviews and technical assistance for petroleum refineries, pulp and paper mills, and aluminum smelters so they have consistent regulatory oversight.
A030	Prepare for Aggressive Response to Oil and Hazardous Material Incidents	This activity ensures large commercial vessels, oil handling facilities, and railroad operators that transport oil by rail maintain state-approved oil spill contingency plans so they can rapidly and effectively respond to major oil spills. State planning standards ensure response equipment and personnel are strategically staged throughout the state. This work is carried out through staff review and approval of contingency plans, drills that test contingency plans, development of geographic response plans, and maintenance of a regional contingency plan in partnership with other agencies.

Activity	Activity Title	Description
A031	Prevent Hazardous Waste Pollution Through Permitting, Closure, and Corrective Action	Facilities that treat, store or dispose of large volumes of dangerous waste must obtain a permit to ensure that their design, construction, maintenance, and operating procedures protect public health and the environment. Washington currently has 14 active facilities that are either in "interim status" or have a final permit. Because these facilities handle such a large volume of dangerous waste they are inspected annually. They are required to have closure plans to effectively deal with the end of their waste management activities. Ecology is currently working on 20 high-priority corrective action clean-up sites. Ecology also ensures that proper financial assurance requirements are in place at all used oil processors and recyclers and facilities treating, storing, or disposing of dangerous wastes.
A032	Prevent Point Source Water Pollution	Ecology protects Washington's water by regulating point source discharges of pollutants to surface and ground waters. This is done with a wastewater permit program for sewage treatment plants and an industrial discharge program for other industries. A permit is a rigorous set of limits, monitoring requirements, or management practices, usually specific to a discharge, designed to ensure a facility can meet treatment standards and water quality limits. The permit is followed by regular inspections and site visits. Technical assistance and follow-up on permit violations also are provided through various means.
A033	Prevent Oil Spills from Vessels and Oil Handling Facilities	Ecology works with communities and regulated entities to prevent spills from vessels and oil handling facilities through inspections, review and approval of plans and manuals, technical assistance, incident investigation, and risk assessment work.
A034	Prevent Unhealthy Air and Violations of Air Quality Standards	To ensure federal air quality standards are met and people have healthier air to breathe, Ecology: • Continuously measures air pollution levels and trends. • Develops and implements area-specific cleanup plans. • Designs and implements strategies to prevent violations. • Cleans up areas that violate standards as quickly as possible.
A035	Promote Compliance with Water Laws	The agency helps ensure that water users comply with the state's water laws so that other legal water users are not impaired; water use remains sustainable over the long term; and the environment is protected for the benefit of people and nature. Activities include water metering and reporting 80 percent of water use in 16 fish critical basins, along with education, technical assistance, and strategic enforcement in egregious cases.

Activity	Activity Title	Description
A036	Protect and Manage Shorelines in Partnership with Local Governments	The Shoreline Management Act establishes a cooperative program between local and state governments, in which local governments develop and administer local Shoreline Master Programs, and the Department of Ecology provides support and oversight. The agency is involved in shoreline management in four primary ways: developing guidelines for local shoreline programs; providing technical assistance to local governments and applicants on shoreline planning and permitting activities; reviewing and approving amendments to local shoreline master programs; and reviewing permits to ensure resource protection and implementation of the law. The agency works with local governments on permit compliance by responding to public inquiries and complaints, making field visits, providing compliance-related technical assistance, and issuing notices of correction, orders, and penalties. Properly managed shorelines provide habitat for fish and wildlife, minimize flooding and property damage, and provide land-use certainty to local landowners.
A037	Protect Water Quality by Reviewing and Conditioning Construction Projects	The Department of Ecology issues water quality certifications and Coastal Zone Management Act consistency determinations for water-related construction projects. Staff provide early review on projects whenever possible (e.g., through State Environmental Policy Act review and pre-application meetings) and provide project guidance and technical assistance through phone calls, e-mails, site visits, and workshops. Projects are approved, denied, or conditioned to protect water quality, sediment quality, and fish and shellfish habitat. This activity allows the state to actively participate in federal permitting activities to ensure that state interests are adequately represented and considered.
A038	Protect, Restore, and Manage Wetlands	The Department of Ecology has the lead responsibility in implementing the state Water Pollution Control Act, which requires the protection of wetlands. The agency provides technical assistance to local governments, helping them implement requirements in the Shoreline Management and Growth Management acts. Staff also provide technical assistance to non-government entities on wetlands conservation and stewardship programs. The agency provides leadership on wetlands issues, coordinating statewide policy issues, and developing new approaches for managing and restoring wetlands. Properly functioning wetlands protect water quality, reduce flooding, provide aquifer recharge for drinking water and other uses, and provide critical habitat for fish and wildlife.
A040	Provide Technical and Financial Assistance to Local Governments to Reduce Flood Hazards	The Department of Ecology administers the Flood Control Assistance Account Program, providing grants and technical assistance to local governments for flood damage reduction projects and comprehensive flood hazard management planning. Staff review and approve local Comprehensive Flood Hazard Management Plans and inspect construction of flood damage reduction projects. The Department of Ecology is also the state's coordinating agency for the National Flood Insurance Program (NFIP) and receives an annual Community Assistance Program grant to provide technical assistance and support to 286 communities enrolled in the NFIP. In this role, staff make regularly scheduled technical assistance visits to communities, assess local regulatory programs for compliance with state and federal requirements, and provide workshops and other outreach on flood hazard recognition and reduction. Proper flood control planning and projects protect both private and public property, as well as natural resources and fish and wildlife habitat.

Activity	Activity Title	Description
A041	Provide Technical Assistance on State Environmental Policy Act (SEPA) Review	SEPA was adopted in 1971 to ensure that state and local decision makers consider the environmental impacts of their actions. The SEPA law provides an opportunity for local citizen involvement in the environmental review process and provides developers an opportunity to identify mitigation opportunities that facilitate overall project approval and minimize development costs. The agency provides training and assistance to local governments and the public, and manages the SEPA register.
A042	Provide Technical Training, Education, and Research through Padilla Bay Estuarine Reserve	The Padilla Bay National Estuarine Research Reserve is one of 25 national reserves established to protect estuaries for research and education. The Padilla Bay Reserve in Skagit County conducts a broad array of public education programs, technical and professional training, coastal restoration, and scientific research and monitoring. The reserve, managed in partnership with the National Oceanic and Atmospheric Administration (NOAA), includes over 11,000 acres of tidelands and uplands; the Breazeale Interpretive Center; a research laboratory; residential quarters; trails; and support facilities. The reserve also provides funding and technical support to local Marine Resource Committees as part of the Northwest Straits Initiative, and administers the Northwest Straits Marine Commission as established by Senator Murray in 1998.
A043	Provide Water Quality Financial Assistance	Ecology provides grants, low-interest loans, and technical assistance to local governments, state agencies, and tribes to enable them to build, upgrade, repair, or replace facilities to improve and protect water quality. This includes meeting the state's obligation to manage the Water Pollution Control Revolving Fund in perpetuity. Ecology also funds nonpoint-source control projects such as watershed planning, stormwater management, freshwater aquatic weed management, education, and agricultural best management practices. Grants are targeted to nonpoint-source problems and communities where needed wastewater facilities projects would be a financial hardship for taxpayers. Local governments use loans for both point and nonpoint-source water pollution prevention and correction projects. Ecology coordinates grant and loan assistance with other state and federal funding agencies.
A044	Provide Water Resources Data and Information	The collection, management, and sharing of data and information is critical to modern water management. It is essential to local watershed groups, conservancy boards, businesses, local governments, nonprofit groups, the Legislature, other agencies, and the media. It supports daily agency operations, including making water allocation decisions; setting and achieving stream flows; identifying the location and characteristics of wells, dams, and water diversions; supporting compliance actions; metering; tracking progress; communicating with constituents; and serving other water resource functions.
A045	Reduce Air Pollution from Industrial and Commercial Sources	Ecology issues permits, conducts inspections, and assures compliance with state and federal air quality requirements for new and existing industrial and commercial facilities that emit significant levels of air pollution. The agency also provides permit application assistance, technical assistance, rule interpretation, and permit review.

Activity	Activity Title	Description
A047	Reduce Health and Environmental Threats from Motor Vehicle Emissions	Cars, trucks, construction equipment, locomotives, and marine vessels are responsible for over 60 percent of Washington's air pollution. More than half of Washington's residents have at least one medical condition that is made worse by air pollution. To protect public health and the environment from motor vehicle pollution, Ecology: • Implements Washington's Clean Car standards. • Promotes transportation alternatives and cleaner motor vehicles and fuels through voluntary, regulatory, and incentive programs. • Replaces or retrofits school buses and other diesel engines to reduce exposure to toxic diesel emissions.
A048	Reduce Health and Environmental Threats from Smoke	The two leading sources of smoke during the non-wildfire season (October – May) in Washington communities are outdoor burning and wood-burning for residential heat. To address smoke from outdoor burning, Ecology: • Issues conditioned permits for agricultural, land clearing, fire training, and other outdoor burning, where required by law. • Produces daily burn forecasts; responds to and resolves complaints related to smoke. • Provides technical assistance to manage and prevent outdoor burning impacts. • Through technical assistance, research, and demonstration projects, promotes development and use of practical alternatives to burning. To address smoke from residential wood heating, Ecology: • Coordinates burn curtailments. • Conducts wood stove change out programs. • Sets strict emission limits for new stoves. • Promotes development of clean burning technologies. • Coordinates with the Environmental Protection Agency on standards for residential home heating appliances. • Assists communities, local health organizations, and fire suppression agencies with health impact messaging and recommendations during large-scale wildfire events.
A049	Reduce Nonpoint-Source Water Pollution	Nonpoint-source pollution (polluted runoff) is the leading cause of water pollution and poses a major health and economic threat. Types of nonpoint pollution include fecal coliform bacteria, elevated water temperature, pesticides, sediments, and nutrients. Sources of pollution include agriculture, forestry, urban and rural runoff, recreation, hydrologic modification, and loss of aquatic ecosystems. Ecology addresses these problems through raising awareness; encouraging community action; providing funding; and supporting local decision makers. The agency also coordinates with other stakeholders through the Washington State Nonpoint Workgroup, the Forest Practices Technical Assistance group, and the Agricultural Technical Assistance group.

Activity	Activity Title	Description
A052	Reduce the Generation of Hazardous Waste and the Use of Toxic Substances through Technical Assistance	The state Hazardous Waste Reduction Act calls for the reduction of hazardous waste generation and the use of toxic substances and requires certain businesses to prepare plans for voluntary reduction. Staff provide on-site assistance through innovative programs designed to reduce the use of source and waste generation reduction. In addition, the agency focuses on improvements in industries that have the highest rate of waste generation and non-compliance to help them achieve energy savings, water conservation, and reduced hazardous waste production. Reducing the use of toxic chemicals in commerce reduces the generation of hazardous waste, minimizes disposal costs, reduces the need for clean-up, minimizes public exposure, and saves businesses money.
A053	Regulate Well Construction	The agency protects consumers, well drillers, and the environment by licensing and regulating well drillers, investigating complaints, approving variances from construction standards, and providing continuing education to well drillers. The work is accomplished in partnership with delegated counties. It delivers technical assistance to homeowners, well drillers, tribes, and local governments.
A054	Rapidly Respond to and Clean Up Oil and Hazardous Material Spills	This activity ensures Ecology and its partners respond to spills in a rapid, aggressive, and well-coordinated manner to ensure impacts to the environment are minimized. Spill response capability is maintained 24 hours a day and seven days a week statewide. This includes ensuring the safety of the public and emergency responders, performing cleanup and oversight of cleanup activities, coordinating wildlife rescue and rehabilitation activities, providing timely information to the public and stakeholders about response activities, and implementing protection strategies to minimize impacts to Washington's environmental, cultural and economic resources. Enforcement actions are issued based on results of incident investigations.
A055	Restore Public Natural Resources Damaged by Oil Spills	When spills occur, Ecology provides incident notification to natural resource trustees and responds to the incident to assess impacts, collect samples, and determine the extent of injury to state publicly owned resources. Ecology then leads the interagency Resource Damage Assessment (RDA) Committee to assess damages and seek fair compensation for damages to Washington resources. Ecology works with the RDA Committee and responsible parties in funding, planning, and implementing effective restoration projects to restore impacted resources. Ecology manages the Coastal Protection Fund Grant process for restoration work, and performs follow-up restoration site visits to ensure they were effective.
A056	Restore Watersheds by Supporting Community-Based Projects with the Washington Conservation Corps	The Washington Conservation Corps (WCC) was established in 1983 to conserve, rehabilitate, and enhance the state's natural and environmental resources, while providing educational opportunities and meaningful work experiences for young adults (ages 18-25). The WCC creates partnerships with federal, state, and local agencies, private entities, and nonprofit groups to complete a variety of conservation-related projects. These include stream and riparian restoration, wetlands restoration and enhancement, soil stabilization, and other forest restoration activities, fencing, and trail work. The WCC also provides emergency response and hazard mitigation services to local communities.

Activity	Activity Title	Description
A057	Services to Site Owners that Volunteer to Clean Up their Contaminated Sites	Ecology provides services to site owners or operators who initiate clean up of their contaminated sites. Voluntary cleanups can be done in a variety of ways: Completely independent of the agency; independent with some agency assistance or review; or with agency oversight under a signed legal agreement (an agreed order or consent decree). They may be done through consultations, prepayment agreements, prospective purchaser agreements, and brownfields redevelopment. The voluntary cleanup program minimizes the need for public funding used for such cleanup and promotes local economic development through new industries and other beneficial uses of cleaned properties.
A063	Climate Change Mitigation and Adaptation	State law sets limits on greenhouse gas emissions and establishes a portfolio of policies to reduce energy use and build a clean energy economy. It also sets requirements to prepare for and respond to climate changes that are already underway and unavoidable. To better understand the volume and sources of greenhouse gas emissions in the state, Ecology conducts a biennial emissions inventory and administers a program for mandatory greenhouse gas reporting. To help the state achieve its greenhouse gas targets, Ecology will continue to provide technical and analytical support to state decision makers, design and implement emission reduction strategies, and monitor and influence federal initiatives that reduce greenhouse gas emissions. Ecology helps local governments and state agencies identify and report their greenhouse gas emissions and develop strategies to reduce those emissions. Ecology makes information about the climate available to decision makers in the public and private sectors, as well as the public.
A064	Manage Solid Waste Safely	To ensure that solid waste handling and disposal facilities are in compliance with environmental requirements, Ecology: • Sets standards for the proper handling and disposal of solid waste. • Negotiates and implements cleanup orders under the Model Toxics Control Act, and oversees cleanup actions at solid waste facilities. • Provides technical assistance, permit review, and regulatory, engineering and hydrogeology expertise to local health departments who permit solid waste handling and disposal facilities.
A065	Reduce Toxic Chemicals in Products and Promote Safer Alternatives	Ecology is implementing a long-term strategy designed to reduce persistent, bioaccumulative toxics in Washington's environment through: • Engaging key organizations and interest groups, especially Department of Health, in reviewing science and developing action plans to reduce presence of these toxics in the environment. • Providing for public education and information on reducing toxics in the environment. Toxic chemicals in some types of consumer products pollute the environment and have the potential to harm humans and wildlife. Reducing toxic chemicals in consumer and other products over time will lower the risks to people and the environment. Ecology uses several strategies to achieve this goal, including: • Identifying chemicals of concern in consumer products and promoting safer alternatives to identified chemicals. • Promoting environmentally preferred purchasing. • Sampling and enforcing statutory reporting requirements and limits in specific products.

Dollars in Thousands

Activity:

CB	T0PL	No measures linked to activity
CB	T0PL	No measures linked to decision package
ML	KE	No measures linked to activity
ML	KE	No measures linked to decision package
PL	KB	No measures linked to activity
PL	KB	No measures linked to decision package
PL	KC	No measures linked to activity
PL	KC	No measures linked to decision package
PL	KH	No measures linked to activity
PL	KH	No measures linked to decision package
PL	KI	No measures linked to activity
PL	KI	No measures linked to decision package
PL	KJ	No measures linked to activity
PL	KJ	No measures linked to decision package
PL	KK	No measures linked to activity
PL	KK	No measures linked to decision package
PL	KL	No measures linked to activity
PL	KL	No measures linked to decision package
PL	KN	No measures linked to activity
PL	KP	No measures linked to activity
PL	KP	No measures linked to decision package
PL	KQ	No measures linked to activity
PL	KQ	No measures linked to decision package
PL	KS	No measures linked to activity
PL	KS	No measures linked to decision package
PL	KT	No measures linked to activity
PL	KT	No measures linked to decision package
PL	KU	No measures linked to activity
PL	KU	No measures linked to decision package
PL	KV	No measures linked to activity
PL	KV	No measures linked to decision package
PL	KW	No measures linked to activity
PL	KW	No measures linked to decision package

PL	KX	No measures linked to activity
PL	KX	No measures linked to decision package
PL	KZ	No measures linked to activity
PL	KZ	No measures linked to decision package
PL	LA	No measures linked to activity
PL	LA	No measures linked to decision package

Output Measures **001296 Number of Ecology-funded small business technical assistance visits conducted by local government**

			FY 2022	FY 2023	FY 2024	FY 2025
PL	KN	Pollution Prevention Assistance	0	250	250	250

Activity: A002 Administration

ML	9Z	No measures linked to decision package
ML	KE	No measures linked to decision package
PL	KB	No measures linked to decision package
PL	KC	No measures linked to decision package
PL	KH	No measures linked to decision package
PL	KI	No measures linked to decision package
PL	KJ	No measures linked to decision package
PL	KK	No measures linked to decision package
PL	KL	No measures linked to decision package
PL	KP	No measures linked to decision package
PL	KQ	No measures linked to decision package
PL	KS	No measures linked to decision package
PL	KT	No measures linked to decision package
PL	KU	No measures linked to decision package
PL	KV	No measures linked to decision package
PL	KW	No measures linked to decision package
PL	KX	No measures linked to decision package
PL	KZ	No measures linked to decision package
PL	LA	No measures linked to decision package

Output Measures **001296 Number of Ecology-funded small business technical assistance visits conducted by local government**

			FY 2022	FY 2023	FY 2024	FY 2025
PL	KN	Pollution Prevention Assistance	0	250	250	250

Activity: A003 Implementing Integrated Solutions to Protect Instream Resources

ML	9Z	No measures linked to decision package

Activity: A005 Clean up the Most Contaminated Sites First (Upland and Aquatic)

ML	9Z	No measures linked to decision package
PL	KH	No measures linked to decision package
PL	KJ	No measures linked to decision package
PL	KS	No measures linked to decision package
PL	KU	No measures linked to decision package
PL	KW	No measures linked to decision package

Activity: A006 Clean Up Polluted Waters

ML	9Z	No measures linked to decision package

Activity: A007 Conduct Environmental Studies for Pollution Source Identification and Control

ML	9Z	No measures linked to decision package
PL	KL	No measures linked to decision package

Activity: A008 Control Stormwater Pollution

ML	9Z	No measures linked to decision package
PL	KI	No measures linked to decision package

Activity: A009 Eliminate Waste and Promote Material Reuse

ML	9Z	No measures linked to decision package

Activity: A010 Prevent and Pick Up Litter

ML	9Z	No measures linked to decision package

Activity: A011 Ensure Dam Safety

ML	9Z	No measures linked to decision package

Activity: A012 Ensure Environmental Laboratories Provide Quality Data

ML	9Z	No measures linked to decision package
PL	KT	No measures linked to decision package

Activity: A013 Provide Planning and Financial Assistance to Manage and Reduce Waste

ML	9Z	No measures linked to decision package

Activity: A014 Restore the Air, Soil, and Water Contaminated from Past Activities at Hanford

ML	9Z	No measures linked to decision package

Activity: A015 Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford

ML	9Z	No measures linked to decision package
PL	KC	No measures linked to decision package

Activity: A016 Treat and Dispose of Hanford's High-Level Radioactive Tank Waste

ML	9Z	No measures linked to decision package

Activity: A017 Ensure Safe Tank Operations, Storage of Tank Wastes, & Closure of the Waste Storage Tanks a

ML	9Z	No measures linked to decision package

Activity: A018 Ensure the Safe Management of Radioactive Mixed Waste at Hanford

ML 9Z — No measures linked to decision package

Activity: A019 Improve Community Access to Hazardous Substance and Waste Information

ML 9Z — No measures linked to decision package
PL KZ — No measures linked to decision package

Activity: A020 Improve Quality of Data Used for Environmental Decision Making

ML 9Z — No measures linked to decision package
PL KP — No measures linked to decision package

Activity: A021 Increase Compliance and Act on Environmental Threats from Hazardous Waste

ML 9Z — No measures linked to decision package
PL KQ — No measures linked to decision package

Output Measures **001296 Number of Ecology-funded small business technical assistance visits conducted by local government**

			FY 2022	FY 2023	FY 2024	FY 2025
PL	KN	Pollution Prevention Assistance	0	250	250	250

Activity: A023 Manage Underground Storage Tanks to Minimize Releases

ML 9Z — No measures linked to decision package
PL KU — No measures linked to decision package

Activity: A024 Manage Water Rights

ML	9Z	No measures linked to decision package

Activity: A025 Measure Air Pollution Levels and Emissions

ML	9Z	No measures linked to decision package

Activity: A026 Measure Contaminants in the Environment by Performing Laboratory Analyses

ML	9Z	No measures linked to decision package

Activity: A027 Monitor the Quality of State Waters and Measure Stream Flows Statewide

ML	9Z	No measures linked to decision package

Activity: A028 Improve Environmental Compliance at State's Largest Industrial Facilities

ML	9Z	No measures linked to decision package

Activity: A030 Prepare for Aggressive Response to Oil and Hazardous Material Incidents

ML	9Z	No measures linked to decision package
PL	KK	No measures linked to decision package
PL	KV	No measures linked to decision package

Activity: A031 Prevent Hazardous Waste Pollution Through Permitting, Closure, and Corrective Action

ML	9Z	No measures linked to decision package

Activity: A032 Prevent Point Source Water Pollution

ML	9Z	No measures linked to decision package
PL	KB	No measures linked to decision package

Activity: A033 Prevent Oil Spills from Vessels and Oil Handling Facilities

ML	9Z	No measures linked to decision package

Activity: A034 Prevent Unhealthy Air and Violations of Air Quality Standards

ML	9Z	No measures linked to decision package

Activity: A035 Promote Compliance with Water Laws

ML	9Z	No measures linked to decision package

Activity: A036 Protect and Manage Shorelines in Partnership with Local Governments

ML	9Z	No measures linked to decision package

Activity: A037 Protect Water Quality by Reviewing and Conditioning Construction Projects

ML	9Z	No measures linked to decision package

Activity: A038 Protect, Restore, and Manage Wetlands

ML	9Z	No measures linked to decision package

Activity: A040 Provide Technical and Financial Assistance to Local Governments to Reduce Flood Hazards

ML	9Z	No measures linked to decision package

Activity: A041 Provide Technical Assistance on State Environmental Policy Act (SEPA) Review

ML	9Z	No measures linked to decision package
PL	LA	No measures linked to decision package

Activity: A042 Provide Technical Training, Education, and Research through Padilla Bay Estuarine Reserve

ML	9Z	No measures linked to decision package

Activity: A043 Provide Water Quality Financial Assistance

ML	9Z	No measures linked to decision package

Activity: A044 Provide Water Resources Data and Information

ML	9Z	No measures linked to decision package

Activity: A045 Reduce Air Pollution from Industrial and Commercial Sources

ML	9Z	No measures linked to decision package

Activity: A047 Reduce Health and Environmental Threats from Motor Vehicle Emissions

ML	9Z	No measures linked to decision package

Activity: A048 Reduce Health and Environmental Threats from Smoke

ML 9Z — No measures linked to decision package

Activity: A049 Reduce Nonpoint-Source Water Pollution

ML 9Z — No measures linked to decision package

Activity: A052 Reduce the Generation of Hazardous Waste and the Use of Toxic Substances through Technical

ML 9Z — No measures linked to decision package

Activity: A053 Regulate Well Construction

ML 9Z — No measures linked to decision package

Activity: A054 Rapidly Respond to and Clean Up Oil and Hazardous Material Spills

ML 9Z — No measures linked to decision package
PL KQ — No measures linked to decision package

Activity: A055 Restore Public Natural Resources Damaged by Oil Spills

ML 9Z — No measures linked to decision package

Activity: A056 Restore Watersheds by Supporting Community-Based Projects with the Washington Conserva

ML 9Z — No measures linked to decision package

Activity: A057 Services to Site Owners that Volunteer to Clean Up their Contaminated Sites

ML	9Z	No measures linked to decision package

Activity: A063 Climate Change Mitigation and Adaptation

ML	9Z	No measures linked to decision package
ML	KE	No measures linked to decision package
PL	KX	No measures linked to decision package
PL	LA	No measures linked to decision package

Activity: A064 Manage Solid Waste Safely

ML	9Z	No measures linked to decision package

Activity: A065 Reduce Toxic Chemicals in Products and Promote Safer Alternatives

ML	9Z	No measures linked to decision package

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2021-23 ACTIVITY INVENTORY INDIRECT COST ALLOCATION

DEPARTMENT OF ECOLOGY
7/27/2021

			Bien	FY 2022			FY 2023			Bien
Act. #	Prog	Activity Title	% Allocation Received	Program Admin	Agency Overhead	Total Indirect	Program Admin	Agency Overhead	Total Indirect	Total Allocated
A002	A00	Administration	10.00%	532,255	4,536,310	5,068,565	539,695	4,596,370	5,136,065	10,204,630
A003	H00	Implementing Integrated Solutions to Protect Instream Resources	2.04%	122,176	911,138	1,033,314	122,176	923,202	1,045,378	2,078,692
A005	J00	Clean up the Most Contaminated Sites First (Upland and Aquatic)	8.62%	379,793	3,991,077	4,370,870	379,793	4,043,920	4,423,713	8,794,583
A006	F00	Clean Up Polluted Waters	1.44%	68,545	659,121	727,666	68,545	667,848	736,393	1,464,059
A007	D00	Conduct Environmental Studies for Pollution Source Identification and Control	4.36%	174,499	2,034,310	2,208,809	177,083	2,061,245	2,238,328	4,447,137
A008	F00	Control Stormwater Pollution	2.62%	125,246	1,204,351	1,329,597	125,246	1,220,296	1,345,542	2,675,139
A009	N00	Eliminate Waste and Promote Material Reuse	2.51%	162,519	1,107,421	1,269,940	172,545	1,122,083	1,294,628	2,564,568
A010	N00	Prevent and Pick Up Litter	1.36%	87,661	597,329	684,990	93,068	605,238	698,306	1,383,296
A011	H00	Ensure Dam Safety	0.73%	43,867	327,137	371,004	43,867	331,469	375,336	746,340
A012	D00	Ensure Environmental Laboratories Provide Quality Data	0.39%	15,590	181,743	197,333	15,820	184,149	199,969	397,302
A013	N00	Fund Local Efforts to Clean Up Toxic Sites and Manage or Reduce Waste	0.60%	38,763	264,133	302,896	41,154	267,630	308,784	611,680
A014	K00	Restore the Air, Soil, and Water Contaminated from Past Activities at Hanford	1.01%	103,856	407,104	510,960	103,856	412,495	516,351	1,027,311
A015	K00	Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford	0.77%	79,437	311,386	390,823	79,437	315,509	394,946	785,769
A016	K00	Treat and Dispose of Hanford's High-level Radioactive Tank Waste	2.00%	206,166	808,151	1,014,317	206,166	818,851	1,025,017	2,039,334
A017	K00	Ensure Safe Tank Operations, Storage of Tank Wastes, and Closure of the Waste Storage Tanks at Hanford	1.10%	113,747	445,876	559,623	113,747	451,780	565,527	1,125,150
A018	K00	Ensure the Safe Management of Radioactive Mixed Waste at Hanford	1.28%	132,292	518,573	650,865	132,292	525,440	657,732	1,308,597
A019	M00	Improve Community Access to Hazardous Substance and Waste Information	1.27%	74,473	570,673	645,146	74,473	578,229	652,702	1,297,848
A020	D00	Improve Quality of Data Used for Environmental Decision Making	0.24%	9,562	111,469	121,031	9,703	112,945	122,648	243,679
A021	M00	Increase Safe Hazardous Waste Management, Pollution Prevention, and Compliance with Dangerous Waste Regulations	2.92%	170,925	1,309,762	1,480,687	170,925	1,327,103	1,498,028	2,978,715
A023	J00	Manage Underground Storage Tanks to Minimize Releases	1.24%	54,421	571,885	626,306	54,421	579,457	633,878	1,260,184
A024	H00	Manage Water Rights	3.23%	193,500	1,443,040	1,636,540	193,500	1,462,146	1,655,646	3,292,186
A025	B00	Measure Air Pollution Levels and Emissions	1.36%	87,862	598,540	686,402	90,195	606,465	696,660	1,383,062
A026	D00	Measure Contaminants in the Environment by Performing Laboratory Analyses	1.59%	63,605	741,512	805,117	64,547	751,329	815,876	1,620,993
A027	D00	Monitor the Quality of State Waters and Measure Stream Flows Statewide	2.84%	113,492	1,323,089	1,436,581	115,173	1,340,607	1,455,780	2,892,361
A028	N00	Improve Environmental Compliance at State's Largest Industrial Facilities	1.16%	75,214	512,515	587,729	79,854	519,301	599,155	1,186,884
A030	P00	Prepare for Aggressive Response to Oil and Hazardous Material Incidents	1.32%	115,934	554,922	670,856	116,515	562,269	678,784	1,349,640
A031	M00	Prevent Hazardous Waste Pollution Through Permitting, Closure, and Corrective Action	0.82%	48,068	368,333	416,401	48,068	373,209	421,277	837,678
A032	F00	Prevent Point Source Water Pollution	5.28%	252,257	2,425,664	2,677,921	252,257	2,457,780	2,710,037	5,387,958
A033	P00	Prevent Oil Spills from Vessels and Oil Handling Facilities	1.49%	130,362	623,984	754,346	131,015	632,246	763,261	1,517,607
A034	B00	Prevent Unhealthy Air and Violations of Air Quality Standards	1.80%	116,853	796,035	912,888	119,956	806,574	926,530	1,839,418
A035	H00	Promote Compliance with Water Laws	0.78%	46,953	350,158	397,111	46,953	354,794	401,747	798,858
A036	E00	Protect and Manage Shorelines in Partnership with Local Governments	2.01%	81,287	937,794	1,019,081	82,810	950,211	1,033,021	2,052,102
A037	E00	Protect Water Quality by Reviewing and Conditioning Construction Projects	1.13%	45,475	524,632	570,107	46,326	531,578	577,904	1,148,011
A038	E00	Protect, Restore, and Manage Wetlands	1.65%	66,689	769,379	836,068	67,938	779,566	847,504	1,683,572
A040	E00	Provide Technical and Financial Assistance to Local Governments to Reduce Flood Hazards	0.42%	16,804	193,859	210,663	17,118	196,426	213,544	424,207
A041	E00	Provide Technical Assistance on State Environmental Policy Act (SEPA) Review	0.35%	14,178	163,569	177,747	14,444	165,734	180,178	357,925
A042	E00	Provide Technical Training, Education, and Research through Padilla Bay	0.91%	36,653	422,855	459,508	37,339	428,454	465,793	925,301
A043	F00	Provide Water Quality Financial Assistance	2.78%	132,807	1,277,048	1,409,855	132,807	1,293,956	1,426,763	2,836,618
A044	H00	Provide Water Resources Data and Information	1.79%	107,067	798,458	905,525	107,067	809,030	916,097	1,821,622
A045	B00	Reduce Air Pollution from Industrial and Commercial Sources	1.09%	70,610	481,013	551,623	72,485	487,382	559,867	1,111,490
A047	B00	Reduce Health and Environmental Threats from Motor Vehicle Emissions	0.46%	29,524	201,129	230,653	30,309	203,792	234,101	464,754
A048	B00	Reduce Health and Environmental Threats from Smoke	0.87%	56,559	385,295	441,854	58,061	390,397	448,458	890,312

2021-23 ACTIVITY INVENTORY INDIRECT COST ALLOCATION

DEPARTMENT OF ECOLOGY
7/27/2021

			Bien	FY 2022			FY 2023			Bien
Act. #	Prog	Activity Title	% Allocation Received	Program Admin	Agency Overhead	Total Indirect	Program Admin	Agency Overhead	Total Indirect	Total Allocated
A049	F00	Reduce Nonpoint Source Water Pollution	1.89%	90,504	869,943	960,447	90,504	881,462	971,966	1,932,413
A052	M00	Reduce the Generation of Hazardous Waste and the Use of Toxic Substances	1.20%	70,204	537,959	608,163	70,204	545,082	615,286	1,223,449
A053	H00	Regulate Well Construction	0.37%	22,096	164,780	186,876	22,096	166,962	189,058	375,934
A054	P00	Rapidly Respond to and Clean Up Oil and Hazardous Material Spills	2.29%	200,479	959,603	1,160,082	201,484	972,309	1,173,793	2,333,875
A055	P00	Restore Public Natural Resources Damaged by Oil Spills	0.16%	14,175	67,851	82,026	14,246	68,749	82,995	165,021
A056	E00	Restore Watersheds by Supporting Community-Based Projects with the WCC	3.37%	136,214	1,571,472	1,707,686	138,765	1,592,278	1,731,043	3,438,729
A057	J00	Services to Site Owners that Volunteer to Clean Up their Contaminated Sites	1.39%	61,339	644,582	705,921	61,339	653,116	714,455	1,420,376
A063	B00	Climate Change Mitigation and Adaptation	5.01%	324,414	2,209,995	2,534,409	333,029	2,239,256	2,572,285	5,106,694
A064	N00	Manage Solid Waste Safely	1.32%	85,349	581,578	666,927	90,614	589,278	679,892	1,346,819
A065	M00	Reduce Persistent, Bioaccumulative, Toxic Chemicals and Promote Safer Consumer Products	1.39%	81,114	621,561	702,675	81,114	629,791	710,905	1,413,580
		Total	**100.00%**	**5,683,434**	**44,991,096**	**50,674,530**	**5,752,144**	**45,586,788**	**51,338,932**	**102,013,462**

Allocation Method Description

Under OFM definitions, "administrative" costs are made up of two components, indirect costs and overhead costs.

1. "Indirect" costs, the subject of this table, are costs that tend to vary with activity level or size. These costs are assigned to activities and are included in the cost of each activity. For Ecology, these include program administration costs, and agency level cost allocated costs. Program administration costs are incurred within the environmental programs and are assigned to the activities within each program based on FTEs. Agency level cost allocated costs are allocated to environmental programs according to various allocation bases (e.g. facility costs are allocated based on square footage) and then assigned to activities within each program based on FTEs.
2. "Overhead" costs are costs that usually support the entire organization, and tend to be relatively fixed and not readily affected by fluctuations in activity levels. These costs are not assigned to activities. They make up the one "administration" activity. In Ecology these costs are in program A00.

Department of Ecology
2022 Supplemental Operating Budget
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ABS024 Recommendation Summary
Department of Ecology
2022 First Supplemental Budget Session
S1 - Supplemental 2022

Dollars in Thousands

		Average Annual FTEs	General Fund State	Other Funds	Total Funds
CB T0PL	Current Biennium Base	1,856.7	88,581	578,087	666,668
2021-23 Current Biennium Total		**1,856.7**	**88,581**	**578,087**	**666,668**
Total Carry Forward Level		**1,856.7**	**88,581**	**578,087**	**666,668**
Percent Change from Current Biennium		.0%	.0%	.0%	.0%
Maintenance – Other Changes					
ML KA	NWRO Furniture COP Reduction	0.0	(39)	(289)	(328)
ML KE	Clean Air Rule Reduction	(20.1)	0	(4,518)	(4,518)
Maintenance – Other Total		**(20.1)**	**(39)**	**(4,807)**	**(4,846)**
Total Maintenance Level		**1,836.6**	**88,542**	**573,280**	**661,822**
Percent Change from Current Biennium		(1.1)%	.0%	(.8)%	(.7)%
Policy – Other Changes					
PL KB	Reduce Nutrients in Puget Sound	1.8	0	989	989
PL KC	Hanford Dangerous Waste Inspections	0.6	0	145	145
PL KD	Support Brownfields Cleanup	0.0	0	500	500
PL KF	Shoreline Aerial Photography	0.0	0	200	200
PL KG	Reduce Food Waste & Prevent Litter	0.0	0	1,800	1,800
PL KH	Abandoned Mine Lands	1.2	0	352	352
PL KI	Protect State Waters from Toxics	2.9	0	714	714
PL KJ	Affordable Housing Cleanup Program	1.2	0	330	330
PL KK	Certifying Financial Responsibility	0.9	0	287	287
PL KL	Land Use and Groundwater	1.3	0	407	407
PL KM	Fix & Modernize WQ Permit Systems	0.0	0	500	500
PL KN	Pollution Prevention Assistance	1.2	0	684	684
PL KP	Improved Stream Mapping	2.3	901	0	901
PL KQ	Illegal Drug Ops Hazardous Waste	4.4	0	1,583	1,583
PL KR	Spill Response Vehicles & Equipment	0.0	0	662	662
PL KS	Prioritize and Complete Cleanups	3.5	0	916	916
PL KT	Laboratory Accreditation Auditors	1.8	0	513	513
PL KU	UST/LUST Inspection/Cleanup Backlog	4.1	0	1,757	1,757
PL KV	Oil Spill Contingency Planning	1.2	0	333	333
PL KW	Legacy Pesticide Pollution	1.2	0	290	290
PL KX	Implement Climate Commitment Act	7.2	856	1,450	2,306
PL KY	WCC Community Support	0.0	0	738	738
PL KZ	Hazardous Waste & Toxics IT Systems	0.6	0	204	204
PL LA	GHG Assessment for Projects	1.1	0	538	538
PL LB	Water Banking Pilot Budget Shift	0.0	(9,000)	0	(9,000)
Policy – Other Total		**37.9**	**(7,243)**	**15,892**	**8,649**

Subtotal - Policy Level Changes	**37.9**	**(7,243)**	**15,892**	**8,649**
2021-23 Total Policy Level	**1,874.4**	**81,299**	**589,172**	**670,471**
Percent Change from Current Biennium	1.0%	(8.2)%	1.9%	.6%

ML KA NWRO Furniture COP Reduction

Ecology relocated its Northwest Regional Office from Bellevue to a facility in Shoreline in July 2021 , co-locating with the Washington State Department of Transportation. In support of that move, Ecology requested, and received appropriation authority in the 2021-23 operating budget to fund a Certificate of Participation (COP) to finance the costs of new furniture needed at the new facility. However, Ecology was able to pay for the furniture in full at the end of the 2019-21 biennium , using one-time positive variance. Therefore, Ecology is now requesting an associated appropriation reduction for the COP funding that is no longer needed. (Multiple Funds)

ML KE Clean Air Rule Reduction

In 2021, the Legislature passed Engrossed Second Substitute Senate Bill 5126 .PL – Climate Commitment Act, which establishes a comprehensive program to reduce carbon pollution and achieve the greenhouse gas limits set in state law . Section 23 of the Act preempts the provisions of Chapter 173-442 WAC – Clean Air Rule , and directs that no state agency may adopt or enforce a program that regulates greenhouse gas emissions for a stationary source except as provided under the Act . As a result, Ecology is now requesting a reduction in our appropriation and FTE authority for the funding to implement the Clean Air Rule , which is no longer needed, beginning in fiscal year 2022. (Model Toxics Control Operating Account)

PL KB Reduce Nutrients in Puget Sound

The health of Puget Sound is significantly degraded by human sources of excess nutrients that cause low dissolved oxygen , disrupt the food chain, and imperil our orca and salmon populations. With one-time funding provided in fiscal year 2020 , Ecology developed a Nutrients General Permit for Puget Sound wastewater treatment plants to reduce nutrient pollution using a coordinated, transparent, public process. The final permit will be issued by the end of 2021 , and Ecology requires staff to administer the permit and provide technical assistance to permittees . This request supports orca and salmon recovery and protection, the Puget Sound Action Agenda's Marine Implementation Strategy , and the Puget Sound Nutrient Source Reduction Project. Related to Puget Sound Action Agenda Implementation. (Water Quality Permit Account and Model Toxics Control Operating Account)

PL KC Hanford Dangerous Waste Inspections

Ecology is required to complete annual inspections of the mixed-waste facilities located at Hanford , in accordance with our Performance Partnership Agreement with the U.S. Environmental Protection Agency. Ecology staff currently inspect 29 operating and closure/post-closure facilities each year. However, beginning in 2022, the U.S. Department of Energy will activate six new mixed-waste facilities at Hanford, including the new waste treatment plant, designed to treat 56 million gallons of mixed radioactive/hazardous waste. Ecology is requesting funding for additional staff to complete the required inspections for these new facilities. (Radioactive Mixed Waste Account and Water Quality Permit Account)

PL KD Support Brownfields Cleanup

There are over 13,700 sites on Ecology's Confirmed and Suspected Contaminated Sites List , and about 6,000 of these are awaiting further investigation and cleanup. A portion of these sites are located in underserved , small, rural, and/or disadvantaged communities. To facilitate cleanup and encourage reuse of properties in these communities , Ecology requests ongoing funding to offer assessment or limited cleanup of selected properties with high redevelopment potential . Ecology will collaborate with local governments in small, rural communities, along with overburdened or underserved communities in urban areas , to identify publicly-owned properties or ones where private owners will allow site access and investigation . (Model Toxics Control Operating Account)

PL KF Shoreline Aerial Photography

Shoreline aerial photographs are an important tool for managing thousands of miles of marine and freshwater shorelines across Washington. Ecology's current collection of shoreline aerial photography is used by resource managers from across the state as a unique source of information for documenting shoreline change over time. They provide important data points for ongoing implementation, evaluation, and improvement of local shoreline master programs, and allow resource managers to better understand development patterns, the locations of critical habitats, and ecosystem changes over time. The last set of photos was taken in 2016, and Ecology's goal is to update these photos every five years. This request will support the collection of 15,000-20,000 new aerial photographs of Washington's 3,300 miles marine shorelines, and around 1,000 miles of large river and lake shorelines throughout the state. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

PL KG Reduce Food Waste & Prevent Litter

Food waste and litter are two of the biggest challenges currently facing communities across Washington, with significant social, environmental, and economic impacts. To help address these issues, the Legislature has passed a number of bills in recent years, including the Food Waste Reduction Act of 2019. This Act established a statewide food waste reduction goal and required the development of a food waste reduction plan to reach those targets. The draft plan, which will be completed by the end of 2021, includes 30 specific recommendations for reducing food waste in Washington. Ecology requests funding to implement an initial recommendation to develop a series of food waste reduction campaigns. Funding will also be used to support the expansion of litter prevention campaigns needed across the state. Related to Puget Sound Action Agenda implementation. (Waste Reduction, Recycling, and Litter Control Account)

PL KH Abandoned Mine Lands

Washington has a legacy of mining activity and that history has led to hundreds of abandoned mines across the state. Since 2007, Ecology has worked to create an inventory of mines with known contamination. From an original list of over 500 potential sites, our field assessments have identified approximately 200 abandoned mine sites that currently require cleanup, while many others are likely awaiting discovery. Mine sites have unique aspects and challenges; most are in remote areas, are contaminated with heavy metals, pollute nearby surface water, and lack viable financial resources to support cleanup. To make real progress in cleaning up these sites, staff resources are needed to develop and implement strategies to reduce this backlog of orphan sites. (Model Toxics Control Operating Account)

PL KI Protect State Waters from Toxics

Managing toxic pollutants in discharges from contaminated sites is important to protect human health and Washington waters. Using a system of water quality permits and water cleanup plans, Ecology helps prevent toxic chemicals from entering the environment. But toxic chemicals, including those of emerging concern, may become mobilized during site remediation activities and threaten our ability to achieve state and national goals for fishable waters, salmon recovery, and healthy watersheds. This request will help provide the support needed to address toxics in stormwater runoff from industrial and contaminated sites, in turn getting contaminated properties back into use sooner for affordable housing, economic redevelopment, public access, and overall economic vitality in the community. Related to Puget Sound Action Agenda implementation. (Model Toxics Control Operating Account)

PL KJ Affordable Housing Cleanup Program

Washington is in dire need of affordable housing across the state. The 2019 Annual Report of the Affordable Housing Advisory Board found that, in 2019, "…affordability worsened throughout the state by 10 percent." One of the report's recommendations is to help local governments reach appropriate housing goals by identifying strategies that will help housing developers make investments. Whether in an urban or rural setting, contamination or suspicion of contamination, drives up the costs of housing development. Ecology's Affordable Housing Cleanup Grant Program offers funding through the capital budget for public, nonprofit, and private entities intending to remediate contaminated property to develop affordable housing. This request will support the transition of this program to a permanent, forward-facing, competitive grant program, and provide permanent technical assistance and formal oversight for affordable housing related cleanups moving forward. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

PL KK Certifying Financial Responsibility

Chapter 88.40 RCW requires certain vessels and facilities transporting, storing, handling, or transferring oil and hazardous substances in Washington to demonstrate a defined level of financial responsibility for the costs of a spill. In 2021, the Legislature included a proviso in section 302(3) of the 2021-23 enacted operating budget that requires Ecology to adopt rules to implement the provisions of RCW 88.40.025 for oil handling facilities. However, funding was not provided to complete the rulemaking process, so Ecology is now requesting the funding needed to adopt those rules, and establish a Certificate of Financial Responsibility program to ensure compliance with these requirements for both facilities and vessels moving forward. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account and Oil Spill Prevention Account)

PL KL Land Use and Groundwater

Groundwater in the Lower Yakima Valley aquifer is contaminated with elevated concentrations of nitrate, and is the principal drinking water source for over 56,000 residents in the area. In 2012, the Lower Yakima Valley developed a groundwater management area and in 2019 finalized an implementation plan with recommendations for reducing groundwater nitrate contamination in the area. To further implementation of several recommendations from that plan, Ecology requests ongoing funding and staff resources needed to analyze deep soil samples that are being collected, develop and implement pilot projects to determine effective land-use best management practices, and provide outreach and education to area residents regarding changes that are needed to reduce nitrate contamination. (Model Toxics Control Operating Account)

PL KM Fix & Modernize WQ Permit Systems

Ecology's complex information technology systems that support water quality permit coverage and monitoring reports are antiquated and inefficient. Permittees are frustrated by the poor user system interface, and compliance data is not flowing to the Environmental Protection Agency properly, making permitted facilities appear out of compliance at an alarming rate. Ecology staf are currently struggling to maintain existing functionality and are unable to resolve or improve many long-standing system challenges. This request for one-time resources will use dedicated water quality permit funding to hire a contractor to make critical improvements to the usability and reporting accuracy of Ecology's water quality permitting systems. (Water Quality Permit Account)

PL KN Pollution Prevention Assistance

Through the Pollution Prevention Partnership, Ecology currently provides funding to 26 local government partners who provide hands-on technical and regulatory assistance to small businesses across the state. Specialists in these jurisdictions show businesses how to manage their waste properly and help diagnose and fix stormwater-related issues. These specialists are also key implementers of the new Product Replacement Program, which provides funding through the capital budget so businesses can remove toxic chemicals from their facilities and work processes. Currently, the vast majority of technical and financial assistance provided through the partnership occurs in western Washington. This request will provide funding to expand the partnership to three new health districts in eastern Washington, and provide the staffing needed to continue effectively managing the partnership as it expands. (Model Toxics Control Operating Account)

PL KP Improved Stream Mapping

Riparian zones play a significant role in supporting water quality, along with the health and diversity of aquatic and terrestrial species throughout Washington. As acknowledged by Governor Inslee and Tribal leaders at the November 2019 Annual Centennial Accord Meeting, growing and protecting trees along the lengths of the state's rivers and streams safeguards our water and builds resilience for our communities. However, in order to better monitor the health of our riparian buffers, the state must significantly improve the accuracy of how our streams are mapped. This request supports a two-year pilot project to identify the technologies, methodologies, datasets, and resources needed to refine and maintain the accuracy of the National Hydrography Dataset for Washington. The State/Tribal Riparian Protection & Restoration Workgroup's Monitoring and Adaptive Management Team identified this request as a top priority for addressing stream-mapping inaccuracies that currently prohibit a statewide riparian assessment and monitoring program. Related to Puget Sound Action Agenda Implementation. (General Fund-State)

PL KQ Illegal Drug Ops Hazardous Waste

Ecology supports law enforcement agencies by helping to manage the dangerous waste found at illegal drug operations. Ecology's spill responders regularly participate alongside law enforcement personnel in these responses, and collect the dangerous waste from these sites, arranging for its proper storage and eventual disposal. The number of these responses has increased significantly over the last five years, and as a result, so too has the amount of dangerous waste having to be temporarily stored at Ecology facilities. Ecology needs additional staffing resources so that we can continue to support our law enforcement partners in these situations, while still being able to complete required follow-up actions for all responses that occur throughout the state. Staff are also needed to ensure that Ecology can meet the dangerous waste requirements for a large quantity waste generator under Chapter 173-303 WAC. (Model Toxics Control Operating Account)

PL KR Spill Response Vehicles & Equipment

Ecology has the primary responsibility under Chapter 90.56 RCW to respond to and contain spills of oil, petroleum products, and other hazardous substances to waters of the state. Ecology spill responders provide year-round, statewide, 24-hour a day response to these incidents, but require specialized vehicles and equipment to safety and effectively do so. Ecology does not have an adequate dedicated equipment budget for the periodic replacement or acquisition of responder equipment, nor a sufficient base budget to ensure the timely replacement of our response vehicles. To ensure that our spill responders are outfitted with the vehicles and equipment needed to safely and effectively respond and do their jobs, Ecology is requesting funding to establish a response vehicle replacement program, and acquire safety equipment that is needed this biennium. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

PL KS Prioritize and Complete Cleanups

Contaminated site cleanups continue to outweigh and outpace current cleanup resources. Between 200 and 300 new contaminated sites are reported to Ecology each year, exceeding the number of sites we can cleanup, and increasing the backlog of cleanups that need to occur. More than 6,000 existing contaminated sites need further cleanup action, and hazards at over 4,200 of these have not been ranked or assessed for threats to human health and the environment. This request will support the implementation of Ecology's new Site Hazard Assessment and Ranking Process, designed to more quickly and accurately assess and rank the potential hazards at a reported site. This request will also provide additional engineering and contracting staff needed to expedite our state-directed cleanup projects. Related to Puget Sound Action Agenda Implementation (Model Toxics Control Operating Account)

PL KT Laboratory Accreditation Auditors

Ecology accredits drinking water laboratories through a memorandum of agreement with the Department of Health . It is a requirement of the federal Safe Drinking Water Act that these laboratories be audited every three years , which is critical element to ensuring municipal drinking water is safe for consumption . A 2021 audit of Ecology's accreditation program by the Environmental Protection Agency found a number of laboratories have not been audited in accordance with this requirement . Ecology does not currently have sufficient staff to conduct the needed audits within the required timeframe . This request will provide additional auditors for two years as a stopgap solution to bring all of Washington's drinking water laboratories up to date on accreditation. (Model Toxics Control Operating Account)

PL KU UST/LUST Inspection/Cleanup Backlog

Ecology regulates almost 9,000 operating underground storage tanks that store over three billion gallons of fuel each year . Releases from properly operated and maintained tanks are rare , but when they do occur, they can contaminate soil, groundwater, and remain in the environment for decades if not cleaned up . The Environmental Protection Agency requires these tank sites be inspected every three years, and Ecology needs additional staff to address a 2019 audit finding and ensure that we can meet this requirement moving forward. This request will also support additional cleanup project managers needed to oversee the cleanup of more than 2,600 known contaminated leaking underground storage tank sites throughout Washington . Petroleum contamination from these sites can impact human health and the environment , while also depressing property values and preventing redevelopment. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

PL KV Oil Spill Contingency Planning

The Northwest Area Contingency Plan is Washington State's master spill contingency plan for emergency response , and has served as the Northwest region's portion of the National Contingency Plan for over 20 years . On October 27, 2020, the U.S. Coas Guard announced that it will no longer recognize that plan as their coastal Area Contingency Plan for Sector Columbia River and Sector Puget Sound, and directed the Captains of the Port for these two sectors to exclusively recognize USCG-developed , sector-specific plans moving forward. In response to the Coast Guard's decision, Ecology is requesting funding to support additional staff needed to develop new state emergency response plans for these two areas , integrate them with those now being used by our federal partners, and update them annually per requirements in RCW 90 .56.060. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account and Oil Spill Prevention Account)

PL KW Legacy Pesticide Pollution

A pesticide called lead arsenate was widely used throughout Central Washington to control codling moth infestations on fruit trees in the early half of the 20th century (between 1900 and 1950). This resulted in widespread lead and arsenic contamination on historic orchard lands, with nearly 115,000 acres of land in Central Washington potentially contaminated . In 2019, Ecology convened the Legacy Pesticide Working Group to find better ways of addressing the challenges faced by communities as contaminated orchard lands are transitioned to new uses like housing developments , schools, and other business ventures. The workgroup's final report in January 2021 included a set of recommendation to help developers , landowners, and community members address lead and arsenic contamination on historic orchard lands in Central Washington . Ecology is now requesting funding for the additional staff needed to implement these recommendations . (Model Toxics Control Operating Account)

PL KX Implement Climate Commitment Act

In 2021, the Legislature passed Engrossed Second Substitute Senate Bill 5126 PL – Climate Commitment Act , which establishes a comprehensive program to reduce carbon pollution and achieve the greenhouse gas limits set in state law . The new law directs Ecology to develop rules to implement a cap on carbon emissions , including mechanisms for the sale and tracking of tradable emissions allowances, along with compliance and accountability measures. While Ecology received funding in the 2021-23 operating budget to begin implementation, there were considerable changes to the bill late in session , and these caused Ecology to be underfunded in the current biennium, as compared to the cost estimates included in our final fiscal note for the bill that passed. Ecology is now requesting that funding difference to ensure that we can fully begin implementation of this new law in 2021-23. (General Fund-State, Climate Investment Account)

PL KY WCC Community Support

Washington Conservation Corps (WCC) collaborates with organizations to complete environmental stewardship projects statewide. WCC's cost-share requires partners fund 75 percent of crew costs, while WCC funds the remaining 25 percent with state appropriations and an AmeriCorps grant. While this cost-share is the best approach for funding the core WCC program in a marketplace of similar programs, it presents barriers for organizations in under-resourced areas. To further the state's goals around environmental justice, Ecology requests funding for a two-year pilot project to provide five WCC crews with no partner-provided cost-share for projects in areas of the state where assistance is most needed. (Model Toxics Control Operating Account)

PL KZ Hazardous Waste & Toxics IT Systems

State and federal regulations require generators of hazardous waste, and manufactures of consumer products that may contain toxic chemicals, to report information and data to the Department of Ecology, which is collect through two existing IT systems. TurboWaste is used to collect information from more than 4,000 hazardous waste generators every year on the on quantity, concentrations, and characteristics of waste generated. The High Priorities Chemical Data System collects manufacture information on toxic chemicals in consumer products, as required by Washington's Children's Safer Products Act. Ecology is requesting funding for additional IT staff and contracting resources to enhance and maintain these two systems so that we can continue to meet increasingly complicated federal reporting requirements, ensure compliance with state laws, and provide technical assistance to these business partners. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

PL LA GHG Assessment for Projects

In 2019, the Governor directed Ecology to adopt rules by September 1, 2021 for assessing greenhouse gas emissions from fossil fuel and industrial projects. One-time funding was provided in the 2020 supplemental operating budget to complete this work, but complications resulting from the COVID-19 pandemic delayed the process, and in March, Governor Inslee extended the deadline for rulemaking to December 31, 2021. However, because the original funding provided only went through August 2021, Ecology needs additional funding to cover the staff time and associated contractor work that was shifted to this biennium because of those delays. This request also supports ongoing funding needed to implement the rule after adoption and provide technical assistance to SEPA-lead agencies and projects that will be subject to the new rule. (Model Toxics Control Operating Account)

PL LB Water Banking Pilot Budget Shift

In 2021, the Legislature appropriated funding in both the operating and capital budgets for Ecology to administer the pilot grant program for water banking strategies to preserve the state's agricultural water supply, maintain productive agricultural lands, protect environmental interests, and support the rural economy. However, because grant funding was appropriated in both budgets, it creates some challenges in being able to effectively use this funding to meet local water needs. To address these challenges and ensure we can effectively and efficiently administer grants during this pilot, Ecology is requesting a technical adjustment to move the operating budget portion of pass through funding to the capital budget so that it can be used in combination with the existing capital budget appropriation for this pilot grant program. (General Fund – State)

Department of Ecology
2022 Supplemental Operating Budget
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DEPARTMENT OF ECOLOGY
State of Washington

Operating

9/13/2021 $ in thousands - Biennialized FTEs

		2022 Supplemental Budget Request 9/13/2021				
		FTE	GF-State	MTCA[1]	Other	Total
2021-23 Enacted Base Budget		**1,856.7**	**88,581**	**289,201**	**288,886**	**666,668**
Maintenance Level Changes						
1	NWRO Furniture COP Reduction		(39)	(192)	(97)	**(328)**
2	Clean Air Rule Reduction	(20.1)		(4,518)		**(4,518)**
Policy Level Changes						
Reduce and Prepare for Climate Impacts						
3	Implement Climate Commitment Act	7.2	856		1,450	**2,306**
4	GHG Assessment for Projects	1.1		538		**538**
Prevent and Reduce Toxic Threats and Pollution						
5	Affordable Housing Cleanup Program	1.2		330		**330**
6	Laboratory Accreditation Auditors	1.8		513		**513**
7	Illegal Drug Ops Hazardous Waste	4.4		1,583		**1,583**
8	Land Use and Groundwater	1.3		407		**407**
9	UST/LUST Inspection/Cleanup Backlog	4.1		1,757		**1,757**
10	Prioritize and Complete Cleanups	3.5		916		**916**
11	Reduce Food Waste & Prevent Litter				1,800	**1,800**
12	Pollution Prevention Assistance	1.2		684		**684**
13	Legacy Pesticide Pollution	1.2		290		**290**
14	Hazardous Waste & Toxics IT Systems	0.6		204		**204**
15	Support Brownfields Cleanup			500		**500**
16	Abandoned Mine Lands	1.2		352		**352**
17	Hanford Dangerous Waste Inspections	0.6			145	**145**
Protect and Manage Our State's Waters						
18	Reduce Nutrients in Puget Sound	1.8		550	439	**989**
19	Water Banking Pilot Budget Shift [2]		(9,000)			**(9,000)**
20	Protect State Waters from Toxics	2.9		714		**714**
21	Improved Stream Mapping	2.3	901			**901**
22	Certifying Financial Responsibility	0.9		201	86	**287**
23	Oil Spill Contingency Planning	1.2		233	100	**333**
24	Fix & Modernize WQ Permit Systems				500	**500**
25	Spill Response Vehicles & Equipment			662		**662**
26	Shoreline Aerial Photography			200		**200**
Other						
27	WCC Community Support			738		**738**
Total Changes		**17.8**	**(7,282)**	**6,662**	**4,423**	**3,803**
Total Operating Budget		**1,874.4**	**81,299**	**295,863**	**293,309**	**670,471**

Notes:

[1] Model Toxics Control Operating Account (23P-1, 23P-7).

[2] Budget shift of grant program funding from the operating budget to the capital budget. General Fund-State revenue will be transferred to a new account created in the 2022 supplemental operating budget through Decision Package PL LB - Water Banking Pilot Budget Shift. Funding will then be appropriated in a new section of the 2022 supplemental capital budget through Capital Project Request 40000469 - Water Banking Pilot Grant Program Budget Shift.

To request an ADA accommodation, contact Ecology by phone at 360-407-6985 or email at valerie.pearson@ecy.wa.gov, or visit https://ecology.wa.gov/accessibility. For Relay Service or TTY call 711 or 877-833-6341.

PL-KX	Implement Climate Commitment Act
PL-KB	Reduce Nutrients in Puget Sound
PL-LB	Water Banking Pilot Budget Shift
PL-KI	Protect State Waters from Toxics
PL-KJ	Affordable Housing Cleanup Program
PL-KP	Improved Stream Mapping
PL-KT	Laboratory Accreditation Auditors
PL-KQ	Illegal Drug Ops Hazardous Waste
PL-KK	Certifying Financial Responsibility
PL-KL	Land Use and Groundwater
PL-KU	UST/LUST Inspection/Cleanup Backlog
PL-KS	Prioritize and Complete Cleanups
PL-KG	Reduce Food Waste & Prevent Litter
PL-KN	Pollution Prevention Assistance
PL-KY	WCC Community Support
PL-KV	Oil Spill Contingency Planning
PL-KW	Legacy Pesticide Pollution
PL-KZ	Hazardous Waste & Toxics IT Systems
PL-KD	Support Brownfields Cleanup
PL-KH	Abandoned Mine Lands
PL-KM	Fix & Modernize WQ Permit Systems
PL-KC	Hanford Dangerous Waste Inspections
PL-LA	GHG Assessment for Projects
PL-KR	Spill Response Vehicles & Equipment
PL-KF	Shoreline Aerial Photography

Policy Level Decision Package Prioritization

All Policy Items Prioritized

	Code	Title
AGENCY	461	Department of Ecology

			2021-23 Biennium						2023-25 Biennium					
			FY-22			FY-23			FY-24			FY-25		
Priority	DP Code	DP Title	NGFS	Other	Total	NGFS	Other	Total	NGFS	Other	Total	NGFS	Other	Total
1	KX	Implement Climate Commitment Act	(648,000)	0	(648,000)	1,504,000	1,450,000	2,954,000	0	607,000	607,000	0	663,000	663,000
2	KB	Reduce Nutrients in Puget Sound	0	0	0	0	989,000	989,000	0	439,000	439,000	0	439,000	439,000
3	LB	Water Banking Pilot Budget Shift [1]	(4,500,000)	0	(4,500,000)	(4,500,000)	0	(4,500,000)	0	0	0	0	0	0
4	KI	Protect State Waters from Toxics	0	0	0	0	714,000	714,000	0	714,000	714,000	0	714,000	714,000
5	KJ	Affordable Housing Cleanup Program	0	0	0	0	330,000	330,000	0	330,000	330,000	0	330,000	330,000
6	KP	Improved Stream Mapping	0	0	0	901,000	0	901,000	661,000	0	661,000	0	0	0
7	KT	Laboratory Accreditation Auditors	0	0	0	0	513,000	513,000	0	513,000	513,000	0	0	0
8	KQ	Illegal Drug Ops Hazardous Waste	0	0	0	0	1,583,000	1,583,000	0	1,145,000	1,145,000	0	1,145,000	1,145,000
9	KK	Certifying Financial Responsibility	0	0	0	0	287,000	287,000	0	339,000	339,000	0	688,000	688,000
10	KL	Land Use and Groundwater	0	0	0	0	407,000	407,000	0	324,000	324,000	0	324,000	324,000
11	KU	UST/LUST Inspection/Cleanup Backlog	0	0	0	0	1,757,000	1,757,000	0	1,757,000	1,757,000	0	1,757,000	1,757,000
12	KS	Prioritize and Complete Cleanups	0	0	0	0	916,000	916,000	0	916,000	916,000	0	916,000	916,000
13	KG	Reduce Food Waste & Prevent Litter	0	0	0	0	1,800,000	1,800,000	0	1,800,000	1,800,000	0	1,800,000	1,800,000
14	KN	Pollution Prevention Assistance	0	0	0	0	684,000	684,000	0	684,000	684,000	0	684,000	684,000
15	KY	WCC Community Support	0	0	0	0	738,000	738,000	0	984,000	984,000	0	246,000	246,000
16	KV	Oil Spill Contingency Planning	0	0	0	0	333,000	333,000	0	332,000	332,000	0	332,000	332,000
17	KW	Legacy Pesticide Pollution	0	0	0	0	290,000	290,000	0	290,000	290,000	0	290,000	290,000
18	KZ	Hazardous Waste & Toxics IT Systems	0	0	0	0	204,000	204,000	0	204,000	204,000	0	204,000	204,000
19	KD	Support Brownfields Cleanup	0	0	0	0	500,000	500,000	0	500,000	500,000	0	500,000	500,000
20	KH	Abandoned Mine Lands	0	0	0	0	352,000	352,000	0	352,000	352,000	0	352,000	352,000
21	KM	Fix & Modernize WQ Permit Systems	0	0	0	0	500,000	500,000	0	500,000	500,000	0	0	0
22	KC	Hanford Dangerous Waste Inspections	0	0	0	0	145,000	145,000	0	145,000	145,000	0	145,000	145,000
23	LA	GHG Assessment for Projects	0	451,000	451,000	0	87,000	87,000	0	87,000	87,000	0	87,000	87,000
24	KR	Spill Response Vehicles & Equipment	0	0	0	0	662,000	662,000	0	225,000	225,000	0	225,000	225,000
25	KF	Shoreline Aerial Photography	0	0	0	0	200,000	200,000	0	0	0	0	0	0
			(5,148,000)	**451,000**	**(4,697,000)**	**(2,095,000)**	**15,441,000**	**13,346,000**	**661,000**	**13,187,000**	**13,848,000**	**0**	**11,841,000**	**11,841,000**

[1] Budget shift of grant program funding from the operating budget to the capital budget. General Fund-State revenue will be transferred to a new account created in the 2022 supplemental operating budget through Decision Package PL LB - Water Banking Pilot Budget Shift. Funding will then be appropriated in a new section of the 2022 supplemental capital budget through Capital Project Request 40000469 - Water Banking Pilot Grant Program Budget Shift.

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Department of Ecology
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Agency Recommendation Summary

Ecology relocated its Northwest Regional Office from Bellevue to a facility in Shoreline in July 2021, co-locating with the Washington State Department of Transportation. In support of that move, Ecology requested, and received appropriation authority in the 2021-23 operating budget to fund a Certificate of Participation (COP) to finance the costs of new furniture needed at the new facility. However, Ecology was able to pay for the furniture in full at the end of the 2019-21 biennium, using one-time positive variance. Therefore, Ecology is now requesting an associated appropriation reduction for the COP funding that is no longer needed. (Multiple Funds)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Operating Expenditures						
Fund 001 - 1	($16)	($23)	**($39)**	($16)	($23)	**($39)**
Fund 027 - 1	($1)	($2)	**($3)**	($1)	($2)	**($3)**
Fund 02P - 1	($1)	($2)	**($3)**	($1)	($2)	**($3)**
Fund 044 - 1	($5)	($7)	**($12)**	($5)	($7)	**($12)**
Fund 163 - 1	($1)	($1)	**($2)**	($1)	($1)	**($2)**
Fund 176 - 1	($19)	($26)	**($45)**	($19)	($26)	**($45)**
Fund 182 - 1	($2)	($2)	**($4)**	($2)	($2)	**($4)**
Fund 199 - 1	($1)	($1)	**($2)**	($1)	($1)	**($2)**
Fund 207 - 1	($3)	($4)	**($7)**	($3)	($4)	**($7)**
Fund 216 - 1	($2)	($2)	**($4)**	($2)	($2)	**($4)**
Fund 217 - 1	($3)	($4)	**($7)**	($3)	($4)	**($7)**
Fund 219 - 1	($2)	($2)	**($4)**	($2)	($2)	**($4)**
Fund 23P - 1	($79)	($113)	**($192)**	($79)	($113)	**($192)**
Fund 564 - 1	($2)	($2)	**($4)**	($2)	($2)	**($4)**
Total Expenditures	**($137)**	**($191)**	**($328)**	**($137)**	**($191)**	**($328)**

Decision Package Description

Ecology relocated its Northwest Regional Office (NWRO) from Bellevue to a facility in Shoreline in July 2021, co-locating with the Washington State Department of Transportation (WSDOT). In support of that move, Ecology requested, and received appropriation authority in the 2021-23 operating budget to fund a Certificate of Participation (COP) to finance the costs of new furniture needed at the Shoreline facility.

The funding Ecology received in 2021-23 was intended to make COP payments over the next 10 years for the furniture that has been purchased, and is now installed at Shoreline. However, the hiring, contract, and equipment spending freezes the state instituted in May 2020 in response to the COVID-19 pandemic generated sufficient one-time positive variance across multiple accounts over the past biennium. This allowed Ecology to purchase the NWRO furniture outright at the end of 2019-21 and avoid the need for long-term COP financing.

Because we were able to pay for the furniture in full at the end of the 2019-21 biennium, Ecology is now requesting an appropriation reduction, across multiple fund sources, for the COP funding that is no longer needed.

Please note, the availability of positive variance at the end of the 2019-21 biennium, and the ability to purchase the furniture outright, were direct results of the spending freezes in place for much of last biennium. Under more normal circumstances, or if the spending freezes had continued through the end of the biennium, Ecology would not have been able to take this action, nor would we be able to do so in the future.

Impacts on Population Served:
Ecology's NWRO serves residents and businesses in King, Kitsap, Snohomish, Skagit, Whatcom, San Juan, and Island Counties. Because Ecology was able to purchase the furniture for the new NWRO at the end of the 2019-21 biennium, and avoid the need for long-term financing of these costs (including the associated interest payments), the requested reduction in appropriation level will not have any negative impact on Washington residents, our stakeholders, or local partners.

Alternatives Explored:
Once it was determined the furniture could be paid for in its entirety before the end of the 2019-21 biennium, Ecology did not explore any alternatives to this request. The funding received in the 2021-23 operating budget is no longer needed for its intended purpose, so Ecology is requesting the associated reduction in our appropriation levels.

Consequences of Not Funding This Request:
This request is for a reduction in appropriation authority related to COP financing costs that are no longer needed because the furniture at Ecology's new NWRO was able to be paid for in full at the end of the 2019-21 biennium. This request does not require any additional funding.

Assumptions and Calculations

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

This is not an expansion or alteration of a current program or service. Ecology received funding in the 2021-23 operating budget to use COP financing to fund furniture costs at the new NWRO in Shoreline. This COP financing is no longer needed because Ecology was able to pay for the furniture in full at the end of the 2019-21 biennium. Therefore, Ecology is requesting an associated reduction in our appropriation levels for these COP financing costs.

Detailed Assumptions and Calculations:

Consistent with the amounts received in the 2021-23 operating budget to finance the costs of furniture at the new NWRO in Shoreline, these costs are now being reduced from Ecology's appropriations because Ecology was able to pay for the furniture in full at the end of the 2019-21 biennium.

Workforce Assumptions:

Expenditures by Object			**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
P	Debt Service		(137,000)	(191,000)	(137,000)	(191,000)	(137,000)	(191,000)
	Total Objects		**(137,000)**	**(191,000)**	**(137,000)**	**(191,000)**	**(137,000)**	**(191,000)**
Staffing								
Job Class		**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
	Total FTEs		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Explanation of costs by object:
All costs are Debt Service (Object P)

How is your proposal impacting equity in the state?

N/A

Strategic and Performance Outcomes

Strategic Framework:

This request provides essential support to the Governor's Results Washington Goal 5 - Efficient, Effective, and Accountable Government, by requesting a reduction in appropriation levels for the costs associated with COP financing that are no longer needed.

Performance Outcomes:

The outcome of this request will be that state appropriations, originally intended to be used for furniture COP financing, will now be freed up and available for other environmental and public health work.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

Ecology worked with the Office of Financial Management, Department of Enterprise Services Real Estate Services, and WSDOT to design a space that functionally works for Ecology and helps WDOT maximize their operations at the Shoreline facility. The requested reduction in appropriation level for the costs associated with furniture COP financing will have no negative impacts on our intergovernmental partners.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

The requested reduction in appropriation level for the costs associated with furniture COP financing will have no negative impacts on our stakeholders.

Changes from Current Law:

N/A

State Facilities Impacts:

This request does not have any direct state facility impacts. But Ecology's ability to pay for these costs in full at the end of the 2019-21 biennium provides the furniture, cubical, and filing equipment needed to effectively use the new Shoreline facility without requiring the state to take on the debt that COP financing would have required.

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. P	($137)	($191)	**($328)**	($137)	($191)	**($328)**

Agency Contact Information

Fran Huntington
(360) 407-7028
fhun461@ecy.wa.gov

Agency Recommendation Summary

In 2021, the Legislature passed Engrossed Second Substitute Senate Bill 5126.PL – Climate Commitment Act, which establishes a comprehensive program to reduce carbon pollution and achieve the greenhouse gas limits set in state law. Section 23 of the Act preempts the provisions of Chapter 173-442 WAC – Clean Air Rule, and directs that no state agency may adopt or enforce a program that regulates greenhouse gas emissions for a stationary source except as provided under the Act. As a result, Ecology is now requesting a reduction in our appropriation and FTE authority for the funding to implement the Clean Air Rule, which is no longer needed, beginning in fiscal year 2022. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	-18.9	-21.3	**-20.1**	-21.3	-21.3	**-21.3**
Operating Expenditures						
Fund 001 - 1	$0	$0	**$0**	($1,586)	($1,586)	**($3,172)**
Fund 23P - 1	($2,151)	($2,367)	**($4,518)**	($781)	($781)	**($1,562)**
Total Expenditures	**($2,151)**	**($2,367)**	**($4,518)**	**($2,367)**	**($2,367)**	**($4,734)**

Decision Package Description

Background

Changes in climate pose serious threats to Washington's economy, public health, natural resources, and environment. In response to these threats, and at the Governor's direction, Ecology adopted emission standards under Chapter 173-442 WAC – Clean Air Rule on September 15, 2016. The rule was designed to cap and reduce greenhouse gas (GHG) emissions from significant in-state stationary sources, petroleum product producers, importers, and distributors and natural gas distributors operating within Washington.

Beginning in the 2017-19 biennium, the Legislature appropriated funding for rulemaking, the development and maintenance of reporting and tracking systems, and ongoing program implementation for the Clean Air Rule. Funding has also been used to verify carbon emissions data, establish baselines and compliance curves for regulated facilities, perform facility process reviews, provide technical assistance to facilities, and support litigation costs related to the rule.

A state Supreme Court ruling in January 2020 found Ecology exceeded its authority for parts of the rule and referred it back to lower court to separate out the remaining legally defensible portions, as well as further consider additional legal challenges not addressed by the Supreme Court. Ecology has not attempted to revise the rule to address the Supreme Court concerns, and the provisions of Chapter 173-442 WAC, as currently written, remain on hold. Implementing the rule in accordance with the Supreme Court ruling would have required rule modifications and realigning targets and protocols to achieve meaningful emissions reductions. The rule has not been enforced since litigation started, and has remained suspended pending rule revisions. For the 2019-21 biennium, Ecology kept program implementation on hold, and placed the majority of funding in unallotted status.

Climate Commitment Act, and Preemption of the Clean Air Rule

In 2021, the Legislature passed Engrossed Second Substitute Senate Bill (E2SSB) 5126.PL – Climate Commitment Act (CCA), which establishes a comprehensive program to reduce carbon pollution and achieve the GHG limits set in state law. The Act caps and reduces GHG emissions from the state's largest emitting sources and industries, allowing businesses to find the most efficient path to lower carbon emissions.

The CCA directs Ecology to develop rules to implement a cap on carbon emissions, including mechanisms for the sale and tracking of tradable emissions allowances, along with compliance and accountability measures. Ecology is also required to design the rules to allow for linkage of the program with similar programs in other jurisdictions.

The CCA puts environmental justice and equity at the center of climate policy, ensuring that communities that bear the greatest burdens from air pollution today see cleaner, healthier air as the state cuts greenhouse gases. Funds from the auction of emission allowances will support new investments in climate resiliency programs, clean transportation, and addressing health disparities across the state.

Section 23 of the Act prohibits a city, town, county, township, or other subdivision or municipal corporation of the state from implementing a charge or tax based exclusively on the quantity of GHG emissions, and directs that no state agency may adopt or enforce a program that regulates GHG emissions for a stationary source except as provided under the Act, preempting the provisions of the Clean Air Rule. Due to this preemption, Ecology is now requesting a reduction in our appropriation and FTE levels because the funding to implement the Clean Air Rule is no longer needed.

Please note, in a separate, but related Decision Package – PL KX-Implement Climate Commitment Act, Ecology is requesting the additional funding needed to fully implement the CCA, consistent with our final fiscal note for E2SSB 5126.PL.

Impacts on Population Served:
This request will reduce appropriation and FTE authority from Ecology's base operating budget for implementation of the Clean Air Rule. Because the CCA, which now preempts the provisions of the Clean Air Rule, is intended to provide improved outcomes to those of the Clean Air Rule, as it relates to Washington's climate change strategy, supporting environmental justice, and investments for a healthy environment and economy, this requested reduction is not expected to have any negative impacts on those that will now benefit from implementation of the CCA.

Alternatives Explored:
Ecology did not explore any alternatives to this request. Section 23 of the CCA preempts the provisions of the Clean Air Rule, and directs that no state agency may adopt or enforce a program that regulates GHG emissions for a stationary source except as provided under the Act. Thus, the funding to implement the Clean Air Rule is no longer needed, and should be returned to the accounts from which it is appropriated.

Consequences of Not Funding This Request:
If this request is not approved, the funding Ecology has to implement the Clean Air Rule would be placed in unallotted or reserve status, as it cannot be used for its intended purpose. Not reducing the requested appropriations would mean that these funds could not be reinvested to support other needs within the state, including important environmental and public health work.

Assumptions and Calculations

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

This request will alter Activity A063 – Climate Change Mitigation and Adaptation by reducing appropriation and FTE authority because the CCA now preempts the provisions of the Clean Air rule, and therefore the funding to implement the rule is no longer needed. Below is a summary of 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative overhead related to this activity is already in the agency's Administration Activity A002, but not shown in the totals below.

A063 Climate Change Mitigation and Adaptation		
	2019-21	**2021-23**
FTEs Total	35.05	91.20
001-1 General Fund - State	$3,666,000	$21,069,000
23P-1 Model Toxics Control Operating - State	$4,439,000	$7,461,000
216-1 Air Pollution Control- State	$1,185,000	$926,000
489-1 Pension Funding Stabilization Acct - State	$195,000	$0
25Q-1 Clean Fuels Program-State	$0	$348,000
26B-1 Climate Investment-State	$0	$4,765,000
TOTAL	**$9,486,000**	**$34,569,000**

Detailed Assumptions and Calculations:

Section 23 of the E2SSB 5126.PL – Climate Commitment Act preempts the provisions of Chapter 173-442 WAC – Clean Air Rule, and directs that no state agency may adopt or enforce a program that regulates GHG emissions for a stationary source except as provided under the Act. Therefore, Ecology is now requesting a reduction in our appropriation and FTE authority for the funding to implement the rule, which is no longer needed, beginning in fiscal year 2022.

Based on current carryforward level funding for Clean Air Rule implementation, this request will reduce Ecology's operating budget appropriations by $4,517,603 and 20.1 FTEs in the 2021-23, and $4,734,000 and 21.3 FTEs in out biennia, beginning in 2023-25. Consistent with our final fiscal note for E2SSB 5126.PL, the reduction amount in 2021-23 is $216,397 less than the reduction in out biennia because funding is needed in 2021-23 to conduct rulemaking to remove Clean Air Rule enforcement provisions from Chapters 173-442 WAC and 173-441 WAC.

In 2019-21, funding for the Clean Air Rule had been split between General Fund-State (GF-S) (67 percent) and Model Toxics Control Operating Account (MTCA Operating) (33 percent), based on the funding for this activity following a directed 2017-19 operating budget fund shift from GF-S to State Toxics Control Account (STCA) in the agency, and the subsequent shift of STCA to MTCA Operating when the accounts were changed in the 2019-21 operating budget. However, due to another one-time fund shift of $3,570,000 in Clean Air Rule funding from GF-S to MTCA Operating in the 2021-23 operating budget, the entire amount reduced in 2021-23 of $4,518,000 will be from MTCA Operating. Beginning in 2023-25, the total reduction of $4,734,000 per biennia will be split $3,172,000 GF-S and $1,562,000 MTCA Operating.

For the purposes of this request, FTE reductions are shown at an average Environmental Specialist 4 level, with FTEs reduced by 16.4 direct FTEs and 2.5 FTEs agency indirect in 2021-23 and 18.5 direct FTEs and 2.8 FTEs agency indirect for the 2023-25 and future biennia.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages	(1,163,678)	(1,312,686)	(1,312,686)	(1,312,686)	(1,312,686)	(1,312,686)
B	Employee Benefits	(427,070)	(481,756)	(481,756)	(481,756)	(481,756)	(481,756)
E	Goods and Services	(68,509)	(18,295)	(18,296)	(18,296)	(18,296)	(18,296)
G	Travel	(35,785)	(40,367)	(40,367)	(40,367)	(40,367)	(40,367)
J	Capital Outlays	(19,696)	(22,219)	(22,218)	(22,218)	(22,218)	(22,218)
T	Intra-Agency Reimbursements	(435,865)	(491,677)	(491,677)	(491,677)	(491,677)	(491,677)
	Total Objects	**(2,150,603)**	**(2,367,000)**	**(2,367,000)**	**(2,367,000)**	**(2,367,000)**	**(2,367,000)**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
ENVIRONMENTAL SPECIALIST 4	70,956	(16.40)	(18.50)	(18.50)	(18.50)	(18.50)	(18.50)
FISCAL ANALYST 2		(1.64)	(1.85)	(1.85)	(1.85)	(1.85)	(1.85)
IT APP DEVELOPMENT-JOURNEY		(0.82)	(0.93)	(0.93)	(0.93)	(0.93)	(0.93)
	Total FTEs	**(18.86)**	**(21.28)**	**(21.28)**	**(21.28)**	**(21.28)**	**(21.28)**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are reduced by $86,804 in 21-23, and by $36,592 in 2023-25 and future biennia to align with the existing appropriation for CAR.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 27.4% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

This request will reduce appropriation and FTE authority from Ecology's operating budget for Clean Air Rule implementation that is no longer needed because those provisions have been preempted by E2SSB 5126.PL – Climate Commitment Act. This requested reduction will not have any direct impact on equity and environmental justice because the Clean Air Rule is being replaced by the CCA.

However, the CCA itself will have a direct and positive impact on equity and environmental justice. The CCA aligns with the requirements of the Healthy Environment for All (HEAL) Act, passed in 2021, and includes specific provisions to promote environmental justice and equity, including:

- Expands air quality monitoring in overburdened communities.
- Requires an environmental justice review every two years starting in 2023 to evaluate whether criteria pollutants and greenhouse gases are being reduced in overburdened communities.
- Requires Ecology and local clean air agencies to adopt additional measures if emissions do not decrease.
- Requires an environmental justice assessment of the allocation or administration of funds provided thru the CCA and to ensure a minimum of 35 percent of total investments provide direct and meaningful benefits to vulnerable populations within overburdened communities that reduce environmental burdens, cumulative risks, support community-led projects, or meet an identified community need.

Strategic and Performance Outcomes

Strategic Framework:

This request provides essential support to the Governor's Results Washington Goal 5 - Efficient, Effective, and Accountable Government, by requesting a reduction in appropriation levels for costs associated with the implementation of the Clean Air Rule, which are no longer needed because the rule has been preempted by section 23 of E2SSB 5126.PL – Climate Commitment Act.

Performance Outcomes:

The outcome of the request will be a reduction in appropriation and FTE authority for implementation of the Clean Air Rule, which is no longer needed because those provisions have been preempted by section 23 of E2SSB 5126.PL – Climate Commitment Act. A second outcome of this request will be that state appropriations, intended for the implementation of the Clean Air Rule, will be freed up and available for other state needs, including important environmental and public health work.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

Because implementation of the Clean Air Rule had been on hold due to the state Supreme Court ruling in January 2020, and has now been preempted by the CCA, Ecology does not anticipate any concerns from state, local, federal, or tribal partners with this requested reduction. The CCA received strong intergovernmental and tribal engagement through its development and ultimate passage by the Legislature in 2021. The substantive environmental and community and public health benefits of the CCA will substantially exceed those that would have been provided by the Clean Air Rule.

Legal or Administrative Mandates:

Section 23 of the E2SSB 5126.PL – Climate Commitment Act preempts the provisions of Chapter 173-442 WAC – Clean Air Rule, and directs that no state agency may adopt or enforce a program that regulates GHG emissions for a stationary source except as provided under the Act. Therefore, consistent with our final fiscal note for E2SSB 5126.PL, Ecology is requesting a reduction in our appropriation and FTE levels for the funding to implement the Clean Air Rule, which is no longer needed, beginning in fiscal year 2022.

Stakeholder Response:

Because implementation of the Clean Air Rule had been on hold due to the state Supreme Court ruling in January 2020, and has now been preempted by the CCA, Ecology does not anticipate any concerns from stakeholders with this requested reduction. Although there was a wide variety of stakeholder positions and perspectives on the policy approach and specific elements of the CCA, with its passage, most understand, and many generally support, the supplanting of the Clean Air Rule with the more comprehensive CCA.

Changes from Current Law:

Section 23 of the E2SSB 5126.PL – Climate Commitment Act preempts the provisions of Chapter 173-442 WAC – Clean Air Rule, and directs that no state agency may adopt or enforce a program that regulates GHG emissions for a stationary source except as provided under the Act. Because of this preemption, Ecology will need to conduct rulemaking during the 2021-23 biennium to remove Clean Air Rule enforcement provisions from Chapters 173-442 WAC and 173-441 WAC.

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	($1,163)	($1,313)	**($2,476)**	($1,313)	($1,313)	**($2,626)**
Obj. B	($427)	($482)	**($909)**	($482)	($482)	**($964)**
Obj. E	($69)	($18)	**($87)**	($18)	($18)	**($36)**
Obj. G	($36)	($40)	**($76)**	($40)	($40)	**($80)**
Obj. J	($20)	($22)	**($42)**	($22)	($22)	**($44)**
Obj. T	($436)	($492)	**($928)**	($492)	($492)	**($984)**

Agency Contact Information

Kathy Taylor
(360) 584-5104
kathy.taylor@ecy.wa.gov

Department of Ecology
2022 Supplemental Operating Budget
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Agency Recommendation Summary

In 2021, the Legislature passed Engrossed Second Substitute Senate Bill 5126 PL – Climate Commitment Act, which establishes a comprehensive program to reduce carbon pollution and achieve the greenhouse gas limits set in state law. The new law directs Ecology to develop rules to implement a cap on carbon emissions, including mechanisms for the sale and tracking of tradable emissions allowances, along with compliance and accountability measures. While Ecology received funding in the 2021-23 operating budget to begin implementation, there were considerable changes to the bill late in session, and these caused Ecology to be underfunded in the current biennium, as compared to the cost estimates included in our final fiscal note for the bill that passed. Ecology is now requesting that funding difference to ensure that we can fully begin implementation of this new law in 2021-23. (General Fund-State, Climate Investment Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	10.8	3.5	**7.15**	3.7	4.1	**3.9**
Operating Expenditures						
Fund 001 - 1	($648)	$1,504	**$856**	$0	$0	**$0**
Fund 26B - 1	$0	$1,450	**$1,450**	$607	$663	**$1,270**
Total Expenditures	**($648)**	**$2,954**	**$2,306**	**$607**	**$663**	**$1,270**

Decision Package Description

Background – The Climate Commitment Act
Changes in climate pose serious threats to Washington's economy, public health, natural resources, and environment. In response to these threats, in 2021, the Legislature passed Engrossed Second Substitute Senate Bill (E2SSB PL) 5126 – Climate Commitment Act (CCA), which establishes a comprehensive program to reduce carbon pollution and achieve the greenhouse gas (GHG) limits set in state law. This new law caps and reduces GHG emissions from the state's largest emitting sources and industries, allowing businesses to find the most efficient path to lower carbon emissions.

The CCA directs Ecology to develop rules to implement a cap on carbon emissions, including mechanisms for the sale and tracking of tradable emissions allowances, along with compliance and accountability measures. Ecology is also required to design and adopt rules to allow for linkage of the program with similar programs in other jurisdictions.

Under the new law, Ecology will create a cap-and-invest program, starting Jan. 1, 2023, by setting emissions allowance budgets that meet the GHG limits in RCW 70A.45.020. Initially, the cap-and-invest program will cover industrial facilities, certain fuel suppliers, in-state electricity generators, electricity importers, and natural gas distributors with annual greenhouse gas emissions above 25,000 metric tons of carbon dioxide equivalent. The program will expand to add waste-to-energy facilities on January 1, 2027, and certain landfills and railroad companies on January 1, 2031.

Covered entities must either reduce their emissions, or obtain allowances to cover any remaining emissions. Some utilities and industries will be issued free allowances, while other allowances will be auctioned. Proceeds from the auction of allowances must be used for clean energy transition and assistance, clean transportation, and climate resiliency projects that promote climate justice, including dedicating a minimum of 35 percent of funds toward overburdened communities, and a minimum of 10 percent toward tribal projects.

The CCA puts environmental justice and equity at the center of climate policy, ensuring that communities that bear the greatest burdens from air pollution today see cleaner, healthier air as the state cuts emissions of greenhouse gases and criteria pollutants. Funds from the auction of emission allowances will support new investments in climate resiliency programs, clean transportation, and addressing health disparities across the state.

Problem and Proposed Solution
While Ecology and other state agencies received funding in the 2021-23 operating budget to begin implementing the CCA, there were a considerable number of changes to the bill late in session before it was ultimately passed by the Legislature on April 24, 2021. These changes both created new costs for agencies responsible for implementing the CCA (that were not accounted for in previous fiscal note versions), and shifted the timing of previously identified costs between fiscal years 2022 and 2023, based on changes to agency assumptions around implementation. As a result of these late-breaking changes, there was a misalignment between the version of the bill, and associated fiscal note costs, used by the Legislature to appropriate funding in the 2021-23 operating budget, and the final costs and timing for implementation based on the agencies' final fiscal notes.

For Ecology, the funding received in the 2021-23 operating budget to implement the CCA was based on our fiscal note estimates for the 2SSB

version of 5126, which was published by the Office of Financial Management (OFM) on April 5, 2021. Understandably, that fiscal note version did not account for all of the changes to both, the bill itself, and to agency cost/timing assumptions, over the final few weeks of session. As a result, Ecology does not have the funding level needed to fully begin implementation of the CCA this biennium, consistent with that final fiscal note. Ecology informed OFM of the funding gap at the close of session, and shared our plans to submit a Decision Package for the 2022 supplemental budget to request the funding adjustment needed to implement the bill as passed by the Legislature.

Below is a summary of the cost differences between the two fiscal note versions, and the adjustments needed by fund and fiscal year to ensure that Ecology can begin full implementation of the new law this biennium.

2022 Supplemental Budget Decision Package
Implement Climate Commitment Act - Air Quality Program
Attachment A - Summary Tables of Fiscal Note Cost Estimate Differences

August 2021

Purpose: Provide summary of differences between Ecology fiscal note estimates for E2SSB 5126 PL (enacted bill version) and 2SSB 5126 (version used to appropriate funding in 2021-23 operating budget) by fund and fiscal year.

Fiscal Note Totals - Summary by Account - E2SSB 5126 PL (legislative-passed version)*	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
*Excludes Clean Air Rule Preemption - those fiscal impacts are included in a separate decision package - ML-KE Clean Air Rule Reduction						
Total Costs - 001-1 GF-S	11,068,279	7,788,072	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	1,291,984	1,281,204
Total Costs - 26B-1 Climate Investment Account	-	6,589,698	10,683,397	11,771,900	9,402,806	9,009,383
Grand Total	***11,068,279***	***14,377,770***	***10,683,397***	***11,771,900***	***10,694,790***	***10,290,587***

Fiscal Note Totals - Summary by Account - 2SSB 5126*	FY 2022[1]	FY 2023[2]	FY 2024	FY 2025	FY 2026	FY 2027
*Funding appropriated in the 2021-23 Operating Budget aligned with the fiscal note estimates for 5126 2SSB						
Total Costs - 001-1 GF-S	11,716,218	6,284,282	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	1,291,984	1,281,204
Total Costs - 26B-1 Climate Investment Account	-	5,139,427	10,076,337	11,108,465	8,427,518	8,221,086
Grand Total	***11,716,218***	***11,423,709***	***10,076,337***	***11,108,465***	***9,719,502***	***9,502,290***

[1] Amounts in 2021-23 operating budget were rounded to $11,7,16,000 GF-S.
[2] Amounts in 2021-23 operating budget were rounded to $6,284,000 GF-S and 5,139,000 Fund 26B-1.

Difference Between Enacted Bill Version (E2SSB 5126 PL) and 2SSB 5126	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Total Costs - 001-1 GF-S	(647,939)	1,503,790	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	1,450,271	607,060	663,435	975,288	788,297
Grand Total	***(647,939)***	***2,954,061***	***607,060***	***663,435***	***975,288***	***788,297***

In total, Ecology is requesting just over $2.3 million in additional funding in 2021-23 to fully support CCA implementation. As shown in the table above, about $1.5 million is requested from General Fund-State (GF-S) in fiscal year 2023, although Ecology will return approximately $648,000 of GF-S in fiscal year 2022 that will go unspent due to a timing assumption change between the two fiscal note versions regarding disbursement of grant funding for offset project assistance grants established in section 20. Ecology also requests approximately $1.45 million in additional funding from the new Climate Investment Account in fiscal year 2023 to cover the costs of other additional work added to the final version of the bill.

For the offset assistance grants created in section 20 of the CCA, Ecology received $2.5 million per year in fiscal years 2022 and 2023, consistent with the Legislature's intent in section 20(2) of the bill that not less than $5 million be provided each biennium for these grants. However, in our final fiscal note for the CCA, Ecology shifted the entire $5 million in grant funding to fiscal year 2023, so that we would have time to establish the new grant program and work with the Tribes, who will be the recipients of this funding, on implementation. If the $2.5 million is not shifted from fiscal year 2022 to fiscal year 2023, Ecology will not have the time needed to establish the grant program, solicit for projects, execute the grants, and work with recipients to spend the first $2.5 million by June 30, 2022. By moving the entire amount of grant funding to fiscal year 2023, Ecology can establish the program in fiscal year 2022, and have grants in place and spending by the beginning of fiscal year 2023.

In addition to this timing issue, the final version of the CCA also added a substantial amount of work and associated costs for Ecology in 2021-23, including over $1.8 million in new staffing costs needed to support additional work that was added to the bill as it was finalized. Areas of increased work and costs include, but are not limited to:

- Farm Fuel Exemptions: The final version of the CCA added an exemption to the cap-and-invest program for fuels used exclusively for agricultural purposes by farm fuel users. This requires Ecology to include this exemption as part of the initial rulemaking to establish the provisions of the cap-and-invest program in fiscal year 2022, and will require additional staff work to establish a data sharing agreement with Department of Revenue (DOR) and Department of Licensing (DOL) to gather information on fuel tax exemptions for purposes of adjusting transportation fuel supplier allowance budgets to account for this exemption.

The final bill also requires Ecology to determine a method for expanding this exemption to fuels used to transport agricultural products on public highways, and Ecology needs additional staff to consult with DOL and DOR on developing that method. Please note, consistent with Ecology's final fiscal note, the costs to implement these methods are currently indeterminate. Once the methods have been determined, Ecology and DOL will coordinate on any legislative or budget proposals needed to support implementation of this exemption.

- Criteria and Allocations for EITE: Compared to the 2SSB version, the legislative-passed version of the CCA will allow emissions-intensive and trade-exposed industries (EITEs) to apply and receive an adjustment to their allocation of allowances based on a facility-specific carbon intensity (CI) benchmark. This requires Ecology complete rulemaking to establish methods to award additional no cost allowance allocations for EITEs, if appropriate based on projected production, to achieve a similar on-going result through the adjustment of the facility's mass-based baseline. The addition of these requirements will require additional staff time to complete the rulemaking required for section 13 of the bill.
-
- Environmental Justice Review: Section 3 of the final version of the CCA requires Ecology to follow criteria established in E2SSB 5141 – HEAL Act to identify overburdened communities where the highest concentrations of GHG emissions and criteria pollutants are occurring, identify sources of the emissions, and monitor GHG and criteria pollutant emissions in the overburdened communities. To meet this obligation, Ecology will need to review the status of GHG emissions and criteria pollutants in these communities every two years, beginning in 2023. If emissions are not reduced in these communities, Ecology is required to adopt more stringent air quality standards and limits, and issue enforceable orders. Ecology is also required to create and adopt a community engagement plan to provide communication, outreach, and engagement with overburdened communities in the monitoring and review of emissions changes. Additional funding is needed to ensure Ecology can meet these obligations, consistent with our final fiscal note.

- Linkage with Other Jurisdictions: The final version of the CCA requires Ecology to evaluate and make a finding regarding whether the aggregate number of unused allowances in a linked program would reduce the stringency of Washington's program and the state's ability to achieve its greenhouse gas emissions reduction limits. Ecology is required conduct a public comment process to obtain input and a review of the linkage agreement by relevant stakeholders and other interested parties. Input from the public comment process would be considered before finalizing a linkage agreement. Ecology plans to contract for this evaluation, and requires additional funding to do so, consistent with our final fiscal note.

In addition to the examples identified above, there is a significant amount of additional funding needed to successfully complete all the required rulemaking within the CCA's prescribed timeframes, and coordinate implementation across both Ecology programs, as well as partner agencies. Additional communications staff are also needed to ensure Ecology can effectively keep stakeholders, partners, and the public informed and engaged in a myriad of different processes required under the CCA as implementation moves forward. For a detailed overview of all of the cost changes between Ecology's fiscal notes for 2SSB 5126 and E2SSB 5126 PL, please see *Attachment B - Detailed Overview of Fiscal Note Estimate Differences Between E2SSB PL (Legislative-Passed Version) and 2SSB 5126 (Amount Funded in 2021-23 Operating Budget)*.

Please note, because additional funding is needed across many areas of the CCA to ensure full implementation, consistent with Ecology's final fiscal note, the areas described above are provided as examples of areas that are at risk of being delayed, or not completed if full funding is not provided. The actual areas impacted by our current underfunding may be different, and will be informed by continued discussions around implementation with the Governor's Office, Legislature, partner agencies, tribes, and stakeholders.

Please note, this budget request is one of several being submitted by state agencies to request funding that was not included in the 2021-23 operating budget, due to the timing of when the final version of the CCA was passed by the Legislature. Funding for each of these budget requests is needed to ensure full implementation of the CAA can be effectively started during the 2021-23 biennium.

Please note, section 23 of the CCA prohibits a city, town, county, township, or other subdivision or municipal corporation of the state from implementing a charge or tax based exclusively on the quantity of GHG emissions, and directs that no state agency may adopt or enforce a program that regulates GHG emissions for a stationary source except as provided under the Act, preempting the provisions of the Clean Air Rule. Due to this preemption, in a separate, but related Decision Package **ML-KE - Clean Air Rule Reduction**, Ecology is requesting a reduction in our appropriation and FTE levels for Clean Air Rule implementation, consistent with our final fiscal note for E2SSB 5126 PL.

Impacts on Population Served:
This request seeks the additional funding needed by Ecology to begin full implementation of the CCA, consistent with our final fiscal note for E2SSB 5126 PL. Reducing GHG pollution is critical to protecting the state's natural resources and economy. People and communities across

Washington will benefit from fully funding these implementation costs, including those in underserved areas of the state.

This request provides additional funding needed to fully implement requirements in Section 3 of the CCA for Ecology to evaluate changes in criteria pollutant and greenhouse gas emissions in overburdened communities in the state, and to work with local air agencies to adopt additional measures where needed to reduce air pollution. Reducing criteria pollutant emissions provides important public health benefits for communities experiencing health disparities and disproportionate impacts due to existing environmental, health, socio-economic, and air pollution burdens.

The request will also provide full funding to implement the exemption for fuels used for agricultural purposes, which will reduce the economic impact to agricultural producers in the state. In addition, by providing full funding to implement the adjustments to the direct allocation of allowances to EITEs, the request will benefit Washington's economy, communities, and businesses by helping minimize and avoid leakage, while encouraging these industries to continue to innovate and be leaders in the low-carbon economy.

Alternatives Explored:
Because this request supports the full the costs needed to begin implementing enacted legislation, consistent with Ecology's final fiscal note, we did not consider other alternatives to this request.

Consequences of Not Funding This Request:
If this request is not funded, Ecology will not have the resources needed to begin full implementation of the CCA during the 2021-23 biennium. Part of this request will shift $2.5 million in offset project assistance grant funding from fiscal year 2022 to fiscal year 2023, so that it can be effectively used to support the state's Tribal partners. If the $2.5 million is not shifted, Ecology will likely not have the time needed to establish a new grant program and work with recipients to spend the first $2.5 million appropriated by June 30, 2022. This would reduce the funding available for these tribal assistance grants in the current biennium by up to half, and would not meet the Legislature's intent under section 20(2) of the CCA to provide no less than $5 million a biennium for this purpose.

In addition to the risks for these grants, if this request is not funded, Ecology will be unable to meet a number of the timelines and requirements for work prescribed in the CCA, including, but not limited to, initial rulemaking to establish the structure for the cap-and-invest program, develop criteria for EITE industries' allowance allocations, and updating the reporting requirements for GHG emissions. Ecology would also be unable to effectively coordinate with other agency partners, such as DOL and DOR on the farm fuels exemption, nor complete the environmental justice review required every two years, starting in 2023, to evaluate whether criteria pollutants and greenhouse gases are being reduced.

Please note, because additional funding is needed across many areas of the CCA to ensure full implementation, consistent with Ecology's final fiscal note, the areas described above are provided as examples of areas that are at risk of being delayed, or not completed if full funding is not provided. The actual areas impacted by our current underfunding may be different, and will be informed by continued discussions around implementation with the Governor's Office, Legislature, partner agencies, tribes, and stakeholders.

Assumptions and Calculations

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

This request will alter Activity A063 – Climate Change Mitigation and Adaptation by providing the funding and FTE authority needed to fully support implementation of the CCA beginning in 2021-23, consistent with Ecology's final fiscal note for E2SSB 5126 PL. Below is a summary of 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative overhead related to this activity is already in the agency's Administration Activity A002, but not shown in the totals below.

A063 Climate Change Mitigation and Adaptation		
	2019-21	**2021-23**
FTEs Total	35.05	91.20
001-1 General Fund - State	$3,666,000	$21,069,000
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25Q-1 Clean Fuels Program - State	$0	$348,000
26B-1 Climate Investment - State	$0	$4,765,000
489-1 Pension Funding Stabilization Acct - State	$195,000	$0
TOTAL	**$9,486,000**	**$34,569,000**

Detailed Assumptions and Calculations:

This request supports the full funding level needed by Ecology to begin implementing the CCA in 2021-23, consistent with our final fiscal note for E2SSB 5126 PL. As detailed in *Attachment C – 6-Year Detail Comparison*, which compares Ecology's fiscal note estimates between the 2SSB version of the CCA (used to appropriate the funding for Ecology in the 2021-23 operating budget), and the legislatively-passed version, Ecology requires a total 10.8 FTEs in fiscal year 2022, but will reduce our overall first-year GF-S appropriations by $647,939, due to a requested shift of $2.5 million for offset project assistance grants between fiscal years 2022 and 2023. In fiscal year 2023, Ecology requires a total of 3.5 FTEs and $2,954,061. $1,503,790 of the required funding is from GF-S, while $1,450,271 is from the new Climate Investment Account.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages	757,446	243,700	243,532	274,390	427,000	347,008
B	Employee Benefits	277,982	89,439	89,376	100,701	156,709	127,351
C	Personal Service Contract	272,400	122,100	125,000	125,000	166,900	125,000
E	Goods and Services	78,828	47,411	47,179	48,630	46,881	44,151
G	Travel	20,447	6,533	6,939	7,702	11,521	9,555
J	Capital Outlays	161,254	(146,401)	3,818	4,238	6,341	5,258
N	Grants, Benefits, and Client Services	(2,500,000)	2,500,000				
T	Intra-Agency Reimbursements	283,704	91,279	91,216	102,774	159,936	129,974
	Total Objects	**(647,939)**	**2,954,061**	**607,060**	**663,435**	**975,288**	**788,297**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
COMM OUTRCH & ENV ED SPEC4	70,956	0.2	-	-	-	-	-
WMS BAND 2	95,000	1.0	1.0	1.0	1.0	1.0	1.0
WMS BAND 3	112,000	0.1	-	-	-	-	-
ENVIRONMENTAL PLANNER 4	86,484	0.3	-	-	-	-	-
ENVIRONMENTAL PLANNER 5	95,484	1.5	0.9	0.2	0.4	1.3	0.8
COMM OUTRCH & ENV ED SPEC3	61,224	-	-	-	-	-	-
ECONOMIC ANALYST 3	82,344	-	0.2	-	-	0.2	-
ENVIRONMENTAL PLANNER 3	78,408	0.5	0.6	-	0.2	0.8	0.4
REGULATORY ANALYST 2	80,292	-	0.1	-	-	0.1	-
ENVIRONMENTAL SPECIALIST 5	78,408	2.4	1.4	1.2	1.2	1.2	1.4
ENVIRONMENTAL SPECIALIST 4	70,956	2.6	(0.7)	0.8	0.8	0.8	0.8
IT DATA MGMT-JOURNEY	101,748	0.6	(0.3)	-	-	-	-
NATURAL RESOURCE SCIENTIST 4	88,644	0.3	(0.1)	-	-	-	-
FISCAL ANALYST 2		0.9	0.3	0.3	0.4	0.5	0.5
IT APP DEVELMNT-JOURNEY-ADM		0.5	0.2	0.2	0.2	0.3	0.2
Total FTEs		**10.8**	**3.5**	**3.7**	**4.1**	**6.1**	**5.1**

Explanation of costs by object:

Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Contracts includes $394,500 for various contracts needed to implement the CCA (see *Attachment B* for details).
Goods and Services are the agency average of $4,144 per direct program FTE. Good and Services also includes $40,000 in fiscal year 2022 and $35,000 in fiscal year 2023 for Attorney General Office support and meeting costs (see *Attachment B* for details).
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE. Equipment also includes $150,000 in costs that were shifted between fiscal years 2022 and 2023 in final fiscal note (see *Attachment B* for details).
Grants include a shift of $2.5 million in funding for offset project assistance grants from fiscal year 2022 to 2023.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Fully funding the implementation costs of the CCA, consistent with Ecology final fiscal note, will benefit all communities across the state, including those under-served areas of the state. The CCA aligns with the requirements of the HEAL Act and includes provisions to promote environmental justice and equity, including:

- Requires the Washington Environmental Justice Council to make recommendations to the Legislature on projects funded by the CCA, and requires agencies allocating funding from CCA accounts to report their progress toward environmental justice goals to the council.
- Expands air quality monitoring in overburdened communities.
- Requires an environmental justice review every two years starting in 2023 to evaluate whether criteria pollutants and greenhouse gases are being reduced.
- Requires Ecology and local clean air agencies to adopt additional measures if emissions do not decrease.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing all goals in Ecology's Strategic Plan:

- Goal 1: Support and engage our communities, customers, and employees, by ensuring that communities that bear the greatest burdens from air pollution today see cleaner, healthier air as the state cuts emissions of greenhouse gases and criteria pollutants, and by supporting new investments in climate resiliency programs, clean transportation, and addressing health disparities across the state.
- Goal 2: Reduce and prepare for climate impacts, by reducing GHG emissions over time to bring the state into compliance with the limits required in statute. Full implementation of the CCA will also provide funding for projects to advance climate change mitigation and resiliency.
- Goal 3: Prevent and reduce toxic threats and pollution, by providing Ecology additional authority to work with local air agencies to adopt air quality or emissions standards, limits, or control strategies to reduce emissions of criteria pollutants in overburdened communities and by generating funding for projects that reduce health disparities across the state.
- Goal 4: Protect and manage our state's waters, by generating funding for clean water investments and projects that increase the resilience of the state's waters from the impacts of climate change.
- Goal 5: Protect and restore Puget Sound, by providing funding needed to implement the CCA, which supports clean water investments and projects that increase the resiliency of Washington's waters to climate change impacts and support ecosystem health and recovery efforts.

This request also provides essential support to the Governor's Results Washington Goals:

- Goal 2: Prosperous Economy, by generating revenue to tackle climate change and support climate resiliency, as well as designing the cap and invest program to reduce the economic impacts to the agricultural sector and to minimize or avoid leakage and support innovation among businesses designated as EITEs.
- Goal 3: Sustainable Energy and a Clean Environment, by providing funding to implement the CCA and to establish a cap and invest program to reduce carbon pollution and support the state's goal of reducing GHG emissions to 95 percent below 1990 levels by 2050.
- Goal 4: Healthy and Safe Communities, by targeting a minimum of 35 percent of the investments from revenue generated under the bill to projects that reduce greenhouse gas emissions and criteria pollutant emissions, reduce health disparities, and support climate resiliency in overburdened communities.
- Goal 5: Efficient, effective and accountable government by providing full funding for Ecology to conduct periodic comprehensive program reviews to evaluate the implementation of the program and the impacts to the state, including impacts on emissions, and costs and benefits, as well as to develop a system to track and report on the impacts of investments made from funds generated under the CCA.

Climate change is one of the most significant issues facing Washington today. Tackling climate change is a strategic priority for Ecology and the Governor to protect public health, ecosystems, the built environment, and the economy from the damage that rising temperatures and shifting precipitation patterns will cause in Washington. Reducing greenhouse gas pollution is vital to protect air, water, food sources, and the economy for all Washingtonians.

Performance Outcomes:

The outcome of this request will be Ecology's ability to fully begin implementing the CCA starting in 2021-23, consistent with our final fiscal note for E2SSB 5162 PL.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

The CCA received strong intergovernmental and tribal engagement through its development and ultimate passage by the Legislature in 2021. This request will provide the full amount of funding needed by Ecology to begin implementation of the CCA in 2021-23. We anticipate general support for fully funding of the enacted legislation, consistent with our final fiscal note, and don't anticipate new concerns from intergovernmental entities beyond those expressed during the legislative session or after the bill was signed by the Governor.

In implementing the CCA, Ecology will work closely with other state agencies as directed in the bill, including:

- Commerce and the Utilities and Transportation Commission to identify methods and criteria for allocating allowances to electric and natural gas utilities
- Department of Health to coordinate on identifying overburdened communities and to evaluate the health impacts related to criteria pollution in overburdened communities.
- Department of Natural Resources by incorporating recommendations on offsets from the Small Forestland Owner Work Group.
- Department of Licensing and Agriculture on developing procedures for verifying agricultural sector exemptions.
- Coordinating with agencies receiving funding under the accounts created in the bill to track the expenditure of revenue and the impacts.

Ecology anticipates that state agencies will support this budget request to fully fund implementation of the CCA.

Although Tribes were generally supportive of the final version of the bill, we recognize that there were significant concerns regarding the veto of the section of the bill related to tribal consultation. Ecology is committed to consulting with tribes on a government-to-government basis as we move forward in developing the tribal assistance offset program required under the CCA.

The CCA has a number of impacts to local governments, including generating funding for projects to tackle climate change, for clean transportation projects, and to increase climate resilience and reduce health disparities. The CCA also directs Ecology to expand air monitoring and take additional measures where needed to reduce air pollution in overburdened communities. The CCA also preempts local governments from implementing a charge or tax based exclusively on the quantity of greenhouse gas emissions. The CCA directs Ecology to develop a supplemental community engagement plan to engage with communities as we move forward in implementing the Act. In general, we anticipate a mixed reaction from local governments on this proposal to fully fund CCA implementation, with some local governments being supportive and some expressing concerns.

Legal or Administrative Mandates:

This request is directly related to implementing E2SSB 5126 PL – Climate Commitment Act, and Ecology is requesting the funding needed to begin full implementation in 2021-23, consistent with our final fiscal note.

Stakeholder Response:

While there was a wide variety of stakeholder positions and perspectives on the policy approach and specific elements of the CCA during session, Ecology anticipates general support for this request to fully fund our obligations and work to implement the enacted legislation. For example, we expect agricultural producers and EITEs to support this proposal to fully fund work needed to implement the agricultural exemption and adjust the allocation of allowances to EITEs. We anticipate support from environmental justice advocates for the funding needed to implement the environmental justice assessments in section 3.

Ecology expects extensive engagement with tribes, stakeholders, and the public as we work to implement the CCA, including the first three rulemaking processes that have already begun.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

PL KX Implement Climate Commit. Act CCA - 6YR Detail Compare - Attachment C.xlsx
PL KX Implement Climate Commit. Act CCA - Compare by Category - Attachment B.xlsx
PL KX Implement Climate Commit. Act CCA - Summary Tables - Attachment A.xlsx

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$758	$244	**$1,002**	$244	$274	**$518**
Obj. B	$278	$89	**$367**	$89	$101	**$190**
Obj. C	$272	$122	**$394**	$125	$125	**$250**
Obj. E	$79	$47	**$126**	$47	$48	**$95**
Obj. G	$20	$7	**$27**	$7	$8	**$15**
Obj. J	$161	($146)	**$15**	$4	$4	**$8**
Obj. N	($2,500)	$2,500	**$0**	$0	$0	**$0**
Obj. T	$284	$91	**$375**	$91	$103	**$194**

Agency Contact Information

Kathy Taylor
(360) 407-6880
kathy.taylor@ecy.wa.gov

2022 Supplemental Budget Decision Package
Implement Climate Commitment Act - Air Quality Program
Attachment A - Summary Tables of Fiscal Note Cost Estimate Differences

August 2021

Purpose: Provide summary of differences between Ecology fiscal note estimates for E2SSB 5126 PL (enacted bill version) and 2SSB 5126 (version used to appropriate funding in 2021-23 operating budget) by fund and fiscal year.

Fiscal Note Totals - Summary by Account - E2SSB 5126 PL (legislative-passed version)*	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
*Excludes Clean Air Rule Preemption - those fiscal impacts are included in a separate decision package - ML-KE Clean Air Rule Reduction						
Total Costs - 001-1 GF-S	11,068,279	7,788,072	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	1,291,984	1,281,204
Total Costs - 26B-1 Climate Investment Account	-	6,589,698	10,683,397	11,771,900	9,402,806	9,009,383
Grand Total	***11,068,279***	***14,377,770***	***10,683,397***	***11,771,900***	***10,694,790***	***10,290,587***

Fiscal Note Totals - Summary by Account - 2SSB 5126*	**FY 2022[1]**	**FY 2023[2]**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
*Funding appropriated in the 2021-23 Operating Budget aligned with the fiscal note estimates for 5126 2SSB						
Total Costs - 001-1 GF-S	11,716,218	6,284,282	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	1,291,984	1,281,204
Total Costs - 26B-1 Climate Investment Account	-	5,139,427	10,076,337	11,108,465	8,427,518	8,221,086
Grand Total	***11,716,218***	***11,423,709***	***10,076,337***	***11,108,465***	***9,719,502***	***9,502,290***

[1] Amounts in 2021-23 operating budget were rounded to $11,7,16,000 GF-S.

[2] Amounts in 2021-23 operating budget were rounded to $6,284,000 GF-S and 5,139,000 Fund 26B-1.

Difference Between Enacted Bill Version (E2SSB 5126 PL) and 2SSB 5126	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
Total Costs - 001-1 GF-S	(647,939)	1,503,790	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	1,450,271	607,060	663,435	975,288	788,297
Grand Total	***(647,939)***	***2,954,061***	***607,060***	***663,435***	***975,288***	***788,297***

2022 Supplemental Budget Decision Package
Implement Climate Commitment Act - Air Quality Program
Attachment B - Detailed Overview of Fiscal Note Estimate Differences Between E2SSB 5126 PL (Legislative-Passed Version) and 2SSB 5126 (Amount Appropriated in 2021-23 Operating Budget)

Purpose: Provide detailed differences between Ecology fiscal note estimates for E2SSB 5126 PL (enacted bill version) and 2SSB 5126 (version used to appropriate funding in 2021-23 operating budget) by section categories, cost categories, fund, and fiscal year.

August 2021

	E2SSB 5126 PL (legislative-passed version) - Clean Air Rule Preemption Removed (addressed in separate decision package - ML-KE Clean Air Rule Reduction)						2SSB 5126 (version used to appropriate funding in 2021-23 operating budget)						Cost Differences					
OPERATING BUDGET	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
Ecology Programs Coordination and Communications - Multiple Sections	**815,490**	**866,142**	**866,135**	**866,135**	**788,880**	**788,880**	**533,267**	**583,914**	**583,912**	**583,912**	**506,657**	**506,657**	**282,223**	**282,228**	**282,223**	**282,223**	**282,223**	**282,223**
Total Costs - 001-1 GF-S	815,491	433,070	-	-	-	-	533,267	291,957	-	-	-	-	282,224	141,113	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	433,072	866,135	866,135	788,880	788,880	-	291,957	583,912	583,912	506,657	506,657	-	141,115	282,223	282,223	282,223	282,223
Total FTEs	6.04	6.33	6.33	6.33	5.75	5.75	3.74	4.03	4.03	4.03	3.45	3.45	2.30	2.30	2.30	2.30	2.30	2.30
Total Staff costs	815,490	866,142	866,135	866,135	788,880	788,880	533,267	583,914	583,912	583,912	506,657	506,657	282,223	282,228	282,223	282,223	282,223	282,223
Professional Services Contracts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meeting costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental Justice Review - Sections 3 and 31	**936,733**	**633,934**	**633,931**	**633,931**	**633,931**	**633,931**	**297,180**	**1,007,736**	**633,931**	**633,931**	**633,931**	**633,931**	**639,553**	**(373,802)**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	936,734	316,969					297,180	392,556	-	-	-	-	639,554	(75,587)	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	316,965	633,933	633,933	633,933	633,933	-	615,180	633,931	633,931	633,931	633,931	-	(298,215)	2	2	2	2
Total FTEs	6.24	4.46	4.46	4.46	4.46	4.46	2.30	6.24	4.46	4.46	4.46	4.46	3.94	(1.79)	-	-	-	-
Total Staff costs	764,733	540,934	540,931	540,931	540,931	540,931	275,180	764,736	540,931	540,931	540,931	540,931	489,553	(223,802)	-	-	-	-
Professional Services Contracts	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	-	-	-	-	-	-
Meeting costs	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	-	-	-	-	-	-
Supplies and Equipment	150,000	71,000	71,000	71,000	71,000	71,000	-	221,000	71,000	71,000	71,000	71,000	150,000	(150,000)	-	-	-	-
Governance Structure - Section 7	**26,347**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**26,347**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	26,347	-	-	-	-	-	-	-	-	-	-	-	26,347	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total FTEs	0.16	-	-	-	-	-	-	-	-	-	-	-	0.16	-	-	-	-	-
Total Staff costs	26,347	-	-	-	-	-	-	-	-	-	-	-	26,347	-	-	-	-	-
Professional Services Contracts		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Initial Requirements and Criteria - Rulemaking for Sections 9, 10, 11, 12, 13, 14, 15, 16, 17, 24, and 25	**1,622,330**	**593,176**	**119,000**	**1,273,477**	**1,238,477**	**1,290,947**	**1,516,290**	**559,176**	**85,000**	**1,239,477**	**1,214,477**	**1,266,947**	**106,040**	**34,000**	**34,000**	**34,000**	**24,000**	**24,000**
Total Costs - 001-1 GF-S	1,622,329	533,675	-	-	-	-	1,516,290	516,675	-	-	-	-	106,039	17,000	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	59,501	119,000	1,273,477	1,238,477	1,290,947	-	42,501	85,000	1,239,477	1,214,477	1,266,947	-	17,000	34,000	34,000	24,000	24,000
Total FTEs	9.55	2.99	-	8.45	8.45	8.86	8.97	2.99	-	8.45	8.45	8.86	0.57	-	-	-	-	-
Total Staff costs	1,287,330	388,301	-	1,150,477	1,150,477	1,202,947	1,215,290	388,301	-	1,150,477	1,150,477	1,202,947	72,040	-	-	-	-	-
Professional Services Contracts	200,000	80,875	-	-	-	-	200,000	80,875	-	-	-	-	-	-	-	-	-	-
Meeting costs	16,000	5,000	-	4,000	4,000	4,000	16,000	5,000	-	4,000	4,000	4,000	-	-	-	-	-	-
AAG Support for Rulemaking (all sections)	119,000	119,000	119,000	119,000	84,000	84,000	85,000	85,000	85,000	85,000	60,000	60,000	34,000	34,000	34,000	34,000	24,000	24,000
Legislation for EITE Pathway - Sections 8 (4) and 8 (6)	**115,810**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**115,810**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	115,810	-	-	-	-	-	-	-	-	-	-	-	115,810	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total FTEs	0.81	-	-	-	-	-	-	-	-	-	-	-	0.81	-	-	-	-	-
Total Staff costs	109,210	-	-	-	-	-	-	-	-	-	-	-	109,210	-	-	-	-	-
Professional Services Contracts	3,600	-	-	-	-	-	-	-	-	-	-	-	3,600	-	-	-	-	-
Meeting costs	3,000	-	-	-	-	-	-	-	-	-	-	-	3,000	-	-	-	-	-
Comprehensive Program Review - Section 8 (5)	**-**	**-**	**-**	**-**	**-**	**31,788**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**31,788**
Total Costs - 001-1 GF-S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	-	-	-	31,788	-	-	-	-	-	-	-	-	-	-	-	31,788
Total FTEs	-	-	-	-	-	0.23	-	-	-	-	-	-	-	-	-	-	-	0.23
Total Staff costs	-	-	-	-	-	31,788	-	-	-	-	-	-	-	-	-	-	-	31,788
Professional Services Contracts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meeting costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AAG Support for Rulemaking (all sections)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Evaluate Program Performance and Linkage - Sections 8 and 9	**168,380**	**-**	**-**	**-**	**-**	**38,495**	**-**	**-**	**-**	**-**	**-**	**-**	**168,380**	**-**	**-**	**-**	**-**	**38,495**
Total Costs - 001-1 GF-S	168,380	-	-	-	-	-	-	-	-	-	-	-	168,380	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	-	-	-	38,495	-	-	-	-	-	-	-	-	-	-	-	38,495
Total FTEs	0.12	-	-	-	-	0.29	-	-	-	-	-	-	0.12	-	-	-	-	0.29
Total Staff costs	17,380	-	-	-	-	37,495	-	-	-	-	-	-	17,380	-	-	-	-	37,495
Professional Services Contracts	151,000	-	-	-	-	-	-	-	-	-	-	-	151,000	-	-	-	-	-
Meeting costs		-	-	-	-	1,000	-	-	-	-	-	-	-	-	-	-	-	1,000
Imported Electricity - Section 10 (1)	**-**	**-**	**-**	**56,375**	**240,960**	**57,375**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**56,375**	**240,960**	**57,375**
Total Costs - 001-1 GF-S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	-	56,375	240,960	57,375	-	-	-	-	-	-	-	-	-	56,375	240,960	57,375
Total FTEs	-	-	-	0.40	1.73	0.40	-	-	-	-	-	-	-	-	-	0.40	1.73	0.40
Total Staff costs	-	-	-	56,375	239,960	56,375	-	-	-	-	-	-	-	-	-	56,375	239,960	56,375
Professional Services Contracts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meeting costs	-	-	-	-	1,000	1,000	-	-	-	-	-	-	-	-	-	-	1,000	1,000
Farm Fuels Exemptions - Section 10 (7)	**231,991**	**154,050**	**28,816**	**28,816**	**28,816**	**28,816**	**-**	**-**	**-**	**-**	**-**	**-**	**231,991**	**154,050**	**28,816**	**28,816**	**28,816**	**28,816**
Total Costs - 001-1 GF-S	231,991	154,051	-	-	-	-	-	-	-	-	-	-	231,991	154,051	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	28,816	28,816	28,816	28,816	-	-	-	-	-	-	-	-	28,816	28,816	28,816	28,816
Total FTEs	1.73	1.15	0.23	0.23	0.23	0.23	-	-	-	-	-	-	1.73	1.15	0.23	0.23	0.23	0.23
Total Staff costs	230,991	153,050	28,816	28,816	28,816	28,816	-	-	-	-	-	-	230,991	153,050	28,816	28,816	28,816	28,816
Professional Services Contracts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meeting costs	1,000	1,000	-	-	-	-	-	-	-	-	-	-	1,000	1,000	-	-	-	-
Implement a Carbon Market for Washington - Sections 11, 12, 16, 17, and 22	**2,411,909**	**3,072,018**	**2,706,812**	**2,394,233**	**2,271,229**	**2,237,979**	**2,386,909**	**3,014,743**	**2,631,994**	**2,319,415**	**2,196,411**	**2,163,161**	**25,000**	**57,275**	**74,818**	**74,818**	**74,818**	**74,818**
Total Costs - 001-1 GF-S	2,411,909	1,605,427	-	-	-	-	2,386,909	1,593,177	-	-	-	-	25,000	12,250	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	1,466,591	2,706,810	2,394,231	2,271,227	2,237,977	-	1,421,566	2,631,994	2,319,415	2,196,411	2,163,161	-	45,025	74,816	74,816	74,816	74,816
Total FTEs	8.11	15.02	14.15	12.22	11.65	11.55	8.11	14.74	13.71	11.79	11.21	11.11	-	0.29	0.44	0.44	0.44	0.44
Total Staff costs	1,231,817	2,029,588	1,835,442	1,544,423	1,442,979	1,442,979	1,231,817	1,996,813	1,785,624	1,494,605	1,393,161	1,393,161	-	32,775	49,818	49,818	49,818	49,818
Professional Services Contracts	1,146,842	1,009,180	838,120	816,560	795,000	795,000	1,121,842	984,680	813,120	791,560	770,000	770,000	25,000	24,500	25,000	25,000	25,000	25,000
SAO Services	33,250	33,250	33,250	33,250	33,250	-	33,250	33,250	33,250	33,250	33,250	-	-	-	-	-	-	-
Implement a Carbon Market - Sections 12, 16, and 17	***1,075,396***	***1,879,043***	***1,879,045***	***1,879,045***	***1,879,045***	***1,845,795***	**1,075,396**	**1,862,000**	**1,862,002**	**1,862,002**	**1,862,002**	**1,828,752**	**-**	**17,043**	**17,043**	**17,043**	**17,043**	**17,043**
Total Costs - 001-1 GF-S	*1,075,396*	*931,000*	-	-	-	-	1,075,396	931,000	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	*948,043*	*1,879,044*	*1,879,044*	*1,879,044*	*1,845,794*	-	931,000	1,862,002	1,862,002	1,862,002	1,828,752	-	17,043	17,042	17,042	17,042	17,042
Total FTEs	2.01	9.06	9.06	9.06	9.06	9.06	2.01	8.91	8.91	8.91	8.91	8.91	-	0.15	0.15	0.15	0.15	0.15
Total Staff costs	*272,146*	*1,075,793*	*1,075,795*	*1,075,795*	*1,075,795*	*1,075,795*	272,146	1,058,750	1,058,752	1,058,752	1,058,752	1,058,752	-	17,043	17,043	17,043	17,043	17,043
Professional Services Contracts	*770,000*	*770,000*	*770,000*	*770,000*	*770,000*	*770,000*	770,000	770,000	770,000	770,000	770,000	770,000	-	-	-	-	-	-
SAO Services	*33,250*	*33,250*	*33,250*	*33,250*	*33,250*		33,250	33,250	33,250	33,250	33,250	-	-	-	-	-	-	-
Compliance and Market Oversight - Sections 11 and 22	***158,145***	***173,878***	***190,920***	***190,920***	***190,920***	***190,920***	**158,145**	**158,146**	**158,145**	**158,145**	**158,145**	**158,145**	**-**	**15,732**	**32,775**	**32,775**	**32,775**	**32,775**
Total Costs - 001-1 GF-S	*158,145*	*79,073*	-	-	-	-	158,145	79,073	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	*94,805*	*190,919*	*190,919*	*190,919*	*190,919*	-	79,073	158,145	158,145	158,145	158,145	-	15,732	32,774	32,774	32,774	32,774

2022 Supplemental Budget Decision Package
Implement Climate Commitment Act - Air Quality Program
Attachment B - Detailed Overview of Fiscal Note Estimate Differences Between E2SSB 5126 PL (Legislative-Passed Version) and 2SSB 5126 (Amount Appropriated in 2021-23 Operating Budget)

Purpose: Provide detailed differences between Ecology fiscal note estimates for E2SSB 5126 PL (enacted bill version) and 2SSB 5126 (version used to appropriate funding in 2021-23 operating budget) by section categories, cost categories, fund, and fiscal year.

August 2021

	E2SSB 5126 PL (legislative-passed version) - Clean Air Rule Preemption Removed (addressed in separate decision package - ML-KE Clean Air Rule Reduction)						2SSB 5126 (version used to appropriate funding in 2021-23 operating budget)						Cost Differences					
OPERATING BUDGET	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
Total FTEs	1.15	1.29	1.44	1.44	1.44	1.44	1.15	1.15	1.15	1.15	1.15	1.15	-	0.14	0.29	0.29	0.29	0.29
Total Staff costs	*158,145*	*173,878*	*190,920*	*190,920*	*190,920*	*190,920*	158,145	158,146	158,145	158,145	158,145	158,145	-	15,732	32,775	32,775	32,775	32,775
Professional Services Contracts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AAG Support for Rulemaking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allowance Trading and Tracking Systems - Section 11	***1,178,368***	***1,019,097***	***636,847***	***324,268***	***201,264***	***201,264***	**1,153,368**	**994,597**	**611,847**	**299,268**	**176,264**	**176,264**	**25,000**	**24,500**	**25,000**	**25,000**	**25,000**	**25,000**
Total Costs - 001-1 GF-S	*1,178,368*	*595,354*	-	-	-	-	1,153,368	583,104	-	-	-	-	25,000	12,250	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	*423,743*	*636,847*	*324,268*	*201,264*	*201,264*	-	411,493	611,847	299,268	176,264	176,264	-	12,250	25,000	25,000	25,000	25,000
Total FTEs	4.95	4.67	3.65	1.73	1.15	1.05	4.95	4.67	3.65	1.73	1.15	1.05	-	-	-	-	-	-
Total Staff costs	*801,526*	*779,917*	*568,727*	*277,708*	*176,264*	*176,264*	801,526	779,917	568,727	277,708	176,264	176,264	-	-	-	-	-	-
Professional Services Contracts	*376,842*	*239,180*	*68,120*	*46,560*	*25,000*	*25,000*	351,842	214,680	43,120	21,560	-	-	25,000	24,500	25,000	25,000	25,000	25,000
Identify and Implement Criteria and Allocations for EITE - Section 13	**930,103**	**704,437**	**78,708**	**215,306**	**352,574**	**189,721**	**807,174**	**547,726**	**78,708**	**215,306**	**215,306**	**126,142**	**122,929**	**156,711**	**-**	**-**	**137,268**	**63,579**
Total Costs - 001-1 GF-S	930,103	448,387	-	-	-	-	807,174	443,422	-	-	-	-	122,929	4,965	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	256,050	78,708	215,306	352,574	189,721	-	104,304	78,708	215,306	215,306	126,142	-	151,746	-	-	137,268	63,579
Total FTEs	5.87	4.83	0.52	1.67	2.36	1.38	4.95	3.68	0.52	1.67	1.67	0.92	0.92	1.15	-	-	0.69	0.46
Total Staff costs	814,103	652,437	78,708	215,306	310,674	189,721	683,974	493,326	78,708	215,306	215,306	126,142	130,129	159,111	-	-	95,368	63,579
Professional Services Contracts	110,000	50,000	-	-	41,900	-	117,200	52,400	-	-	-	-	(7,200)	(2,400)	-	-	41,900	-
Meeting costs	6,000	2,000	-	-	-	-	6,000	2,000	-	-	-	-	-	-	-	-	-	-
Allocations for Electricity Suppliers and Natural Gas Utilities - Sections 14 and 15	**402,023**	**509,223**	**-**	**632,299**	**632,299**	**262,512**	**402,023**	**509,223**	**-**	**632,299**	**632,299**	**262,512**	**-**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	402,023	228,377	-	-	-	-	402,023	228,377	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	280,846	-	632,299	632,299	262,512	-	280,846	-	632,299	632,299	262,512	-	-	-	-	-	-
Total FTEs	2.79	3.54	-	4.37	4.37	1.87	2.79	3.54	-	4.37	4.37	1.87	-	-	-	-	-	-
Total Staff costs	400,023	507,224	-	627,299	627,299	260,512	400,023	507,224	-	627,299	627,299	260,512	-	-	-	-	-	-
Professional Services Contracts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meeting costs	2,000	2,000	-	5,000	5,000	2,000	2,000	2,000	-	5,000	5,000	2,000	-	-	-	-	-	-
Price Ceiling Units - Section 18	**982,488**	**509,287**	**77,668**	**77,668**	**77,668**	**77,668**	**982,488**	**509,287**	**77,668**	**77,668**	**77,668**	**77,668**	**-**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	982,488	408,761	-	-	-	-	982,488	408,761	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	100,526	77,668	77,668	77,668	77,668	-	100,526	77,668	77,668	77,668	77,668	-	-	-	-	-	-
Total FTEs	6.15	2.93	0.58	0.58	0.58	0.58	6.15	2.93	0.58	0.58	0.58	0.58	-	-	-	-	-	-
Total Staff costs	930,686	476,946	77,668	77,668	77,668	77,668	930,686	476,946	77,668	77,668	77,668	77,668	-	-	-	-	-	-
Professional Services Contracts	51,802	32,340	-	-	-	-	51,802	32,340	-	-	-	-	-	-	-	-	-	-
Meeting costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Offset Protocols - Section 19	**727,738**	**699,200**	**417,218**	**299,190**	**299,190**	**532,489**	**727,738**	**699,200**	**417,218**	**299,190**	**299,190**	**532,489**	**-**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	727,738	351,998	-	-	-	-	727,738	351,998	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	347,202	417,218	299,190	299,190	532,489	-	347,202	417,218	299,190	299,190	532,489	-	-	-	-	-	-
Total FTEs	4.14	3.85	3.05	2.07	2.07	3.44	4.14	3.85	3.05	2.07	2.07	3.44	-	-	-	-	-	-
Total Staff costs	564,238	535,700	416,218	299,190	299,190	452,239	564,238	535,700	416,218	299,190	299,190	452,239	-	-	-	-	-	-
Professional Services Contracts	160,500	160,500	-	-	-	80,250	160,500	160,500	-	-	-	80,250	-	-	-	-	-	-
Meeting costs	3,000	3,000	1,000	-	-	-	3,000	3,000	1,000	-	-	-	-	-	-	-	-	-
Assistance for Offset Projects - Section 20	**336,840**	**5,273,594**	**2,651,579**	**2,651,579**	**2,651,579**	**2,651,579**	**2,836,840**	**2,773,594**	**2,651,579**	**2,651,579**	**2,651,579**	**2,651,579**	**(2,500,000)**	**2,500,000**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	336,839	2,697,802	-	-	-	-	2,836,840	1,447,804	-	-	-	-	(2,500,001)	1,249,998	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	2,575,791	2,651,579	2,651,579	2,651,579	2,651,579	-	1,325,790	2,651,579	2,651,579	2,651,579	2,651,579	-	1,250,001	-	-	-	-
Total FTEs	2.30	2.02	1.15	1.15	1.15	1.15	2.30	2.02	1.15	1.15	1.15	1.15	-	-	-	-	-	-
Total Staff costs	307,340	265,094	144,079	144,079	144,079	144,079	307,340	265,094	144,079	144,079	144,079	144,079	-	-	-	-	-	-
Grants	-	5,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	(2,500,000)	2,500,000	-	-	-	-
Grant System Maintenance Costs	27,500	7,500	7,500	7,500	7,500	7,500	29,500	8,500	7,500	7,500	7,500	7,500	(2,000)	(1,000)	-	-	-	-
Meeting costs	2,000	1,000	-	-	-	-	-	-	-	-	-	-	2,000	1,000	-	-	-	-
GHG Reporting Changes – Sections 8, 15, 24, and 33, total costs of components below	**1,226,309**	**1,219,110**	**2,064,336**	**1,805,627**	**1,291,984**	**1,281,204**	**1,226,309**	**1,219,110**	**2,064,336**	**1,805,627**	**1,291,984**	**1,281,204**	**-**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	1,226,309	609,555	-	-	-	-	1,226,309	609,555	-	-	-	-	-	-	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	1,291,984	1,281,204	-	-	-	-	1,291,984	1,281,204	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	609,555	2,064,336	1,805,627	-	-	-	609,555	2,064,336	1,805,627	-	-	-	-	-	-	-	-
Total FTEs	8.45	8.50	11.85	11.10	8.11	8.11	8.45	8.50	11.85	11.10	8.11	8.11	-	-	-	-	-	-
Total Staff costs	1,226,309	1,219,110	1,801,144	1,650,727	1,248,864	1,248,864	1,226,309	1,219,110	1,801,144	1,650,727	1,248,864	1,248,864	-	-	-	-	-	-
Professional Services Contracts	-	-	263,192	154,900	43,120	32,340	-	-	263,192	154,900	43,120	32,340	-	-	-	-	-	-
GHG Reporting Changes – Rulemaking	***100,579***	***100,580***	***106,579***	***154,049***	**-**	**-**	**100,579**	**100,580**	**106,579**	**154,049**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	*100,579*	*50,290*	-	-	-	-	100,579	50,290	-	-	-	-	-	-	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	*50,290*	*106,579*	*154,049*	-	-	-	50,290	106,579	154,049	-	-	-	-	-	-	-	-
Total FTEs	0.86	0.86	0.86	1.27	-	-	0.86	0.86	0.86	1.27	-	-	-	-	-	-	-	-
Total Staff costs	*100,579*	*100,580*	*100,579*	*153,049*	-	-	100,579	100,580	100,579	153,049	-	-	-	-	-	-	-	-
Meeting costs	-	-	*6,000*	*1,000*	-	-	-	-	6,000	1,000	-	-	-	-	-	-	-	-
GHG Reporting Changes – Align GGRT with California's System	**-**	**-**	***839,232***	***533,053***	***422,273***	***411,493***	**-**	**-**	**839,232**	**533,053**	**422,273**	**411,493**	**-**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	*422,273*	*411,493*	-	-	-	-	422,273	411,493	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	*839,232*	*533,053*	-	-	-	-	839,232	533,053	-	-	-	-	-	-	-	-
Total FTEs	-	-	3.45	2.30	2.30	2.30	-	-	3.45	2.30	2.30	2.30	-	-	-	-	-	-
Total Staff costs	-	-	*582,040*	*379,153*	*379,153*	*379,153*	-	-	582,040	379,153	379,153	379,153	-	-	-	-	-	-
Professional Services Contracts	-	-	*257,192*	*153,900*	*43,120*	*32,340*	-	-	257,192	153,900	43,120	32,340	-	-	-	-	-	-
GHG Reporting Changes – Reassemble Data, Collect and Verify Data, and Provide Support for New Reporters	***1,125,730***	***1,118,530***	***1,118,525***	***1,118,525***	***869,711***	***869,711***	**1,125,730**	**1,118,530**	**1,118,525**	**1,118,525**	**869,711**	**869,711**	**-**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	*1,125,730*	*559,265*	-	-	-	-	1,125,730	559,265	-	-	-	-	-	-	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	*869,711*	*869,711*	-	-	-	-	869,711	869,711	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	*559,265*	*1,118,525*	*1,118,525*	-	-	-	559,265	1,118,525	1,118,525	-	-	-	-	-	-	-	-
Total FTEs	7.59	7.63	7.53	7.53	5.81	5.81	7.59	7.63	7.53	7.53	5.81	5.81	-	-	-	-	-	-
Total Staff costs	*1,125,730*	*1,118,530*	*1,118,525*	*1,118,525*	*869,711*	*869,711*	1,125,730	1,118,530	1,118,525	1,118,525	869,711	869,711	-	-	-	-	-	-
GHG Lifecycle Emissions Analysis - Section 10	**-**	**-**	**851,991**	**650,061**	**-**	**-**	**-**	**-**	**851,991**	**650,061**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S							-	-	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	851,991	650,061	-	-	-	-	851,991	650,061	-	-	-	-	-	-	-	-
Total FTEs	-	-	4.06	4.66	-	-	-	-	4.06	4.66	-	-	-	-	-	-	-	-
Total Staff costs	-	-	595,391	647,861	-	-	-	-	595,391	647,861	-	-	-	-	-	-	-	-
Professional Services Contracts	-	-	253,600	1,200	-	-	-	-	253,600	1,200	-	-	-	-	-	-	-	-
Meeting costs			3,000	1,000			-	-	3,000	1,000	-	-	-	-	-	-	-	-
Pre-emption of Clean Air Rule - Section 23	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Costs - 001-1 GF-S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2022 Supplemental Budget Decision Package
Implement Climate Commitment Act - Air Quality Program
Attachment B - Detailed Overview of Fiscal Note Estimate Differences Between E2SSB 5126 PL (Legislative-Passed Version) and 2SSB 5126 (Amount Appropriated in 2021-23 Operating Budget)

Purpose: Provide detailed differences between Ecology fiscal note estimates for E2SSB 5126 PL (enacted bill version) and 2SSB 5126 (version used to appropriate funding in 2021-23 operating budget) by section categories, cost categories, fund, and fiscal year.

August 2021

	E2SSB 5126 PL (legislative-passed version) - Clean Air Rule Preemption Removed (addressed in separate decision package - ML-KE Clean Air Rule Reduction)						2SSB 5126 (version used to appropriate funding in 2021-23 operating budget)						Cost Differences					
OPERATING BUDGET	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
Total Costs - 23P-1 MTCA-Op	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total FTEs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Staff costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Professional Services Contracts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Staff Cost Adjustments - CAR Pre-emption	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
							-											
Linkage with Other Jurisdictions - Section 24	**117,380**	-	-	-	-	-	-	-	-	-	-	-	**117,380**	-	-	-	-	-
Total Costs - 001-1 GF-S	117,380	-	-	-	-	-	-	-	-	-	-	-	117,380	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total FTEs	0.12	-	-	-	-	-	-	-	-	-	-	-	0.12	-	-	-	-	-
Total Staff costs	17,380	-	-	-	-	-	-	-	-	-	-	-	17,380	-	-	-	-	-
Professional Services Contracts	100,000	-	-	-	-	-	-	-	-	-	-	-	100,000	-	-	-	-	-
Meeting costs		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Evaluating Investments - Section 26	**-**	**117,380**	**134,764**	**134,764**	**134,764**	**134,764**	-	-	-	-	-	-	**-**	**117,380**	**134,764**	**134,764**	**134,764**	**134,764**
Total Costs - 001-1 GF-S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	117,380	134,764	134,764	134,764	134,764	-	-	-	-	-	-	-	117,380	134,764	134,764	134,764	134,764
Total FTEs	-	0.12	0.23	0.23	0.23	0.23	-	-	-	-	-	-	-	0.12	0.23	0.23	0.23	0.23
Total Staff costs	-	17,380	34,764	34,764	34,764	34,764	-	-	-	-	-	-	-	17,380	34,764	34,764	34,764	34,764
Professional Services Contracts	-	100,000	100,000	100,000	100,000	100,000	-	-	-	-	-	-	-	100,000	100,000	100,000	100,000	100,000
Meeting costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual Reporting - Section 46	**-**	**26,219**	**52,439**	**52,439**	**52,439**	**52,439**	-	-	-	-	-	-	**-**	**26,219**	**52,439**	**52,439**	**52,439**	**52,439**
Total Costs - 001-1 GF-S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	26,219	52,439	52,439	52,439	52,439	-	-	-	-	-	-	-	26,219	52,439	52,439	52,439	52,439
Total FTEs	-	0.23	0.46	0.46	0.46	0.46	-	-	-	-	-	-	-	0.23	0.46	0.46	0.46	0.46
Total Staff costs	-	26,219	52,439	52,439	52,439	52,439	-	-	-	-	-	-	-	26,219	52,439	52,439	52,439	52,439
Professional Services Contracts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meeting costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Home Heating Assistance - Section 47	**16,408**	-	-	-	-	-	-	-	-	-	-	-	**16,408**	-	-	-	-	-
Total Costs - 001-1 GF-S	16,408	-	-	-	-	-	-	-	-	-	-	-	16,408	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total FTEs	0.12	-	-	-	-	-	-	-	-	-	-	-	0.12	-	-	-	-	-
Total Staff costs	14,408	-	-	-	-	-	-	-	-	-	-	-	14,408	-	-	-	-	-
Professional Services Contracts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meeting costs	2,000	-	-	-	-	-	-	-	-	-	-	-	2,000	-	-	-	-	-
ECOLOGY TOTAL OPERATING FTEs	**62.7**	**56.0**	**47.0**	**58.4**	**51.6**	**49.0**	**51.9**	**52.5**	**43.4**	**54.3**	**45.5**	**43.9**	**10.8**	**3.4**	**3.7**	**4.1**	**6.1**	**5.0**
ECOLOGY TOTAL OPERATING EXPENDITURES	**11,068,279**	**14,377,770**	**10,683,397**	**11,771,900**	**10,694,790**	**10,290,587**	**11,716,218**	**11,423,709**	**10,076,337**	**11,108,465**	**9,719,502**	**9,502,290**	**(647,939)**	**2,954,061**	**607,060**	**663,435**	**975,288**	**788,297**

*Total FTEs include 0.15 FTE administrative overhead. Staff costs include salary and benefits, travel, equipment,

Fiscal Note Totals - Operating Summary by Account	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
Total Costs - 001-1 GF-S	11,068,279	7,788,072	-	-	-	-	11,716,218	6,284,282	-	-	-	-	(647,939)	1,503,790	-	-	-	-
Total Costs - 216-1 APCA	-	-	-	-	1,291,984	1,281,204	-	-	-	-	1,291,984	1,281,204	-	-	-	-	-	-
Total Costs - 26B-1 Climate Investment Account	-	6,589,698	10,683,397	11,771,900	9,402,806	9,009,383	-	5,139,427	10,076,337	11,108,465	8,427,518	8,221,086	-	1,450,271	607,060	663,435	975,288	788,297
Grand Total	***11,068,279***	***14,377,770***	***10,683,397***	***11,771,900***	***10,694,790***	***10,290,587***	***11,716,218***	***11,423,709***	***10,076,337***	***11,108,465***	***9,719,502***	***9,502,290***	***(647,939)***	***2,954,061***	***607,060***	***663,435***	***975,288***	***788,297***

Fiscal Note Totals - Operating Summary by Cost Category	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
Professional Services Contracts	1,935,744	1,444,895	1,466,912	1,084,660	992,020	1,019,590	1,663,344	1,322,795	1,341,912	959,660	825,120	894,590	272,400	122,100	125,000	125,000	166,900	125,000
AAG Support for Rulemaking (all sections)	119,000	119,000	119,000	119,000	84,000	84,000	85,000	85,000	85,000	85,000	60,000	60,000	34,000	34,000	34,000	34,000	24,000	24,000
Meeting costs	45,000	24,000	14,000	20,000	20,000	18,000	37,000	22,000	14,000	20,000	19,000	16,000	8,000	2,000	-	-	1,000	2,000
SAO Services	33,250	33,250	33,250	33,250	33,250	-	33,250	33,250	33,250	33,250	33,250	-	-	-	-	-	-	-
Grants	-	5,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	(2,500,000)	2,500,000	-	-	-	-
Grant System Maintenance Costs	27,500	7,500	7,500	7,500	7,500	7,500	29,500	8,500	7,500	7,500	7,500	7,500	(2,000)	(1,000)	-	-	-	-
Total Staff costs	8,757,785	7,678,125	6,471,735	7,936,490	6,987,020	6,590,497	7,368,124	7,231,164	6,023,675	7,432,055	6,203,632	5,953,200	1,389,661	446,961	448,060	504,435	783,388	637,297
Supplies and Equipment	150,000	71,000	71,000	71,000	71,000	71,000	-	221,000	71,000	71,000	71,000	71,000	150,000	(150,000)	-	-	-	-
Grand Total	***11,068,279***	***14,377,770***	***10,683,397***	***11,771,900***	***10,694,790***	***10,290,587***	***11,716,218***	***11,423,709***	***10,076,337***	***11,108,465***	***9,719,502***	***9,502,290***	***(647,939)***	***2,954,061***	***607,060***	***663,435***	***975,288***	***788,297***

2022 Supplemental Budget Decision Package
Implement Climate Commitment Act - Air Quality Program
Attachment C - 6 Year Detail Comparison

Purpose: Provide summary of differences between Ecology fiscal note estimates for E2SSB 5126 PL (legislative-passed version) and 2SSB 5126 (version used to appropriate funding in 2021-23 operating budget) by fund, fiscal year, object, and job class).

August 2021

E2SSB 5126 PL (legislative-passed version) - Clean Air Rule Preemption Removed (addressed in separate Decision Package - ML-KE Clean Air Rule Reduction)

6 Year Fiscal Detail

Expenditures by Account		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
216-1	APCA					1,291,984	1,281,204
001-1	GF-S	11,068,279	7,788,072				
26B-1	Climate Commitment Account		6,589,698	10,683,397	11,771,900	9,402,806	9,009,383
	Total Expenditures	**11,068,279**	**14,377,770**	**10,683,397**	**11,771,900**	**10,694,790**	**10,290,587**

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages	4,793,150	4,198,420	3,539,266	4,337,752	3,818,069	3,600,199
B	Employee Benefits	1,759,088	1,540,828	1,298,913	1,591,957	1,401,234	1,321,277
C	Personal Service Contract	1,935,744	1,444,895	1,460,912	1,083,660	992,020	1,019,590
E	Goods and Services	450,595	456,418	420,259	462,077	401,628	356,969
G	Travel	118,924	106,194	89,261	110,755	97,879	92,924
J	Capital Outlays	215,462	58,450	49,126	60,956	53,870	51,139
N	Grants, Benefits, and Client Services		5,000,000	2,500,000	2,500,000	2,500,000	2,500,000
T	Intra-Agency Reimbursements	1,795,316	1,572,565	1,325,660	1,624,743	1,430,090	1,348,489
	Total Objects	**11,068,279**	**14,377,770**	**10,683,397**	**11,771,900**	**10,694,790**	**10,290,587**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
COMM OUTRCH & ENVIRO ED SPEC 4	70,956	2.2	2.0	2.1	2.1	2.0	2.0
COMMUNICATIONS CONSULTANT 5	84,396	0.5	0.5	0.5	0.5	-	-
WMS BAND 2	95,000	2.0	2.0	2.0	2.0	2.0	2.0
WMS BAND 3	112,000	0.8	1.0	1.0	1.0	1.0	1.0
ENVIRONMENTAL PLANNER 4	86,484	1.3	1.0	2.4	2.4	1.0	1.0
ENVIRONMENTAL PLANNER 5	95,484	9.1	5.5	4.0	7.2	6.1	4.9
COMM OUTRCH & ENVIRO ED SPEC 3	61,224	1.9	1.5	0.5	1.3	1.0	1.0
ECONOMIC ANALYST 3	82,344	-	1.4	0.3	0.5	0.2	0.8
ENVIRONMENTAL PLANNER 3	78,408	4.4	3.1	0.8	2.4	2.5	2.1
REGULATORY ANALYST 2	80,292	-	0.5	0.1	0.2	0.1	0.3
ENVIRONMENTAL ENGINEER 5	105,384	3.5	2.8	1.5	3.3	3.3	2.8
ENVIRONMENTAL SPECIALIST 5	78,408	9.4	6.0	4.8	8.7	8.0	7.5
ENVIRONMENTAL ENGINEER 3	95,484	2.5	2.7	2.0	2.8	2.8	2.3
ENVIRONMENTAL SPECIALIST 4	70,956	3.8	8.8	9.1	9.1	9.1	9.1
IT APP DEVELOPMENT-JOURNEY	96,888	3.7	3.2	3.0	2.5	2.5	2.5
IT APP DEVELOPMENT-SR/SPECIALIST	112,176	3.0	2.8	3.5	1.5	1.0	1.0
IT APP DEVELOPMENT-MANAGER	123,636	0.1	0.1	-	-	-	-
FISCAL ANALYST 5	78,408	0.5	-	-	-	-	-
FISCAL ANALYST 3	62,748	0.5	0.1	0.1	0.1	0.1	0.1
IT BUSINESS ANALYST-ENTRY	83,892	0.5	-	-	-	-	-
IT DATA MANAGEMENT-JOURNEY	101,748	0.6	0.3	0.3	0.3	0.3	0.3
MANAGEMENT ANALYST 5	88,644	3.0	3.0	3.0	3.0	2.0	2.0
NATURAL RESOURCE SCIENTIST 4	88,644	0.3	0.1	0.1	0.1	0.1	0.1
IT PROJECT MANAGEMENT-SR/SPECIALIST	112,176	1.0	0.5	-	-	-	-
FISCAL ANALYST 2		5.4	4.9	4.1	5.1	4.5	4.3
IT APP DEVELOPMENT-JOURNEY-Admin		2.7	2.4	2.1	2.5	2.3	2.1
Total FTEs		**62.7**	**56.0**	**47.1**	**58.4**	**51.6**	**49.0**

2SSB 5126 (version used to appropriate funding in 2021-23 operating budget)

6 Year Fiscal Detail

Expenditures by Account		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
216-1	APCA					1,291,984	1,281,204
001-1	GF-S	11,716,218	6,284,282				
26B-1	Climate Commitment Account		5,139,427	10,076,337	11,108,465	8,427,518	8,221,086
	Total Expenditures	**11,716,218**	**11,423,709**	**10,076,337**	**11,108,465**	**9,719,502**	**9,502,290**

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages	4,035,704	3,954,720	3,295,734	4,063,362	3,391,069	3,253,191
B	Employee Benefits	1,481,106	1,451,389	1,209,537	1,491,256	1,244,525	1,193,926
C	Personal Service Contract	1,663,344	1,322,795	1,335,912	958,660	825,120	894,590
E	Goods and Services	371,767	409,007	373,080	413,447	354,747	312,818
G	Travel	98,477	99,661	82,322	103,053	86,358	83,369
J	Capital Outlays	54,208	204,851	45,308	56,718	47,529	45,881
N	Grants, Benefits, and Client Services	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
T	Intra-Agency Reimbursements	1,511,612	1,481,286	1,234,444	1,521,969	1,270,154	1,218,515
	Total Objects	**11,716,218**	**11,423,709**	**10,076,337**	**11,108,465**	**9,719,502**	**9,502,290**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
COMM OUTRCH & ENVIRO ED SPEC 4	70,956	2.0	2.0	2.1	2.1	2.0	2.0
COMMUNICATIONS CONSULTANT 5	84,396	0.5	0.5	0.5	0.5	-	-
WMS BAND 2	95,000	1.0	1.0	1.0	1.0	1.0	1.0
WMS BAND 3	112,000	0.8	1.0	1.0	1.0	1.0	1.0
ENVIRONMENTAL PLANNER 4	86,484	1.0	1.0	2.4	2.4	1.0	1.0
ENVIRONMENTAL PLANNER 5	95,484	7.6	4.6	3.8	6.8	4.8	4.1
COMM OUTRCH & ENVIRO ED SPEC 3	61,224	1.9	1.5	0.5	1.3	1.0	1.0
ECONOMIC ANALYST 3	82,344	-	1.2	0.3	0.5	-	0.8
ENVIRONMENTAL PLANNER 3	78,408	3.9	2.5	0.8	2.2	1.7	1.8
REGULATORY ANALYST 2	80,292	-	0.4	0.1	0.2	-	0.3
ENVIRONMENTAL ENGINEER 5	105,384	3.5	2.8	1.5	3.3	3.3	2.8
ENVIRONMENTAL SPECIALIST 5	78,408	7.0	4.6	3.6	7.5	6.8	6.1
ENVIRONMENTAL ENGINEER 3	95,484	2.5	2.7	2.0	2.8	2.8	2.3
ENVIRONMENTAL SPECIALIST 4	70,956	1.3	9.4	8.3	8.3	8.3	8.3
IT APP DEVELOPMENT-JOURNEY	96,888	3.7	3.2	3.0	2.5	2.5	2.5
IT APP DEVELOPMENT-SR/SPECIALIST	112,176	3.0	2.8	3.5	1.5	1.0	1.0
IT APP DEVELOPMENT-MANAGER	123,636	0.1	0.1	-	-	-	-
FISCAL ANALYST 5	78,408	0.5	-	-	-	-	-
FISCAL ANALYST 3	62,748	0.5	0.1	0.1	0.1	0.1	0.1
IT BUSINESS ANALYST-ENTRY	83,892	0.5	-	-	-	-	-
IT DATA MANAGEMENT-JOURNEY	101,748	-	0.6	0.3	0.3	0.3	0.3
MANAGEMENT ANALYST 5	88,644	3.0	3.0	3.0	3.0	2.0	2.0
NATURAL RESOURCE SCIENTIST 4	88,644	-	0.3	0.1	0.1	0.1	0.1
IT PROJECT MANAGEMENT-SR/SPECIALIST	112,176	1.0	0.5	-	-	-	-
FISCAL ANALYST 2		4.5	4.6	3.8	4.7	4.0	3.8
IT APP DEVELOPMENT-JOURNEY-Admin		2.3	2.3	1.9	2.4	2.0	1.9
Total FTEs		**51.9**	**52.5**	**43.4**	**54.3**	**45.5**	**43.9**

Decision Package Summary - Activity A063

6 Year Fiscal Detail

Expenditures by Account		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
216-1	APCA						
001-1	GF-S	(647,939)	1,503,790				
26B-1	Climate Commitment Account		1,450,271	607,060	663,435	975,288	788,297
	Total Expenditures	**(647,939)**	**2,954,061**	**607,060**	**663,435**	**975,288**	**788,297**

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages	757,446	243,700	243,532	274,390	427,000	347,008
B	Employee Benefits	277,982	89,439	89,376	100,701	156,709	127,351
C	Personal Service Contract	272,400	122,100	125,000	125,000	166,900	125,000
E	Goods and Services	78,828	47,411	47,179	48,630	46,881	44,151
G	Travel	20,447	6,533	6,939	7,702	11,521	9,555
J	Capital Outlays	161,254	(146,401)	3,818	4,238	6,341	5,258
N	Grants, Benefits, and Client Services	(2,500,000)	2,500,000				
T	Intra-Agency Reimbursements	283,704	91,279	91,216	102,774	159,936	129,974
	Total Objects	**(647,939)**	**2,954,061**	**607,060**	**663,435**	**975,288**	**788,297**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
COMM OUTRCH & ENVIRO ED SPEC 4	70,956	0.2	-	-	-	-	-
COMMUNICATIONS CONSULTANT 5	84,396	-	-	-	-	-	-
WMS BAND 2	95,000	1.0	1.0	1.0	1.0	1.0	1.0
WMS BAND 3	112,000	0.1	-	-	-	-	-
ENVIRONMENTAL PLANNER 4	86,484	0.3	-	-	-	-	-
ENVIRONMENTAL PLANNER 5	95,484	1.5	0.9	0.2	0.4	1.3	0.8
COMM OUTRCH & ENVIRO ED SPEC 3	61,224	-	-	-	-	-	0.1
ECONOMIC ANALYST 3	82,344	-	0.2	-	-	0.2	-
ENVIRONMENTAL PLANNER 3	78,408	0.5	0.6	-	0.2	0.8	0.4
REGULATORY ANALYST 2	80,292	-	0.1	-	-	0.1	-
ENVIRONMENTAL ENGINEER 5	105,384	-	-	-	-	-	-
ENVIRONMENTAL SPECIALIST 5	78,408	2.4	1.4	1.2	1.2	1.2	1.4
ENVIRONMENTAL ENGINEER 3	95,484	-	-	-	-	-	-
ENVIRONMENTAL SPECIALIST 4	70,956	2.6	(0.7)	0.8	0.8	0.8	0.8
IT APP DEVELOPMENT-JOURNEY	96,888	-	-	-	-	-	-
IT APP DEVELOPMENT-SR/SPECIALIST	112,176	-	-	-	-	-	-
IT APP DEVELOPMENT-MANAGER	123,636	-	-	-	-	-	-
FISCAL ANALYST 5	78,408	-	-	-	-	-	-
FISCAL ANALYST 3	62,748	-	-	-	-	-	-
IT BUSINESS ANALYST-ENTRY	83,892	-	-	-	-	-	-
IT DATA MANAGEMENT-JOURNEY	101,748	0.6	(0.3)	-	-	-	-
MANAGEMENT ANALYST 5	88,644	-	-	-	-	-	-
NATURAL RESOURCE SCIENTIST 4	88,644	0.3	(0.1)	-	-	-	-
IT PROJECT MANAGEMENT-SR/SPECIALIST	112,176	-	-	-	-	-	-
FISCAL ANALYST 2		0.9	0.3	0.3	0.4	0.5	0.5
IT APP DEVELOPMENT-JOURNEY-Admin		0.5	0.2	0.2	0.2	0.3	0.2
Total FTEs		**10.8**	**3.5**	**3.7**	**4.1**	**6.1**	**5.1**

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Agency Recommendation Summary

In 2019, the Governor directed Ecology to adopt rules by September 1, 2021 for assessing greenhouse gas emissions from fossil fuel and industrial projects. One-time funding was provided in the 2020 supplemental operating budget to complete this work, but complications resulting from the COVID-19 pandemic delayed the process, and in March, Governor Inslee extended the deadline for rulemaking to December 31, 2021. However, because the original funding provided only went through August 2021, Ecology needs additional funding to cover the staff time and associated contractor work that was shifted to this biennium because of those delays. This request also supports ongoing funding needed to implement the rule after adoption and provide technical assistance to SEPA-lead agencies and projects that will be subject to the new rule. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	1.5	0.6	**1.05**	0.6	0.6	**0.6**
Operating Expenditures						
Fund 23P - 1	$451	$87	**$538**	$87	$87	**$174**
Total Expenditures	**$451**	**$87**	**$538**	**$87**	**$87**	**$174**

Decision Package Description

Background
Climate change poses a threat to the health and well-being of all Washingtonians. Our state is already experiencing the effects of climate change in the form of intensifying wildfires, drought, floods, sea level rise, ocean acidification, and ecosystem decline. Climate change threatens the health and prosperity of future generations, particularly for the most vulnerable communities. As scientific understanding of the pace, scale, and drivers of climate change improves, governmental decision-making must adapt to new information.

Large fossil fuel and industrial projects have the potential to emit high amounts of greenhouse gases (GHGs), which result in adverse environmental impacts. In the case of long-lived infrastructure and industrial projects, siting decisions must be informed by a comprehensive understanding of a project's statewide and global impact, including its impact on climate change. It is essential that the assessments of environmental and climate impacts for such projects be based on the most current climate change science available.

On December 19, 2019, Governor Inslee issued Directive 19-18, Environmental Assessment of Greenhouse Gas Emissions (https://www.governor.wa.gov/sites/default/files/directive/19-18%20-%20ECY%20Climate%20Rules%20%28tmp%29.pdf), directing Ecology to "strengthen and standardize" environmental emissions assessments for all new and expanding industrial and fossil fuel projects in order to decrease climate risk. The directive required Ecology to adopt rules (Greenhouse Gas Assessment for Projects (GAP) Rule) by September 1, 2021 for evaluating GHG emissions from major industrial and fossil fuel projects and determining what type of mitigation is appropriate for these impacts.

The GAP rule will provide methods to assess GHG emissions from these projects and require a plan to eliminate, reduce, or offset the environmental impacts. The rule will enable consistent, predictable, and transparent consideration of GHG emissions related to industrial and fossil fuel projects, and will:

- Address analysis and mitigation of GHG emissions for environmental assessments of public and private industrial and fossil fuel projects.
- Provide consistent and comprehensive assessment methods for projects covered by the rule.
- Provide clarity and transparency to industry, the public, and agencies.

According to Ecology's Draft GAP Rule Framework published in March 2021, the rule will have three main section:

1. Applicability: The rule will include an applicability screening process to identify which projects will use the rule.
2. Environmental Assessment: The rule will include environmental assessment methods for GHG emissions to be used during the State Environmental Policy Act (SEPA) environmental review process.
3. Mitigation Plan: The rule will include requirements for a GHG emissions mitigation plan to address potential environmental impacts.

The GAP rule will supplement existing SEPA rules in Chapter 197-11 WAC by providing detailed instructions regarding the analysis and mitigation of GHG emissions. GHGs are already considered in the SEPA environmental review process as an air pollutant. However, the SEPA rules do not describe detailed methods for analyzing any particular pollutant or resource; typically, other rules, guidance, and policies direct the analysis of these impacts. The GAP rule will provide a consistent and comprehensive methodology for performing the analysis of applicable

projects.

Delayed Rulemaking
Ecology received $2.39 million in one-time funding in the 2020 supplemental operating budget to complete this rulemaking, but work on this rule was delayed last year because of the COVID-19 pandemic. The project experienced challenges and delays in gathering public feedback during the rulemaking process, and, at the request of Ecology, on March 4, 2021 Governor Inslee extended the deadline for rule adoption to December 31, 2021.

While the amended deadline provided Ecology the time needed to complete the rulemaking, Ecology needs additional funding to cover the costs of the staff working on the rule for an additional four months. The funding Ecology received in the 2020 supplemental budget was only intended to cover this work through August 31, 2021. Because the deadline for rule adoption is fast approaching, Ecology is shifting base budget funding from other priority work planned for later this biennium to ensure we can support the additional work required to complete the rulemaking this fall. This request supports the backfill of the funding that has had to be shifted this biennium to cover these costs. Please note, as of September 1, 2021 Ecology has $200,000 remaining in its base operating budget from the funding originally provided for this work in fiscal year 2022. Therefore, this request reflects only the remaining staff costs needed to complete the rulemaking under the extended timeframe.

In addition to covering these staff costs, Ecology is also having to shift funding this biennium to support contracting work, which was delayed last year due to the COVID-19 pandemic. A portion of the funding Ecology received in 2020 was used to contract for technical consultation needed to complete the rulemaking and develop responses to formal public comments. Because the pandemic impacted the public's ability to provide comments at informational meetings in 2020, after coordinating with the Governor's Office, Ecology provided a second public comment period in 2021. This extended the project timeline and meant that the contract for technical assistance wasn't needed until after the second comment period had concluded. This delayed the start of the contract, and meant that the majority of those planned costs will now be paid for in the current biennium.

Because the contracted work was originally supposed to be complete by June 30, 2021, it was removed at carry-forward level in the 2021-23 operating budget, and is not available to support these costs this biennium. This means that Ecology is now having to redirect existing base budget away from other priorities to pay for these costs. This request supports the backfill of the funding that had to be shifted from other work this biennium to cover these contractor costs.

If the funding that has had to be shifted from other planned priority work is not backfilled, Ecology will be unable to fulfill other planned work this biennium including, but not limited to, providing training and technical assistance to SEPA Lead Agencies, applicants, and the public. This would also limit the ability of our Air Quality Program to perform scientific research and analysis that supports statewide air quality permitting. This could lead to permitting delays and/or have a negative impact on statewide air quality.

Please note, if this rule is appealed, Ecology may need additional resources to pay for Attorney General Office (AGO) representation. It is difficult at this time to predict whether the rule will be appealed, as well as what the associated legal costs may be. If additional resources are needed in the future to handle appeals, Ecology, in coordination with the AGO, may submit a future budget request to address those needs.

New Implementation Costs
In addition to these backfill needs, once the rule is adopted, Ecology will need additional resources to ensure successful implementation of the rule, and provide technical assistance to project applicants and SEPA lead agencies on how to comply. A project applicant or SEPA lead agency will use an initial screening process to determine if the GAP rule applies to a proposed project. Staff supported by this request will provide technical assistance to these project proponents in making that determination.

Those projects deemed applicable will be required to provide an assessment of the project's potential GHG emissions and energy impacts, using the environmental assessment methods in the GAP rule. Although Ecology already reviews projects for GHG impacts on a case-by-case basis during SEPA review, this rule establishes more rigorous and complex review requirements for Ecology. Staff supported by this request will assist proponents in conducting these assessments and help to provide a consistent and comprehensive approach to identifying a project's GHG emissions and energy impacts. The environmental assessment will include two key parts:

1. Greenhouse Gas Emissions Analysis, including:
    a. Facility emissions – for emissions from the project facility or core project infrastructure.
    b. Life cycle analysis (LCA) of emissions – for the life cycle of GHGs associated with the project, including inputs and outputs.
2. Energy Analysis – for direct or indirect effects on energy supply, output, load, or other energy impacts associated with the project.

The rule will also require an applicant or lead agency to develop a mitigation plan that will describe the mitigation needed to reduce GHG emissions for all phases of the project. Staff supported by this request will assist project applicants and lead agencies in assessing GHG emissions and developing these plans.

Impacts on Population Served:
Climate change poses a threat to the health and well-being of all Washingtonians. Our state is already experiencing the effects of climate change in the form of intensifying wildfires, drought, floods, sea level rise, ocean acidification, and ecosystem decline. Climate change threatens the

health and prosperity of future generations, particularly for the most vulnerable communities. Completion and successful implementation of the GAP rule will provide methods to assess GHG emissions from these projects and require a plan to eliminate, reduce, or offset the environmental impacts.

Each year, there are around 3,000 SEPA project actions taken in Washington. Of these projects, about 500 to 600 proponents are expected to conduct an applicability check to determine if the new GAP rule applies to their project. It's currently estimated that around six projects a year will need detailed assistance to assess greenhouse gas emissions and develop mitigation plans.

In addition, there are 202 SEPA lead agencies in Washington and they are also expected to have questions about implementing the rule, conducting assessments, and developing mitigation plans.

If the backfill portion of this request is supported, it will ensure that Ecology has the resources needed to continue other core environmental and public health work across the state without interruption or a decline in service.

Alternatives Explored:
In order to meet the Governor's directive, and adopt the GAP rule by December 31, 2021, Ecology must continue to move forward with its current rulemaking process, and that means redirecting base budget resources from other priority work areas in order to support this project. The only alternative to this approach would be to delay rulemaking until resources could be obtained, but that is not feasible given the Governor's directive.

The only alternative to this request for supporting the ongoing implementation of the rule would be to redirect existing staff to this work. This alternative is also not feasible as it would reduce capacity for other core work currently being done in our Air Quality and Shorelands Programs.

Consequences of Not Funding This Request:
If this request is not funded, Ecology would not have the resources needed to replace the funding that had to be redirected to support completion of the GAP rule in fiscal year 2022. Without this backfill funding, Ecology's would be less responsive to project applicants and local project review needs under SEPA this biennium. This would mean that projects could be stalled early on in the review process, go through the process without their impacts being fully addressed, which could lead to increased appeals and/or project delays later on. In addition, other planned work with SEPA would be delayed or reduced, including providing SEPA training and technical assistance to SEPA lead agencies, applicants, and the public. This would also limit the agency's ability to complete research and analysis needed to support air quality permitting decisions being made across the state.

If this request is not funded, Ecology would not have the resources to support the ongoing implementation of the GAP rule. This would impact our ability to provide technical assistance and support to project applicants and SEPA lead agencies in determining applicability with the rule, completion of environmental assessments, and creation of mitigation plans.

Assumptions and Calculations

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

To complete the proposed rulemaking, $2.39 million was appropriated from the Model Toxics Control Operating Account (MTCA Operating) in the 2020 supplemental budget. That funding was split between activities A063 - Climate Change Mitigation and Adaptation and A041 - Provide Technical Assistance on State Environmental Policy Act (SEPA) Review. This request expands these activities by adding a combination of one-time and ongoing funding needed to complete rulemaking and implement the new rule moving forward. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for these activities. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A063: Climate Change Mitigation and Adaptation		
	2019-21	**2021-23**
FTEs Total	35.05	91.20
001-1 General Fund - State	$3,666,000	$21,069,000
216-1 Air Pollution Control - State	$1,185,000	$926,000
23P-1 Model Toxics Control - State	$4,439,000	$7,461,000
25Q-1 Clean Fuels Program - State	$0	$348,000
26B-1 Climate Investment - State	$0	$4,765,000
489-1 Pension Funding Stabilization - State	$195,000	$0
TOTAL	**$9,486,000**	**$34,569,000**

A041: Provide Technical Assistance on State Environmental Policy Act (SEPA) Review		
	2019-21	2021-23
FTEs Total	9.55	6.75
001-1 General Fund - State	$0	$360,000
001-2 General Fund - Federal	$276,000	$286,000
23P-1 Model Toxics Control Operating - State	$2,576,000	$1,516,000
TOTAL	**$2,852,000**	**$2,162,000**

Detailed Assumptions and Calculations:

Ecology requires a combination of one-time and ongoing funding to (1) backfill resources used to complete the GAP rulemaking by December 31, 2021, and (2) support new staff needed to implement the new rule beginning January 1, 2022. For the purposes of this Decision Package, requested resources are described below, and shown in the corresponding expenditure tables, based on when the work will be conducted, even though resources wouldn't be appropriated until after the 2022 supplemental budget is enacted. Because the requested funding source, MTCA Operating, is a biennial appropriation, if funded, this request will be able support Ecology's needs across the current biennium.

Rulemaking Backfill
As noted above, Ecology has $200,000 in one-time funding remaining in its base budget for the current biennium to support this work. Therefore, beginning September 1, 2021 through December 31, Ecology only requires the following salaries, benefits, and associated staff costs to cover the additional time needed to complete the GAP rulemaking:

- 0.08 FTE Environmental Planner (EP) 4 to act as rulemaking lead.
- 0.17 FTE EP5, 0.13 FTE Environmental Specialist (ES) 5, and 0.03 FTE Environmental Engineer 5 across Ecology's Air Quality and Shorelands programs to provide subject matter expertise on the GAP rule.
- 0.03 FTE Regulatory Analyst (RA) 2 and 0.08 FTE Economic Analyst 3 to perform an economic impact analysis of the rule prior to adoption.
- 0.01 FTE Communications Outreach & Environmental Education Specialist 4 to act as public outreach coordinator.

Implementation
Beginning January 1, 2022 through June 30, 2022, Ecology requires salaries, benefits, and associated staff costs for 0.25 FTE EP5 and 0.25 FTE ES5 to provide one-time support for rule implementation through technical assistance, consultation, and guidance drafting support for the review process under the rule.

Ecology also requires $238,000 for contracted technical assistance needed to complete the rulemaking. One-time funding for this contract was part of the funding received in the 2020 supplemental budget, but because of delays in the rulemaking process stemming from the COVID-19 pandemic, the work of the contractor was delayed until fiscal year 2022. These costs are shown in Object C.

Beginning January 1, 2022, and ongoing, Ecology requires salaries, benefits, and associated staff costs 0.25 FTE to provide SEPA guidance/technical review and SEPA environmental impact statement (EIS) project management support. This increases to 0.5 FTE beginning in fiscal year 2023.

Please note, because this is a new rule, implementation costs may be different from currently anticipated. Ecology may submit future budget requests to support additional implementation costs should this workload increase.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages Employee	111,746	47,742	47,742	47,742	47,742	47,742
B	Benefits	41,011	17,521	17,521	17,521	17,521	17,521
C	Personal Service Contract	238,000					
E	Goods and Services	13,088	2,072	2,072	2,072	2,072	2,072
G	Travel	2,750	1,091	1,091	1,091	1,091	1,091
J	Capital Outlays	1,511	601	601	601	601	601
T	Intra-Agency Reimbursements	43,228	18,470	18,470	18,470	18,470	18,470
	Total Objects	**451,334**	**87,497**	**87,497**	**87,497**	**87,497**	**87,497**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Environmental Planner 4	86,484	0.08					
Environmental Planner 5	95,484	0.67	0.50	0.50	0.50	0.50	0.50
Environmental Specialist 5	78,408	0.38					
Regulatory Analyst 2	80,292	0.03					
Economic Analyst 3	82,344	0.08					
Environmental Engineer 5	105,384	0.03					
COMM OUTRCH & ENVIRO ED SPEC 4	70,956	0.01					
FISCAL ANALYST 2		0.13	0.05	0.05	0.05	0.05	0.05
IT APP DEVELOPMENT-JOURNEY		0.06	0.03	0.03	0.03	0.03	0.03
Total FTEs		**1.45**	**0.58**	**0.58**	**0.58**	**0.58**	**0.58**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Contracts are $238,000 in FY 2022 for a contractor to provide technical assistance during the rulemaking process.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Climate change poses a threat to the health and well-being of all Washingtonians. Our state is already experiencing the effects of climate change in the form of intensifying wildfires, drought, floods, sea level rise, ocean acidification, and ecosystem decline. Climate change threatens the health and prosperity of future generations, particularly for the most vulnerable communities. Large fossil fuel and industrial projects have the potential to emit high amounts of GHGs, which result in adverse environmental impacts. The GAP rule requires a comprehensive assessment of GHG emissions and a mitigation plan for these projects. The applicant or lead agency will develop a mitigation plan that will identify mitigation measures for GHG emissions from the project. The mitigation plan applies for the lifetime of the project, and therefore may go beyond the life span considered in the environmental assessment. The rule will require mitigation projects within the plan to be prioritized for:

- Minorities and communities of color.
- Tribal communities.
- Low-income populations.
- Communities disproportionately affected by climate change.
- Communities that are affected by other impacts from the project, such as local transportation, water quality, or other air quality impacts.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing three goals in Ecology's strategic plan:

- Reduce and prepare for climate impacts
- Prevent and reduce toxic threats and pollution
- Support and engage our communities, customers, and employees

The GAP rule will provide comprehensive and consistent GHG assessments and require mitigation plans be developed as part of the SEPA process. This approach will use best available science and conduct evaluations using the legislative greenhouse gas limits for Washington. The rule is expected to encourage GHG emission reductions. This supports the agency's work toward reducing and preparing for climate impacts, preventing and reducing toxic threats and pollution, and supporting and engaging our communities in the rulemaking process and mitigating impacts.

This request also provides essential support to the Governor's Results Washington Goals for Sustainable Energy and a Clean Environment and Healthy and Safe Communities. It is also responsive to Governor's Directive 19-18.

Performance Outcomes:

Implementation of the GAP rule is expected to provide more consistent and comprehensive assessments of GHG emissions for Washington projects. This is expected to create an incentive to reduce GHG emissions through the use of new technology, efficiencies, and alternative fuels. This will benefit Washington residents and provide consistency for businesses proposing new projects. Developing a mitigation plan for projects subject to the GAP rule will help reduce GHG emissions over the lifetime of the project.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

The GAP rule applies to public and private projects undergoing SEPA review. Therefore, it could impact projects proposed by tribal, regional, and local governments in Washington. There has been limited comment on the GAP rule by local and tribal governments. During the rulemaking process, all groups have stated a desire for a rule that provides consistent and comprehensive methods for assessing GHG emissions.

Local governments are also SEPA lead agencies and will implement the GAP rule for proposed projects. Developing guidance to implement the rule will directly affect these groups. A lack or delay in providing guidance would be received negatively, and increase lead agencies' workload, either in their role as lead agencies, or as project applicants.

Legal or Administrative Mandates:

This rulemaking is responsive to Governor Directive 19-18.

Stakeholder Response:

This request is responsive to how important the stakeholder process is in our rulemaking process, and findings stemming from our first round of public feedback during the pandemic.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$112	$48	**$160**	$48	$48	**$96**
Obj. B	$41	$17	**$58**	$17	$17	**$34**
Obj. C	$238	$0	**$238**	$0	$0	**$0**
Obj. E	$13	$2	**$15**	$2	$2	**$4**
Obj. G	$3	$1	**$4**	$1	$1	**$2**
Obj. J	$1	$1	**$2**	$1	$1	**$2**
Obj. T	$43	$18	**$61**	$18	$18	**$36**

Agency Contact Information

Diane Butorac
(360) 763-2394
dbut461@ecy.wa.gov

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Department of Ecology
2022 Supplemental Operating Budget
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Agency Recommendation Summary

Washington is in dire need of affordable housing across the state. The 2019 Annual Report of the Affordable Housing Advisory Board found that, in 2019, "…affordability worsened throughout the state by 10 percent." One of the report's recommendations is to help local governments reach appropriate housing goals by identifying strategies that will help housing developers make investments. Whether in an urban or rural setting, contamination or suspicion of contamination, drives up the costs of housing development. Ecology's Affordable Housing Cleanup Grant Program offers funding through the capital budget for public, nonprofit, and private entities intending to remediate contaminated property to develop affordable housing. This request will support the transition of this program to a permanent, forward-facing, competitive grant program, and provide permanent technical assistance and formal oversight for affordable housing related cleanups moving forward. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	2.3	**1.15**	2.3	2.3	**2.3**
Operating Expenditures						
Fund 23P - 1	$0	$330	**$330**	$330	$330	**$660**
Total Expenditures	**$0**	**$330**	**$330**	**$330**	**$330**	**$660**

Decision Package Description

In 2019, Engrossed Substitute Senate Bill 5993 made amendments to the Model Toxics Control Act (MTCA), providing Ecology the authority to grant funding for cleaning up property for development of affordable housing. The Legislature then appropriated funding to support these grants in both the 2019-21 and 2021-23 biennia. Ecology's Affordable Housing Cleanup Grant Program (AHCGP) offers funding to public, nonprofit, and private entities intending to remediate contaminated property to develop affordable housing, while also supporting the Governor's priorities to address housing and homelessness.

To date, Ecology has issued over $5.9 million in capital funding to support investigation, redevelopment planning, and cleanup of properties for use as affordable housing locations, and we plan to issue over $10 million more during the 2021-23 biennium in order to keep affordable housing cleanup projects moving. Since its inception, Ecology has operated the AHCGP under existing funding authority in order to make timely use of the funds appropriated by the Legislature, and support the projects within the timelines needed for project delivery. However, moving forward, Ecology intends to pivot these grants to a permanent, forward-facing program for regular delivery of affordable housing related cleanup projects, and develop rules specific to the AHCGP that will serve as the foundation for the program.

This request will provide ongoing funding for staff to oversee the development and long-term management of a permanent, competitive grant program, and provide technical assistance and formal oversight of affordable housing related cleanups. Funding for AHCGP development and management staff will directly impact Ecology's work to support sustainable communities by providing dedicated staff to lead stakeholders and partner agencies through the process of developing program-specific rules for the AHCGP. Right now, there are no dedicated staff to do this work, and policy, financial management, and cleanup project management staff within Ecology's Toxics Cleanup Program (TCP) have to work on an ad-hoc, and site-specific basis, to move affordable housing related cleanups forward. This is inefficient and does not allow for statewide policy implementation across all communities.

The requested staff will provide policy level coordination with key partners, including the Washington State Department of Commerce, the U.S. Environmental Protection Agency (EPA), local housing authorities, affordable housing developers, and other significant stakeholders. Specifically, they will:

- Collaborate with the state Brownfields Team (including representatives from Commerce and EPA) to ensure the AHCGP complements other efforts and partnerships to fund or support cleanup from the initial stages of site identification, community building, and visioning, to a completed cleanup with a "no further action" status.
- Present to stakeholder groups and local governments, host listening sessions, and attend conferences and events that help build awareness of Ecology's affordable housing-related cleanup work.
- Serve as Ecology's lead contact when negotiating special terms and conditions with grant recipients. Answer questions from the public and potential grant recipients on availability of funding, eligibility of potential projects, how Ecology selects projects for funding, and other

details about the AHCGP.

This FTE will also manage the AHCGP itself, which will continue to provide capital funding each biennium for the cleanup of contaminated sites, with a dedicated end land-use goal of affordable housing. This work will include:

- **Rulemaking** – Rulemaking is needed to successfully transition the regulatory framework for the AHCGP from Ecology's general grant and loan rule to a rule that outlines specific AHCGP policies and procedures that meet the needs of and establish the requirements for affordable housing developers who received grant funding.
- **AHCGP Program Administration** – Staff will lead efforts to write grant guidance and develop application materials in Ecology's Administration of Grant and Loans (EAGL) system each biennium. They will also negotiate grant terms and conditions with recipients, as needed, to meet special circumstances that may arise at each site. Long-term, this staff will update and modify the materials and administrative requirements as the AHCGP evolves.

Permanent funding is also needed for cleanup project management staff to provide technical assistance and formal oversight of these cleanups. There are currently nine active projects or project proponents working with Ecology, five of which are in the due diligence, or planning phase, of their project. Work in this phase typically includes early environmental assessment or more extensive investigation, which provides developers with the information needed to understand the nature and extent of the contamination. This ensures they can successfully clean up a property to be compatible with housing before deciding to purchase the property. The other four projects are ready to start, or have started, active cleanup.

Ecology did request, and received, project funding for a cleanup project manager in the 2021-23 capital budget. However, Ecology normally funds permanent cleanup project managers from the operating budget, and this request will allow Ecology to establish that permanent, long-term site management resource for affordable housing-related cleanups. This will ensure permanent technical staff resources are available for these projects moving forward, and will provide internal consistency in funding methodology for our technical cleanup staff. Please note, additional staff resources may need to be requested in future biennia, either on a project basis through the capital budget, or through a future operating budget request, as the program expands.

Impacts on Population Served:
Evidence shows that people do not easily move as housing costs rise. Community members typically stay in place as long as economics allow. Higher and higher percentages of income are used to meet basic housing needs at the expense of other economic goods, such as education, health care, or retirement planning. Keeping housing affordable (i.e., so rent and utilities cost no more than 30 percent of local median income) allows for greater local investment and access to costly services, such as higher education. It also allows people to maintain access to the sorts of important social support that can be lost when people have to move suddenly due to economic dislocation. Social support from local communities is associated with better health, safety, and educational outcomes for residents.

Ecology's AHCGP supports communities by:

- Cleaning up environmental contamination for residential use;
- Providing meaningful community engagement that informs and shapes decisions throughout the cleanup process;
- Integrating longer-term goals of shared economic and community asset building across a diverse population.

The transition of the current grants to a permanent, forward-facing, and competitive grant is expected to increase the equity of the service delivery of these grants. Once established, the new program and process will incorporate notification of opportunities to solicit projects, as well as outreach to affordable housing organizations that we do not otherwise currently work with during our cleanup activities.

Alternatives Explored:
Ecology does not have the capacity to support the AHCGP, or the related site management work, on an ongoing basis. Without additional funding, the alternatives would be one of the following:

- Reduce the project management of policy development and rulemaking activities for the MTCA Cleanup Rule, or other critical activities, and redirect cleanup project managers from other, ongoing cleanup oversight.
- Continue to operate under a general grant and loan rule that does not recognize or institutionalize the needs and requirements of affordable housing-related cleanup projects.

We need additional policy and technical staff to support the continuous improvement of this new grant program, the needed rulemaking to effectively transition the program, and manage the funded cleanups.

Consequences of Not Funding This Request:
If this request is not funded, Ecology would have to either delay rulemaking for the AHCGP or rulemaking for other program priorities, such as the second rulemaking on the MTCA Cleanup Rule to update cleanup standards.

Stakeholders have expressed that Ecology needs to clearly demonstrate a long-term commitment to a grant program for affordable housing-related cleanups. If this request is not funded, it would place that commitment at risk, and if we delay, others could introduce legislation that would require us to establish rules to support the AHCGP on a faster timeline than we could accomplish without severe impacts to other agency priorities and work currently underway. Adding additional technical cleanup staff that are supported by permanent operating budget funding also further demonstrates Ecology's commitment to this work, and is a critical step to creating a stable program.

Assumptions and Calculations

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

This request expands activity A005 - Clean up the Most Contaminated Sites First (Upland and Aquatic) by adding dedicated policy staff to oversee the statewide program development, rulemaking, and implementation of the AHCGP, as well as technical staff to manage individual site cleanups funded through the capital budget. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A005 Clean up the Most Contaminated Sites First (Upland and Aquatic)		
	2019-21	**2021-23**
FTEs Total	157.80	164.70
001-2 General Fund – Federal	$7,137,000	$7,003,000
001-7 General Fund – Private/Local	$3,004,000	$3,004,000
176-1 Water Quality Permit - State	$1,583,000	$1,583,000
23P-1 Model Toxics Control Operating – State	$40,848,000	$41,717,000
23P-7 Model Toxics Control Operating - Local	$499,000	$499,000
TOTAL	**$53,071,000**	**$53,806,000**

Detailed Assumptions and Calculations:

PROGRAM DEVELOPMENT ($159,000 and 1.2 FTEs per fiscal year)
Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 FTE Environmental Planner 4 to support the affordable housing program development and management of a permanent, competitive grant program.

CLEANUP PROJECT MANAGEMENT ($171,000 and 1.2 FTEs per fiscal year)
Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 direct FTE Hydrogeologist 4 to provide technical assistance and formal oversight of affordable housing related cleanups.

Workforce Assumptions:

Expenditures by Object		**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
A	Salaries and Wages		179,616	179,616	179,616	179,616	179,616
B	Employee Benefits		65,919	65,919	65,919	65,919	65,919
E	Goods and Services		8,288	8,288	8,288	8,288	8,288
G	Travel		4,364	4,364	4,364	4,364	4,364
J	Capital Outlays		2,402	2,402	2,402	2,402	2,402
T	Intra-Agency Reimbursements		69,487	69,487	69,487	69,487	69,487
	Total Objects	**0**	**330,076**	**330,076**	**330,076**	**330,076**	**330,076**

Staffing

Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
HYDROGEOLOGIST 4	93,132		1.00	1.00	1.00	1.00	1.00
ENVIRONMENTAL PLANNER 4	86,484		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.20	0.20	0.20	0.20	0.20
IT APP DEVELOPMENT-JOURNEY			0.10	0.10	0.10	0.10	0.10
	Total FTEs	**0.00**	**2.30**	**2.30**	**2.30**	**2.30**	**2.30**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Ecology is committed to evaluating and implementing service equity. This includes developing rules, guidance, and protocols that support equity and environmental justice (EJ) considerations in grant and loan processes for affordable housing-related cleanups, such as:

- Cleanups contribute to gentrification pressure, and the AHCGP provides some restorative justice related to that particular harm because it creates opportunities for residents to remain in their chosen communities.
- A restriction on land-use for a 30 year period (the affordable housing covenant) offsets the spike in property value that would occur at completion of a cleanup.

Ecology has authority to enter into grant agreements with any person who seeks to clean up properties to use for affordable housing. Typical potential grant recipients include local governments (housing authorities and preservation and development authorities) and non-profit affordable housing developers. The residents who live in the affordable housing units benefit directly from the AHCGP, and Washington benefits from the increased availability of affordable housing. Through these grants, Ecology will directly invest in communities statewide that have lived with contamination, including many people of color or low-income residents.

According to housing literature, the best place for affordable housing is in places that don't have existing EJ communities, as concentrating affordable housing only in existing low-income areas can increase or maintain segregation (income/racial). Please note, Ecology staff are not housing experts, and we rely on input from Commerce and housing experts to help prioritize locations for grant funding based on their suitability for housing.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees, because affordable housing grants support cleanups that would not occur from market-based forces alone, and provides opportunities for residents to remain in their communities, counteracting gentrification pressure that can often follow cleanup. Cleanup can also play an important role in improving the economic health of many communities because property owners can put cleaned up properties back into productive use for industry, commerce, housing, or natural services. Connecting cleanup of contaminated sites to the redevelopment of those sites for affordable housing invests in a greater social good beyond the economic and environmental benefits of cleanup.

- Goal 3: Prevent and reduce toxic threats and pollution, because cleaning up sites under MTCA reduces contaminant levels below concentrations that can cause harm to human health and the environment. For affordable housing, cleanups use the state's most stringent cleanup levels because the sites will be used for residential purposes.

This request also provides essential support to the Governor's Results Washington Goal 3: Sustainable Energy, and a Clean Environment and Goal 4: Healthy and Safe Communities, because affordable housing development provides an opportunity for Ecology to play a larger part in protecting and improving public health. While cleanup directly improves health, housing that supports existing communities provides people continued access to family, long-term friendships, and business relationships. These hard to quantify aspects of social support are associated with improved health, better educational outcomes, and personal financial stability.

Performance Outcomes:

The outcome of this request will be the development of clear programmatic rules and guidance needed to provide grants for affordable housing-related cleanups. Through these grants, Ecology will directly invest in the communities who have lived with contamination. This work also helps reduce gentrification and displacement that can often follow cleanup activities.

Other Collateral Connections

Puget Sound Recovery:

This request supports Puget Sound Action Agenda implementation through the following Regional Priorities, Strategies, and Sub-strategies:

- Regional Priority TIF 1.1: Enhance pollutant reduction programs and corrective measures, and increase authorities and programs to prevent toxic chemicals from entering Puget Sound. By cleaning up toxic legacy pollutants, Ecology prevents these damaging chemicals from entering the Puget Sound and other potential routes for exposure.
- Regional Priority TIF 3.1: Provide the infrastructure and incentives to accommodate new development and redevelopment within designated urban centers in Urban Growth Areas. By cleaning up brownfield properties, Ecology helps to incentivize growth within Urban Growth Areas.
- Strategy 4: Encourage compact regional growth patterns and create dense, attractive, mixed-use, and transit-oriented communities.
  - Sub-Strategy: 4.3: Enhance and expand the benefits of living in compact communities.
- Strategy 9: Prevent, reduce, and control the sources of contaminants entering Puget Sound.
  - Sub-strategy 9.1: Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem.
- Strategy 10: Use a comprehensive approach to manage urban stormwater runoff at the site and landscape scales.
  - Sub-strategy 10.3: Fix problems caused by existing development.
  - Sub-Strategy 10.4: Control sources of pollutants.
- Strategy 21: Address and clean up cumulative water pollution impacts in Puget Sound.
  - Sub-strategy 21.2: Clean up contaminated sites within and near Puget Sound by reducing and controlling the sources of pollution.

State Workforce Impacts:

N/A

Intergovernmental:

This request will continue to eliminate barriers for affordable housing by establishing a competitive, forward-facing grant program, supported by specific rules, guidance, and criteria. The requested staff will provide policy level coordination with key partners, including Commerce, EPA, and local housing authorities through this development process, and we anticipate that they will support this request for additional resources.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

In December of 2020, Ecology met with stakeholders and shared initial plans to develop the AHCGP as a competitive grant program for the 2023-25 biennium. We need to update stakeholders with more detailed plans, including a projected rulemaking timeframe, but based on their support for our initial plans, and their high engagement in this work, we anticipate they will support this request for additional resources, and engage with us during the rulemaking process. We are planning additional stakeholder engagement during Summer 2021, including with the Washington Environmental Council, Citizens for a Healthy Bay, King County, City of Seattle, affordable housing developers, and several affordable housing focused organizations such as HomeSight.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$180	**$180**	$180	$180	**$360**
Obj. B	$0	$66	**$66**	$66	$66	**$132**
Obj. E	$0	$8	**$8**	$8	$8	**$16**
Obj. G	$0	$4	**$4**	$4	$4	**$8**
Obj. J	$0	$2	**$2**	$2	$2	**$4**
Obj. T	$0	$70	**$70**	$70	$70	**$140**

Agency Contact Information

Angie Wirkkala
(360) 688-3214
angie.wirkkala@ecy.wa.gov

Agency Recommendation Summary

Ecology accredits drinking water laboratories through a memorandum of agreement with the Department of Health. It is a requirement of the federal Safe Drinking Water Act that these laboratories be audited every three years, which is critical element to ensuring municipal drinking water is safe for consumption. A 2021 audit of Ecology's accreditation program by the Environmental Protection Agency found a number of laboratories have not been audited in accordance with this requirement. Ecology does not currently have sufficient staff to conduct the needed audits within the required timeframe. This request will provide additional auditors for two years as a stopgap solution to bring all of Washington's drinking water laboratories up to date on accreditation. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	3.5	**1.75**	3.5	0.0	**1.75**
Operating Expenditures						
Fund 23P - 1	$0	$513	**$513**	$513	$0	**$513**
Total Expenditures	**$0**	**$513**	**$513**	**$513**	**$0**	**$513**

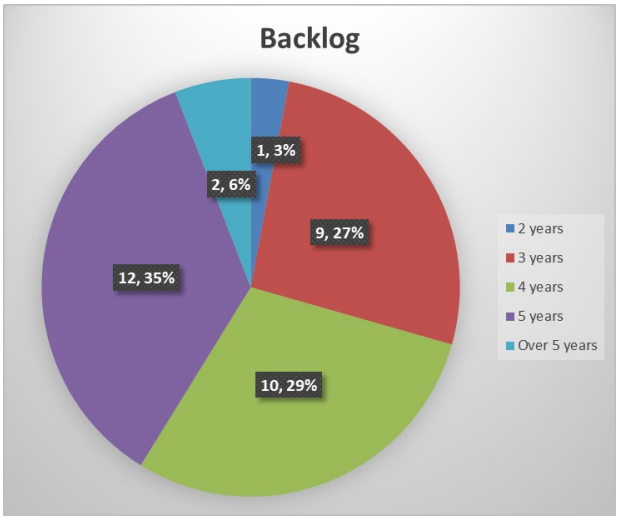
Decision Package Description

Ecology audits drinking water laboratories through a memorandum of agreement (MOA) with the Department of Health (DOH). We are required to conduct these audits every three years in order for DOH to maintain primacy (federal delegated authority) over drinking water laboratories and protect public health under the federal Safe Drinking Water Act. The Environmental Protection Agency (EPA) audited Ecology's accreditation program in 2021 and found a significant number of laboratories have not been audited according to the required three-year cycle.

34 drinking water laboratories have not been audited in over three years. This backlog of laboratories not meeting the audit requirement is due primarily to insufficient funding for the number of auditors needed to successfully complete these audits within the required timeframe. Other contributing factors that impact our ability to complete these audits, especially recently, included the inability to fill vacancies due to the hiring freeze in place during the 2019-21 biennium, as a result of the COVID-19 pandemic, and the fact that technical assistance and other activities provided by Ecology's audit program are not currently supported through accreditation fees. Laboratory accreditation is indirectly supported by accreditation fees, which are intended to cover the cost of the program, but these fees have not been increased in over ten years.

Ecology intends to increase laboratory accreditation fees in 2024 to a level sufficient to cover the cost of additional auditors needed to keep the program current on audit requirements. Until that time, this request will provide a stopgap solution to bring all of Washington's drinking water laboratories up-to-date on laboratory accreditation, while increased fees beginning in 2024 will allow us to establish and hire permanent auditor positions necessary to meet workload demands of the accreditation program moving forward. Funding this request will protect DOH's primacy over drinking water laboratories and authority to administer the federal Safe Drinking Water Act. It will also maintain Ecology's credibility with DOH and the public and protect public health by ensuring drinking water laboratories are audited on a more frequent basis.

Figure 1. Backlog of drinking water laboratory audits by the number of years past the three-year audit requirement.



This request will fund three new laboratory accreditation auditors for two years to address the backlog of drinking water laboratory audits that need to be completed, reducing it from the current backlog of 34 labs to zero by 2024 when we plan to revise fees so the program can be properly self-supported.

On a separate, but related note, laboratory accreditation fees are currently deposited into General Fund – State (GF-S). But the accreditation program is currently supported with funding from the Model Toxics Control Operating Account (MTCA Operating). Funding for the accreditation program was shifted to MTCA as part of an effort to save GF-S during a recent economic downturn. When Ecology seeks to increase accreditation fees in 2024, we also intend to pursue request legislation to align where accreditation fees are deposited with where the work is funded from, by shifting the deposit of this fee revenue from GF-S to MTCA Operating.

Impacts on Population Served:
This request will impact all residents in Washington. It is a requirement of the federal Safe Drinking Water Act that state drinking water laboratories be audited, and this is critical element to ensuring municipal drinking water is safe for consumption. It also impacts Washington businesses (laboratories) and local governments that test drinking water.

Alternatives Explored:
The alternative of continuing as we currently are was considered, but is not a viable alternative due the EPA's requirements, needs of DOH, and the importance of having safe drinking water for our state. Ecology is exploring several options to facilitate addressing the drinking water laboratory backlog. This includes identifying several efficiency improvements, such as conducting virtual audits during the pandemic. But in order to ensure we can eliminate the backlog, additional resources are needed over the next two years.

Consequences of Not Funding This Request:
If this request is not approved, the backlog of drinking water laboratory audits would continue to grow. DOH would risk losing primacy over drinking water labs under the federal Safe Drinking Water Act, and Ecology would risk cuts to its accreditation program if DOH primacy were rescinded. Of most concern is the fact that the risk to public health would grow because many of these laboratories have not been audited in over five years.

Assumptions and Calculations

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

This request expands activity A012 – Ensure Environmental Laboratories Provide Quality Data by adding three staff for a two-year period to address the backlog of drinking water laboratory audits that need to be completed, reducing it from the current backlog of 34 labs to zero by 2024 when we plan to revise fees so the program can be properly self-supported. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A012 Ensure Environmental Laboratories Provide Quality Data		
	2019-21	2021-23
FTEs Total	8.90	7.50
23P-1 Model Toxics Control Operating - State	$1,702,000	$1,694,000
315-1 Dedicated Marijuana Account - State	$851,000	$529,000
TOTAL	**$2,553,000**	**$2,223,000**

Detailed Assumptions and Calculations:

Beginning July 1, 2022 through June 30, 2024 Ecology requires salaries, benefits, and associated staff costs for the following positions to address and eliminate the backlog of audits for drinking water laboratories:

- 2.0 FTEs Chemist 4 – one senior organic chemist, one senior inorganic chemist
- 1.0 FTE Microbiologist 4

There are 34 drinking water laboratories that have not been audited in over three years. Based on experience with the workloads of existing auditors, Ecology will need three senior scientists in these specialty areas for a period of two years each to bring all drinking water laboratories current on audit requirements by the end of that two-year period.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		279,396	279,396			
B	Employee Benefits		102,538	102,538			
E	Goods and Services		12,432	12,432			
G	Travel		6,546	6,546			
J	Capital Outlays		3,603	3,603			
T	Intra-Agency Reimbursements		108,087	108,087			
	Total Objects	**0**	**512,602**	**512,602**	**0**	**0**	**0**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
CHEMIST 4	93,132		2.00	2.00			
MICROBIOLOGIST 4	93,132		1.00	1.00			
FISCAL ANALYST 2			0.30	0.30			
IT APP DEVELOPMENT-JOURNEY			0.15	0.15			
	Total FTEs	**0.00**	**3.45**	**3.45**	**0.00**	**0.00**	**0.00**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

This request supports Ecology's goals around equity by providing a critical aspect of ensuring drinking water is safe for consumption. Ecology audits nearly 500 laboratories that conduct environmental testing for the state of Washington. Many of these laboratories conduct drinking water testing, which is a critical aspect of ensuring drinking water is safe for consumption and is a requirement under the federal Safe Drinking Water Act.

This work is critical in communities that rely solely on municipal drinking water, which can become contaminated with lead, PFAS (per- and polyfluoroalkyl substances), nitrates, and many other contaminants that disproportionally impact disadvantaged communities. This request helps to level the playing field so all laboratories are audited according to the requirements of the Safe Drinking Water Act and can provide services to these communities. Laboratory accreditation also provides technical assistance to laboratories, many of which are small businesses. Ecology's technical support allows these businesses to expand their scope of analysis, improve the quality of their products, and grow.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing Goal 1: Support and engage communities, customers, and employees in Ecology's strategic plan because it provides accreditation of our state's drinking water laboratories as required by the federal Safe Drinking Water Act.

This request also provides essential support to the Governor's Result Washington Goal 3: Healthy and Safe Communities by providing accreditation of our state's drinking water laboratories, which is a critical piece of ensuring communities have safe drinking water.

Performance Outcomes:

The outcome of this request will be that the 34 drinking water laboratories testing drinking water for the state of Washington that currently out of compliance with the triennial requirement specified by the federal Safe Drinking Water Act will audited and brought into compliance by June 30, 2024.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

DOH is the primary intergovernmental stakeholder. DOH risks losing primacy over drinking water labs under the federal Safe Drinking Water Act if requirements for laboratory accreditation audits are not met. We have had extensive conversations with the DOH regarding this issue, and they have stated they support a request for additional capacity.

Also, local municipalities will be positively impacted by this request because they have laboratories and/or use private laboratories that have not received auditing services and technical support due to these capacity issues.

Legal or Administrative Mandates:

This request is in response to a recent 2021 EPA audit finding. Ecology is required to conduct drinking water laboratory audits every three years for DOH to maintain primacy over drinking water laboratories and to protect public health under the Safe Drinking Water Act. EPA recently audited our accreditation program and found a significant number of laboratories do not meet the triennial audit requirement.

Stakeholder Response:

Private laboratories are the primary non-governmental stakeholders impacted by this request. We anticipate that laboratories will support this request because they will receive auditing services and technical assistance without additional costs. This will allow these laboratories to continue or expand drinking water testing services to customers.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$279	**$279**	$279	$0	**$279**
Obj. B	$0	$103	**$103**	$103	$0	**$103**
Obj. E	$0	$12	**$12**	$12	$0	**$12**
Obj. G	$0	$7	**$7**	$7	$0	**$7**
Obj. J	$0	$4	**$4**	$4	$0	**$4**
Obj. T	$0	$108	**$108**	$108	$0	**$108**

Agency Contact Information

Jessica Archer
(360) 890-2721
jessica.archer@ecy.wa.gov

Agency Recommendation Summary

Ecology supports law enforcement agencies by helping to manage the dangerous waste found at illegal drug operations. Ecology's spill responders regularly participate alongside law enforcement personnel in these responses, and collect the dangerous waste from these sites, arranging for its proper storage and eventual disposal. The number of these responses has increased significantly over the last five years, and as a result, so too has the amount of dangerous waste having to be temporarily stored at Ecology facilities. Ecology needs additional staffing resources so that we can continue to support our law enforcement partners in these situations, while still being able to complete required follow-up actions for all responses that occur throughout the state. Staff are also needed to ensure that Ecology can meet the dangerous waste requirements for a large quantity waste generator under Chapter 173-303 WAC. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary	Fiscal Years		Biennial	Fiscal Years		Biennial
Dollars in Thousands	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	8.7	**4.35**	8.7	8.7	**8.7**
Operating Expenditures						
Fund 23P - 1	$0	$1,583	**$1,583**	$1,145	$1,145	**$2,290**
Total Expenditures	**$0**	**$1,583**	**$1,583**	**$1,145**	**$1,145**	**$2,290**

Decision Package Description

Law Enforcement Drug Operations Response Support
RCW 69.50.511 requires law enforcement agencies to notify the Department of Ecology when, during an official investigation or enforcement of any illegal drug manufacturing facility, they come in contact with, or are made aware of any suspected hazardous substances as defined by RCW 70.105D.020. When law enforcement agencies are called to the site of an illegal drug operation, they regularly include Ecology's spill responders in the response to protect the safety of the operation's team. Ecology's spill responders have the primary authority under Chapter 90.56 RCW to respond to and contain spills of oil, petroleum products, and other hazardous substances.

While RCW 69.50.511 directs Ecology to secure a contractor to identify, clean up, store, and dispose of suspected hazardous substances at these illegal drug operation sites, the practical application of this work is normally completed in two phases. Ecology's spill responders, who respond to the site along with law enforcement personnel, collect and store the waste from these sites at one of Ecology's regional hazardous waste accumulation areas for a maximum of 90 days, and then it is transferred to the contractor for treatment and disposal. This is done for several reasons:

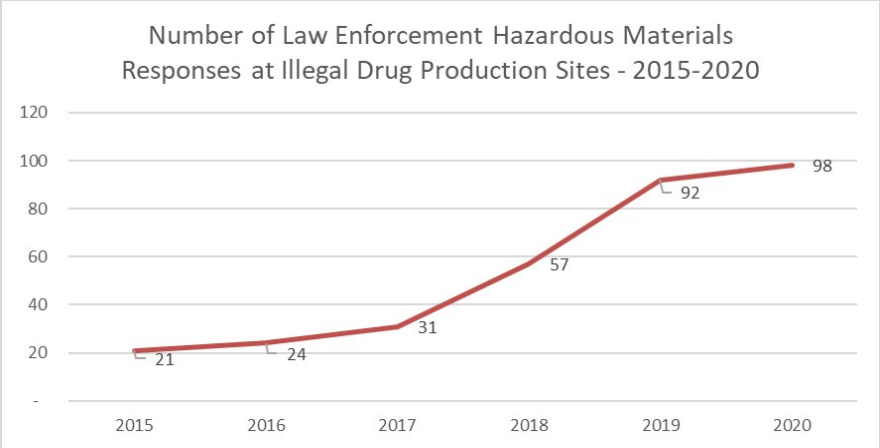
1. The federal Resource Conservation and Recovery Act (RCRA) requires a hazardous waste profile be provided to the transportation, storage, or disposal (TSD) facility where hazardous materials are taken for disposition. This profile itemizes the hazardous materials collected, and provides safety information for each item to the TSD facility.

Illegal drug operation responses are conducted at active crime scenes, and access to any suspected hazardous waste at the site is provided through a search warrant, which specifies a limited time for access to the property. It can take several weeks to a couple months for a hazmat disposal contractor to create a hazardous waste profile and schedule the pick-up of the waste onsite. For their safety and security, spill responders can't return to an illegal drug lab facility without law enforcement support. This limits our ability to store the collected wastes at the crime scene for contractor collection and disposal at a later time.

2. Hazardous materials are generally not well-managed at illegal drug labs, as containers are typically not marked, and different wastes may be mixed together. These wastes must be collected, identified, and consolidated prior to disposal, and Ecology's spill responders, who are already on site, are trained to perform these functions. If we were to contract with a hazmat disposal contractor to perform all of these functions at the site, and then subcontract for disposal, the agency would incur significant costs for each response.

When Ecology spill responders assist law enforcement agencies at these sites, they monitor the air at the site to ensure the response team can enter safety, and scan the area for immediate hazards and chemical safety concerns. Ecology responders collect the chemical precursors, contaminated equipment, and hazardous wastes onsite, and safely transport these materials back to an Ecology storage facility. Ecology staff then characterize the collected wastes through chemical testing, and consolidate similar and compatible materials together in order to reduce the costs of disposal. Ecology staff then generate the required waste profiles under RCRA, and submit those to the waste disposal contractor, who schedules a date for the waste pickup. The disposal contractor removes the waste for final disposal, and an Ecology responder is available on site to sign the waste manifest and answer any questions.

Ecology's support for law enforcement agencies' response to these situations has increased five-fold over the past five years, from 20 responses in calendar year 2015 to 98 responses in calendar year 2020. The majority of recent responses have all been related to illegal marijuana growing operations, which produce large volumes of waste, such as fertilizers and herbicides.



Calendar Year	Total Number of Marijuana Plants at Illegal Grow Responses
2015	3,040,317
2016	3,474,648
2017	4,488,087
2018	8,252,289
2019	13,319,484
2020	14,188,146

In order to continue to effectively respond to these situations in support of our law enforcement partners, Ecology needs additional staff to keep up with the exponential growth we have experienced over the last five years. As the number of responses to these situations has increased, Ecology's Spills Program has had to defer and delay the required follow-up actions for responses, such as investigations, enforcement, and cost recovery, as well as waste disposal coordination, because we don't have enough responders to meet all of demands for our services. This request will add five additional spill responders to help meet this increasing need around illegal drug operations, while ensuring that we can more fully address all other response needs as they arise.

Large Quantity Waste Generator Designation
To ensure the safe handling and management of dangerous waste, Ecology's Hazardous Waste and Toxics Reduction Program conducts inspections, and provides compliance and technical assistance for Washington's small, medium, and large quantity waste generators (LQGs), as defined in Chapter 173-303 WAC. As the number of illegal drug operation responses have increased over the last five years, so too has the amount of hazardous materials being stored at Ecology facilities. During a recent internal audit, Ecology realized that the waste collected from these illegal drug operations could cause the agency's facilities that store these materials to exceed the thresholds for a LQG under rule. Chapter 173-303 WAC defines an LQG as a generator of hazardous waste meeting the following minimum thresholds in a calendar month:

- at least 2,200 lb. (or five 55-gallon drums) of dangerous waste; or
- at least 2.2 lb. (1 kg) of acutely hazardous waste as defined in the chapter; or
- at least 220 lb. (100 kg) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste.

While the nature of our spill responses, and associated volumes of hazardous materials collected, can vary month to month in a given year, based on the outcome of our internal audit, and the recognition that the number of drug operation responses is only likely to increase in the future, Ecology determined that the most appropriate course of action was to designate our regional offices and headquarters building as LQGs, beginning July 1, 2021, and establish an operations plan to meet those requirements year-round.

In 2020, Ecology began working to reduce the legacy waste at our different facilities, and develop a transition plan to meet the more stringent waste management requirements for a LQG under rule. The agency invested one-time funding and staff time in 2019-21 to evaluate and establish appropriate hazardous waste storage facilities at our headquarters and regional facilities, and finalized the transition plan in July 2021. However, to ensure that Ecology can meet all of the LQG requirements moving forward, on an ongoing basis, additional resources are needed.

LQGs are required to properly organize and inventory waste so materials on site are known in the event of a facility emergency. Facilities operating as LQGs must prepare and implement a contingency plan, and provide an emergency coordinator to be available at all times to coordinate with first responders in the event of a facility emergency. This request will support the creation of a statewide coordinator within Ecology to ensure that all agency facilities storing hazardous waste are meeting LQG requirements. The request will also provide staffing resources in each regional office to maintain the facility's waste inventories and disposal schedules, in accordance with the requirements in rule.

Impacts on Population Served:
This request supports:

- The law enforcement community by ensuring Ecology can continue to safely manage waste from illegal drug manufacturing operations and minimize potential exposure and other hazards for law enforcement officers.
- Communities where illegal drug operations occur by ensuing any hazardous materials at the scene of the crime are safely contained, removed, and properly disposed.
- The safety of first responders in the event of an emergency at one of Ecology's facilities, as we will have dedicated staff available to notify responders of the location and nature of any hazardous wastes on site.

Additional population impacts and considerations are provided in the focus on equity section below.

Alternatives Explored:
One alternative to this request would be for Ecology to hire a contractor to cover the entire response to an illegal drug operation investigation. This alternative would not always be feasible for the following reasons:

- These responses are conducted at active crime scenes, and law enforcement agencies restrict access to these sites. Using a contractor at the site to collect and transport waste would require additional coordination with law enforcement ahead of time in order to authorize contractor staff to be present at the scene.
- Because access is limited at the scene, the contractor would likely remove the waste from the site, and subcontract with a service provider for actual disposal. This would increase disposal costs, typically adding 20 percent to the total cost for each disposal.
- In addition to investing staff time in coordinating with law enforcement and the contractor, Ecology would also need to cover the contractual costs for collection, storage, and disposal. Based on current rates under the Department of Enterprise Services (DES) master contract for hazardous waste collection and disposal services, and the amount of contracted services required each year to respond to these situations (based on the current number of responses), this option would be cost prohibitive, as compared to this request.
- Waste volumes at illegal drug manufacturing facilities are not well known in advance of law enforcement serving the search warrant and obtaining access to the facility. Because of this unknown, contractor resources may be unnecessarily mobilized, resulting in needlessly incurring contractor mobilization expenses.

A second alternative to this request was for Ecology to remain as a medium quantity generator, and only ramp up waste management practices in months when the LQG thresholds were exceeded. Because a response to a single marijuana grow can generate enough waste to meet the LQG thresholds, Ecology staff would be required to be readily trained and available for after-hours emergency coordination with minimal notice. The LQG requirements are critical for both facility and first responder safety, and with number of illegal drug operation responses expected to continue to increase, Ecology anticipates exceeding the LQG thresholds more frequently in the future. Therefore, it is better to establish the resources needed to ensure we can meet LQG requirements year-round, versus jumping back and forth, in order to minimize risk, and maximize readiness.

Consequences of Not Funding This Request:
If this request is not funded, Ecology would not have the resources needed to respond to illegal drug operations in support of our law enforcement partners. As the number of these response situations continues to grow, Ecology will be required to either not respond when requested, or have to do so instead of completing other required follow-up actions for these and other responses, such as investigations, enforcement, cost recovery, and waste disposal coordination. Ecology does not currently have enough responders to meet all of demands for our services.

If this request is not funded, Ecology would not have the staff or expertise needed to ensure that we can comply with the requirements under Chapter WAC 173-303 for a LQG. Facilities operating as LQGs must prepare and implement a contingency plan, and provide an emergency coordinator to be available at all times to coordinate with first responders in the event of a facility emergency. If Ecology is unable to meet these requirements, it could risk the safety of those working in and around our facilities, as well the first responders who would need to respond in case of an emergency.

Assumptions and Calculations

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

This request will expand activity A054 – Rapidly Respond to and Clean Up Oil and Hazardous Material Spills by proving funding and staff to ensure that Ecology's spill responders can support law enforcement agency response to illegal drug operations. This request also expands activity A021 – Increase Safe Hazardous Waste Management, Pollution Prevention, and Compliance with Dangerous Waste Regulations by

adding staffing resources needed to ensure that Ecology can comply with hazardous materials storage and disposal requirements under Chapter 173-303 WAC. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for these activities. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

Activity A054 – Rapidly Respond to and Clean Up Oil and Hazardous Material Spills		
	2019-21	2021-23
FTEs Total	39.70	39.60
001-7 General Fund – Private/Local	$114,000	$114,000
217-1 Oil Spill Prevention – State	$2,200,000	$0
223-1 Oil Spill Response - State	$8,576,000	$7,076,000
23P-1 Model Toxics Control Operating - State	$15,443,000	$13,706,000
	$24,333,000	**$20,896,000**

Activity A021 – Increase Safe Hazardous Waste Management, Pollution Prevention, and Compliance with Dangerous Waste Regulations		
	2019-21	2021-23
FTEs Total	38.55	54.05
001-2 General Fund - Federal	$1,633,000	$2,852,000
207-1 Hazardous Waste Assistance – State	$0	$540,000
23P-1 Model Toxics Control Operating - State	$7,477,000	$15,760,000
TOTAL	**$9,110,000**	**$19,152,000**

Detailed Assumptions and Calculations:

Beginning July 1, 2022, and ongoing, Ecology requires salaries, benefits, and associated staff costs for the following positions:

- 5.0 FTEs Environmental Specialist 4 spill responders to address the increase in hazardous materials at illegal drug operations. These positions will support the increased demand by law enforcement agencies for hazardous materials response and management at illegal marijuana grow operations and drug laboratories, and also support the compliance requirement under WAC 173-303 for 24/7 emergency contact coverage.
- 1.0 FTE Environmental Specialist 5 to serve as the statewide waste management coordinator to provide expertise in waste management regulations and compliance requirements. This position will coordinate with designated staff in each region to ensure compliance requirements are met.
- 1.6 FTEs Environmental Specialist 4 (0.4 FTE per region) to maintain facility waste inventories and disposal schedules, in accordance with the requirements in rule. This is estimated to be 0.2 FTE Environmental Specialist in each region for both the Hazardous Waste Program and the Spills Program. This will ensure that Spills Program staff collecting and managing waste can work as a two-person team with Hazardous Waste Program staff in each region who will provide waste management subject-matter expertise and guidance.

The number of spill responders required is based on the following calculations. Our average, a medium-size drug lab response requires 119 hours of staff time, which includes coordinating with the law enforcement agency, time on site assessing conditions and identifying materials for removal, removing hazards, packaging and labeling hazardous materials for storage and disposal, coordinating with the disposal vendor to generate a waste disposal profile, and coordinating with the vendor during the disposal. Since 2016, the average number of illegal drug labs per year has increased from 24 to 98 (an increase of 74 labs). This increase (74 labs x 119 hours = 8,806 hours. Divided by 2,088 hours per year (the OFM standard number of hours per FTE), this incremental workload increase equates to approximately 4.2 FTEs. However, based on the trajectory of illegal drug operation responses to date, and the acknowledgement that these incidents are only expected to increase in the future, Ecology estimates we will need 5.0 new responder FTEs moving forward to address this workload. These positions will cover the waste management requirement under rule to provide standby coverage to coordinate with first responders on hazardous materials guidance in the event of a facility emergency. The total estimated staff time required is 5.0 spill responder FTEs.

This request includes contractor costs for the removal and disposal of hazardous wastes collected from these illegal drug operation sites, estimated to be $18,500 per year beginning in fiscal year 2023, based on current drug lab response volume trajectories and disposal costs. Average disposal costs are $185.00 per response x 100 responses per year.

Object E includes estimated supplemental training and supplies for responders and staff managing the associated waste in compliance with LQG requirements. Initial HAZWOPER training is estimated to be $250 per requested FTE in the Hazardous Waste Program in fiscal year 2023. Beginning in fiscal year 2024, training costs are estimated at $125 per FTE per year. Also included in Object E are Initial supplies, personal protective equipment (PPE), and training costs for the new responders, estimated to be $19,334 above the standard cost per FTE in fiscal year 2023, and $2,567 above the standard cost per FTE beginning in fiscal year 2024.

Object J includes estimated equipment costs for responders, including response vehicles for five responder positions in fiscal year 2023,

estimated to be $80,299 more than the standard equipment cost per FTE. Ongoing equipment costs are estimated to be $9,513 higher than the agency standard per FTE beginning in fiscal year 2024, and each fiscal year thereafter, including depreciation of the response vehicles, estimated at $10,715 per vehicle per year, beginning in fiscal year 2024, based on the proposed replacement schedule of seven years for each vehicle.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		582,196	582,196	582,196	582,196	582,196
B	Employee Benefits		213,666	213,666	213,666	213,666	213,666
E	Goods and Services		147,114	63,054	63,054	63,054	63,054
G	Travel		18,174	18,174	18,174	18,174	18,174
J	Capital Outlays		410,623	56,693	56,693	56,693	56,693
T	Intra-Agency Reimbursements		211,503	211,503	211,503	211,503	211,503
	Total Objects	**0**	**1,583,276**	**1,145,286**	**1,145,286**	**1,145,286**	**1,145,286**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
ENVIRONMENTAL SPECIALIST 5	78,408		1.00	1.00	1.00	1.00	1.00
ENVIRONMENTAL SPECIALIST 4	70,956		6.60	6.60	6.60	6.60	6.60
FISCAL ANALYST 2			0.76	0.76	0.76	0.76	0.76
IT APP DEVELOPMENT-JOURNEY			0.38	0.38	0.38	0.38	0.38
Total FTEs		**0.00**	**8.74**	**8.74**	**8.74**	**8.74**	**8.74**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L. Responder FTEs also have assignment pay added to these costs, based on the amount required (10% of salaries) under the current collective bargaining agreements.
Benefits are the agency average of 36.7% of total estimated salaries.
Goods and Services are the agency average of $4,144 per direct program FTE, and include initial and refresher HAZWOPER training costs for all regional FTE and the statewide coordinator in the Hazardous Waste Program, estimated to be $450 in fiscal year 2023, and $225 in fiscal year 2024 and each fiscal year thereafter. Object E also includes initial personal protective gear and supplies for each new spill responder, estimated to be $19,334 per FTE in the first year (fiscal year 2023) for a total of $96,670, and $2,567 each year per FTE, for a total of $12,835 in fiscal year 2024 and each fiscal year thereafter.
Travel is the agency average of $2,182 per direct program FTE, plus $318 per FTE (a total of $1,590) in fiscal year 2023 and ongoing each year thereafter for response travel.
Equipment is the agency average of $1,201 per direct program FTE, plus $80,299 per FTE (a total of $401,495) in fiscal year 2023 for initial responder equipment, including an assigned response vehicle, and $9,513 per FTE (a total of $47,565) in fiscal year 2024 and ongoing each year thereafter for equipment replacement and vehicle depreciation.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Ecology's Spills Program has reviewed the locations of our illegal drug operations responses in 2019 and 2020 on the Department of Health's (DOH) Environmental Health Disparities Map. This map ranks census tracts on a scale of 1 to 10, with 1 representing the lowest environmental health disparities in the state, and 10 representing the highest. These rankings are based on each census tract's environmental exposures and disparities, sensitive populations with indicators for poor health outcomes, and socioeconomic disparities. The four primary criteria and elements included are:

- Environmental Exposures (NOx-diesel emissions; ozone concentration; PM2.5 Concentration; populations near heavy traffic roadways; toxic release from facilities (RSEI model)).
- Environmental Effects (lead risk from housing; proximity to hazardous waste treatment, storage, and disposal facilities (TSDFs); proximity to National Priorities List sites (Superfund Sites); proximity to Risk Management Plan (RMP) facilities; wastewater discharge).
- Sensitive Populations (death from cardiovascular disease; low birth weight).
- Socioeconomic Factors (limited English; no high school diploma; poverty; race - people of color; transportation expense; unaffordable housing; unemployed).

Ecology's hazmat responses in support of law enforcement agencies occur at the site where drugs are being manufactured, or grown in the case of illegal marijuana grow responses. Many of these locations are inside houses, which increase exposure and risk for nearby neighbors. 36 percent of illegal drug operations needing hazmat response support over the past two years have been located in census tracts ranking seven or higher on the DOH Environmental Health Disparities Map, and more than 10 percent of responses are located in neighborhoods that rank 9 or 10 on the map, indicating the highest levels of environmental health disparities.

Year	Location DOH Environmental Health Disparities Rank	Number of Illegal Drug Hazmat Responses
2019	1	3
2019	2	4
2019	3	7
2019	4	15
2019	5	4
2019	6	26
2019	7	13
2019	8	10
2019	9	5
2019	10	5
Total		92
2020	1	3
2020	2	8
2020	3	10
2020	4	17
2020	5	16
2020	6	9
2020	7	17
2020	8	5
2020	9	5
2020	10	8
		98

% 6 or above	% 7 or above	% 8 or above	% 9 or above
64%	36%	22%	11%

% 6 or above	% 7 or above	% 8 or above	% 9 or above
45%	36%	18%	13%

Ecology is frequently called in to illegal marijuana farms to help remove pesticides, fungicides, corrosive materials, flammable liquids, and contact poisons — chemicals that are considered dangerous waste under state law. Anyone coming into contact with these could get burned or poisoned, and they are also toxic by inhalation. Besides common household chemicals, responders have also seen compounds in quantities so large that they fall under EPA regulation and should only be applied by a licensed applicator, as well as substances that are banned in the United States. By safely removing these items from these sites, Ecology is removing toxic burdens in areas already heavily burdened by other environmental disparities.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing Goal 3: Prevent and Reduce Toxic Threats and Pollution in Ecology's strategic plan because it supports Ecology's effective management of toxic waste collected for law enforcement at illegal drug manufacturing sites.

This request provides essential support to the following Governor's Results Washington Goals:

- Goal 3: Sustainable Energy and a Clean Environment, by supporting proper removal and disposal of hazardous materials.
- Goal 4: Healthy and Safe Communities, by supporting law enforcement safety and proper storage and management of hazardous wastes.
- Goal 5: Efficient, Effective, and Accountable Government, by providing the additional staff resources to ensure that collected materials are disposed of as promptly as possible to minimize quantities of waste stored at Ecology facilities.

Performance Outcomes:

The outcomes of this request will be:

- Safe management of waste stored at Ecology facilities at all volumes.
- 24-hour availability to coordinate with first responders in the event of a facilities emergency.
- Dedicated support for law enforcement drug operation responses without compromising our ability to rapidly and aggressively response to other hazardous spills that occur.

Other Collateral Connections

Puget Sound Recovery:

While 74 percent of response activities in ongoing program #OGP_ECY28 – Spill Response, are related to Puget Sound, this request is focused on illegal drug operation responses, which are primarily inland and contained within buildings. For this reason, this request is not directly related to Puget Sound recovery efforts.

State Workforce Impacts:

N/A

Intergovernmental:

This request supports Ecology's coordination with state and local law enforcement agencies to remove hazardous materials from sites of illegal drug production and ensure that the site is safe and free of toxic hazards for law enforcement investigations. Ecology has developed good working relationships with drug manufacturing enforcement partners and is a trusted resource to operate at these sites and ensure maximum safety for everyone present. By following the large quantity generator requirements, staff would also provide consultation for first responders in the event of an Ecology facilities emergency where hazardous waste materials are stored. This request supports first responder safety, and safety of employees who work at Ecology facilities where hazardous wastes are stored prior to disposal.

Legal or Administrative Mandates:

This request will support Ecology's ability to comply with LQG requirements under Chapter 173-303 WAC, and our statutory obligations under Chapters 69.50 and 90.56 RCW to assist law enforcement agencies with illegal drug operations responses.

Stakeholder Response:

By providing dedicated support for illegal drug operations hazardous materials response, this proposal benefits all communities where covert drug production occurs, safely removing hazards and ensuring that the site is safe for neighboring homes and businesses. As noted above, these responses commonly occur in houses in the middle of neighborhoods. This proposal would support this important effort to reduce toxic threats in residential communities and urban areas statewide due to illegal drug production, and ensure that the waste is promptly and properly managed and disposed.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$582	**$582**	$582	$582	**$1,164**
Obj. B	$0	$214	**$214**	$214	$214	**$428**
Obj. E	$0	$147	**$147**	$63	$63	**$126**
Obj. G	$0	$18	**$18**	$18	$18	**$36**
Obj. J	$0	$411	**$411**	$57	$57	**$114**
Obj. T	$0	$211	**$211**	$211	$211	**$422**

Agency Contact Information

David Byers
(360) 790-6899
david.byers@ecy.wa.gov

Agency Recommendation Summary

Groundwater in the Lower Yakima Valley aquifer is contaminated with elevated concentrations of nitrate, and is the principal drinking water source for over 56,000 residents in the area. In 2012, the Lower Yakima Valley developed a groundwater management area and in 2019 finalized an implementation plan with recommendations for reducing groundwater nitrate contamination in the area. To further implementation of several recommendations from that plan, Ecology requests ongoing funding and staff resources needed to analyze deep soil samples that are being collected, develop and implement pilot projects to determine effective land-use best management practices, and provide outreach and education to area residents regarding changes that are needed to reduce nitrate contamination. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	2.5	**1.25**	2.5	2.5	**2.5**
Operating Expenditures						
Fund 23P - 1	$0	$407	**$407**	$324	$324	**$648**
Total Expenditures	**$0**	**$407**	**$407**	**$324**	**$324**	**$648**

Decision Package Description

Background
The Lower Yakima Valley aquifer, which is the principal drinking water source for over 56,000 residents in the area, is one of the most contaminated aquifers in the state, with widespread, historic, elevated nitrate concentrations. Groundwater monitoring by Pacific Groundwater Group (2019) and the United States Geological Survey (USGS) (2017) indicated that 45 percent of 30 randomly placed monitoring wells and over 20 percent of 159 private drinking water wells sampled exceeded the state's safe drinking water standard for nitrate (https://fortress.wa.gov/ecy/ezshare/wq/groundwater/yakima-gwma-well-installation-report.pdf and https://pubs.usgs.gov/ds/1084/ds1084.pdf). These results indicate that elevated nitrate levels in the area's groundwater is a pervasive problem, and has resulted in a quarter of the area's residents not having access to clean, safe drinking water.

Nitrate sources include commercial fertilizers, manure, compost, lagoons, on-site sewage systems, hobby farms, and abandoned wells, among others. Agriculture is the primary economic and land-use activity in the Lower Yakima Valley, and most of the cropland is irrigated. The elevated nitrate concentrations detected in groundwater indicate impacts by these activities. These impacts are significant to human health. Drinking water high in nitrates is a potential health risk for infants, pregnant women, and people with compromised immune systems. The Washington State Department of Health (DOH) has warned that drinking water high in nitrate concentrations can lead to a serious condition that reduces oxygen to red blood cells.

One-fifth of all residents in this area are currently living in poverty, and almost half of the population is Hispanic. In 2010, the U.S. Environmental Protection Agency (EPA) designated the Lower Yakima Valley as an Environmental Justice (EJ) Showcase Community. The EJ Showcase Communities' effort brings together governmental and non-governmental organizations and pools their collective resources and expertise to help communities with EJ concerns, such as multiple disproportionate environmental health burdens and population vulnerability.

In 2012, a groundwater management area (GWMA) was formed to characterize, analyze, and develop a plan to reduce nitrate concentrations in the Lower Yakima Valley groundwater to safe levels. The Lower Yakima Groundwater Advisory Committee (Committee) is made up of a diverse group of about 30 representatives from local, state, and federal government agencies; local concerned citizens; farmers; livestock producers; Tribes; WSU and Heritage University staff; environmentalists; and others. The Committee has been meeting monthly over the last six years and working to reach consensus on issues through the use of credible data and sound scientific practices.

The Committee finalized their plan for reducing groundwater nitrate contamination in June 2019 (https://ecology.wa.gov/Water-Shorelines/Water-quality/Groundwater/Protecting-aquifers/Lower-Yakima-Valley-groundwater), which includes the required elements described in Chapter 173-100 WAC for reducing groundwater nitrates. This plan went through a State Environmental Policy Act (SEPA) process that included public comment, response to comments, and revisions to the plan.

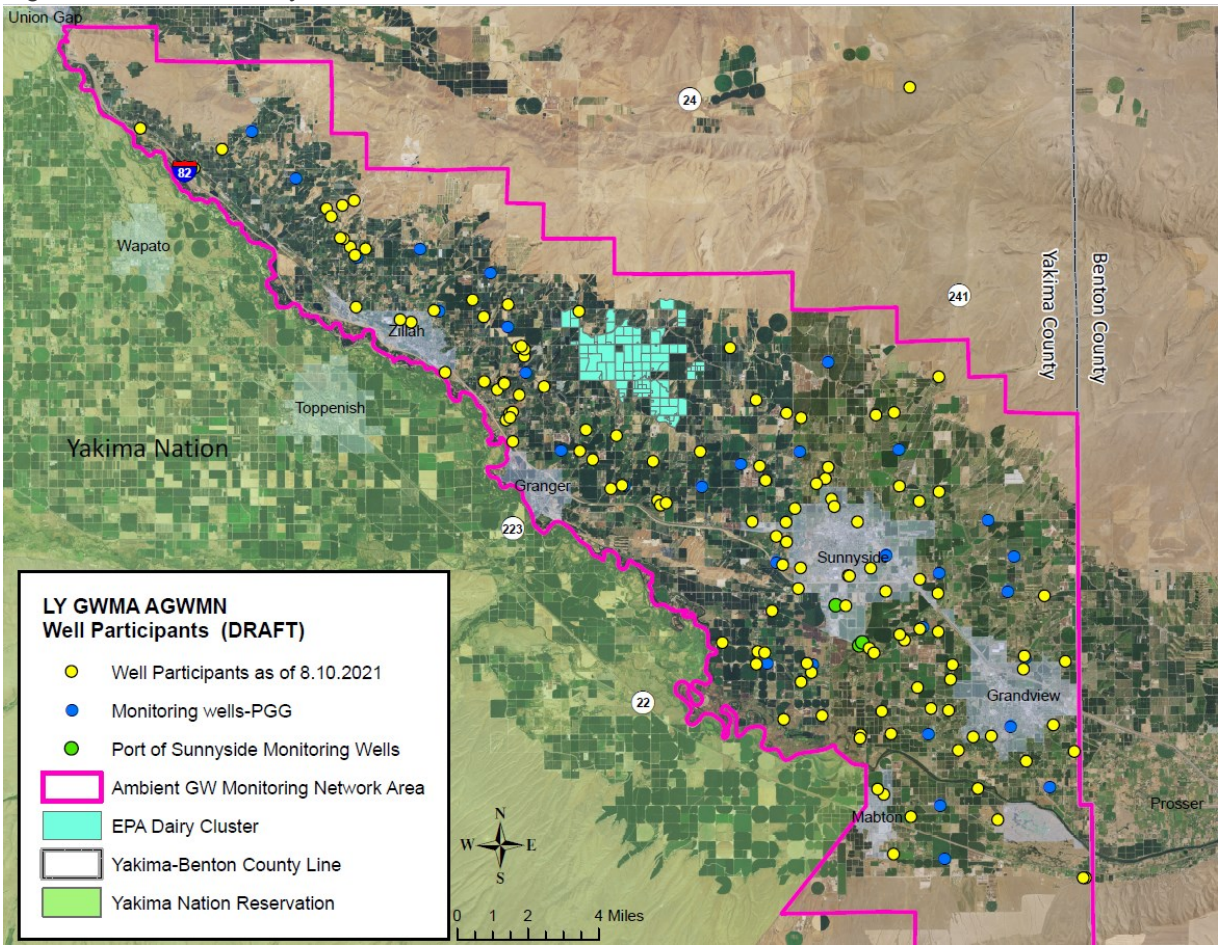
Previous Funding Provided
The Legislature has provided funding in the past to support the GWMA and its current plan to reduce nitrate contamination. In 2012, Ecology received $450,000 in the supplemental capital budget to pass through to Yakima County for the GWMA's establishment and creation of the plan. Tasks completed in that assessment and planning phase included:

- Offering free well water testing.
- Providing point–of-use water treatment systems.
- Conducting education and public outreach in both English and Spanish. This included:

  - Door-to-door outreach and surveys
  - Fact sheets
  - Community fairs
  - Community billboards
  - Website posts
  - Radio public service announcements
  - News releases
- Establishing a comprehensive database that can graphically display information (GIS).
- Collecting deep (six feet down) soil samples from 175 fields.
- Conducting a detailed nitrogen availability assessment to identify the predominant sources of nitrogen.
- Collecting samples from 159 private domestic wells for six consecutive months.
- Installing 30 monitoring wells (and conducting one-time sampling) for future monitoring of long-term trends (Pacific Groundwater Group).
- Developing sampling plans for all future monitoring work.
- Developing alternative management strategies intended to reduce the nitrate loading to groundwater from a variety of sources.

As the GWMA moved into the implementation phase of its plan, groundwater monitoring was needed to establish baseline conditions to effectively measure how improved management practices affect groundwater quality. Groundwater monitoring is a required element in WAC 173-100-100(6)(b) to evaluate the effectiveness of the GWMA program. A groundwater monitoring system is essential to provide feedback about the effectiveness of alternative management practices designed to reduce nitrate loading to groundwater, by helping to identify those practices most effective at reducing nitrate concentrations.

In 2020, the Legislature provided ongoing funding to Ecology to establish an extensive groundwater monitoring network to assess the condition of groundwater over time. This is the measuring stick to see if groundwater quality is improving. The funding provided in 2020 supports the monitoring of 170 groundwater wells, including 140 private domestic wells and the 30 groundwater monitoring wells, to determine how nitrate concentrations are changing with the implementation of new management practices. Figure 1 shows the locations of the ambient groundwater monitoring in the Lower Yakima Valley GWMA.



What's Needed Now

Now that the groundwater monitoring network has been established, other projects are necessary to determine the specific actions that will

effectively reduce the nitrate in groundwater. This request is designed to identify, and work with the community to implement land-use practices that will reduce nitrate loading to groundwater. This is a cooperative effort between Ecology, the Washington State Department of Agriculture (WSDA), and the South Yakima Conservation District (SYCD), and implements (or partially implements) the following GWMA plan recommendations:

- #10: Design and implement pilot studies focusing on innovative farm techniques, which will reduce nitrogen loading to crops and monitor results.
- #23: Monitor changes occurring in agricultural operations. Evaluate whether these changes positively affect improvement in groundwater quality.
- #24: Establish a multi-year deep soil sampling program.
- #7: Develop an agricultural producer education and outreach campaign.

Ecology is requesting staff and funding to analyze the deep soil sampling data collected by SYCD, who received funding through a Department of Commerce grant to purchase equipment and collect the soil samples. However, SYCD does not have the funding, nor expertise, to analyze the data and correlate the soil nitrate values with land-use practices. SYCD will sample and survey the same land areas in the fall and spring each year, and continued sampling of the same fields over time will capture a view of how nitrate migrates through the soil over time. Proper analysis of these samples will inform which land-use management practices are effective in reducing nitrate migration to groundwater, which is a critical component to understanding the link between what happens at the land surface and what happens in the soils.

Using these sample analyses, Ecology will work collaboratively with WSDA and SYCD to establish pilot studies for land-use practices identified as effective in reducing nitrate migration in the subsurface. Monitoring wells will be placed up-gradient and down-gradient to monitor groundwater quality and help determine the effectiveness of the practices piloted. This will provide the link between land-use management practices at the land surface and the impact to groundwater quality. Once protective land-use management practices have been identified, this information will be distributed and communicated to the community.

Ultimately, improvements to groundwater quality will depend on the community making positive changes in the practices they use. Community members will want to know that their investment in change will make a difference, and we have found that those in the Lower Yakima Valley respond well to using sound scientific methods, credible data, and clear public education and outreach. This request will help support all three of those areas, and continue implementation of the GWMA plan.

This will likely be the final funding request from Ecology to implement and support some of the major recommendations from the current GWMA plan. This request assists SYCD with data analysis of a complex and important data set from deep soil sampling. It allows us to identify land-use management practices that reduce nitrate moving to groundwater, and verify their effectiveness through groundwater monitoring. This will allow us to communicate effectively with the community so changes can be made. All of this work supports the community and other local entities with improving drinking water quality in the Lower Yakima Valley.

Impacts on Population Served:
The population of the Lower Yakima Valley will benefit from having a clean and safe source of drinking water. The analysis of soil samples and the design of pilot projects to evaluate best management practices will help improve groundwater quality by determining which practices are best at reducing nitrate contamination.

Information collected will help this community make better decisions about how best to protect their drinking water supplies. Clean, safe drinking water is important to the health of all our communities. It helps sustain the agricultural economy and is good for the environment. Working in concert to address all sources of nitrate will help improve groundwater quality so that all area residents and visitors have a safe source of drinking water.

Alternatives Explored:
This project is designed to address elements and recommendations of the GMWA plan sequentially. First, the deep soil sample data needs to be analyzed, then the effective land-use management practices will be identified. Test plots will then be designed with groundwater monitoring to evaluate impacts to groundwater, and finally, public education and outreach will be conducted to inform the community of land-use practices that reduce nitrate contamination of groundwater. Delaying any of the elements will push back all the subsequent elements and may jeopardize the ability of our partners to effectively carry out their work in the timeframes expected.

Consequences of Not Funding This Request:
Groundwater quality that exceeds a drinking water standard is a health risk. The Lower Yakima Valley residents need safe drinking water. For improvement to be made, residents in the area need to change what they are doing, but it is challenging to convince someone to change their habits if we can't demonstrate that what they are doing impacts their environment and the safety of their drinking water. Now that the groundwater monitoring network is established to serve as the groundwater quality measuring stick, we can focus on identifying land-use management practices that will improve groundwater quality. Ecology can provide SYCD proper analysis of the deep soil samples that they collect, identify the development of best management practices for land use that are needed to reduce nitrate migrating to groundwater, and inform and educate the community of what needs to change.

If this request is not funded, implementation of recommendation in the GWMA plan would be delayed and there would continue to be data gaps in understanding the nitrate loading in the Lower Yakima Valley. This would continue making it difficult to analyze the impacts and reduce nitrate sources needed to meet water quality targets that protect community health.

Assumptions and Calculations

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

In the 2020 supplemental operating budget, Ecology received ongoing funding to design and conduct a long-term ambient groundwater monitoring network in the Lower Yakima Valley. This request expands activity A007 - Conduct Environmental Studies for Pollution Source Identification and Control by adding staff and funding to analyze deep soil samples, develop and implement pilot projects to determine land use best management practices, and provide outreach and education to area residents regarding changes that are needed to reduce nitrate contamination.

A007 Conduct Environmental Studies for Pollution Source Identification and Control		
	2019-21	2021-23
FTEs Total	66.75	83.95
001-1 General Fund - State	$65,000	$1,670,000
001-2 General Fund - Federal	$4,569,000	$4,571,000
176-1 Water Quality Permit Account - State	$5,589,000	$5,560,000
207-1 Hazardous Waste Assistance Account - State	$11,000	$0
23P-1 Model Toxics Control Operating - State	$9,159,000	$16,503,000
TOTAL	**$19,392,000**	**$28,305,000**

Detailed Assumptions and Calculations:

Beginning July 1, 2022, and ongoing, Ecology requires salaries, benefits, and associated staff costs for:

- 1.0 FTE Hydrogeologist 3 is the project lead that will design the land use study, determine groundwater flow direction, install up-gradient and down-gradient monitoring wells, conduct field sampling, analyze the resulting data, determine effective land use management practices and write a report detailing findings from the study.
- 0.5 FTE Hydrogeologist 2 to provide field and data support to the Hydrogeologist 3. The deep soil sampling data will be a large complex dataset which will require making correlations between nitrates found at different depths over the years and correlating this with how land is managed, including the crops grown, irrigation and fertilization methods.
- 0.5 FTE Communications and Outreach Specialist 3 to provide education and public outreach services to the community. An effective and extensive communication strategy is necessary to influence community members and encourage them to make positive changes. This position will provide report production, graphics development, and maintain the agency's online materials related to this work.
- 0.2 FTE Hydrogeologist 4 is the licensed hydrogeologist that is required to manage the project and provide active Quality Assurance/Quality Control assessments of data collected. This position will also coordinate with other local, and state entities to foster the GWMA goal of reducing nitrate concentrations in groundwater.

Laboratory Analytical Costs

- Beginning July 1, 2022, and ongoing, quarterly sampling of 20 groundwater wells to be analyzed for nitrate and chloride at an estimated cost of $3,000 per year.

One-time Costs

- During fiscal year 2023, Ecology requires $75,000 in contracts for installing 20 groundwater monitoring wells. This estimate is based on previous well installation projects.
- During fiscal year 2023, Ecology requires $8,000 for sampling equipment (pump, field meter, tubing). This estimate is based on previous groundwater sampling projects.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		173,396	173,396	173,396	173,396	173,396
B	Employee Benefits		63,636	63,636	63,636	63,636	63,636
C	Personal Service Contract		78,000	3,000	3,000	3,000	3,000
E	Goods and Services		9,117	9,117	9,117	9,117	9,117
G	Travel		4,800	4,800	4,800	4,800	4,800
J	Capital Outlays		10,643	2,643	2,643	2,643	2,643
T	Intra-Agency Reimbursements		67,082	67,082	67,082	67,082	67,082
	Total Objects	**0**	**406,674**	**323,674**	**323,674**	**323,674**	**323,674**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
HYDROGEOLOGIST 3	84,396		1.00	1.00	1.00	1.00	1.00
HYDROGEOLOGIST 2	76,416		0.50	0.50	0.50	0.50	0.50
COMMUNICATIONS CONSULTANT 3	64,332		0.50	0.50	0.50	0.50	0.50
HYDROGEOLOGIST 4	93,132		0.20	0.20	0.20	0.20	0.20
FISCAL ANALYST 2			0.22	0.22	0.22	0.22	0.22
IT APP DEVELOPMENT-JOURNEY			0.11	0.11	0.11	0.11	0.11
	Total FTEs	**0.00**	**2.53**	**2.53**	**2.53**	**2.53**	**2.53**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Contracts includes $75,000 in fiscal year 2023 for groundwater monitoring well installation. It also includes $3,000 per year for laboratory analytical costs.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE plus $8,000 in fiscal year 2023 for sampling equipment (pump, field meter, and tubing).
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

In 2010, EPA designated the Lower Yakima Valley as an Environmental Justice Showcase Community. They determined there are a disproportionate number of low income families that do not have access to clean, safe drinking water. Almost 15,000 residents cannot drink their well water because it does not meet drinking water standards. And approximately 20 percent of the population is living at or below the poverty level.

Almost half of the population in Yakima is Hispanic (46 percent), while overall in Washington State, the population is 12 percent Hispanic. The area is also 47 percent low income, significantly above the state average of 27 percent. These populations often cannot financially afford to purchase bottled water or filtration systems, and they are potentially at higher health risk from lack of access to clean drinking water.

This request will have direct benefits to these communities disproportionately impacted by drinking water contaminants. Identifying land-use management practices that effectively reduce nitrates migrating to groundwater will improve the quality of the groundwater overall. These critical actions will support long needed improvements in water quality, which will help ensure that economically distressed populations have access to groundwater that is safe for drinking.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing Goal 1: Support and engage our communities, customers, and employees and Goal 4: Protect and manage our state's waters in Ecology's strategic plan by adding staff and funding to analyze deep soil samples, develop and implement pilot projects to determine land use best management practices, and provide outreach and education to area residents regarding changes that are needed to reduce nitrate contamination in the Lower Yakima Valley.

This request also provides essential support to the Governor's Results Washington Goal 3: Sustainable Energy and a Clean Environment and Goal 4: Healthy and Safe Communities. Protecting groundwater is critical to maintaining agricultural economy and the health of community drinking water.

Performance Outcomes:

The outcome of this request will be reduced nitrogen loading to groundwater and improved drinking water for the Lower Yakima Valley residents. This request will provide credible scientific information to identify land use management practices that successfully reduce nitrogen loading to groundwater. Understanding and quantifying which practices are most protective of groundwater is important to be able to educate and convince people to make changes that will improve their drinking water resources.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

Many local, state, and federal government agencies participated on the Lower Yakima Groundwater Advisory Committee to develop a comprehensive plan to reduce nitrate in groundwater. These governmental agencies have a vested interest in making improvements to groundwater quality, and they are actively implementing many of the recommendations identified in the plan, and are expected to support this request.

These include:

- Local jurisdictions
  - Yakima County
  - Yakima Health District
  - South Yakima Conservation District
  - Sunnyside and Roza Irrigation Districts
  - Port of Sunnyside
- State agencies
  - Department of Health
  - Department of Agriculture
  - Department of Ecology
- Tribal
  - Yakama Nation

Legal or Administrative Mandates:

This request supports Ecology's statutory and regulatory responsibilities under Chapter 90.48 RCW (Water Pollution Control Act), and Chapter 173-200 WAC (Water Quality Standards for Groundwaters of the State of Washington), which protect and preserve groundwater quality. Also, Chapter 173-100 WAC (Groundwater Management Areas and Programs) provides the authority for designating the Lower Yakima Valley Groundwater Management Area.

Stakeholder Response:

When the GWMA Committee was formed in 2012, approximately 30 stakeholders participated in an intensive, six-year planning process to reduce nitrate levels in groundwater. The Committee included residents and representatives of specific interest groups, such as farmers; dairy producers; environmental groups; and local, state, and federal government agencies. The plan includes 64 prioritized recommendations to improve groundwater quality and was unanimously approved by the Committee.

These stakeholders are invested in making improvements to groundwater for the benefit of the community. Different entities are addressing different recommendations in the plan, and there is momentum and a willingness to implement actions that will improve groundwater quality in the Lower Yakima Valley. Delaying the next steps in implementation will erode the great work and efforts over the last eight years by so many individuals, local, state, and federal government agencies.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$173	**$173**	$173	$173	**$346**
Obj. B	$0	$64	**$64**	$64	$64	**$128**
Obj. C	$0	$78	**$78**	$3	$3	**$6**
Obj. E	$0	$9	**$9**	$9	$9	**$18**
Obj. G	$0	$5	**$5**	$5	$5	**$10**
Obj. J	$0	$11	**$11**	$3	$3	**$6**
Obj. T	$0	$67	**$67**	$67	$67	**$134**

Agency Contact Information

Sage Park
(509) 480-1753
sage.park@ecy.wa.gov

Agency Recommendation Summary

Ecology regulates almost 9,000 operating underground storage tanks that store over three billion gallons of fuel each year. Releases from properly operated and maintained tanks are rare, but when they do occur, they can contaminate soil, groundwater, and remain in the environment for decades if not cleaned up. The Environmental Protection Agency requires these tank sites be inspected every three years, and Ecology needs additional staff to address a 2019 audit finding and ensure that we can meet this requirement moving forward. This request will also support additional cleanup project managers needed to oversee the cleanup of more than 2,600 known contaminated leaking underground storage tank sites throughout Washington. Petroleum contamination from these sites can impact human health and the environment, while also depressing property values and preventing redevelopment. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	8.1	**4.05**	8.1	8.1	**8.1**
Operating Expenditures						
Fund 23P - 1	$0	$1,757	**$1,757**	$1,757	$1,757	**$3,514**
Total Expenditures	**$0**	**$1,757**	**$1,757**	**$1,757**	**$1,757**	**$3,514**

Decision Package Description

Background
Each year, just over 3 billion gallons of fuel are stored underground in Washington State. Ecology's Underground Storage Tank (UST) Program is one of the largest pollution prevention programs in the state, regulating more than 9,000 tanks at more than 3,400 facilities across Washington, including gas stations, industrial and commercial properties, and government-owned properties. The UST program helps to prevent leaking underground storage tanks from creating a new cleanup site. When an UST leaks the petroleum contaminates groundwater and surrounding soils. Petroleum contamination from these sites can impact human health and the environment, while also depressing property values and preventing redevelopment.

Ecology UST inspectors conduct compliance inspections and provide technical assistance to help tank owners prevent leaks and spills. Inspectors check for leaks, ensure operators have the correct certification, have conducted the required testing on their USTs, and are up to date with required training. Ecology currently has 17 UST inspector positions across the state, including:

- 8 in the Northwest Region
- 5 in the Southwest Region
- 1 at Headquarters (supporting both Northwest and Southwest)
- 2 in the Eastern Region
- 1 in the Central Region

The current distribution of UST inspectors, with the exception of the Central Region, allows for an equitable distribution of staff in relation to number of UST sites in that area. These staff are funded through a combination of grant funding from the Environmental Protection Agency (EPA), Underground Storage Tank Fees, and Model Toxics Control Operating Account (MTCA Operating) funds.

Ecology has delegated authority from EPA to operate Washington's UST Program. EPA delegation is granted to states that operate UST programs that are at least as stringent as the federal program. UST regulations that are required to be at least as stringent must include provisions that require owners and operators to pass an operator training course, new USTs must be double walled to better protect against leaks, and there must be periodic testing of the tank system. The state must also have a system of escalating enforcement that includes the ability to prohibit fuel delivery to UST systems not operated in compliance with state regulations.

Increase Inspection Capacity
As part it delegation, EPA requires Ecology to conduct inspections of UST sites every three years. In 2019, Ecology received an audit finding from the State Auditor's Office because we were not meeting this requirement. In response to that finding, Ecology developed a corrective action plan, which included improving the training available to UST inspectors, improving our ability to share inspectors between regions, creating a new report to identify sites due for an inspection six months in advance of the due date, and evaluating the deployment of UST inspectors across the state. This evaluation identified the Central Region as a location that was lacking inspector capacity.

The current UST inspector in the Central Region has around 460 sites to inspect every three years, compared to about 215 sites per inspector in

the other regions of the state. In order to meet EPA's inspection requirement, and ensure that UST sites across the state are licensed and maintained in accordance with state and federal law, Ecology UST inspectors can manage a caseload of approximately 200 sites per inspector. This request will support an additional UST inspector in the Central Region to ensure we can meet the federal requirements to inspect every UST site once every three years, and reduce the possibility of these UST sites leaking and requiring cleanup in the future.

Reduce the LUST Backlog
In addition to the requested UST inspector, additional project managers are needed to oversee the cleanup of more than 2,600 known contaminated leaking underground storage tank (LUST) sites throughout Washington. The majority of these sites are located in the Northwest and Southwest regions (see *Attachment A* for a map of current site locations).

The majority of LUST sites in Washington that are making progress toward remediation are being cleaned up independently through Ecology's Voluntary Cleanup Program (VCP) (currently 274 sites undergoing cleanup), or the Pollution Liability Insurance Agency's (PLIA) Petroleum Technical Assistance Program (currently 283 sites undergoing cleanup). While these programs are both effective pathways for cleanups where there are development or other pressures prompting the remediation, it still leaves the cleanup of many LUST sites behind.

These contaminated sites present an ongoing risk to the environment and communities across Washington. Ecology receives annual grant funding from EPA to support four dedicated LUST cleanup staff and 0.5 of an FTE to provide statewide UST and LUST coordination, which includes reporting to the EPA, organizing meetings and trainings, and participating in national meetings. In addition to these staff, Ecology has 15 other cleanup managers that work on LUST sites, along with other assigned cleanups.

Ecology has used a variety of strategies over the years to make progress on the LUST backlog, and while we have had had some success, a large number of sites remain contaminated. Strategies employed to date include, but are not limited to:

- **Model Remedies:** Ecology's model remedies speed up the selection of cleanup actions and provide permanent solutions to protect human health and the environment.
- **Capital Contract Funding:** We have requested and received capital grant funding in the past that has gone directly to pay for assessment and cleanups at some LUST sites. Ecology may request additional resources for future cleanups as part of our Clean Up Toxics Sites – Puget Sound and Eastern Washington Clean Sites Initiative capital budget requests, but needs the staff supported by this request to manage the contracted cleanups.
- **Alternative Agreement types:** Ecology has also negotiated multi-site agreements and technical assistance agreements with companies that own many LUST sites in an effort to make it easier for these companies to work with us.

While these investments and strategies have helped to a certain extent, they have not resulted in significantly reducing the number of LUST sites in Washington. In the past five years, Ecology has cleaned up 288 LUST sites, but during that same time another 156 LUST sites were reported to the agency. As a result, the net reduction in the backlog over the last five years has only 26 been sites per year. While the strategies above have prevented the backlog from increasing, new resources are needed to reduce the backlog in a meaningful way and ensure that we get these sites cleaned up.

This request supports six additional LUST cleanup project managers needed oversee the cleanup of sites that are not being addressed through one of the state's voluntary processes. These sites will require some level of enforcement to compel the owner to conduct a cleanup. Because most cleanups are driven by development, sites in areas without redevelopment interests can sit for many years without progressing toward a permanent cleanup remedy. Enforcement, or funding incentives, are necessary in many cases to either require Potentially Liable Parties (PLPs) to clean up the site, or for the state to move forward with a state-directed cleanup. Without remediation, environmental impacts from these sites will continue and expand, including contaminated soil, contaminated groundwater, and the potential for contaminated vapors to travel into structures that sit above or adjacent to contamination.

Staff supported by this request will work to re-engage PLPs across the state, notify them that we are aware of a LUST release, and as needed, outline Ecology's enforcement authority to push a site toward cleanup. For sites without a PLP, the requested staff will directly supervise contractors conducting the cleanup of sites that are funded as part of future capital budget requests. These staff will provide technical assistance in helping to choose the best cleanup remedy for the site, review testing results, and confirm when the site has met the cleanup requirements in the MTCA cleanup regulation.

Ecology has notified EPA about this budget request for additional cleanup resources to reduce the current LUST backlog, and they are supportive of any effort to speed up the cleanup of these sites (see *Attachment B* for copy of letter of support).

Impacts on Population Served:
This request will provide Ecology the resources needed to better protect our environment and communities through additional inspection and cleanup capacity. Additional inspection capacity will help limit leaks from USTs in the Central Region, better protecting the area's soil and groundwater resources. Additional LUST site managers will enable Ecology to better understand the distribution of LUST sites, and to prioritize the cleanup of sites in the communities most impacted. Currently, LUST cleanups are largely driven by cooperative PLPs working through the VCP or PLIA, where the desire to sell or redevelop the property is motivating the cleanup.

Alternatives Explored:
The alternative to this request would be to continue trying to manage UST inspections and LUST cleanups as we currently have. This alternative is not acceptable, as Ecology needs additional inspectors in order to meet the inspection requirements dictated by our delegated authority from EPA to inspect UST sites every three years. Without additional resources, we will continue to struggle in meeting these requirements.

Without additional LUST site managers, Ecology will not be able to significantly reduce the current backlog of sites that require cleanup. Without remediation, the environmental impacts from these sites will continue, including contaminated soil, groundwater, and the potential for contaminated vapors to travel into structures that sit above, or adjacent, to contamination. While Ecology has been able to deploy strategies to prevent the backlog from increasing, new resources are needed to reduce the backlog in a meaningful way and ensure that we can get these sites cleaned up.

Consequences of Not Funding This Request:
Ecology works hard to prevent petroleum releases and to clean up contaminated sites throughout Washington. Without the additional UST inspector for the Central Region, this area will continue to be underserved by inspections and available technical assistance, which could result in an increased potential of leaks at these sites.

High profile sites being cleaned up to support redevelopment projects take up the majority of the current available staff resources. In many cases, LUST sites are not high profile, and their cleanup is not driven by such redevelopment interests. With our current resources, Ecology has not been able to make acceptable progress on the LUST backlog, and many of these sites continue to be a threat to human health and the environment.

Assumptions and Calculations

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

This request expands activity A005 - Clean up the Most Contaminated Sites First (Upland and Aquatic) by adding six cleanup project managers to oversee cleanup at the more than 2,600 known contaminated LUST sites in Washington. The request also expands activity A023 - Manage Underground Storage Tanks to Minimize Releases by adding an addition UST inspector in the Central Region to address a 2019 audit finding, and ensure Ecology can meet the EPA's requirement of inspecting all licensed UST sites at least every three years. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for these activities. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A005 Clean up the Most Contaminated Sites First (Upland and Aquatic)		
	2019-21	**2021-23**
FTEs Total	157.80	164.70
001-2 General Fund - Federal	$7,137,000	$7,003,000
001-7 General Fund - Private/Local	$3,004,000	$3,004,000
176-1 Water Quality Permit - State	$1,583,000	$1,583,000
23P-1 Model Toxics Control Operating - State	$40,847,000	$41,717,000
23P-7 Model Toxics Control Operating - Local	$499,000	$499,000
TOTAL	**$53,071,000**	**$53,806,000**

A023 Manage Underground Storage Tanks to Minimize Releases		
	2019-21	**2021-23**
FTEs Total	23.6	23.60
001-2 General Fund - Federal	$809,000	$941,000
182-1 Underground Storage Tank - State	$3,593,000	$3,613,000
23P-1 Model Toxics Control Operating - State	$414,000	$314,000
TOTAL	**$4,816,000**	**$4,868,000**

Detailed Assumptions and Calculations:

INCREASE INSPECTION CAPACITY ($115,000 and 1.2 FTEs per fiscal year)

Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 direct FTE Environmental Specialist 3 to increase UST inspection capacity in the Central Region.

REDUCE THE LUST BACKLOG ($1,625,000 and 6.9 FTEs per fiscal year)

Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 6.0 direct FTEs Hydrogeologist 4 cleanup project managers to oversee cleanup at the more than 2,600 known contaminated LUST sites in Washington.

An additional $100,000 per year per LUST cleanup project manager is required to support sampling and other environmental investigation or contracted cleanup work. Since many LUST sites managed by the requested staff will likely not have a viable PLP, Ecology expects to need contractual support to move cleanups forward at several sites. These costs are shown in Object E.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		629,329	629,329	629,329	629,329	629,329
B	Employee Benefits		230,964	230,964	230,964	230,964	230,964
E	Goods and Services		629,008	629,008	629,008	629,008	629,008
G	Travel		15,274	15,274	15,274	15,274	15,274
J	Capital Outlays		8,407	8,407	8,407	8,407	8,407
T	Intra-Agency Reimbursements		243,463	243,463	243,463	243,463	243,463
	Total Objects	**0**	**1,756,445**	**1,756,445**	**1,756,445**	**1,756,445**	**1,756,445**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
HYDROGEOLOGIST 4	93,132		4.00	4.00	4.00	4.00	4.00
ENVIRONMENTAL SPECIALIST 3	61,224		1.00	1.00	1.00	1.00	1.00
KING CO - HYDROGEOLOGIST 4	97,789		2.00	2.00	2.00	2.00	2.00
FISCAL ANALYST 2			0.70	0.70	0.70	0.70	0.70
IT APP DEVELOPMENT-JOURNEY			0.35	0.35	0.35	0.35	0.35
	Total FTEs	**0.00**	**8.05**	**8.05**	**8.05**	**8.05**	**8.05**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE plus $100,000 per direct program FTE to support cleanup work.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

The additional UST inspector in the Central Region will address a long standing service equity issue by providing a similar site to staff ratio to what exists in the other three Ecology regions. Added capacity in Central will also assist our Eastern Region in areas that are close to the regional border, such as the Tri-Cities.

Washington's approximately 2,600 LUST sites are found throughout state, and across many socially and economically diverse communities. Redevelopment and other economic factors are the driving force behind cleanups in Washington. As a result, communities in economically disadvantaged areas are more often subject to contaminated sites that may take longer to clean up.

Ecology's cleanup resources are overextended and unable to pivot toward better serving highly impacted comminutes. Studies in other states have also shown differences and bias in cleanups (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3980862/). This request will allow Ecology to dedicate resources to better understanding how LUST sites impact these comminutes and develop a strategy to address any disparities moving forward.

Ecology will use this funding to focus on ensuring the systems that store petroleum fuel in Washington are following UST regulations designed to minimize releases and cleanup of existing petroleum contaminated sites. A primary factor in deciding which contaminated sites Ecology will target for enforcement will be whether the site affects overburdened communities. Ecology developed a mapping tool called "What's in My Neighborhood" (https://apps.ecology.wa.gov/neighborhood/). This tool pulls data from DOH's Washington Tracking Network (WTN) and connects demographic data to the contaminated site locations in Washington. Though the integration of these data, Ecology is able to identify overburdened communities affected by contaminated sites and use these data in decision making related to prioritizing LUST cleanups.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees
- Goal 3: Protect and reduce toxic threats and pollution
- Goal 5: Protect and Restore Puget Sound

This request will allow Ecology to address the large backlog of contaminated LUST sites across the state, including in the Puget Sound region. Contamination from LUST sites often impact groundwater and nearby waterways. By reducing the current backlog of contaminated sites through completed cleanups, Ecology will reduce the amount of contamination in the environment at these sites, and thereby reducing toxic threats and pollution impacting our state.

This request also provides essential support to the Governor's Results Washington Goal 3: Sustainable Energy and a Clean Environment, and Goal 4: Healthy and Safe Communities. The majority of LUST sites in our state are located at existing or closed gas stations. These sites are generally located in areas where residents work and live. Cleaning up more of these sites will improve the environmental quality, health, and safety of many communities throughout Washington.

Performance Outcomes:

One outcome of this request will be a reduction in the current backlog of LUST sites that need to be cleaned up throughout the state. There are currently about 2,600 known LUST sites in Washington, and Ecology is only able to address a small portion of these sites with our current resources. By adding six additional cleanup project managers, Ecology will have the staff needed to focus on those LUST sites are not already going through established cleanup process, which is roughly two-third of the sites in the state (approximately 1,700). The other outcome of this request will be Ecology's ability to meet EPA-mandated inspection requirements across the state. The additional inspector included in this request will help prevent additional releases from UST system in the Central Region.

Other Collateral Connections

Puget Sound Recovery:

This request supports Puget Sound Action Agenda implementation through the following Strategies, Sub-strategies, and Regional Priorities:

- Strategy 9 – Prevent, reduce and control the sources of contaminants entering Puget Sound. Sub-strategy 9.1, Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem and Sub-strategy 9.6, Increase compliance with and enforcement of environmental laws, regulations, and permits.
- Strategy 10 - Use a comprehensive approach to manage urban stormwater runoff at the site and landscape scales. Sub-strategy 10.3, Fix problems caused by existing development and Sub-strategy 10.4, Control sources of pollutants.
- Strategy 21 - Address and clean up cumulative water pollution impacts in Puget Sound. Sub-strategy 21.2, clean up contaminated sites within and near Puget Sound by reducing and controlling the sources of pollution. Ecology's work to cleanup areas contaminated with hazardous substances returns a polluted or degraded environment, as much as possible, to a healthy, self-sustaining ecosystem.
- Regional Priority -TIF 1.1: Enhance pollutant reduction programs and corrective measures, and increase authorities and programs to prevent toxic chemicals from entering Puget Sound. By cleaning up toxic legacy pollutants Ecology prevents these damaging chemicals from entering the Puget Sound and other potential routes for exposure.
- Regional Priority - TIF 3.1: Provide the infrastructure and incentives to accommodate new development and redevelopment within designated urban centers in Urban Growth Areas. By cleaning up brownfield properties Ecology helps to incentivize growth within Urban Growth Areas.

This request also supports Governor Inslee's Executive Order 18-02, Southern Resident Killer Whale Recovery and Task Force, because it supports cleanup projects that address legacy and new toxic contaminants in Puget Sound. The Order lists toxic contaminants as one of the three primary factors threatening the Southern Resident population. This request specifically supports the Task Force's Recommendation 31 to reduce stormwater threats and accelerate cleanup of toxics harmful to orcas.

State Workforce Impacts:

N/A

Intergovernmental:

Ecology has notified EPA of this budget request for additional cleanup resources to reduce the current LUST backlog, and they are supportive of any effort to speed up the cleanup of these sites. The rate of LUST cleanups has been a source of friction between Ecology and EPA for many years. Expediting the cleanup of these sites with additional staff will improve the relationship between the agencies, and help Washington contribute to EPA's national goal of reducing the LUST backlog. Ecology is also required by EPA to inspect every UST facility at least once every three years. An additional UST inspector will help Ecology maintain compliance with this requirement.

Legal or Administrative Mandates:

In 2019, the State Auditor's Office conducted an audit on Ecology's compliance with the federal requirement to conduct inspections at all UST facilities at least once every three years. This audit resulted in a finding against Ecology due to our failure to meet the three-year inspection requirement. Additional UST staffing will help Ecology maintain compliance with this requirement.

Stakeholder Response:

The majority of UST and LUST sites are located at non-governmental locations. Site owners in central Washington will benefit from the additional technical assistance that the new UST inspector will be able to provide. Owners of LUST sites, who have been able to delay and defer the cost of paying cleanup at these sites may not like the increased focus that will come with additional cleanup project managers, but cleaning up the contamination at these sites will benefit both the environment and those living in Washington.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

PL KU UST LUST Inspection Cleanup Backlog Attachment A.pdf
PL KU UST LUST Inspection Cleanup Backlog Attachment B.pdf

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$629	**$629**	$629	$629	**$1,258**
Obj. B	$0	$231	**$231**	$231	$231	**$462**
Obj. E	$0	$629	**$629**	$629	$629	**$1,258**
Obj. G	$0	$15	**$15**	$15	$15	**$30**
Obj. J	$0	$9	**$9**	$9	$9	**$18**
Obj. T	$0	$244	**$244**	$244	$244	**$488**

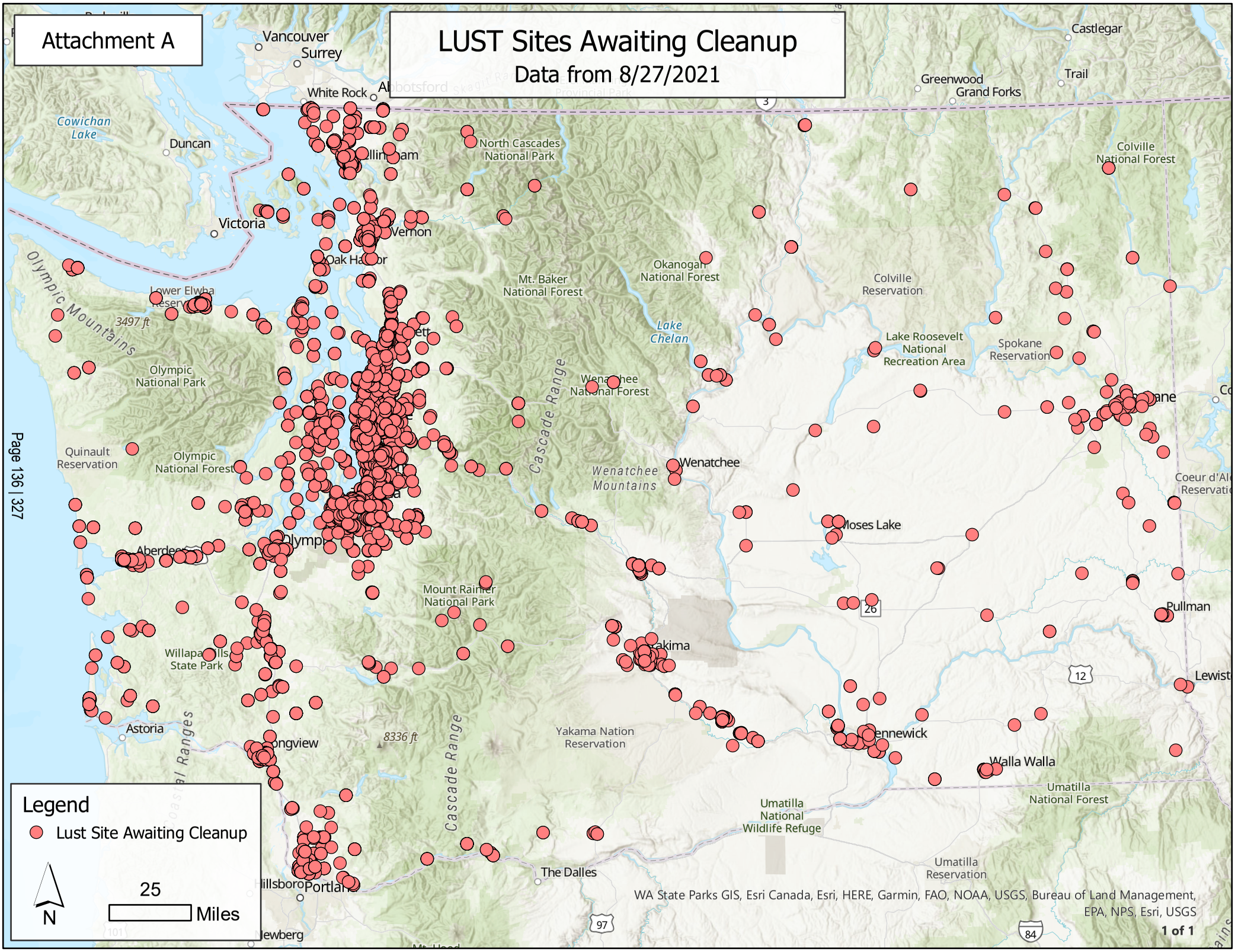
Agency Contact Information

Angie Wirkkala
(360) 688-3214
angie.wirkkala@ecy.wa.gov

Attachment A

LUST Sites Awaiting Cleanup

Data from 8/27/2021



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

LAND, CHEMICALS &
REDEVELOPMENT
DIVISION

August 12, 2021

Reply To: 15-D13

Brock Milliern, Program Manager
Toxics Cleanup Program
Washington State Department of Ecology
300 Desmond Drive SE
Lacey, Washington 98504

Re: Supplemental Budget Requests for SHARP assessment tool and LUST staff

Dear Mr. Milliern:

Thank you for meeting with me in June to discuss the Washington State Department of Ecology's cleanup program and your efforts to address the leaking underground storage tank (LUST) backlog (see enclosed maps). The EPA and Ecology have worked closely together to address the backlog in Washington. Most recently, the EPA and Ecology have made several changes which are positive steps moving forward; however, without significant additional resources we are not likely to be successful given the magnitude, extent, and duration of the backlog. The supplemental budget requests for additional staff to implement Ecology's new site assessment and ranking tool, SHARP, and address priority LUST sites are critical if the State is going to effectively reduce the backlog. With these additional resources, the State should make significant progress to protect people and the environment from the risks associated with these sites including highly impacted communities and sensitive populations. I strongly support your request for additional resources to ensure these sites are effectively managed and cleaned up in the most expeditious manner possible.

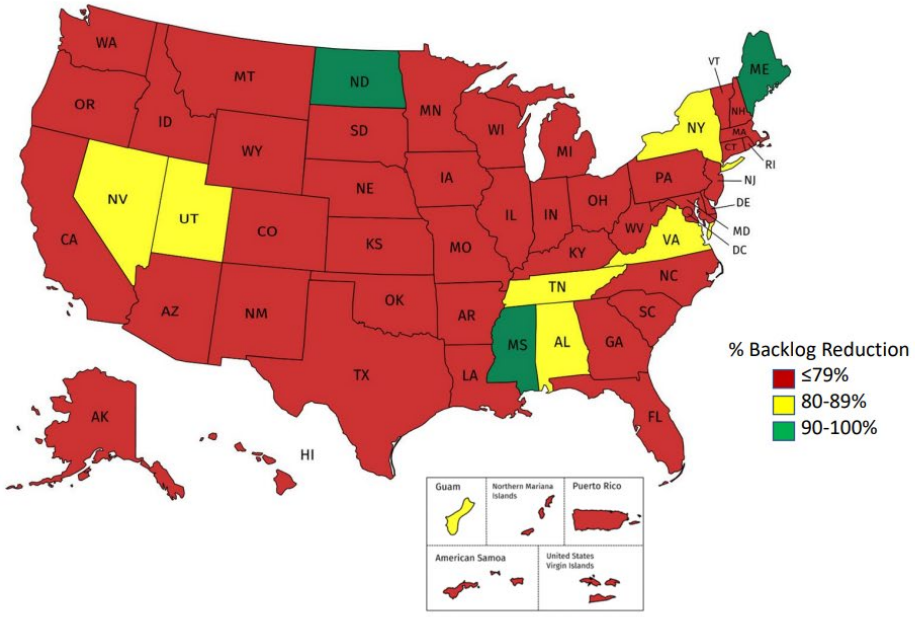
Please don't hesitate to contact me if you have any questions or comments regarding this letter.

Sincerely,
Hamlin, Timothy
Digitally signed by Hamlin, Timothy
Date: 2021.08.12 11:28:46 -07'00'
Timothy B. Hamlin
Director

Enclosure

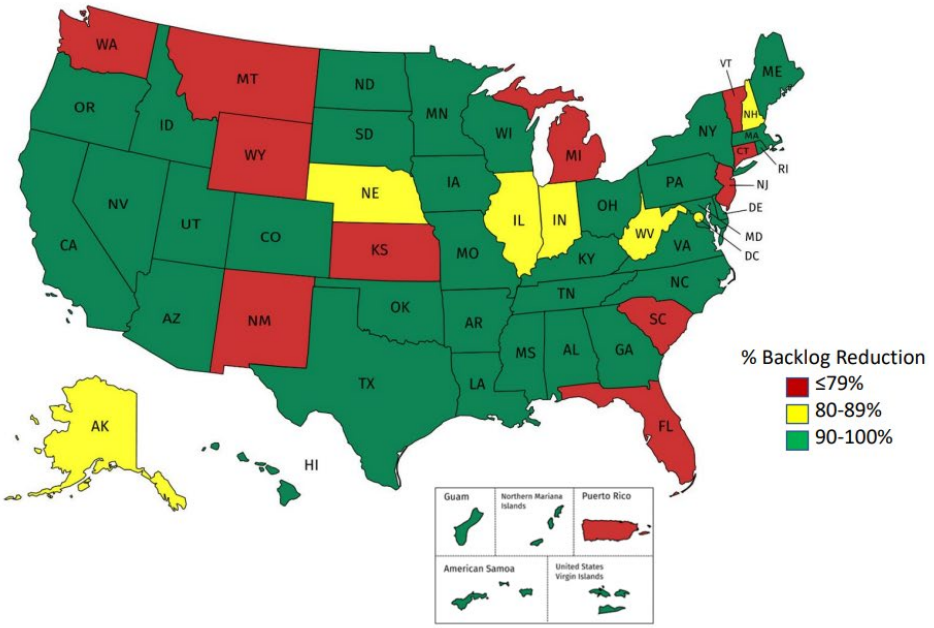
cc Jeff Johnston
Washington State Department of Ecology

2000



EPA Office of Underground Storage Tanks, January 2021

2020



EPA Office of Underground Storage Tanks, January 2021

Agency Recommendation Summary

Contaminated site cleanups continue to outweigh and outpace current cleanup resources. Between 200 and 300 new contaminated sites are reported to Ecology each year, exceeding the number of sites we can cleanup, and increasing the backlog of cleanups that need to occur. More than 6,000 existing contaminated sites need further cleanup action, and hazards at over 4,200 of these have not been ranked or assessed for threats to human health and the environment. This request will support the implementation of Ecology's new Site Hazard Assessment and Ranking Process, designed to more quickly and accurately assess and rank the potential hazards at a reported site. This request will also provide additional engineering and contracting staff needed to expedite our state-directed cleanup projects. Related to Puget Sound Action Agenda Implementation (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	6.9	**3.45**	6.9	6.9	**6.9**
Operating Expenditures						
Fund 23P - 1	$0	$916	**$916**	$916	$916	**$1,832**
Total Expenditures	**$0**	**$916**	**$916**	**$916**	**$916**	**$1,832**

Decision Package Description

Implement New Site Hazard Assessment and Ranking Process
The Hazardous Waste Cleanup Act, passed by Legislature in 1987, directed Ecology to adopt rules to establish criteria for determining priorities among hazardous substance sites. These criteria were meant to assure that sites are ranked by a system that objectively and numerically assessed the relative degree of risk at each site. On July 15, 1988, Ecology adopted the Hazard Ranking System Regulation (Chapter 173-338 WAC), which established criteria for evaluating sites, and established the basis for developing a detailed scoring procedure.

When the Model Toxics Control Act was enacted in 1989, it replaced the Hazardous Waste Cleanup Act, but still required Ecology to establish a ranking system for hazardous sites. Ecology fulfilled this requirement in 1993, when it amended the Model Toxics Control Act Cleanup Rule (Chapter 173-340 WAC) to adopt the Washington Ranking Method (WARM) for the assessment of relative potential risk posed by sites to human health and the environment (https://apps.ecology.wa.gov/publications/documents/90014.pdf).

WARM relied on information available from site hazard assessments to assess the potential risks posed by contaminated sites. The ranking of sites provided the basis for program planning and priority assessment of those sites identified as potential threats to human health and the environment.

Prior to the 2017-19 biennium, Ecology provided capital budget funding through its Site Hazards Assessment Grants to 17 local health departments (covering most of the state's population) to assist in performing initial investigations and these site rankings. Unfortunately, uncertainty around this funding source, caused by the MTCA revenue shortfall in 2015-17, led to participating local health departments to reassign or lay off unfunded staff. After the 2017-19 capital budget was delayed, causing more uncertainty for the local health departments, Ecology made the decision to transition this site assessment work back to Ecology, but we have not requested any additional funding for this work since it came back. Today, all initial investigations are conducted by Ecology staff or the Pollution Liability Insurance Agency (PLIA). PLIA only conducts initial investigations for suspected heating oil tank sites, while Ecology conducts all site hazard assessments, but these assessments may or may not include a WARM ranking.

Over time, WARM has become an antiquated and ineffective tool for conducting site hazard assessments and ranking sites, as the science, magnitude, and reality of cleanup has changed. For example, WARM was developed when only a few hundred contaminated sites were ever anticipated, and was designed to rank sites relative to one another. There are now more than 13,000 known or suspected contaminated sites in Washington, and with more than 6,000 of these sites awaiting cleanup. Today, it now makes more sense to rank these sites by the specific threats of the hazards posed by each, rather than their relative nature to one another.

In addition to being a relative ranking system, WARM has become outdated as the science behind cleanup has changed, such as a better understanding of exposure pathways like vapor intrusion, and the toxicity of emerging chemicals, such as perfluoroalkyl and polyfluoroalkyl substances (PFAS). Furthermore, the WARM ranking does not consider any information about a site's contaminants, who might be exposed, or the level of exposure risk. Due to the limited utility and the labor intensive nature of a WARM ranking, sites today are usually only ranked if they are part of a formal cleanup process.

To address the current drawbacks of WARM, and increase the number of sites being ranked, Ecology is currently conducting rulemaking to update Chapter 173-340 WAC – MTCA Cleanup Rule, with a proposal to remove the explicit reference to WARM, and the WARM scoring Manual. Instead, the proposed rule amendments will direct and provide performance measures for Ecology to develop and maintain a hazard ranking system – through agency-issued policy and procedures, not rule – with appropriate public review and comment. This current phase of

rulemaking is expected to be complete by late 2022.

The Site Hazard Assessment and Ranking Process (SHARP) Tool will be the new ranking system. The SHARP Tool, when fully implemented, will allow Ecology to rank the threat of exposure at sites, and allow ranking scores for a site to be updated, as applicable, throughout the cleanup process. The SHARP ranking process considers:

- Contamination exposure routes for soil, groundwater, surface water, and sediment, and now vapor intrusion (excluded from WARM).
- Type and severity of site hazards.
- Proximity to sensitive populations (such as the young, elderly, or low-income).

Full implementation of the SHARP Tool will result in a vastly improved understanding of exposure risks associated with MTCA sites, and allow Ecology to better identify, and allocate resources to priority sites. However, in order to achieve these outcomes, Ecology needs additional staff to implement SHARP and rank sites across Washington. The three additional staff supported by this request will begin ranking target or high priority sites using the current version of the SHARP Tool starting in fiscal year 2023. These sites likely will include those supported by Ecology's regular budget requests to support capital cleanup programs across the state (Eastern Washington Clean Sites Initiative, Clean Up Toxic Sites – Toxics Sites, Remedial Action Grants, etc.). The SHARP ranking scores for each site will be one of a number of factors considered when prioritizing sites for funding on a given project list.

SHARP rankings won't be published until after rulemaking is completed and the revised MTCA Cleanup Rule is adopted in late 2022. At that time, the requested staff will continue to work through the backlog of current unranked sites, and re-rank those that had previously been ranked using WARM. These ranking activities will also support prioritizing the leaking underground storage tank (LUST) backlog, by identifying those that are a greater threat to human health and the environment. Once rulemaking is complete, the current version of the SHARP Tool will eventually be converted into an online application, which will be used to quickly rank sites, upload documents to our databases, and automatically present ranking scores for public and internal queries.

Engineering and Contracts Expertise for Ecology-Conducted Cleanups
The state's capital investments in cleanups continue to be robust. In the 2021-23 enacted capital budget, Ecology was appropriated nearly $50 million for new state-directed capital cleanup work through our Clean Up Toxics Sites – Puget Sound (including ASARCO cleanups), Eastern Washington Clean Sites Initiative, and Protecting Investments in Cleanup Remedies programs. In addition to these new investments, Ecology is managing more than $83 million in reappropriated dollars for projects already underway in these state-directed programs. Ensuring that this funding is put to work quickly in order to expedite cleanups and protect human health and the environment is an agency priority.

State-directed cleanups are currently underway at over 50 sites across Washington. These are cleanups with either no identifiable liable person, the identified liable party is technically or financially unable to conduct remedial action (orphaned and abandoned sites), or where the liable party is non-compliant. Without state funds, and direct state involvement in the cleanup, these sites would continue to pose threats to the public, and the environment. Some state-directed projects are done collaboratively with local governments (through grants or interagency agreements), while others are directly managed by Ecology through contracts under the state's public works process, which uses a traditional design-bid-build method (Chapter 39.80 RCW - Architectural and Engineering (A/E) Services and Chapter 39.04 RCW - Public Works).

The design-bid-build method for these projects is a linear process. The design part begins with the selection of a qualified engineering firm. Once under contract, that firm develops the design documents for construction, and then the approved design documents are made publicly available to allow contractors the opportunity submit bids for the project. A contract is awarded following the competitive bidding process. Once the contract is executed for construction the build portion of the project can begin.

This entire process must be supervised by Ecology engineers with contracting expertise in the public works process. Right now, Ecology's Toxics Cleanup Program only has one engineer with the expertise to oversee the A/E and public works contracting process. This is a limiting factor in how quickly cleanup projects can proceed, and is a risk area because no other staff at Ecology have the expertise to provide redundancy or expanded capacity as the number of projects continues to increase.

Project schedules and contract timelines vary due to complexity, project size, negotiations, and other factors like continued impacts from COVID 19. It can take six to eight months to get the initial A/E contract in place. With current support capacity, Ecology's one engineer can handle the procurement and bidding process for around 10 contracts (A/E or PW) a biennium due to the complexity of the process. For the 2021-23 biennium, we are prioritizing and staging contracts, but anticipate the need to procure or bid about 30 contracts under 54 state-directed projects. With current resources, it could take Ecology's one engineer two to three biennia to complete all identified procurement and biding processes for currently funded state-directed projects.

This request will address gaps in engineering expertise and general capacity by funding two additional engineers and a management analyst position to support Ecology's state-directed contracting work. The additional engineering expertise will allow Ecology to move more projects through the public works process at an increased pace. The additional capacity added by the management analyst will support improved process and template development, communications, and bid support. This critical support will enable the contract engineers to remain focused on the engineering portion of contract development and management.

Impacts on Population Served:
The implementation of SHARP will more clearly communicate the level of contamination at a particular site, and whether it poses a threat of

exposure to communities in the area. The SHARP Tool will provide information needed to more effectively present site hazard information around site characterization, which can strengthen meaningful engagement. SHARP will also help us track and communicate to affected communities our overall progress in cleaning up contaminated sites. By using an absolute ranking tool, Ecology may re-rank sites, as appropriate, to show progress toward a decreased threat to human health and the environment during the cleanup process.

SHARP offers an updated approach to prioritizing contaminated sites for cleanup. The priorities will help inform and support future capital budget requests. For cleanups funded by state-directed appropriations, ensuring adequate engineering and contracting support means Ecology will have a more reliable and predictable process for completing cleanups and spending state capital budget appropriations.

Expediting the contracting process for state-directed cleanup projects will ensue that contaminated sites across Washington are remediated sooner, preventing further risk to the human health and the environment. This request will support new and ongoing efforts in local cleanups and land redevelopment. Cleaning up contaminated property is usually integrated with economic development, habitat restoration, and public recreation projects. Most cleanup projects are the first phase of a larger community or economic redevelopment project where the cleanup site is the focal point of the project.

Alternatives Explored:
At this time, Ecology has no plans to reinstate the Site Hazard Assessment Grants, which were previously awarded to local health departments who assisted with initial investigations and site hazard assessment. The unpredictability of past funding for local health department staff is likely to have left these partners hesitant to re-engage in that type of relationship with Ecology. Additionally, the staff supported by this request will allow Ecology to prioritize which sites are ranked ahead of others (such as those in the LUST backlog, or that are receiving capital funding), and enable the of ranking sites with the SHARP Tool to begin before the current phase of MTCA rulemaking is finished.

Another alternative to this request is that we could continue to only rank sites at intake as capacity allows. While ranking sites during the initial investigation may focus on new sites, it will take a concentrated effort to rank (or re-rank) all contaminated sites. We would have to wait longer for a more complete picture of ranked sites in order to prioritize and target capital spending on cleanups that would yield the highest environmental and human health protection benefits. This lack of data presents an equity concern, especially as Ecology looks forward to reporting on new requirements in the HEAL Act.

The only alternative to the request for additional engineering and contract support for Ecology's state-directed cleanups is to continue at our current level of support these projects. This is not a feasible alternative, as the current level of support puts cleanup plans and schedules for projects requiring design-bid-build public works contracting at risk of significant delays and increased costs.

Consequences of Not Funding This Request:
More cleanup sites are discovered all the time. Not funding this request would delay comprehensive site rankings that would enable Ecology to change to a more equitable approach to resource management. Many of today's sites are driven by complaint and market-driven systems, but SHARP would provide a more extensive ability to compare the impact of sites to human health and the environment.

Ecology plans to align full implementation of SHARP with the adoption of our updated MTCA Cleanup Rule in late 2022. The requested staff would begin initial rankings (to be published once rulemaking is completed), train current staff to use the tool, and provide capacity to rank and re-rank those sites that are currently backlogged.

Once sites are prioritized for cleanup, the work needed for remediation requires a multi-faceted professional team that includes environmental specialists, hydrogeologists, scientists, and environmental engineers. The consequences of not investing in our design-bid-build public works contracting experts means it would take longer to complete cleanups and spend state-directed funding, which would increase the cost of these projects due to inflation. Delays would also increase the potential spread of contamination and could result in missed construction windows and timelines. Having the capacity to enter contracts at a reliable and predictable pace is critical to meeting cleanup timelines and spending capital funds. Timely spending of capital appropriations for cleanup is a priority for Ecology, and this investment will help increase spending and cleanup rates.

Assumptions and Calculations

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

This request expands activity A005 - Clean up the Most Contaminated Sites First (Upland and Aquatic) by adding additional staff to complete hazard rankings for contaminated sites in Washington, and expedite the contracting process for state-directed cleanup projects that required A/E and public works contracts. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A005 Clean up the Most Contaminated Sites First (Upland and Aquatic)		
	2019-21	2021-23
FTEs Total	157.80	164.70
001-2 General Fund - Federal	$7,137,000	$7,003,000
001-7 General Fund - Private/Local	$3,004,000	$3,004,000
176-1 Water Quality Permit - State	$1,583,000	$1,583,000
23P-1 Model Toxics Control Operating - State	$40,847,000	$41,717,000
23P-7 Model Toxics Control Operating - Local	$499,000	$499,000
TOTAL	**$53,071,000**	**$53,806,000**

Detailed Assumptions and Calculations:

SHARP IMPLEMENTATION ($396,000 and 3.45 FTEs per fiscal year)
Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 3.0 direct FTE Environmental Specialist 4 to rank site hazards using the SHARP Tool.

IMPROVE STATE-DIRECTED CLEANUP PROGRAM CONTRACTING PROCESS ($514,000 and 3.45 FTEs per fiscal year)
Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 2.0 FTE Environmental Engineer 5 and 1.0 FTE Management Analyst 3 to support state-directed contracting work through the cleanup design-bid-build process.

Workforce Assumptions:

Expenditures by Object		**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
A	Salaries and Wages		496,448	496,448	496,448	496,448	496,448
B	Employee Benefits		182,197	182,197	182,197	182,197	182,197
E	Goods and Services		24,864	24,864	24,864	24,864	24,864
G	Travel		13,092	13,092	13,092	13,092	13,092
J	Capital Outlays		7,206	7,206	7,206	7,206	7,206
T	Intra-Agency Reimbursements		192,056	192,056	192,056	192,056	192,056
	Total Objects	**0**	**915,863**	**915,863**	**915,863**	**915,863**	**915,863**

Staffing

Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
ENVIRONMENTAL ENGINEER 5	105,384		2.00	2.00	2.00	2.00	2.00
ENVIRONMENTAL SPECIALIST 4	70,956		2.00	2.00	2.00	2.00	2.00
MANAGEMENT ANALYST 3	69,264		1.00	1.00	1.00	1.00	1.00
KING CO - ENVIRONMENTAL SPECIALIST 4	74,504		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.60	0.60	0.60	0.60	0.60
IT APP DEVELOPMENT-JOURNEY			0.30	0.30	0.30	0.30	0.30
Total FTEs		**0.00**	**6.90**	**6.90**	**6.90**	**6.90**	**6.90**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2, 182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Using SHARP rankings informs decision making to prioritize sites affecting overburdened communities and underserved populations, while aligning with the goals of the HEAL Act. Ranking contaminated sites using our new SHARP Tool will provide us with the information to prioritize and report on the number of contaminated sites that may be affecting communities with environmental justice concerns and the threat of exposure to environmental hazards. The SHARP Tool integrates community demographic indicators, including the percent people of color, percent low-income, linguistic isolation, level of educational attainment, and individuals under age five and over age 64. These data will support Ecology's determination to consider and prioritize areas with vulnerable and sensitive populations.

This request encourages and expedites the cleanup and reuse of contaminated sites, while advancing service equity and environmental justice. Washington residents working or living on or near cleaned up sites benefit from the reduced exposure to environmental hazards. Typically, cleanups happen in communities where the market supports it. This creates potential environmental and health disparities for residents in communities where cleanups are not economical. These are often communities with heightened percentages of people of color and low-income residents.

Adding staff to rank contaminated sites using the new SHARP Tool will provide us with the information Ecology needs to prioritize and report on the number of contaminated sites that may be affecting communities with environmental justice concerns and the threat of exposure to these populations. The more efficiently sites can be catalogued and prioritized, the sooner we can initiate cleanup in overburdened communities and underserved populations.

This request will have a statewide impact, including the potential to benefit tribes. Many contaminated sites are in or near populations with environmental justice considerations. Contamination threatens fish, shellfish, and the people who harvest and eat them. Many contaminated sites fall in areas that are important to local tribes, particularly along our state's riverbanks and shorelines. Identifying these sites and their environmental and health risk is a first step toward cleanup. Prioritizing and cleaning up additional sites will have an impact on issues critical to tribal health, such as subsistence shellfishing, salmon habitat, resource access, and cultural preservation.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing all five goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees, by more clearly communicating the threat posed to human health and the environment by contaminated sites, along with the progress of their cleanup.
- Goal 3: Prevent and reduce toxic threats and pollution, by speeding up site identification and ensuring state directed cleanups predictably and efficiently are cleaned up through the complex design-bid-build process.
- Goal 4: Protect and manage our state's waters, by identifying and more efficiently addressing sites that pose a greater threat through the nature of contamination or the ability of the contamination to spread through ground or surface water.
- Goal 5: Protect and restore Puget Sound, by identifying and more efficiently addressing contaminated sites in direct proximity to the Puget Sound.

This request also provides essential support to the Governor's Results Washington Goal 2, Prosperous Economy; Goal 3, Sustainable Energy and a Clean Environment; Goal 4, Healthy and Safe Communities; and Goal 5, Efficient, Effective, and Accountable Government. Proceeding with the new SHARP Tool and supporting state-directed cleanups with additional engineering and contracting staff will:

- Make information readily available to the public and more clearly communicate the threat of potential exposure to environmental hazards and the severity of those exposures.
- Focus and prioritize where future cleanups happen, included capitally funded project tracking and communicating overall progress in cleaning up contaminated sites.
- Track and communicate overall progress in cleaning up contaminated sites.

- Reduce the toxic threats posed by contamination.
- Protect the state's water resources and Puget Sound as cleanups are completed.
- Provide capacity and expertise to contract for state-directed cleanup work following legal requirements and industry best practice standards.

Performance Outcomes:

By implementing SHARP, Ecology will more quickly assess and update the threats posed by a site, and communicate more effectively with the public about those threats, and the progress made to reduce them. For Ecology-conducted cleanup work, we will have the capacity to prioritize cleanup projects for state funding, move them more quickly through the design-bid-build contracting process, spend our capital budget appropriations, and complete cleanups.

Other Collateral Connections

Puget Sound Recovery:

This request supports Puget Sound Action Agenda implementation through the following Strategies, and Sub-strategies:

- Strategy 9 – Prevent, reduce and control the sources of contaminants entering Puget Sound. Sub-strategy 9.1, Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem and Sub-strategy 9.6, Increase compliance with and enforcement of environmental laws, regulations, and permits.

- Strategy 10 - Use a comprehensive approach to manage urban stormwater runoff at the site and landscape scales. Sub-strategy 10.3, Fix problems caused by existing development and Sub-strategy 10.4, Control sources of pollutants.
- Strategy 21 - Address and clean up cumulative water pollution impacts in Puget Sound. Sub-strategy 21.2, clean up contaminated sites within and near Puget Sound by reducing and controlling the sources of pollution. Ecology's work to cleanup areas contaminated with hazardous substances returns a polluted or degraded environment, as much as possible, to a healthy, self-sustaining ecosystem.

This request also supports the following Vital Sign Regional Priorities:

- TIF 1.1: Enhance pollutant reduction programs and corrective measures, and increase authorities and programs to prevent toxic chemicals from entering Puget Sound. By cleaning up toxic legacy pollutants Ecology prevents these damaging chemicals from entering the Puget Sound and other potential routes for exposure.
- TIF 3.1: Provide the infrastructure and incentives to accommodate new development and redevelopment within designated urban centers in Urban Growth Areas. By cleaning up brownfield properties Ecology helps to incentivize growth within Urban Growth Areas.

This request also supports Governor Inslee's Executive Order 18-02, Southern Resident Killer Whale Recovery and Task Force, by supporting cleanup projects that reduce legacy and address new toxic contaminants in Puget Sound. The Order lists toxic contaminants as one of the three primary factors threatening the Southern Resident population. This request specifically supports the Task Force's Recommendation 31 to reduce stormwater threats and accelerate cleanup of toxics harmful to orca.

State Workforce Impacts:

N/A

Intergovernmental:

Within Ecology, any program managing cleanup sites (Hazardous Waste and Toxics Reduction Program, Nuclear Waste Program, and the Solid Waste Program) will benefit from the new SHARP Tool and the more accurate rankings it will generate. The new SHARP Tool will provide an agency-wide benefit by informing site prioritization for all cleanup sites managed by Ecology.

The Department of Health (DOH) is proving hands-on input to and support of SHARP Tool development and testing to partner with us in conducting site hazard assessments. SHARP Tool rankings will facilitate continued collaboration with DOH to support crucial data sharing between agencies. Additionally, PLIA may consider revising the eligibility requirements for their Petroleum Technical Assistance Program, and may wish to adopt an approach similar to SHARP for assessing heating oil tank sites.

State-directed cleanup projects support collaboration among local, tribal, state, and federal governments, businesses, agricultural and environmental interests, and the public to help preserve and protect human health and the environment throughout Washington State.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

Ecology receives advice from the Ecology's Stakeholder & Tribal Advisory Group (STAG) on updates to the MTCA Cleanup Rule. The STAG is a group of 22 key stakeholders and representatives of tribal interests who have practical experience with contaminated site cleanups in Washington State.

This group is motivated to provide diverse perspectives, advice, and feedback as Ecology staff update the Cleanup Rule. Group members serve as ambassadors who represent the diverse interests and concerns of their organizations and communities throughout the rulemaking process. SHARP Tool development is part of the current rulemaking process, and as such, STAG members have provided valuable comments on the SHARP Tool as it's been developed. This has facilitated improvements and a greater ability to address a wider set of environmental topics and concerns in the tool. Continued improvements to SHARP and its ranking tool will help streamline our decision-making processes for quicker cleanups, while meeting community needs.

We will continue to provide STAG with SHARP Tool updates, as we work with them through its implementation. Ecology's proposed process to develop policies and procedures to implement SHARP will include a public comment period before we finalize them.

Changes from Current Law:

Ranking hazardous sites has always been a requirement of MTCA (RCW 70A.305.030 (2)(b)). Ecology is currently conducting rulemaking to update Chapter 173-340 WAC – MTCA Cleanup Rule, with a proposal to remove the explicit reference to WARM, and the WARM scoring Manual. Instead, the proposed rule amendments will direct and provide performance measures for Ecology to develop and maintain a hazard ranking system – through agency-issued policy and procedures, not rule – with appropriate public review and comment. This current phase of rulemaking is expected to be complete by late 2022.

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$497	**$497**	$497	$497	**$994**
Obj. B	$0	$182	**$182**	$182	$182	**$364**
Obj. E	$0	$25	**$25**	$25	$25	**$50**
Obj. G	$0	$13	**$13**	$13	$13	**$26**
Obj. J	$0	$7	**$7**	$7	$7	**$14**
Obj. T	$0	$192	**$192**	$192	$192	**$384**

Agency Contact Information

Angie Wirkkala
(360) 688-3214
angie.wirkkala@ecy.wa.gov

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Agency Recommendation Summary

Food waste and litter are two of the biggest challenges currently facing communities across Washington, with significant social, environmental, and economic impacts. To help address these issues, the Legislature has passed a number of bills in recent years, including the Food Waste Reduction Act of 2019. This Act established a statewide food waste reduction goal and required the development of a food waste reduction plan to reach those targets. The draft plan, which will be completed by the end of 2021, includes 30 specific recommendations for reducing food waste in Washington. Ecology requests funding to implement an initial recommendation to develop a series of food waste reduction campaigns. Funding will also be used to support the expansion of litter prevention campaigns needed across the state. Related to Puget Sound Action Agenda implementation. (Waste Reduction, Recycling, and Litter Control Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Operating Expenditures						
Fund 044 - 1	$0	$1,800	**$1,800**	$1,800	$1,800	**$3,600**
Total Expenditures	**$0**	**$1,800**	**$1,800**	**$1,800**	**$1,800**	**$3,600**

Decision Package Description

This budget request addresses two priority focus areas for reducing solid waste in Washington State – Food Waste Reduction and Litter Prevention.

Food Waste Reduction
Wasting food does not make sense – for people or for the environment. In 2017, the Washington State Department of Agriculture (WSDA) estimated that 16 percent of Washington's population struggled to put food on the table, based on one in six Washingtonians (1.15 million people) receiving food from emergency food providers. Meanwhile, studies show that Washington currently generates more than one million tons of food waste annually, including over 370,000 tons of edible food. Food waste is the largest component of both the state's and country's municipal solid waste production. State data from 2015-16 (https://apps.ecology.wa.gov/publications/SummaryPages/1607032.html) shows that food makes up 16 percent of overall garbage (779,555 tons), and edible food makes up eight percent of all garbage (374,490 tons).

Food is a valuable resource. Wasting edible and inedible food also wastes the water, energy, labor, pesticides, fertilizers, and land used to make the food. The U.S. Environmental Protection Agency (EPA) estimates $218 billion is spent each year to grow food in the United States that is not eaten. When food goes to the landfill, nutrients in the food do not return to the soil, and wasted food rots, producing methane gas that is emitted from the landfill. Methane (CH4), which is one of the three main greenhouse gases, along with carbon dioxide (CO2) and nitrous oxide (N2O), is pound for pound 28 times more effective at trapping heat than carbon dioxide.

To address this social, environmental, and economic issue, the Legislature passed the Food Waste Reduction Act (RCW 70A.205.715) in 2019. The law established a statewide food waste reduction goal to reduce food waste generated by 50 percent by 2030, relative to 2015 levels, and required a subset of the goal to focus on reducing the amount of edible food that is wasted. Under the new law, Ecology was required to establish baseline data and annually track progress toward the statewide food waste reduction goals. We were also tasked to develop and adopt a food waste reduction plan, now titled the Use Food Well Washington Plan (UFWW Plan), which focuses on three key strategies:

1. Prevention: Prevent and reduce the amount of food that is wasted.
2. Rescue: Rescue edible food that would otherwise be wasted and ensure the food reaches those who need it.
3. Recovery: Support productive uses of inedible food materials, including using it for animal feed, energy production through anaerobic digestion, and for off-site or on-site management systems, including composting, vermicomposting, or other biological systems.

To draft the plan and identify ways to reduce food waste in Washington, Ecology consulted with the Washington State departments of Health, (DOH), Commerce, the Office of Superintendent Public Instruction (OSPI), WSDA, and over 150 subject matter experts. We also conducted research and literature reviews to support the recommendations in the plan. For more information on the UFWW Plan, please see the Use Food Well Washington Focus Sheet, here: https://apps.ecology.wa.gov/publications/SummaryPages/2007029.html.

The draft plan, which is currently being finalized and will be delivered to the Legislature by the end of 2021, includes 30 recommendations to reduce food waste that were identified through this collaborative engagement process, including:

- Federal action to support standardized date labeling, increase markets for off-grade produce, and increase tax incentives for edible food donations.

- State action to create the Washington Center for Sustainable Food Management.
- State action to increase and sustain funding for grants focused on food waste prevention, rescue, and recovery.
- State action to increase access to cold-chain and transportation infrastructure for the hunger relief sector.
- State action to increase access to value-added food processing hubs and community kitchens across the state.

One specific recommendation, #13 – Implement statewide food waste reduction campaigns – has been identified as a clear starting point for putting the plan into action. A major barrier to using food well is education and understanding. These campaigns will promote responsible behavior and a greater cultural shift toward sustainable behaviors. The campaigns will aim to increase the quality of edible food donated and provide the commercial sector guidance on food donation and rescue laws. Implementing this recommendation will also reduce barriers by developing tool kits, guidance materials, and resources tailored to both the residential and commercial sectors.

When the Food Waste Reduction Act was passed in 2019, the Legislature provided Ecology one-time funding to develop the UFWW Plan, but that funding was removed at carry forward level for the 2021-23 biennium. Therefore, Ecology is now requesting funding to develop and implement the statewide food waste reduction campaigns recommended in the UFWW Plan through the 2023-25 biennium. Funding will be used to develop education and outreach materials, print and distribute campaign materials, and purchase media for billboards, radio, and TV.

Please note, implementing the other recommendations from the UFWW Plan will likely require additional funding in the future. Ecology will submit future budget requests, as needed, to continue support of the UFWW Plan and its recommendations.

Litter Prevention
Every year in Washington, more than 12 million pounds of litter is tossed and blown onto roadways, and another 6 million pounds ends up in parks and recreation areas (according to previous litter studies; https://apps.ecology.wa.gov/publications/SummaryPages/0507029.html and https://apps.ecology.wa.gov/publications/SummaryPages/0007023.html). Litter is an eyesore, harms wildlife and the environment, reduces real estate value, attracts more litter, and puts motorists at risk.
While Ecology-funded programs picked up over 4.5 million pounds of litter and cleaned 21,581 miles of road statewide in 2020, we cannot address the state's litter problem through pickup programs alone. In 2021, Ecology partnered with the Washington State Patrol (WSP), Washington Department of Transportation (WSDOT), and the Washington Traffic Safety Commission (WTSC) to design and launch a much needed campaign to address the state's growing and highly visible litter pollution problem.

The We Keep WA Litter Free campaign (www.LitterFreeWA.org) uses social marketing and a positive culture framework to change littering behaviors. It incorporates diversity, equity, and inclusion into its design and implementation and was translated into Spanish. The first effort under this campaign focused on unsecured vehicle loads, because they contribute to a large percentage of roadside litter and cause hundreds of traffic crashes a year. The Secure Your Load for Safer Roads campaign (www.SecureLoadsWA.org) includes statewide advertising, retail partnerships, emphasis patrols by WSP, messages on WSDOT highway signs, cargo net giveaway events in multiple counties, and more. This campaign runs annually in May and June around the national Secure Your Load Day on June 6.

The next campaign priority for Ecology and its partners is to address litter from food packaging and beverage containers. An estimated 2.6 billion food-packaging film items (snack bags, candy wrappers, etc.) were littered in the U.S. in 2020, making food-packaging film the second most littered product after cigarette butts. These items do not break down, are highly visible, and result in a large number of complaints from those impacted. Litter pickup crews spend a lot of time and resources picking up these items, and a significant proportion of litter in our communities and along our roads end up in the state's waterways.

Ecology has base budget funding to maintain the We Keep WA Litter Free and Secure Your Load for Safer Roads campaigns through fiscal year 2022, and conduct future campaigns every other year, but additional funding is needed to maintain these efforts on a more consistent annual basis, and expand to new areas, such as food packaging and beverage containers, in the future. Therefore, Ecology is requesting additional ongoing funding, beginning in fiscal year 2023, to continue and expand on these campaign efforts moving forward.

Impacts on Population Served:
Most, if not all, communities in Washingtonian will benefit from this request. Both residential and commercial sectors will be targeted through the food waste reduction campaigns implemented as part of the UFWW Plan, and campaign materials will provide details on how edible food can be safely and properly donated to hunger relief organizations. These sectors will also receive guidance on smart purchasing to prevent food from being wasted in the first place.

Washington residents understand that litter has a strong negative impact on their communities. Litter negatively affects the environment, waterways, wildlife, property taxes, home values, tourism and businesses, quality of life, and health and safety in their communities. The litter reduction campaigns supported by this request will benefit everyone in the state by reducing the amount of litter and improving safety for those who live, travel, and recreate in Washington.

Alternatives Explored:
One alternative to this request would be to divert existing funding within Ecology's base budget to support these new campaigns. However, this this alternative was not selected because it would negatively impact other core environmental and public health work being done within the agency. Ecology could choose to delay or not implement the recommendations within the UFWW Plan, but that would be contrary to the

legislative intent of the Food Waste Reduction Act and would risk the state's ability to achieve the Act's food waste reduction targets by 2030. Ecology would also not be able to advance efforts in litter prevention beyond our current cleanup efforts.

Consequences of Not Funding This Request:
We have the opportunity to begin implementing strategies to achieve statewide food waste reduction goals over the next decade and turn the tide on litter in Washington, but additional funding is needed to support these efforts. If this request is not funded, Washington risks not meeting the 2030 food waste reduction goals established in the Food Waste Reduction Act of 2019. Washington's hunger relief sector is at capacity and needs support. If this request is not funded, Washington risks not meeting this critical need within local communities and working toward a more resilient food system across the state.

If this request is not funded, there would also be unfortunate consequences for litter prevention in Washington. Ecology would be unable to continue the We Keep WA Litter Free and Secure Your Loads for Safer Roads campaigns on an annual basis into the future, nor be able to expand to new campaign areas that are needed. Instead of building on the successes of the current campaigns, work in these areas would be reduced and could end entirely. We need to prioritize and invest in these efforts to make progress and reduce litter pollution over the long term. When the social marketing campaigns end, often people's behavior reverts to old habits, and that could mean more litter impacting the state.

Assumptions and Calculations

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

This request expands activities A009 – Eliminate Waste and Promote Material Reuse, and A010 – Prevent and Pick up Litter, by providing funding for two new food waste reduction campaigns and to maintain/expand current litter prevention campaigns in the future. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for these activities. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A009 - Eliminate Waste and Promote Material Reuse		
	2019-21	**2021-23**
FTEs Total	45.45	45.70
001-1 General Fund - State	$51,000	$0
044-1 Waste Reduction/Recycle/Litter Control - State	$13.153,000	$13,078,000
11J-6 Electronic Products Recycling - Non Approp	$770,000	$788,000
16T-6 Product Stewardship Programs - Non Approp	$229,000	$243,000
199-1 Biosolids Permit - State	$2,508,000	$2,453,000
22G-6 Photovoltaic Module Recycling - Non Approp	$74,000	$76,000
23P-1 Model Toxics Control Operating - State	$1,202,000	$2,095,000
23W-1 Paint Product Stewardship - State	$167,000	$131,000
489-1 Pension Funding Stabilization Acct - State	$4,000	$439,000
TOTAL	**$18,158,000**	**$19,302,000**

A010 - Prevent and Pick up Litter		
	2019-21	**2021-23**
FTEs Total	24.65	24.65
044-1 Waste Reduction/Recycle/Litter Control - State	$11,880,000	$12,486,000
TOTAL	**$11,880,000**	**$12,486,000**

Detailed Assumptions and Calculations:

From July 1, 2022 through June 30, 2025, Ecology requires $1 million per year from the Waste Reduction, Recycling, and Litter Control Account (WRRLCA) to develop and implement two food waste reduction campaigns to support the new UFWW Plan and Food Waste Reduction Act of 2019.

Beginning July 1, 2022, and ongoing, Ecology also requires $800,000 per year from WRRLCA to maintain existing litter prevention campaigns implemented in 2021 on an annual basis, and expand campaign efforts to new areas, including food packaging and beverage containers, in the future.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
C	Personal Service Contract		1,800,000	1,800,000	1,800,000	800,000	800,000
	Total Objects	**0**	**1,800,000**	**1,800,000**	**1,800,000**	**800,000**	**800,000**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Total FTEs		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Explanation of costs by object:
Costs are shown in Object C, Personal Service Contracts.

How is your proposal impacting equity in the state?

Everyone in Washington will benefit from the new food waste reduction campaigns supported by this request, but they will be particularly beneficial to those in underserved and overburdened communities who may be experiencing food insecurity.

While the campaigns supported by this request will be developed so they can be used statewide, priority consideration for printed material and media will be made for local application. This means that local governments, organizations, and communities can use the materials as a baseline message, and they can add messaging, languages, and details that make sense for their local communities.

The We Keep WA Litter Free campaign is for everyone in Washington, but will particularly benefit those in overburdened, underserved populations who are most affected by litter pollution. With the requested funding, Ecology will be able to have meaningful engagement, ensure equitable access to information available, and make sure that messages and interventions reach diverse populations statewide.

Unsecured loads and litter on our roadways causes traffic crashes every year. According to the WTSC, serious injury and fatal crashes are more likely for people living in poverty, which includes an overrepresentation of people of color, the elderly, and people with disabilities. Additional vulnerable populations include young people, people with limited English proficiency, and people living in rural areas.

Implementation strategies for both litter and food waste campaigns will also focus on diversity, equity, and inclusion. All campaign materials will be developed for cultural appropriateness, language, and accessibility. They will be fully translated into Spanish, and we hope to translate materials into other languages as well. A positive culture framework will be used to develop messages, the same way it was used to create the draft UFWW Plan. Shifting away from punitive messaging and litter reporting (as used in the Litter and It Will Hurt campaign) was driven by these goals and values.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees because reducing litter is good for community pride, tourism, and attracting economic opportunities. We need to invest in litter prevention work to properly engage the communities and residents most impacted by this problem, while reducing the barriers and providing the motivation for litterers to change their behavior.
- Goal 2: Reduce and prepare for climate impacts because our food waste reduction work helps advance, the agency Strategy 2.2, Reduce and prevent greenhouse gas emissions, keeping in mind communities that are most impacted by climate change. Wasted food has significant greenhouse gas impacts from all the energy that went into producing and distributing it. There are also water and toxic chemical impacts as well. All of these impacts are reduced when we waste less food.
- Goal 3: Prevent and reduce toxic threats and pollution because effectively addressing Washington's litter problem through a comprehensive litter prevention strategy and diverse partnerships will reduce and prevent harmful chemicals, found in litter, from leaching into our waterways, and harming wildlife.
- Goal 5: Protect and restore Puget Sound because preventing litter keeps chemical contaminates from entering our waterways.

This request provides essential support to the following Governor's Results Washington Goals:

- Goal 2: Prosperous Economy
- Goal 3: Sustainable Energy and a Clean Environment
- Goal 4: Healthy and Safe Communities
- Goal 5: Efficient, Effective, and Accountable Government.

There are major economic benefits to food waste reduction. When implemented comprehensively, the recommendations in the draft UFWW Plan has the potential to not only reduce food waste, but to create a more vibrant and resilient food system and local economy. Sustainable energy and a clean environment are the cornerstones of the draft UFWW Plan. From increasing access and use of renewable natural gas through increasing access to anaerobic digestion (AD) across the state, to valuing food well and therefore the resources used to produce, transport, process, and distribute the food. Food rescue and reducing burdens for Washington's hunger relief sector are key areas of the draft UFWW Plan. This request supports education and outreach on safe food donation for both the residential and commercial sectors, with the goal to increase access to affordable and nutritious foods. (Results WA Goals, 2, 3 and 4)

Cleaner roads and public areas support more vibrant communities, help promote more tourism and attract economic opportunities, and people feel better when their surroundings are clean. Having a cleaner, safer environment and roadways benefits everyone in Washington. According to a WSP Public Information Officer, litter on our roadways causes more than 300 traffic crashes every year. These are completely preventable. (Results WA Goals, 2, 3 and 4)

The number of litter complaints to state agencies, local governments, and elected officials is at an all-time high. Washington residents are demanding the state do something to address our serious litter pollution problem. Investing in a comprehensive litter prevention strategy based on social marketing best practices ensures we are using tax payer dollars wisely and being responsive to the residents' concerns. (Results WA Goal 5)

Performance Outcomes:

One outcome of this request will be successful implementation of recommendations from the state's new UFWW Plan supporting the Food Waste Reduction Act of 2019, including development and implementation of at least two new food waste reduction campaigns. These campaigns can be further amplified through other recommendations in the UFWW Plan and provide a pathway toward measurable food waste reduction. Annual tracking and analytics will measure the impacts of these campaigns within both commercial and residential sectors.

Additional funding to continue litter prevention work will help the state make progress on addressing the negative impacts of litter on the environment, waterways, wildlife, home values, tourism and businesses, quality of life, health and safety, and community pride. Funded campaigns will help build awareness and trust that Ecology and our partners are responding to the widespread concern and unprecedented number of litter complaints coming from Washington residents. It can also help reduce the more than 300 traffic crashes caused by debris that blows or falls from unsecured vehicle loads, as well as reduce roadside wildfires caused by people throwing out cigarette butts.

Other Collateral Connections

Puget Sound Recovery:

Investing in a comprehensive litter prevention strategy supports Puget Sound recovery efforts. A significant proportion of waste littered in our communities and along our roads will end up in waterways. Ecology's litter prevention work supports Puget Sound Action Agenda implementation by aligning with the following Regional Priorities and Sub-strategy:

Regional Priorities:

- CHIN1.10 - Enforce and improve compliance with existing regulations.
- CHIN7.1 - Protect and/or restore critical habitat for salmon populations.
- EST3.1 - Develop and implement outreach, education, and/or incentive programs.
- EST3.2 - Implement plans and priorities to protect habitat
- SA3.1 - Develop and implement outreach, education, and/or incentive programs.
- FUND1.1 - Develop a strategy to enable and mobilize the public to take actions to protect Puget Sound and support funding of recovery actions.
- SHELL1.3 - Increase compliance with and enforcement of environmental laws, regulations, and permits.

Sub-strategy:

- 9.4 – Provide education and technical assistance to prevent and reduce releases of pollution.

State Workforce Impacts:

N/A

Intergovernmental:

Local governments and communities will be better supported through these efforts. An informal local government survey conducted by Ecology in December 2020 showed a key barrier to food waste reduction locally is access to effective communication and uniform messaging. Similarly, local organizations and communities will benefit from better mapping of local resources and networks to prevent, rescue, and recover food waste and edible food. The UFWW Plan was jointly created by Ecology, WSDA, DOH, and OSPI, and there are roles and opportunities for these agencies, and many others, in implementing the plan.

Addressing Washington's litter problem is a team effort and relies on a tremendous amount of cross-agency relationships and coordination. Ecology's partners and supporters of the new litter prevention efforts currently underway include WSP, WTSC, WSDOT, DNR, and WDFW, along with local governments across the state. These partners support this request.

Legal or Administrative Mandates:

This request, in part, provides funding to implement recommendations developed in response to the Food Waste Reduction Act of 2019 (RCW 70A.205.715).

Stakeholder Response:

Development of the UFWW Plan included input from over 150 stakeholders, including representatives from across the food sector, such as schools, local health jurisdictions, hunger relief organizations, and food businesses, including Fred Meyer, the Washington Dairy Association, and Washington Hospitality Association. Through an inclusive and comprehensive planning process, the UFWW Plan is widely supported across Washington's food sector.

For litter prevention efforts, Ecology plans to pursue additional partnerships with non-profits and businesses involved with litter issues. This includes those that pay the state's litter tax, such as the Washington Food Industry Association's 480 members, which may be potential partners in Washington's litter prevention efforts.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. C	$0	$1,800	**$1,800**	$1,800	$1,800	**$3,600**

Agency Contact Information

Laurie Davies
(360) 407-6103
laurie.davies@ecy.wa.gov

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Agency Recommendation Summary

Through the Pollution Prevention Partnership, Ecology currently provides funding to 26 local government partners who provide hands-on technical and regulatory assistance to small businesses across the state. Specialists in these jurisdictions show businesses how to manage their waste properly and help diagnose and fix stormwater-related issues. These specialists are also key implementers of the new Product Replacement Program, which provides funding through the capital budget so businesses can remove toxic chemicals from their facilities and work processes. Currently, the vast majority of technical and financial assistance provided through the partnership occurs in western Washington. This request will provide funding to expand the partnership to three new health districts in eastern Washington, and provide the staffing needed to continue effectively managing the partnership as it expands. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	2.3	**1.15**	2.3	2.3	**2.3**
Operating Expenditures						
Fund 23P - 1	$0	$684	**$684**	$684	$684	**$1,368**
Total Expenditures	**$0**	**$684**	**$684**	**$684**	**$684**	**$1,368**

Decision Package Description

Background
The Pollution Prevention Assistance (PPA) Partnership is comprised of local government technical specialists from cities, counties, and health districts, located primarily in the Puget Sound region, and along the Spokane and Columbia rivers. The PPA Partnership allows local government partners to offer hands-on technical and regulatory assistance to small businesses via contract funding from Ecology. Specialists in these jurisdictions show businesses how to manage their wastes properly and help diagnose and fix stormwater-related issues. Delivering free, in-person assistance is the best way to help these businesses understand and comply with regulations, such as proper containment for chemicals, being prepared for spills, and educating employees about chemical handling and disposal.
Because of PPA assistance, businesses:

- Adopt safer materials handling and storage practices.
- Manage interior and exterior drainage systems to reduce impacts to stormwater.
- Create a plan for spill prevention and preparedness, including having spill kits on site.
- Use fewer toxics in their processes or replace toxic chemicals with safer alternatives.

Since its inception in 2008, PPA Partnership specialists have completed over 40,000 site visits, helping small businesses understand and comply with dangerous waste and stormwater laws and provide assistance with spill prevention and cleanup preparedness. PPA specialists look closely at business practices, offer solutions to practices that could pollute the environment, and suggest alternatives to the hazardous materials that businesses use, store, and dispose of every day. These specialists help ensure that businesses not only meet, but exceed the state's dangerous waste regulations for small waste generators, making these workplaces, and communities they are located in, safer.

Additionally, since 2019-21, PPA specialists have also served as the "boots on the ground" implementers for Ecology's new Product Replacement Program (PRP). The PRP program provides funding through the capital budget to businesses across Washington so they implement changes that remove toxic chemicals from their facilities and business processes, creating a safer and healthier workplace for their employees and customers. PRP funding is used by businesses to replace machinery and/or make building improvements, which will produce long-term benefits for both the businesses and the public.

For more information on the PPA partnership, please see the Pollution Prevention Assistance Partnership 2017-2019 Biennium Report at: https://fortress.wa.gov/ecy/publications/documents/2004005.pdf. The 2019-21 Biennial Report is expected to be finalized by November, and will be available on Ecology's website.

Problem
In 2021-23, Ecology is contracting with 26 local government PPA partners who will conduct over 8,000 site visits this biennium, providing technical assistance and financial incentives to businesses in their communities. However, because the vast majority of current partners are located in the Puget Sound region and Clark County, it means that the bulk of Partnership's financial and technical assistance services only occur in western Washington.

Prior to 2021-23, Spokane County was the only local government jurisdiction from eastern Washington participating in the PPA Partnership. Ecology was able to use funding provided in the 2021-23 capital budget, as part of the PRP program, to add four new PPA partners for the 2021-23 biennium, including one in Walla Walla County. Funding was also used to meet the demand for additional support from current

partners, including Spokane County, there local source work was increasing.

However, the need for additional PPA partners continues to increase, especially in eastern Washington, where urban areas continue to grow in both population and the number of businesses. Wenatchee, East Wenatchee, Yakima, Moses Lake, Richland, Pasco, Kennewick, Colville, Walla Walla, and Pullman all have urban areas and water bodies affected by polluted stormwater that would benefit by technical assistance visits from PPA specialists.

Solutions to pollution concerns are often simple, but many businesses may not realize that their current practices present a risk to the environment and their workers. PPA specialists can offer simple steps that business can take to address these issues, and may be able to offer financial assistance to reduce or prevent pollution through the PRP program.

Solution
To address the growing demand for PPA Partnership opportunities, and expand these services to new communities in eastern Washington, Ecology is requesting ongoing funding to add three new eastern Washington health districts to the partnership beginning in fiscal year 2023. These districts include Walla Walla County Health, Chelan-Douglas Health District, and Tri-County Health District (covering Ferry, Stevens, and Pend Oreille counties).

Ecology is requesting a total of $450,000 per year to contract with these new local partners. The actual amounts per partner agreement for these three new health districts will depend on the information submitted in their application for fiscal year 2023, including the number of site visits proposed, and staffing level needed to complete that work.

In addition to the contract funding needed to support these three new partners, Ecology is requesting funding for additional staff needed to provide the additional technical and financial oversight needed as the partnership continues to grow. Ecology currently has only one dedicated FTE to manage the partnership, which has expanded from 22 partners in 2019-21 to 26 this biennium, and will grow to 29 if this request is funded. As the partnership continues to expand, and becomes more integrated with the capital PRP program, Ecology needs additional technical and fiscal staff to help manage the increased workload. Duties for the new technical staff will include, but are not limited to the following:

- Conducting regulatory and technical training for local governments.
- Managing the contractual relationship with the local partners.
- Researching and developing consistent best management practices for sectors.
- Assisting with statewide business sector-specific technical research.
- Coordinating compliance referrals to determine appropriate Ecology and PPA support.
- Promoting local efforts to establish green business programs.
- Providing chemical alternatives assistance for chemicals and products to businesses.
- Facilitating water and waste cross-agency coordination with local governments.
- Liaising with businesses, industry, and trade associations to identify training needs.
- Providing outreach and education to local governments and businesses regarding the benefits of the partnership.

Along with additional technical staff, increased financial management is also needed to ensure we can meet the growing demands of our partners. Expansion of the partnership will necessitate additional agreements that need to be developed, managed, and processed with partner jurisdictions, along will an increased number, and frequency, of reimbursement requests from businesses that are recruited by these new PPA partners to participate in capital PRP program. Therefore, Ecology is requesting funding for an additional FTE in our Fiscal Office to manage the increase in payment transactions and reimbursement requests that will result from the continued expansion of these two programs.

Impacts on Population Served:
Ecology currently supports cities, counties, and health districts through the PPA Partnership to provide free, one-on-one technical assistance to small businesses. Specialists show businesses how to manage their wastes properly and help diagnose and fix stormwater-related issues. They also offer businesses help with complicated regulatory issues, and serve as a pathway for those that want to participate in Ecology's capital PRP program. This request will allow Ecology to expand the PPA Partnership in eastern Washington by partnering with three new health districts that have expressed interest in joining the partnership.

Alternatives Explored:
To expand the PPA partnership into eastern Washington without addition funding would require Ecology to reduce funding provided to our existing PPA partners. This alternative is not feasible because Ecology's current funding is needed where it is deployed, and could not be repurposed without negatively impacting the current PPA partners who rely on their funding to address toxics and stormwater in Puget Sound and other urban-impacted watersheds.

Ecology explored the possibility of only requesting funding for the contract portion of this budget request. However, this alternative would require Ecology to reassign existing staff to help manage the additional workload of an expanding PPA Partnership. This alternative is also not feasible as reassigning staff would negatively impact other core work within Ecology's Hazardous Waste and Toxics Reduction Program and Fiscal Office that must currently be completed.

Consequences of Not Funding This Request:
Without additional funding for the PPA Partnership, Ecology would be unable to meet the local community demand for this program, particularly in eastern Washington. Small businesses east of the Cascades would be unable to get the same technical assistance in reducing toxic chemical spills, correcting illicit wastewater and stormwater discharges, and ensuring proper management of chemicals and dangerous wastes that their western Washington neighbors receive. Local governments would continue to fall behind in controlling environmental releases from smaller businesses, and some toxic cleanup sediment sites may become re-contaminated.

Assumptions and Calculations

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

This request expands activity A021 – Increase Compliance and Act on Environmental Threats from Hazardous Waste by expanding Ecology PPA Partnership to three additional health districts in eastern Washington. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

Base support for the PPA Partnership is currently provided by approximately $4.6 million in ongoing funding from this activity, and $2.7 million from Ecology's capital PRP request that was funded in the 2021-23 capital budget.

A021 – Increase Compliance and Act on Environmental Threats from Hazardous Waste		
	2019-21	2021-23
FTEs Total	38.55	54.05
001-2 General Fund - Federal	$1,633,000	$2,852,000
207-1 Hazardous Waste Assistance - State	$0	$540,000
23P-1 Model Toxics Control Operating - State	$7,477,000	$15,760,000
TOTAL	**$9,110,000**	**$19,152,000**

Detailed Assumptions and Calculations:

PPA TECHNICAL ASSISTANCE AND FINANCIAL OVERSIGHT ($234,399 and 2.3 FTEs per fiscal year)

- Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 FTE Environmental Specialist 4 to provide technical assistance and formal oversight of PPA contracts to local jurisdiction partners.
- Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 FTE Fiscal Analyst 2 to manage the increase in payment transactions and reimbursement requests that will result from the continued expansion of the PPA Partnership and PRP program.

PPA FUNDING TO LOCAL JURISDICTIONS ($450,000 for contracts (object C) per fiscal year)

- Beginning July 1, 2022, and ongoing, Ecology requires funding to contract with selected local jurisdictions who will provide hands-on technical and regulatory assistance to small businesses in their communities.

Workforce Assumptions:

Expenditures by Object		**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
A	Salaries and Wages		125,064	125,064	125,064	125,064	125,064
B	Employee Benefits		45,899	45,899	45,899	45,899	45,899
C	Personal Service Contract		450,000	450,000	450,000	450,000	450,000
E	Goods and Services		8,288	8,288	8,288	8,288	8,288
G	Travel		4,364	4,364	4,364	4,364	4,364
J	Capital Outlays		2,402	2,402	2,402	2,402	2,402
T	Intra-Agency Reimbursements		48,382	48,382	48,382	48,382	48,382
	Total Objects	**0**	**684,399**	**684,399**	**684,399**	**684,399**	**684,399**

Staffing

Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
ENVIRONMENTAL SPECIALIST 4	70,956		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2	54,108		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.20	0.20	0.20	0.20	0.20
IT APP DEVELOPMENT-JOURNEY			0.10	0.10	0.10	0.10	0.10
Total FTEs		**0.00**	**2.30**	**2.30**	**2.30**	**2.30**	**2.30**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Contract funding for new PPA Partners totals $450,000 per year.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T.
Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

This request will provide funding so that three additional local jurisdictions can begin participating in the PPA Partnership, and provide free, one-on-one technical assistance small businesses on how to find and fix problems related to improperly stored and disposed of chemicals and toxic wastes. The three health districts supported by this request have jurisdiction over six counties, all of which will benefit from this request. These include Chelan-Douglas Health District (Chelan and Douglas counties), Tri-County Health District (Ferry, Pend Oreille, and Stevens counties), and Walla Walla County Public Health.

The Department of Health's (DOH) Environmental Health Disparities Map ranks census tracts on a scale of 1 to 10, with 1 representing the lowest environmental health disparities in the state, and 10 representing the highest. These rankings are based on each census tract's environmental exposures and disparities, sensitive populations with indicators for poor health outcomes, and socioeconomic disparities. The four primary criteria and elements included are:

- Environmental Exposures (NOx-diesel emissions; ozone concentration; PM2.5 Concentration; populations near heavy traffic roadways; toxic release from facilities (RSEI model)).
- Environmental Effects (lead risk from housing; proximity to hazardous waste treatment, storage, and disposal facilities (TSDFs); proximity to National Priorities List sites (Superfund Sites); proximity to Risk Management Plan (RMP) facilities; wastewater discharge).
- Sensitive Populations (death from cardiovascular disease; low birth weight).
- Socioeconomic Factors (limited English; no high school diploma; poverty; race - people of color; transportation expense; unaffordable housing; unemployed).

According to the map's scoring matrix, the health districts supported by this request have notable environmental justice (EJ) communities within their jurisdictions:

- Chelan County has significant areas with high risk due to socioeconomic factors including high rates of poverty (rank 9), high transportation expense (rank 9), high rates of limited English proficiency (rank 10), no high school diploma (rank 10), and large populations of people of color (rank 10).
- Douglas County has significant areas with high risk due to socioeconomic factors including high rates of poverty (rank 10), high transportation expense (rank 9), high unemployment (rank 9); and sensitive populations due to high rates of low birth weight (rank 10).
- Ferry County has significant areas with high risk due to high contamination from wastewater discharge (rank 9); and socioeconomic factors including high rates of poverty (rank 9), high transportation expense (rank 10), high unemployment (rank 9); and sensitive populations due to high rates of low birth weight (rank 10).
- Pend Oreille County has significant areas with high risk due to socioeconomic factors including high transportation expense (rank 10) and high unemployment (rank 10); and sensitive populations due to high rates of low birth weight (rank 10).
- Stevens County has significant areas with high risk due to socioeconomic factors including high transportation expense (rank 10) and high unemployment (rank 10); and sensitive populations due to high rates of low birth weight (rank 10).
- Walla Walla County has significant areas with high risk due to socioeconomic factors including high exposure to ozone (rank 10), limited English proficiency (rank 9), no high school diploma (rank 9), high transportation expense (rank 10), high unemployment (rank 9), and close proximity to Risk Management Plan Facilities (rank 9).

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees'
- Goal 3: Prevent and reduce toxic threats and pollution.
- Goal 4: Protect and manage our state's waters.

The PPA Partnership supports these goals through an integrated water and waste assistance approach to help small businesses improve environmental practices, while reducing hazardous waste generation, spills, and toxic stormwater impacts. Small businesses prefer the "one stop" assistance-oriented site visit approach provided by the PPA specialists, and this funding allows them to get this needed one-on-one technical assistance at no additional cost to their business.

This request also provides essential support to the Governor's Results Washington following goals:

- Goal 2: Prosperous Economy, by ensuring small business vitality through providing technical assistance to help these businesses reduce waste, liability, and potential cleanup costs from leaks, spills, or other exposures.
- Goal 3: Sustainable energy and a clean environment, by ensuring that small quantity generators and facilities that treat, store, or dispose of dangerous wastes in three health districts supported by this request know how to operate and comply with state and federal rules designed to protect human health and the environment.

Performance Measures	Incremental Changes 2022	Incremental Changes 2023	Incremental Changes 2024	Incremental Changes 2025
001296 - Number of Ecology-funded small business technical assistance visits conducted by local government	0	250	250	250

Performance Outcomes:

This request will result in increased technical and financial services to small businesses in eastern Washington. Funding requested will ensure:

- More equitable access to technical assistance for these businesses to switch to safer products and equipment.
- More businesses will have the knowledge and ability to properly manage and dispose of toxic chemicals, reducing worker and customer exposure to these toxins.
- Fewer releases of toxic chemicals and other pollutants to air, land, and water.
- Better stormwater practices to protect state waters in these areas.
- Proper financial management of the PPA Partnership and PRP program as these continue to grow.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

Removing toxic chemicals from use, and ensuring proper management of other waste-generating activities through technical assistance visits should reduce future cleanup costs for the areas of the state where these services are provided. Removing toxic chemical use in commerce and manufacturing results in healthier workplaces and neighborhoods, potentially reducing industrial insurance claims. Ecology anticipates support from the jurisdictions that will be served by this expansion of the PPA Partnership.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

The non-governmental stakeholders impacted by this request are the small businesses that received technical and financial assistance through the PPA partners. This expansion of the partnership will increase the number of businesses across the state receiving this assistance, and may result in decreased waste management costs, and fewer environmental regulatory compliance issues or fines. Ecology only anticipates support from the stakeholders impacted by this request.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$125	**$125**	$125	$125	**$250**
Obj. B	$0	$46	**$46**	$46	$46	**$92**
Obj. C	$0	$450	**$450**	$450	$450	**$900**
Obj. E	$0	$8	**$8**	$8	$8	**$16**
Obj. G	$0	$5	**$5**	$5	$5	**$10**
Obj. J	$0	$2	**$2**	$2	$2	**$4**
Obj. T	$0	$48	**$48**	$48	$48	**$96**

Agency Contact Information

Elaine Snouwaert
(509) 385-5169
esno461@ecy.wa.gov

Agency Recommendation Summary

A pesticide called lead arsenate was widely used throughout Central Washington to control codling moth infestations on fruit trees in the early half of the 20th century (between 1900 and 1950). This resulted in widespread lead and arsenic contamination on historic orchard lands, with nearly 115,000 acres of land in Central Washington potentially contaminated. In 2019, Ecology convened the Legacy Pesticide Working Group to find better ways of addressing the challenges faced by communities as contaminated orchard lands are transitioned to new uses like housing developments, schools, and other business ventures. The workgroup's final report in January 2021 included a set of recommendation to help developers, landowners, and community members address lead and arsenic contamination on historic orchard lands in Central Washington. Ecology is now requesting funding for the additional staff needed to implement these recommendations. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	2.3	**1.15**	2.3	2.3	**2.3**
Operating Expenditures						
Fund 23P - 1	$0	$290	**$290**	$290	$290	**$580**
Total Expenditures	**$0**	**$290**	**$290**	**$290**	**$290**	**$580**

Decision Package Description

Background
Tree fruit orchards have been an important economic and cultural resource in Central Washington communities since the late 1800s. Until approximately 1950, agricultural activities at tree fruit orchards often included the use of lead arsenate pesticides to mitigate insect damage. In some cases, historical application of these pesticides has resulted in shallow-soil concentrations of lead and arsenic that exceed Washington State cleanup levels. According to the Washington State Agricultural Census from 1947, nearly 188,000 acres of land in Washington have been historical orchard areas, subject to application of lead-arsenate pesticides, and are therefore considered potentially contaminated by lead and arsenic. Of those areas, approximately 115,000 acres of potentially impacted orchard lands are located in Yakima, Chelan, Douglas, Okanogan, and Benton counties (see *Attachment A* for a map of current orchard sites).

Over time, growth in these counties has resulted in the transition of tree fruit orchards to nonagricultural uses (e.g., residential or commercial), increasing the potential for more frequent, direct exposure to soil that may have elevated concentrations of lead and arsenic that could adversely impact human health. Arsenic and lead are toxic metals, and exposure can increase the risk of certain health problems. Although these metals are not easily absorbed through the skin, living in close proximity to soils contaminated with lead and arsenic can result in ingestion of soil and inhalation of dust. This can place people who are regularly exposed to soil, such as construction workers, landscapers, gardeners, and small children, at risk.

In many cases, the concentration of lead and arsenic in the historical orchard soil exceeds the Model Toxics Control Act (MTCA) cleanup levels for these metals. MTCA requires appropriate assessment, notification, and cleanup methods to ensure sufficient protection of potential, current, and future residents living in historical orchard areas where lead and arsenic may be present at levels of concern.

Because the scope of potential contamination is so vast, and we want to avoid the traditional approach of cleaning up these properties one by one, in December 2019, Ecology convened the Legacy Pesticide Working Group to address the complex issues surrounding lead and arsenic contamination of former orchard lands. This group represented the interests of local government planning departments, real estate, healthcare, banking, and construction and homebuilders in Central Washington. In December 2020, the group held its last meeting and, in January 2021, published a final report here: Final LPWG Report January 2021 (https://www.ezview.wa.gov/Portals/_1962/images/Legacy%20Pesticides/Rf%20-%20LPWG%20Final%20Report%20(2).pdf), including a set of recommendation to help developers, landowners, and community members address lead and arsenic contamination on historic orchard lands in Central Washington.

1. Develop model remedies for orchard lands. Using model remedies eliminates the uncertainty of whether the selected remedy will be successful and meet state cleanup requirements.
2. Investigating the use of soil banks. The availability of clean, uncontaminated soil could be a source of clean soil for developers and homebuilders.
3. Developing an alternative cleanup strategy, working in conjunction with the local government permitting process. This strategy would make it unnecessary for an individual homeowner to clean up their property.
4. Implementing a robust education campaign with local health districts, school nurses, other health organizations, and the Washington State Department Health (DOH) to dispel misconceptions about lead and arsenic, their toxicity, and their use.

Work Already Completed or Currently Underway

Model Remedies for Cleanup of Former Orchard Properties
Model remedies are standardized methods developed for cleaning up routine contamination at sites that pose lower risks to people and the environment. MTCA defines model remedies as, "…a set of technologies, procedures, and monitoring protocols identified by Ecology for use in routine types of cleanup projects at facilities that have common features and lower risk to human health and the environment." In July 2021, Ecology published its Model Remedies for Cleanup of Former Orchard Properties (https://apps.ecology.wa.gov/publications/SummaryPages/2109006.html). These remedies have the following goals:

- Provide simple sampling and cleanup guidance for any former orchard property.
- Encourage independent cleanup during property development.
- Provide consistency and clarity for developers and home builders.
- Encourage independent cleanup during smaller projects involving soil movement, such as landscaping, building a deck, or putting in a swimming pool.

Soil Bank Investigations
A clean soil bank would provide a local source of clean material to be used in the application of model remedy cleanup methods as properties are developed. In the 2021-23 capital budget, the Legislature appropriated $300,000 for Ecology to conduct a feasibility study for locating soil banks in certain Central Washington counties to provide clean soils for mitigating historic lead arsenate contamination on historic orchard lands that are being converted to new uses. This funding will also be used to create a set of model codes for local governments, which can be used at the local level to 1) notify people that a property was a former orchard; 2) require sampling; 3) require notification of sampling and/or cleanup being done; or 4) mandate ongoing restrictions.

Work Still Needed

While the work of the Legacy Pesticide Working Group and development of model remedies have provided a solid foundation for how to address contamination and conduct outreach to Central Washington communities, more work is still needed. This budget request will provide the additional staff needed to support implementation of the remaining two workgroup recommendations noted above.

Cleanup Strategy
Generally, there are two situations where addressing the issue of lead and arsenic contamination from historical orchard practices is required: 1) existing developed properties; and 2) proposed new development projects. To address these, the workgroup's recommendations included the implementation of an integrated development permit review process that clearly outlines how and when the recommended model remedy components are considered during the local government land use and building permit processes for residential development projects, including single-family home construction, residential subdivisions, and multifamily developments.

To ensure that properties developed for new uses are safe, it is critical that sampling and cleanup be done routinely and consistently throughout the property development process for projects on former orchards. However, this increased focus on sampling and cleanups creates a new workload that Ecology cannot meet within our existing staff resources. Current cleanup staff are at capacity managing other sites, and the only staff available to this project is an intermittent 0.5 FTE who conducts soil sampling to inform cleanup decisions on legacy pesticides. This request will support a dedicated cleanup project manager to work with local governments, developers, and homebuilders in Central Washington to integrate these needs into the property development processes that already exist.

To reduce confusion and delays to new residential development projects, it is important to ensure compliance with MTCA can be accomplished within the local government land use and building permit processes a developer is already required to complete. Ecology staff supported by this request will work with local planners so they understand which projects require sampling and cleanup and can fold that information into their local permitting process. Ecology staff will also provide technical assistance to developers who will be required to do the cleanup.

As the development process moves forward, and homebuilders come into the picture, Ecology staff will ensure cleanup requirements and options are properly understood and implemented. Ecology plans to make developers and homebuilders aware of the pre-approved model remedies and cleanup options available for this kind of contamination. Staff will work one-on-one with developers and homebuilders to ensure they understand how to complete the required cleanup, and we will let local governments know when Ecology's cleanup requirements have been met, allowing them to issue an occupancy permit.

More fully integrating sampling and cleanup into the property development process will require a local-state nexus that is not typical to the cleanup process. This will require extra work at the local level, and within the construction industry, but it will enable the cleanup of an entire development and limit impacts to individual homeowners. The increased technical support that will be provided through this request is critical to keeping pace with the rapid increase in new and proposed developments in Central Washington.

Public Outreach and Education
Addressing the issue of potential lead and arsenic contamination on properties that have already been developed will require on a robust public education and outreach strategy. The use of lead arsenate as a pesticide was widespread in Central Washington for many years, however, the risks associated with exposure to these contaminants can be significantly reduced if homeowners/residents implement appropriate best management practices (BMPs). It is important to ensure that residents have access to and knowledge of these practices.

Under the education and outreach strategy outlined in the Legacy Pesticide Working Group's final report, efforts will target key stakeholders and landowners, emphasizing messages for those who live, work, and play where pesticide contamination is commonly found in historical orchard areas. Attention will be given to the steps people can take, from testing their property for contamination, to cleaning up soils, and other BMPs and actions that can be taken to manage and mitigate risk if contamination exists. More specifically, Ecology will use the education and outreach strategy to do the following:

- Demonstrate the plan for addressing pesticide contamination on historical orchard properties.
- Increase public awareness and understanding about pesticide contamination, how to test for contamination, and how to manage risk on impacted properties.
- Partner with community leaders, including local governments, landowners, developers, builders, and real estate companies, to help communicate about pesticide contamination and what people can do about it.

Ecology does not have the staff needed to implement this recommendation, and we are requesting funding for a new Communications Outreach and Environmental Education Specialist 3 position to complete the work planned with local health districts, school nurses, other health organizations, and the DOH. This position will make community presentations; network with schools, doctors, nurses, realtors, homebuilders, and developers; and develop fliers, focus sheets, or other materials that outline simple ways to reduce risk to homeowners already living on impacted properties.

Impacts on Population Served:
Central Washington has large areas of land contaminated from the pesticide lead arsenate, made up of lead and arsenic, two very toxic metals. This pesticide was in use for around six decades before it was replaced by safer alternatives. There is no safe level of lead and no treatment. Its cumulative exposure from not just soil, but lead-based paint and lead in pottery or jewelry, leads to neurological damage. Its effects on children are insidious and can account for a number of learning disabilities (https://www.npr.org/2017/10/31/561155244/flint-residents-confront-long-term-health-issues-after-lead-exposure). Arsenic is a known carcinogen and causes a variety of skin conditions, such as warts and lesions. Both lead and arsenic can be fatal in high enough doses.

Communities across Central Washington have become increasingly concerned about this contamination, and they need assurance that Ecology is engaged and dedicated to addressing the issue. Requiring cleanup as part of the property development processes in these areas, prior to occupancy, will mitigate any health or financial impacts to future residents.

Alternatives Explored:
The alternative to this request would be to continue trying to address this contamination as we have in the past. This alternative is not acceptable, as Ecology needs to implement a better solution for cleaning these areas up and educating those that live in Central Washington on how to best protect themselves from exposure. Ecology convened the Legacy Pesticide Working Group in 2019 because our current way of addressing this contamination was not working. This request will allow Ecology to fully implement the recommendations coming from the workgroup and reassure the community that the issue is being addressed.

Consequences of Not Funding This Request:
If this request is not funded, Ecology risks not being able to implement the recommendations of the Legacy Pesticide Working Group. This means we would lose trust with the very stakeholders we need to make this effort successful. Requested sampling, required cleanup, and outreach work would be delayed, or not implemented at all, due to insufficient staff resources. Local governments are eager for Ecology's support as they integrate new requirements into their permitting process, like making cleanup a requirement prior to occupancy. Homebuilders and developers are looking for consistency and certainty in how the regulations are applied, and community members are hoping for prompt responses to sampling and outreach requests.

Assumptions and Calculations

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

This request expands activity A005 - Clean up the Most Contaminated Sites First (Upland and Aquatic) by adding staff to support the cleanup oversight for legacy pesticide contamination in Central Washington and conduct outreach work envisioned by the Legacy Pesticide Working Group. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for these activities. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A005 Clean up the Most Contaminated Sites First (Upland and Aquatic)		
	2019-21	2021-23
FTEs Total	157.80	164.70
001-2 General Fund - Federal	$7,137,000	$7,003,000
001-7 General Fund - Private/Local	$3,004,000	$3,004,000
176-1 Water Quality Permit - State	$1,583,000	$1,583,000
23P-1 Model Toxics Control Operating - State	$40,848,000	$41,717,000
23P-7 Model Toxics Control Operating - Local	$499,000	$499,000
TOTAL	**$53,071,000**	**$53,806,000**

Detailed Assumptions and Calculations:

CLEANUP ($175,000 and 1.2 FTEs per fiscal year)

Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 direct FTE Environmental Engineer 3 to support the cleanup oversight for legacy pesticide contamination.

OUTREACH ($115,000 and 1.2 FTEs per fiscal year)

Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 direct FTE Community Outreach and Environmental Education Specialist 3 to engage the community and conduct the outreach work envisioned by the Legacy Pesticide Working Group.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		156,708	156,708	156,708	156,708	156,708
B	Employee Benefits		57,512	57,512	57,512	57,512	57,512
E	Goods and Services		8,288	8,288	8,288	8,288	8,288
G	Travel		4,364	4,364	4,364	4,364	4,364
J	Capital Outlays		2,402	2,402	2,402	2,402	2,402
T	Intra-Agency Reimbursements		60,624	60,624	60,624	60,624	60,624
	Total Objects	**0**	**289,898**	**289,898**	**289,898**	**289,898**	**289,898**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
COMM OUTRCH & ENVIRO ED SPEC 3	61,224		1.00	1.00	1.00	1.00	1.00
ENVIRONMENTAL ENGINEER 3	95,484		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.20	0.20	0.20	0.20	0.20
IT APP DEVELOPMENT-JOURNEY			0.10	0.10	0.10	0.10	0.10
Total FTEs		**0.00**	**2.30**	**2.30**	**2.30**	**2.30**	**2.30**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

This request will ensure contaminated orchards are cleaned up prior to residential development. Washington residents working or living on or near cleaned up properties will benefit from the reduced environmental hazard in their neighborhood and the associated cost of cleanup liability. Typically, cleanup happens in communities where the market supports it. This creates disparities for residents in communities where cleanups are not economical, and these are often communities with higher percentages of people of color and low-income residents.

Central Washington has a large number of communities that stand to benefit from dedicated cleanup project management and outreach staff. The

vast majority of contaminated orchard lands are located in Yakima and Wenatchee. Both cities have low-income and/or people of color populations above the state average. The majority of the population in Yakima are people of color (52 percent). This is significantly higher than the state average of 31 percent. And low-income residents are 47 percent of Yakima's population, while the state average is 27 percent.

In Wenatchee, people of color make up 38 percent of the city, and the low-income population is 34 percent. Again, percentages above the average in Washington. Additionally, both cities have a high percentage of residents who speak Spanish at home – 36 percent in Yakima residents and 30 percent in Wenatchee. Communities of color, low-income populations, and linguistically isolated populations often face barriers accessing adequate medical care, may fear or distrust government agencies, and are underserved by government entities and overburdened with environmental hazards. To address these inequities, this request will support an outreach campaign that includes partnering with local health organizations that specialize in working with economically disadvantaged populations, translating publications, and providing one-on-one, in-home recommendations on reducing risk.

Currently, a child with high blood lead levels is typically referred for a home assessment. Ecology staff supported by this request will participate in that assessment by sampling soil and other items for lead. Ecology and the local health district personnel will evaluate exposure pathways and provide risk reduction education. Ecology hopes to work with DOH moving forward to increase the number of children getting tested. Currently, less than three percent of children in any Central Washington county have had their blood tested for lead.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology strategic plan:

- Goal 1: Support and engage our communities, customers, and employees and Goal 3: Prevent and reduce toxic threats, because it will reduce the toxic threats posed from widespread lead and arsenic contamination. It will also address the health and environmental impacts concerning the community

This request provides essential support to the Governor's Results Washington. This funding will allow Ecology to support:

- Goal 2: Prosperous Economy, because it supports a robust economy as Ecology partners with local business leaders to ensure affordable housing remains available.
- Goal 3: Sustainable Energy and a Clean Environment, because it addresses the contamination from lead and arsenic.
- Goal 4: Healthy and Safe Communities, because it will reduce widespread pollution and any associated health impacts.
- Goal 5 Efficient, Effective, and Accountable Government, because it will give the public an online mapping tool that shows sampling and cleanup information in real time.

Performance Outcomes:

The outcome of this request will be reduced exposure to lead and arsenic in Central Washington communities, resulting in better health for those that live and visit there. By implementing recommendations from the Legacy Pesticide Working Group's final report, Ecology will be able to partner with local governments and ensure that sampling and cleanup work is made part of the property development processes in these areas, and that both residents and visitors have the information and knowledge they need to mitigate the impacts of contamination.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

In Central Washington, Ecology will work with DOH, local health districts, school nurses, and other health organizations that work with low-income and disadvantaged populations, to increase knowledge and awareness around lead and arsenic and their toxicity. We will work with DOH to increase blood lead level testing for children throughout Central Washington, and we will advocate for increased health studies specific to the children in Central Washington.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

Central Washington communities will support this request because they regularly voice concerns about lead and arsenic and support cleanup requirements. Additionally, the Legacy Pesticide Working Group, representing the interests of local government planning departments, real estate, healthcare, banking, and construction and home building companies, will support this request to ensure the implementation of workgroup recommendations.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

PL KW Legacy Pesticide Pollution Attachment A.pdf

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$157	**$157**	$157	$157	**$314**
Obj. B	$0	$58	**$58**	$58	$58	**$116**
Obj. E	$0	$8	**$8**	$8	$8	**$16**
Obj. G	$0	$4	**$4**	$4	$4	**$8**
Obj. J	$0	$2	**$2**	$2	$2	**$4**
Obj. T	$0	$61	**$61**	$61	$61	**$122**

Agency Contact Information

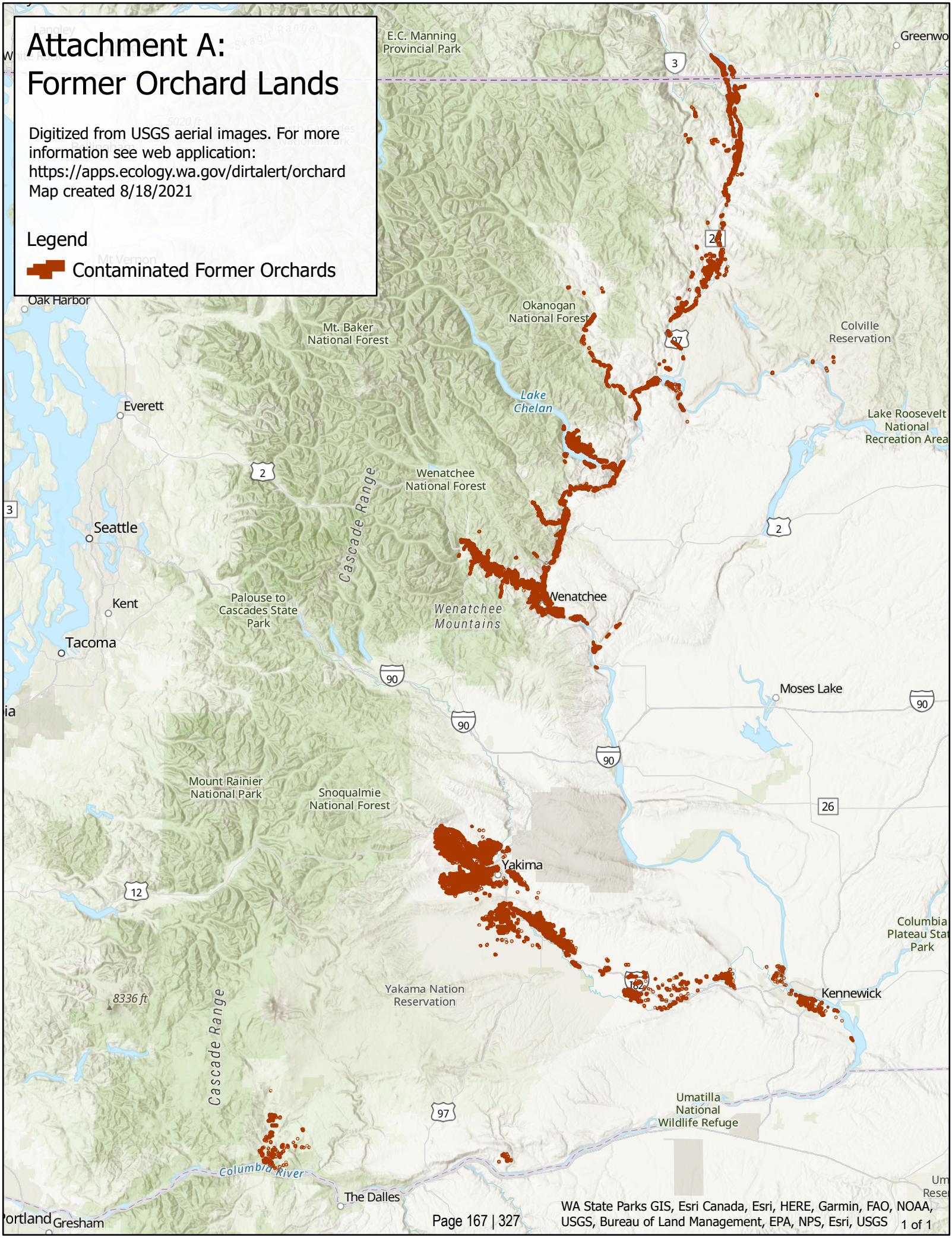
Angie Wirkkala
(360) 688-3214
angie.wirkkala@ecy.wa.gov

Attachment A: Former Orchard Lands

Digitized from USGS aerial images. For more information see web application: https://apps.ecology.wa.gov/dirtalert/orchard
Map created 8/18/2021

Legend

Contaminated Former Orchards



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Agency Recommendation Summary

State and federal regulations require generators of hazardous waste, and manufactures of consumer products that may contain toxic chemicals, to report information and data to the Department of Ecology, which is collect through two existing IT systems. TurboWaste is used to collect information from more than 4,000 hazardous waste generators every year on the on quantity, concentrations, and characteristics of waste generated. The High Priorities Chemical Data System collects manufacture information on toxic chemicals in consumer products, as required by Washington's Children's Safer Products Act. Ecology is requesting funding for additional IT staff and contracting resources to enhance and maintain these two systems so that we can continue to meet increasingly complicated federal reporting requirements, ensure compliance with state laws, and provide technical assistance to these business partners. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	1.2	**0.6**	1.2	1.2	**1.2**
Operating Expenditures						
Fund 23P - 1	$0	$204	**$204**	$204	$204	**$408**
Total Expenditures	**$0**	**$204**	**$204**	**$204**	**$204**	**$408**

Decision Package Description

This request supports two high priority IT systems used to meet federal and state hazardous waste reporting requirements and track manufacturer compliance with state laws regulating toxic chemicals in products.

TurboWaste
TurboWaste is the largest, most complex, and oldest IT application supported by Ecology's Hazardous Waste and Toxics Reduction Program. Ecology uses the TurboWaste application to collect information from more than 4,000 hazardous waste generators every year, in accordance with state and federal reporting requirements. Ecology uses this information to help protect human health and the environment from the risks of exposure or pollution by ensuring hazardous wastes are being safely managed. Information is used to inform compliance inspections, help design waste management education and outreach methods and materials, increase our understanding of community risks, and inform agency decision making.

Businesses and other organizations that generate certain quantities of hazardous waste are required to regularly send reports to both Ecology and to the Environmental Protection Agency (EPA) regarding the quantity, concentrations, waste characteristics, and treatment or disposal methods used by the generator. Washington's hazardous waste reporting requirements are different and more extensive than federal requirements, due to our Dangerous Waste Regulations being more protective than federal regulations. For example, in many cases our state regulations cover more types of waste, or invoke requirements at lower concentrations, than compared to their federal counterparts.

TurboWaste provides a single, online reporting mechanism that streamlines the process and reduces confusion about different reporting requirements and reduces the regulatory burden for Washington's waste generators. EPA authorizes Ecology to collect and pass along data reported by waste generators to fulfill generators' federal reporting requirements. This allows generators to only report their data once, simultaneously fulfilling both state and federal requirements. It also allows Ecology to catch and resolve any reporting errors upfront, prior to federal data submission.

Every two years, Ecology extracts, validates, and translates the required hazardous waste information from TurboWaste into mandatory formats (that change frequently) and transmits the data to EPA's National Biennial RCRA Hazardous Waste Report System, (https://www.epa.gov/hwgenerators/biennial-hazardous-waste-report). Over time, EPA's reporting requirements have become more complex, and TurboWaste has increased in complexity accordingly. Examples of these kinds of changes include those associated with the new Generator Improvement Rule, which overhauled a large number of federal waste regulations, or changes to the required file/data formats and field codes that EPA want states to use for biennial reporting data transmission. These changes have made it extremely challenging to prepare and submit the information to EPA in the limited timeframe we have (between March 1st and November 1st).

Right now, Ecology has one IT application developer/journey that supports TurboWaste, along with other applications, and an Environmental Specialist 4 that works as a project manager with IT staff to incorporate EPA requirements into the process and validate data. EPA Region 10 has expressed concerns about Ecology's ability to submit this information on time and has strongly encouraged Ecology to invest additional, ongoing IT resources to make the process more efficient (see attached letter of support from EPA for this budget request). Comparatively, other states with similar hazardous waste generation levels dedicate more IT resources to supporting the biennial reporting process. For example, EPA informed us that Oregon, which is similar to Washington in terms of waste generation and use of a separate state reporting system, relies on a senior IT project manager, a team of IT specialists, and an external IT contractor to manage their system and ensure the data can be accurately translated to meet EPA requirements.

Ecology needs additional IT staff to enhance TurboWaste and provide ongoing support and maintenance of the system as EPA requirements change over time. Improvements will help streamline Ecology's process of submitting collected hazardous waste data to EPA. Rather than relying on manual data manipulation, as we currently do, this request will allow us to develop automated scripts to convert the data into EPA's required formats. We also plan to make additional improvements to the system's usability and quality assurance framework. For example, currently waste generators must enter their information into TurboWaste from scratch every year, even if their waste streams haven't changed. Improvements to the system will allow waste stream data from the EPA e-manifest system or RCRA Hazardous Waste Report System, captured previously, to be pre-populated into TurboWaste, which will help businesses save time from data entry and increase reporting accuracy.

We also plan to reintegrate TurboWaste with the Ecology facility/site system, which will improve agency cross-program coordination and customer service. This will help agency staff understand customer concerns when they have several different permits issued by Ecology, or are subject to inspections from staff across several programs. By reintegrating the two systems, our hazardous waste compliance inspectors will be better able to understand the total regulatory universe that waste generators are dealing with, and be able to better coordinate with other inspections conducted by the agency.

We plan to start work on this in the summer of 2022, to have enough time for outlining the process and implementing and testing discrete functional improvements before the next reporting deadlines in November 2022 and November 2024. Doing this will reassure EPA we are willing to invest in updating, maintaining, and automating our reporting system and process. Our goal is to start making improvements before the next biennial reporting due November 1, 2022, and to start designing the next round of priority improvements well before the next November 2024 reporting deadline.

High Priority Chemicals Data System (HPCDS)
Manufacturers of children's products have used this reporting system since 2019 for reporting toxic chemicals used in their products to Ecology, as required by Washington's Children's Safe Products Act (CSPA), Chapter 70A.430 RCW. Under this law, manufacturers must annually report the presence of chemicals of high concern to children in children's products offered for sale in Washington. Examples of this manufacturer-reported data includes the reported amount of formaldehyde in kids clothing, heavy metals like lead in children's school supplies, toxic plastizers in toys, and cadmium in jewelry.

Manufacturers must submit this information through the High Priority Chemicals Data System (HPCDS) so that Ecology can determine compliance with our reporting requirements, and provide technical assistance to reporting manufactures. Using this approach, Ecology has been able to maintain high industry compliance with the reporting requirements. Also, Ecology uses the data to analyze trends to help identify non-reporters and coordinate with federal agencies to conduct product recalls, including an enforcement case (https://apps.ecology.wa.gov/publications/documents/1603007.pdf) related to children's jewelry containing high levels of cadmium.

Ecology helped support development of the HPCDS in coordination with the Interstate Chemicals Clearinghouse (IC2), Oregon Health Authority, and Northeast Waste Management Officials' Association (NEWMOA). IC2 is a multi-state nonprofit organization established as an operating entity under the bylaws of NEWMOA. The IC2 has a board of directors from state and local governments that direct the activities of the organization, including the planning and development of the HPCDS, which is owned and operated by the IC2. A key benefit IC2 membership is the ability for states to collaborate and avoid duplication of efforts. Membership allows participating states to share the costs to operating, maintaining, and enhancing the HPCDS for the benefit of the participating states and the public.

The current states participating in the cost-sharing of the HPCDS include Washington, Oregon, Vermont, and New York. Vermont is currently testing the system so they can begin accepting manufacturer reporting in 2022, and New York is currently conducting its reporting rulemaking, and is expected to begin accepting reporting data in 2023.

The HPCDS provides manufacturers with a "one-stop" multi-state reporting system to collect data about the chemicals of high concern in children's products as required by the states. In the past, each state would have needed to set up its own reporting system similar to the law passed in Washington.

Since its initial deployment in 2019, states have identified the need for significant improvements to the HPCDS's compliance and reporting tools. For example, if Ecology staff want to check all states' reporting compliance, they frequently need to run reports to see which manufacturers have reported toxic chemicals in their products in Oregon, but not in Washington (where both states require reporting on the same chemical). Currently, Ecology staff must conduct a complex, six-step process to run multiple reports and manually review, and cross-reference reporting data by industry. This process requires significant staff time and multi-state coordination. Funding supported by this request will support enhancements that will automate much of the current manual process, and allow staff more time to spend on other tasks, including more in-depth investigations and outreach to manufacturers.

The current annual operation and maintenance cost-share per state for HPCDS is $20,405.87. This includes the cost of the hosted service, contract support, and IC2 staff to oversee the operation and management of the system. Ecology is requesting ongoing funding to work with IC2 so they can continue to hire IT contractors to improve, operate, and maintain the HPCDS and its associated data sets on an ongoing basis. Ecology is requesting $18,094.13 per year in funding so that we can increase our annual cost-share level for HPCDS support to $50,000 per year. This funding level will support our current basic membership (currently $11,500 based on state population), current HPCDS cost-share ($20,405.87), and $18,094.13 in new funding to cover the cost of needed system enhancements.

The main enhancements planned for 2022, pending the availability of new funding, are to build out the administrative report and query-building tools to enhance states' ability to conduct compliance assurance activities. This work involves modifications to the database, building an

improved user-interface, testing, and deployment. The enhanced features will allow Washington to more easily compare lists of reporting companies across states, and more easily download discrete data sets for analysis. This will allow us to identify non-reporters more effectively and efficiently.

If this request is funded, Ecology will to work with IC2 to prioritize and develop necessary features for the HPCDS beginning in July 2022, so that the enhancements are functional by January 2024, and before Washington's CSPA reporting deadlines for manufacturers. Moving forward, Ecology will establish the annual HPCDS work plan with IC2 to make the necessary improvements to the system. Future enhancements with include, but not be limited to providing the public with increased access to the manufacturing data in order to help improve product ingredient transparency.

Impacts on Population Served:
The IT systems supported by this request store data on toxic substances that allows us to better understand and address health risks to human populations statewide. For example, Ecology staff can use the data collected through TurboWaste to see where geographically hazardous waste is being generated and stored, and overlay that with other data on sensitive populations or those with environmental justice concerns, through such sources as the Washington Tracking Network's Environmental Health Disparities Map (https://www.doh.wa.gov/DataandStatisticalReports/WashingtonTrackingNetworkWTN).

These analyses can inform where we invest efforts in compliance or other assessments of community risks related to climate change adaptation and emergency response. The HPCDS helps ensure compliance with the Children's Safe Products Act, which protects children who are considered a vulnerable population. Making data available and usable on these projects helps keep the public informed about what products are safe to purpose and use.

Alternatives Explored:
The alternative to this request would be to continue trying to manage these IT systems within existing resources. This is not a viable alternative, as IT staff and funding to support these systems is already fully utilized, and in many cases, over-extended in managing the program's current IT portfolio. Supporting the TurboWaste application with a single IT application developer/journey and one ES4 position is no longer an option due to EPA's increasing and complex reporting requirements. We have a limited window of time between when waste generators report their information to Ecology and EPA's reporting deadline. Within that short window of time we must extract, validate, and translate the required information into the required format. Due to the application being designed to collect data in a way that does not fully match frequently changing federal format requirements, this process requires time-intensive manual efforts to translate the data into the appropriate formats, which can also introduce data quality risks from human error. Redirecting existing funding to work with IC2 to enhance HPCDS would require the program to shift resources already committed to other IT projects, slowing development of planned enhancements for those systems.

Consequences of Not Funding This Request:
If this request for additional IT resources is not funded, Ecology would not be able to effectively complete future biennial reporting to EPA on time. This could threaten our ability to continue providing a streamlined reporting process for waste generators to fulfill their state and federal reporting requirements through the TurboWaste application. EPA may require waste generators in our state to complete the federal reporting process separately, which would increase the regulatory burden on these reporters and lead to confusion about different reporting systems and requirements. This could result in stakeholder frustration and pressure directed at our state reporting requirements that are vital for supporting critical work.

Improving our biennial reporting process EPA is a major, multi-year process that will require ongoing development and modification to TurboWaste to align with changing EPA reporting requirements and periodic updates needed to the state's Dangerous Waste Regulations. If we were to redirect one of two existing application developers to this work, other mission critical projects would come to a halt for prolonged periods—including applications connected to fee collection and a mobile application for emergency responders that provides information about the location and type of dangerous chemicals.

Without funding to enhance and maintain both TurboWaste and HPCDS, Ecology would be less able to understand hazardous waste quantities, types, and risks across the state, and their potential impacts to communities and the environment. The process of using data reported into HPCDS to determine compliance with state reporting requirements would continue to be labor intensive, and detract from our ability to provide more proactive technical assistance to reporting manufactures. We would also be less able to use such information to direct program operations, stakeholder engagement, and address environmental justice and equity considerations.

Assumptions and Calculations

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

This request expands activity A019 Support and Engage our Communities and Provide Hazardous Substance and Waste Information by adding additional IT staff and contracting resources to enhance and maintain two existing IT systems used to collect and operationalize data reported by hazardous waste generators and manufacturers of consumer products that may contain toxic chemicals. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for these activities. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

Activity A019 Support and Engage our Communities and Provide Hazardous Substance and Waste Information		
	2019-21	2021-23
FTEs Total	23.55	23.55
001-2 General Fund - Federal	$404,000	$398,000
163-1 Worker Community Right to Know - State	$1,865,000	$1,583,000
207-1 Hazardous Waste Assistance - State	$1,646,000	$1,635,000
23P-1 Model Toxics Control Operating - State	$1,397,000	$1,698,000
TOTAL	**$5,313,000**	**$5,315,000**

Detailed Assumptions and Calculations:

IT DATA DEVELOPER FOR TURBOWASTE ($185,979 and 1.15 FTEs per fiscal year)

Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 FTE IT Data Management-Journey to provide development and programing expertise for TurboWaste improvements. This position will provide ongoing support as EPA requirements change.

HPCDS DATA SYSTEM MAINTENANCE MEMBERSHIP ($18,094 (object E) per fiscal year)

Beginning July 1, 2022, and ongoing, Ecology will establish a membership with IC2 to provide resources needed for ongoing maintenance and database development costs for HPCDS.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		101,748	101,748	101,748	101,748	101,748
B	Employee Benefits		37,342	37,342	37,342	37,342	37,342
E	Goods and Services		22,238	22,238	22,238	22,238	22,238
G	Travel		2,182	2,182	2,182	2,182	2,182
J	Capital Outlays		1,201	1,201	1,201	1,201	1,201
T	Intra-Agency Reimbursements		39,362	39,362	39,362	39,362	39,362
	Total Objects	**0**	**204,073**	**204,073**	**204,073**	**204,073**	**204,073**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
IT DATA MANAGEMENT-JOURNEY	101,748		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.10	0.10	0.10	0.10	0.10
IT APP DEVELOPMENT-JOURNEY			0.05	0.05	0.05	0.05	0.05
	Total FTEs	**0.00**	**1.15**	**1.15**	**1.15**	**1.15**	**1.15**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE. Goods and Services also includes $18,094 per year for IC2 Enhanced Membership costs to provide HPCDS data system development and maintenance support.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Hazardous waste management activities pose a risk to hazardous waste workers as well as surrounding communities. Risks include exposure to toxic chemicals, spills, fires, reactions, explosions, contamination, air pollution, and lowered property values. Evidence suggests living near these hazardous waste facilities may contribute to reduced life expectancy and higher mortality and disease rates from diabetes, asthma, heart disease, stroke, hypertension, poor birth outcomes, and some cancers (Fazzo L, Minichilli F, Santoro M, Ceccarini A, Della Seta M, Bianchi F, Comba P, Martuzzi M. (2017) Hazardous waste and health impact: a systematic review of the scientific literature. Environ Health 16,

107. https://doi.org/10.1186/s12940-017-0311-8).

Analysis using the Washington Tracking Network's Environmental Health Disparities Map shows that hazardous waste exposure risks are disproportionately higher in areas already facing other pressures:

- Areas with the highest environmental health disparities (ranked in the top 10 percent) have 10 times more large quantity hazardous waste generators compared to areas with the lowest disparities.
- The most diverse areas (ranked in the top 10 percent) contain 2.1 times more large quantity hazardous waste generators compared to the least diverse areas.
- The lowest earning areas (ranked in the top 10 percent) contain 2.5 times more large quantity hazardous waste generators compared to the highest earning areas.

While these measures of inequity are more pronounced in the urban areas west of the Cascades, it is a notable trend throughout the state. The TurboWaste application helps Ecology identify and evaluate these risks to human health and the environment, and helps us prioritize our mitigation efforts for the most overburdened communities and vulnerable populations. Reporting is critical to understanding how our hazardous waste generator universe is distributed across vulnerable populations throughout the state.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees, by using the data collected through TurboWaste to inform decision making on how to engage with waste generators and manufacturers, which communities are most at risk from what types of hazardous waste and toxic substances, how to prepare Ecology employees to safely conduct hazardous waste compliance inspections. Ensuring compliance helps protect workers and communities from improperly managed hazardous waste.
- Goal 3: Prevent and reduce toxic threats and pollution, by using the data collected through TurboWaste and HPDCS to inform which hazardous waste and toxic chemicals are in our state and where they exist geographically or in what products. This helps Ecology make decisions or adjust operations (compliance, technical assistance, and outreach) in ways to better address environmental or human health impacts.
    - HPDCS supports agency Strategy 3.1, involving measuring, and understanding impacts from toxic chemicals, and manufacturer reporting required by state consumer product laws and rules.
    - TurboWaste explicitly supports agency Strategy 3.2, involving gathering data and implementing regulatory and compliance work. Data collected supports hazardous waste fee billing, informs compliance inspections, and helps meet state and federal reporting requirements (especially the increasingly complex needs associated with EPA biennial reporting).
- Goal 4: Protect and manage our state's waters, by using the data collected through TurboWaste and HPDCS to inform Ecology's compliance enforcement efforts that protect stormwater systems and connected waterbodies or groundwater from contamination from improperly managed hazardous waste or unauthorized toxic chemical use.
- Goal 5: Protect and restore Puget Sound, by using the data collected through TurboWaste and HPDCS to help Ecology enforce restrictions on toxic substances in consumer products or hazardous waste. This reduces risks of releases of these substances into Puget Sound and reduces toxic impacts to sensitive ecosystems or endangered species.

This request also provides essential support to three of the Governor's Results Washington Goals:

- Goal 3: Sustainable Energy and a Clean Environment, by using data collected through TurboWaste and HPDCS to inform Ecology's compliance and technical assistance efforts helps support a clean environment by reducing contamination from hazardous waste sources or toxic chemicals in products.
- Goal 4: Healthy and Safe Communities, by using data collected through TurboWaste and HPDCS to better understand environmental justice considerations related to hazardous waste and toxic chemical risks. This helps inform decision making on where to invest more resources geographically or in terms of area of focus as we address these risks to communities.
- Goal 5: Efficient, Effective, and Accountable Government, by updating TurboWaste and HPDCS to improve usability, quality assurance, and compliance with reporting requirements, and efficiency through automated processes.

Performance Outcomes:

The outcomes of this request will be:

- More robust, sustainable, and usable applications and systems.
- Improve data reporting and analysis of hazardous waste and toxic chemical trends.
- Increase ability to meet Ecology's statutory responsibilities and ensure manufacturer and hazardous waste generator compliance with state laws and rules.
- Reduce risk of environmental and public health impacts to Washington communities.
- Increase agility and ability to adapt to changing EPA requirements.
- Increase efficiency, timeliness, and quality assurance for Ecology's EPA biennial reporting process.
- Reduced regulatory burden for Washington state businesses.

Other Collateral Connections

Puget Sound Recovery:

This request supports Puget Sound Action Agenda implementation through the following Regional Priorities, Strategies, and Sub-strategies:

- Regional Priority - TIF1.1: Enhance pollutant reduction programs, corrective measures and increase authorities and programs to prevent toxic chemicals from entering Puget Sound.
- Sub-strategy - 9.1: Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem.
- Sub-strategy - 9.2: Promote the development and use of safer alternatives to toxic chemicals.

This request also supports Governor Inslee's Executive Order 18-02, Southern Resident Killer Whale Recovery and Task Force, through recommendation 30 - Identify, prioritize, and take action on chemicals that impact orcas and their prey.

State Workforce Impacts:

N/A

Intergovernmental:

EPA Region 10 has communicated to Ecology that we need to dedicate more IT resources to meet national deadlines in a timely and effective manner (see attached letter of support from EPA for this budget request).

DOH and the Local Hazardous Waste Program in King County support the additional funding to enhance the HPCDS system, since they are members of IC2, and system provides easy public access to a single source of the information reported by companies to the member states.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

We anticipate that hazardous waste generators that use TurboWaste to meet state and federal reporting requirements will support this request, as it will provide enhancements to the system, and continue to allow them to meet both state and federal requirements through a single reporting system. We plan to share information about upcoming updates via our Shoptalk newsletter in order to provide an opportunity for those who use the application to provide feedback. This publication is distributed quarterly and reaches about 7,500 subscribers across the state.

We anticipate manufacturers that use HPCDS to fulfill CSPA reporting requirements would support this request. As shared by IC2, this system "reduces manufacturers' reporting burden and should result in fewer reporting errors and inconsistencies. It also provides easy public access to a single source of the information reported by companies to the states." (http://www.theic2.org/hpcds#gsc.tab=0). There is also support from local governments and nongovernmental organizations that are interested in the accessing the data submitted by industry to increase awareness of toxics in children's products.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

PL KZ Hazardous Waste & Toxics IT Systems - Attachment A.pdf
PL KZ Hazardous Waste & Toxics IT Systems - IT Addendum.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?

Yes

Objects of Expenditure

Objects of Expenditure *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$102	**$102**	$102	$102	**$204**
Obj. B	$0	$37	**$37**	$37	$37	**$74**
Obj. E	$0	$22	**$22**	$22	$22	**$44**
Obj. G	$0	$2	**$2**	$2	$2	**$4**
Obj. J	$0	$1	**$1**	$1	$1	**$2**
Obj. T	$0	$40	**$40**	$40	$40	**$80**

Agency Contact Information

Eli Levitt
(360) 280-2016
elev461@ecy.wa.gov

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

LAND, CHEMICALS & REDEVELOPMENT DIVISION

June 23, 2021

Darin Rice, Program Manager
Hazardous Waste and Toxic Reduction
Washington State Department of Ecology
300 Desmond Drive SE
Lacey, Washington 98504

Dear Mr. Rice,

As you know, the Department of Ecology is authorized to implement the Resource Conservation and Recovery Act (RCRA) in the State of Washington. The federal requirements for your authorization include publishing a biennial report on Washington's Treatment, Storage and Disposal (TSD) facilities and Large Quantity Generators (LQG) in a timely manner and with appropriate quality assurance. This requirement is further documented in the Memorandum of Agreement between the EPA and Ecology as well as in the State and Tribal Assistance Grant terms and conditions. This work is not only important as part of your authorized program, but also for equity and environmental justice, as making this information available to the public is an essential step to giving underserved communities a voice to influence change.

Last year you had data programming code inconsistencies which led to delayed data transmission and incomplete data. This issue was further compounded by your lack of IT support to update or correct your software to meet the appropriate BR submission requirements. Ecology's preliminary data transmission was received after the twice-extended deadline. The final data transmission was completed two days before the third deadline, following numerous hand-edited data corrections. Additional corrections and quality assurance review was required after the completion of the BR to accurately reflect Washington's data.

I understand that your supplemental budget proposal would address deficiencies in your ageing software, help you to meet the requirements of your authorized program, and make treatment, storage, disposal and generation of hazardous waste information more readily available to members of the public. I wholeheartedly endorse those goals and your thoughtful proposal to achieve them.

Sincerely,

TIMOTHY HAMLIN
Digitally signed by TIMOTHY HAMLIN
Date: 2021.06.23 12:45:53 -07'00'

Timothy B. Hamlin,
Director

2021-23 IT ADDENDUM

NOTE: Only use this addendum if your decision package includes IT costs and DOES NOT relate to implementation of the One Washington project.

Part 1: Itemized IT costs

Please access the 2021-23 IT Fiscal Estimate Workbook imbedded in this document below. Agencies must itemize all IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. When itemizing costs, please consider the total cost of the combined level of effort which includes: the associated costs, from planning through closeout, of state, vendor, or both, in order to purchase, acquire, gather and document requirements, design, develop or configure, plan or conduct testing, and complete implementation of enhancement(s) to an existing system.

Please itemize all IT cost associated with this request where you are not asking for additional funding. These costs are considered in-kind and provided through existing agency base. Detailed costs from existing agency base should be entered on the in-kind tab within the 2021-23 IT Fiscal Estimate Workbook.

21-23 IT Fiscal Estimates Workbook.›

Part 2: Questions that support the reuse of existing state resources

To ensure effective reuse of existing state resources, all IT investments — including project IT expenditures — are expected to comply with IT statutes and policies. The answer to these questions will help OCIO and OFM determine if the decision package will be funded.

A. Does this investment provide for acquisition of, or enhancement to, an administrative or financial system? ☐Yes ☒ No

B. If Yes, has this decision package gone through the Administrative and Financial System review as required in (SAAM) section 80.30.88? ☐Yes ☐ No

   If Yes, attach the approval letter.

   If No, do not submit the decision package. Recommendation will be "Do Not Fund".

C. Does this decision package fund the acquisition or enhancement of equipment or facilities in any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No

D. If yes, do you have an approved waiver to proceed with this proposed investment? ☐Yes ☐ No

If Yes, attach a copy of the waiver approval.

If No, do not submit this decision package. Recommendation will be "Do Not Fund".

E. For Health and Human Services agencies (HHS Coalition) DCYF, DOH, DSHS, HCA and Washington Health Benefit Exchange, has this project been screened for inclusion in the HHS Coalition portfolio? ☐Yes ☐ No

If Yes, this is part of the HHS Coalition portfolio, has this project received HHS Coalition project initiation approval? ☐Yes ☐ No ☐ N/A

If answer to the first HHS Coalition question is Yes (or N/A for second question), attach approved HHS Coalition Project Initiation Form.

If No to either HHS question, do not submit the decision package. Recommendation will be "Do Not Fund".

Part 3: Maintenance and policy level decision packages

Answers to these questions will be used in part to determine if the decision package will be evaluated and ranked by the OCIO as required by RCW 43.88.092.

A. Does this decision package fund the acquisition or expansion of computer hardware capacity? ☐Yes ☒ No

If Yes, where will the hardware solution be hosted? ☐ State Data Center
☐ External Cloud

B. Does this decision package fund the development or acquisition of a new or enhanced software solution or service? ☒Yes ☐ No

If Yes, where will the software solution be hosted? ☒ State Data Center
(for the TurboWaste application only; the other two systems included in the decision package are managed/hosted by third parties.)
☐ External Cloud

C. If response to question B is Yes, do you expect this to solution to exchange information with the state financial system (AFRS) or the OneWA solution? ☐Yes ☒ No

D. If response to question B is Yes, will this investment renew or procure facial recognition service? ☐Yes ☒ No

E. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If Yes, name the project: TurboWaste application managed by HWTR program (not managed by ITSO)

(Project name published on the IT Dashboard)

If you your decision package is maintenance and you answered "yes" to any of the above questions in Part 3, you must answer the questions in Part 4 below to finish the IT Addendum. All policy decision packages must answer question in Part 4.

Part 4: IT Investment Questions

Please provide a response to the following questions. Responses will be evaluated and ranked by the OCIO as required by RCW 43.88.092. Chapter 10 of the operating budget instructions contains the criteria used to evaluate 2021-23 decision packages.

AGENCY READINESS

Due diligence

1. Summarize the feasibility or due diligence work completed in support of this decision package. Attach a copy of the feasibility study or other documentation of due diligence to the decision package.

This decision package supports resources for updating two aging applications/systems that collect information required by state and federal law. We have done due diligence in exploring feasible options and also plan to ensure feasibility using agile project management approaches to make incremental improvements to these systems based on prioritized use cases.

- **TurboWaste**: This application collects information from more than 4,000 hazardous waste generators as required by state (Hazardous Waste Management Act, Chapter 70A.300 RCW) and federal (Resource Conservation and Recovery Act of 1976) law. We need an additional IT application developer/journey to update TurboWaste to (1) align with EPA's increasingly complex and frequently changing biennial reporting requirements, and (2) to streamline the time-consuming process for reporting data to EPA, which reduces burdens on businesses by avoiding double reporting through different systems.
    - Currently, HWTR has one IT application developer/journey that supports TurboWaste, along with other applications. An Environmental Specialist 4 works as a project manager with IT staff to incorporate EPA requirements into the process and validate data, among other duties.
    - This status quo approach is no longer sufficient for ensuring timely reporting to EPA. We have a limited window of time between when waste generators report their information to Ecology and EPA's reporting deadline. Within that short window of time we must extract, validate, and translate the information into the required format. Due to the current limitations in the application, this process requires time-intensive manual efforts to complete these steps, which can also introduce data quality risks from human error. EPA Region 10 has expressed concerns about our ability to submit this information on time and is strongly encouraging Ecology to invest additional ongoing IT resources to make the process more efficient. Comparatively, other states with similar hazardous waste generation levels dedicate more IT resources to supporting the biennial reporting process. For example, EPA informed us that Oregon (similar to Washington in terms of waste generation and use of a separate state reporting system), relies on a senior IT project manager, a team of IT specialists, and an external IT contractor to manage their system and ensure the data can be accurately translated to meet EPA requirements.
    - We explored using existing IT staff to update the system to meet EPA biennial reporting requirements. However, this approach has considerable impacts. Improving the biennial reporting process is a major multi-year process that will require ongoing development to align with changing EPA reporting requirements and periodic necessary updates to

our Dangerous Waste Regulations. If we were to redirect one of two existing application developers to this work, other mission critical projects will come to a halt for prolonged periods—including applications connected to fee collection, and a mobile application for emergency responders that provides information about the location and type of dangerous chemicals. Ecology would be less able to understand hazardous waste quantities, types, and risks across the state and their potential impacts to communities and the environment. We would be less able to use such information to direct program operations, stakeholder engagement, and address environmental justice and equity considerations.

- **The High Priorities Chemicals Data System (HPCDS)**: This system collects manufacturer information on toxic chemicals in consumer products as required by the Children's Safe Products Act (Chapter 70A.430 RCW). We need additional ongoing contracting resources to update and maintain this system.
    - HWTR initially helped support the development of the HPCDS with the Interstate Chemicals Clearinghouse (IC2), along with funding from EPA, the Oregon Health Authority, and the Northeast Waste Management Officials' Association (NEWMOA). Having one system to collect similar reporting data required by both Washington state and Oregon law reduces burdens on manufacturers. The IC2 has no dedicated resources for maintaining and updating this system.
    - It has become clear over the past two years of use of this system that current investments are insufficient to support the service level we need. For example, we frequently run compliance reports to see which manufacturers have reported toxic chemicals in their products in Oregon but not in Washington (where both states require reporting on the same chemicals). Currently, this is a complicated, multi-step process. This kind of time-consuming manual process could easily be automated with a new feature that would free up time for addressing other pressing needs or conducting more in-depth investigations and outreach to manufacturers.
    - We considered using existing IT staff to complete updates. However, we do not believe this is a viable option because IT staff are currently at or exceeding full capacity working on other mission critical priorities, and the system is currently managed and hosted by a third party.

Governance and management

1. What governance processes will support this project? Examples of governance processes include appropriately placed executive sponsor, representative steering committee, resourced vendor/contract management, change control, and incorporating stakeholder feedback into decision making processes. Provide examples of how your proposed budget includes adequate funding and planning for governance processes, if applicable.

We plan to use governance processes already in place and funded to support these projects:

- **Executive sponsor**: Our program manager serves as the executive sponsor for these projects.
- **Representative steering committees**: Necessary updates for these projects primarily focus on use cases for internal needs, such as running reports to ensure compliance, improving efficiency and reducing manual efforts, and methods to reduce redundancy or provide better quality assurance. As such, the steering committees for these projects include representatives from all of the impacted internal stakeholder teams and functions. Additionally, steering committee

members include those from the customer service team who provide regular assistance and technical support to external TurboWaste users (business owners).

- **Resourced vendor/contract management**: Each of these projects already have project managers and contract management support as appropriate. Project managers follow project management best practices per the Project Management Body of Knowledge and/or use agile iterative project management approaches such as Scrum as appropriate for development needs. Ecology has a well-established Project Management Office and we incorporate the PMBOK artifacts into agency templates used when helpful and appropriate for chartering, planning, scheduling, change management, and reporting and closing. For HPCDS, we plan to update the contract to include specific additional deliverables for the additional funding for this project to support our ability to confirm manufacturer compliance with the law.
- **Change control**: We use change control and versioning tools with development, test, and production environments for TurboWaste. Third parties are responsible for developing and managing the HPCDS.
- **Incorporating stakeholder feedback into decision-making**: Necessary updates for these projects primarily focus on use cases for internal needs, such as running reports to ensure compliance, improving efficiency and reducing manual efforts, and methods to reduce redundancy or provide better quality assurance. As such, feedback from internal stakeholders will provide the main input for decision-making. For TurboWaste, we also work closely with external stakeholders such as EPA and hazardous waste generators to understand use cases and technical requirements, and plan to solicit and consider feedback from those who use the system.

Planning and readiness

2. Describe how your agency will resource the project management of this project. Will in-house resources be used, or will resources be acquired? How has organizational change management been factored into planning and approach? Has the project requested a project management approach to be used for this project? Describe whether project and organizational change management resources are included in this request or will be provided by in-kind resources. Describe whether the proposed budget includes costs associated with independent quality assurance.

We plan to use project management processes already in place and funded to support these projects:

- **Project management**: We plan to use existing and already assigned in-house resources for project management. These projects already have project managers who follow project management best practices per the Project Management Body of Knowledge and/or use agile iterative project management approaches such as Scrum as appropriate for development needs. Ecology has a well-established Project Management Office and the PMBOK artifacts have been incorporated into agency templates that used when helpful and appropriate for chartering, planning, scheduling, change management, and reporting and closing. Ongoing development and updates for TurboWaste will continue to use iterative agile approaches to prioritize frequently changing requirements and use cases.
- **Project change management**: Necessary updates for these projects primarily focus on use cases for internal needs, such as running reports to ensure compliance, improving efficiency and reducing manual efforts, and methods to reduce redundancy or provide better quality assurance. As such, the steering committees for these projects include representatives from all of the impacted internal stakeholder teams and functions, which will also serve to inform and convey project change management needs. If we anticipate updates affecting external stakeholders, we will develop communication and outreach plans to solicit feedback during

development and convey changes pre-release as appropriate using existing resources. Communication plans will include strategies such as sharing information about upcoming updates via our Shoptalk newsletter (which reaches 7,500 subscribers 3-4 times per year) to provide an opportunity for those who use these systems to provide feedback.

- **Organizational change management**: Resources are already funded and available as-needed for consultation or training at the program and agency level. Ecology relies on the Plan-Do-Check-Act model of organizational change management. Our program has also invested heavily in building leadership and change management skills, enabling all employees to complete the globally known and research-based The Leadership Challenge® training program.
- **Independent quality assurance**: The TurboWaste application gathers data that EPA uses to conduct quality assurance and produce a national biennial hazardous waste generation report. This does not depend on Ecology resources or funding this request.

Technical alignment

Strategic alignment

3. Using specific examples, describe how this investment aligns with strategic elements of the Enterprise Technology Strategic Plan. Examples of strategic principles that tie back to tenets of the strategic plan include, but are not limited to: buy don't build, solutions hosted on modern hosting solutions, solutions promoting accessibility, early value delivery of functionality throughout the project, and modular implementation of project features.

This request aligns with the following strategic principles:

- **Solutions hosted on modern hosting solutions**: The TurboWaste application is hosted on State Data Center servers while using the Secure Access Washington (SAW) portal and EPA's Cross-Media Electronic Reporting Rule (CROMERR) legal framework.
- **Solutions promoting accessibility**: All projects focus on updates that will improve data quality and access. We will continue to access accessibility needs and opportunities to improve usability as we proceed with these projects.
- **Agile, modular implementation of project features, and early value delivery of functionality throughout the project**: All projects already are functional and in use. As we proceed with updating these systems we will focus on opportunities to use iterative agile development approaches, especially for the TurboWaste application that must incorporate frequently changing requirements from EPA. This will provide modular implementation of project features and early value delivery of functionality as defined through prioritized use cases.
- **Data Driven**: We use data collected through all the projects in this request to fulfill legal reporting requirements, help understand the environmental, economic, and social impacts of legislation on the environment, understand and help address community risks from toxic substances and environmental justice considerations, inform rulemaking, help enforce regulatory compliance, and inform program decision making.

This request aligns with the following strategic elements in the Enterprise Technology Strategic Plan:

- **Efficient & Effective Government**: The projects in this request help advance digital government, reduce barriers to access, improve customer experiences, and decrease their regulatory burden. This request will also support expanding integration between systems—specifically between the TurboWaste application and Ecology's facility/site system, and EPA's e-manifest system and biennial reporting system. Improved data management from TurboWaste updates will also help support large intergovernmental coordination efforts and accords—such as the Tri-Party agreement between the U.S. Department of Energy, EPA, and Ecology that established

milestones for bringing the Hanford site into compliance with federal and state environmental regulations.

- **Accountable IT Management**: The projects in this request promote reuse of existing systems and IT assets, and improve project outcomes with better practices. For example, while updating the TurboWaste application we will conform to agency development standards for current technologies to ensure the system is robust and allow for easier maintenance and future updates.
- **IT Workforce**: This request helps support a diverse, resilient IT workforce. The request includes resources to hire an IT developer/journey. The agency is committed to building a culture that values diversity, equity, inclusion, and respect and creates a safe place for all employees. As part of the hiring process for the IT position, we fully plan to follow our newly revised recruiting process addressing diversity and inclusion considerations developed in partnership with HR. We have also recently invested in a new senior IT developer position and lead for a newly formed dedicated IT unit. This will support inclusive retention and work-life balance for all IT staff working on these projects through mentoring, training, and more effective workload balancing to meet pressing external and regulatory demands. This will also provide better career path support and adoption of modern technology and approaches. This request also supports remote work as we expect to continue with high percentages of the agency workforce working remotely at least 60% of the time, including IT developers for these projects.
- **Enterprise Architecture**: The TurboWaste application is hosted on State Data Center servers (supporting adoption of modern, cloud-based technologies). The external facing side of the application uses Washington government service domains. TurboWaste application updates will conform to agency development standards for current technologies, which supports the use of common, shared technologies across agencies.

Technical alignment

4. Using specific examples, describe how this investment aligns with technical elements of the Enterprise Technology Strategic Plan. Examples of technical principles that tie back to tenets of the strategic plan include, but are not limited to: technology reuse, data minimization, incorporating security principles into system design and implementation, publishing open data, and incorporating mobile solutions into systems.

This request aligns with the following technical principles and elements in the Enterprise Technology Strategic Plan:

- **Technology reuse**: All projects in this request are for updating existing systems. Planned updates for the TurboWaste application include integration with other existing Ecology and EPA systems.
- **Data minimization**: All projects in this request collect information as required by law. The TurboWaste application and our planned updates (including integration with other Ecology and EPA systems) help reduce redundant data entry or duplicative storage in different systems.
- **Security & Privacy/incorporating security principles into system design and implementation**: TurboWaste application updates will conform to agency development standards for current technologies, which will result in a more robust and secure application for both data security and user account privacy. TurboWaste currently uses Secure Access Washington (SAW) and we are part of WaTech's security program. Ecology is also working on integrating EPA's Cross-Media Electronic Reporting Rule (CROMERR) legal framework with Lexis Nexis identity proofing for increased security of electronic file transfer and e-signatures. Once this is finalized we plan to integrate it with the TurboWaste application. As we work with third parties to update the HPCDS, we plan to prioritize features that will improve collection and secure transfer of data, supporting data quality and security.

- **Transparency/publishing open data**: The HPCDS provides transparent, publically available information on various toxic chemicals in consumer products sold in Washington, as required by law.

Reuse and interoperability

5. Does the proposed solution support interoperability and/or interfaces of existing systems within the state? Does this proposal reuse an existing solution or existing components of a solution already in use elsewhere in the state? If the solution is a new proposal, will it allow for such principles in the future? Provide specific examples.

The projects in this request will build on existing systems and look for ways to increase interoperability between past and future revisions. The TurboWaste application provides a prime example of how this request supports reuse and interoperability:

- Updates will conform to agency development standards for current technologies to ensure the system is robust and allow for easier maintenance and future updates.
- Planned updates include integration with Ecology's facility/site system, and EPA's e-manifest system and biennial reporting system. This includes pre-populating waste stream data from the EPA e-manifest system or biennial reporting system to help businesses save time from double entry and ensure more accurate reporting. We would also like to reintegrate TurboWaste with the Ecology facility/ site system to improve agency cross-program coordination and customer service. We also intended to integrate TurboWaste with Ecology's finished solution for applying EPA's Cross-Media Electronic Reporting Rule (CROMERR) legal framework with Lexis Nexis identity proofing for increased security of electronic file transfer and e-signatures.
- Federal reporting requirements are different and less extensive than Washington state's, due to our Dangerous Waste Regulations being more protective than federal regulations. TurboWaste provides a single streamlined reporting mechanism for businesses that generate hazardous waste. This reduces confusion and regulatory burdens associated with different reporting requirements and systems.

Business alignment

Business driven technology

6. What are the business problems to be addressed by the proposed investment? These business problems should provide the basis for the outcome discussion below. Describe how end users (internal and external) will be involved in governance and implementation activities.

- **TurboWaste:**
    - Business Problems:
        - Reporting under TurboWaste can require exhaustive data entry placing a regulatory burden on the more than 4,000 hazardous waste generators who use the system every year. This data entry and reporting process impacts companies like Boeing and other large quantity generators that generate, treat, store, or dispose of thousands or millions of hazardous waste streams each year. Improvements will reduce this burden by pre-populating recurring waste data and automating the process Ecology uses to pass along reported data to EPA to meet waste generator federal reporting requirements, helping ensure that EPA will continue to allow state submission and avoid needing to have waste generators submit duplicative information to both the state and EPA systems.
        - Ecology struggles to extract, validate, and translate the required hazardous waste information into mandatory formats (which change frequently) and

transmits the data to EPA's National Biennial RCRA Hazardous Waste Report. Improvements will automate this process, reducing the need for Ecology staff to complete these time consuming steps manually.

- TurboWaste updates will support continued functionality and improved data quality vital to ensuring compliance with Dangerous Waste Regulations and supporting large and complex waste management and cleanup efforts in Washington. For example, the Tri-Party Agreement between Ecology, EPA, and the U.S. Department of Energy (DOE) includes commitments for managing hazardous and nuclear mixed waste at Hanford. There are different reporting requirements for private contractors, state, and DOE that rely on data collected by TurboWaste. Data collected through TurboWaste helps Ecology make decisions or adjust operations (compliance, technical assistance, outreach) in ways to better address environmental or human health impacts.
- Legal agreements with EPA require Ecology to use EPA's Cross-Media Electronic Reporting Rule (CROMERR) legal framework, as required by the U.S. Department of Justice. Currently, TurboWaste relies on a legacy version of this and needs updating. Ecology is working on a solution that when ready, will need to be integrated into TurboWaste.
- Broken integration with Facility Site database makes cross program coordination difficult, impacting our ability to efficiently meet customer needs. These two systems used to be integrated but we did not have IT resources to keep them fully connected. This is useful for understanding customer concerns when they have several permits or are subject to inspections from Ecology staff across several programs. By reintegrating TurboWaste with this system, our hazardous waste compliance inspectors will be better able to understand the total regulatory universe that waste generators are dealing with and be able to better coordinate with other inspections conducted by the agency.

- Governance and Implementation: Necessary updates primarily focus on use cases for internal needs, such as running reports to ensure compliance, improving efficiency and reducing manual efforts, and methods to reduce redundancy or provide better quality assurance. As such, the steering committees for these projects include representatives from all of the impacted internal stakeholder teams and functions. We also work closely with external stakeholders such as EPA and hazardous waste generators to understand use cases and technical requirements, and plan to solicit and consider feedback from those who use the system. We use change control and versioning tools with development, test, and production environments for TurboWaste. We intend to begin an initial overhaul of TurboWaste as soon as possible using iterative agile development approaches, prioritizing required features and addressing the biggest needs first. Once we have sufficient resources in place, we will create a prioritized list of user stories and features. External end users participate in beta testing significant application changes.

- **High Priority Chemical Data System (HPCDS):**
  - Business Problems:
    - The IC2 has one part-time project coordinator to work with the states for maintaining and updating the HPCDS and relies on member states to contribute ongoing cost-sharing funding.
    - Reporting functionality currently impairs the agency's ability to conduct compliance and enforcement on manufacturer reporting such as checking for non-reporters. For example, manufacturers must submit the data through the

HPCDS to allow Ecology to determine compliance with our reporting requirements and take action if necessary. Examples of this data includes the reported amount of formaldehyde in kids clothing, heavy metals like lead in children's school supplies, toxics in toys and cadmium in jewelry. Collecting this information is vital for Ecology to ensure regulatory compliance. We do this by reviewing the manufacturer's data submitted to the agency for any reporting violations with the state law. Ecology use the data to contact the manufacturers to address compliance issues and provide technical assistance. Using this approach, Ecology has been able to maintain high industry compliance with the reporting requirements. Ecology analyzes trends in this information to help identify non-reporters and coordinate with federal agencies to conduct product recalls, including an enforcement case related to children's jewelry containing high levels of cadmium.

- Complex reporting needs currently require excessive staff time to address manually, introducing possible errors and inefficiency. For example, if we want to check all states' reporting compliance, we frequently need to run reports to see which manufacturers have reported toxic chemicals in their products in Oregon, but not in Washington (where both states require reporting on the same chemical). However, currently this is a multi-step, complicated process. Ecology staff must run multiple reports and manually review and cross-reference reporting by industry. This process requires significant staff time and multi-state coordination. Our goal is to change this to an automated approach with a new feature that would free up time for addressing other pressing needs or conducting more in-depth investigations and outreach to manufacturers.

- Governance and Implementation: Necessary updates primarily focus on use cases for internal needs, such as running reports to ensure compliance, improving efficiency, and reducing manual efforts, and methods to reduce redundancy or provide better quality assurance. As such, the steering committees for these projects include representatives from all of the impacted internal stakeholder teams and functions.

Measurable business outcome

7. Strategic and Performance Outcomes (Chapter 2 - 2021-23 Budget Instructions) of the decision package response will be used to identify how this proposed IT investment improves business outcomes within your agency. The description in the decision package should provide specific examples of business outcomes in use within your agency, and how those outcomes will be improved as a result of this technology investment.

The outcome of this request will be:

- More robust, sustainable, and usable applications and systems.
- Improve data reporting and analysis of hazardous waste and toxic chemical trends.
- Increase Ecology's ability to meet statutory responsibilities and ensure manufacturer and hazardous waste generator compliance with state laws and rules.
- Reduce risk of environmental and public health impacts to Washington communities.
- Increase agility and ability to adapt to changing EPA requirements.

- Increase efficiency, timeliness, and quality assurance for Ecology's EPA biennial reporting process.
- Reduce regulatory burden for Washington state businesses.

Decision Package Urgency

8. Address the urgency of implementing the technology investment in this cycle and impacts to business if technology effort doesn't proceed as planned?

- **TurboWaste**: If unfunded, Ecology may not be able to complete future biennial reporting on time. This could threaten our ability to continue providing a streamlined reporting process for waste generators to fulfill their state and federal reporting requirements. EPA may require waste generators in our state to complete the federal reporting process separately, which would increase their regulatory burden and lead to confusion about different reporting systems and requirements. This could result in stakeholder frustration or legislative and EPA pressure directed towards Ecology and our state reporting requirements that are vital for supporting various critical work across our program. Ecology would be less able to understand hazardous waste quantities, types, and risks across the state and their potential impacts to communities and the environment. We may not be able to integrate updates with a more robust security/identify solution for addressing EPA's Cross-Media Electronic Reporting Rule (CROMERR) legal framework due to a lack of Ecology employee capacity to update TurboWaste to use the new framework, which would put our legal agreement with EPA at risk. We would be less able to use such information to direct program operations, stakeholder engagement, and address environmental justice and equity considerations. We need to begin this work as soon as possible to have enough time for outlining the process and implementing and testing discrete functional improvements before the next reporting deadlines in November 2022 and November 2024. This will also reassure EPA we are willing to invest in updating, maintaining, and automating our reporting system and process. Our goal is to address as many improvements as possible before the next biennial reporting due November 1, 2022. Then, we will address the next round of significant priority improvements well before the next November 2024 reporting deadline.
- **HPCDS**: If unfunded, Ecology will continue to use a manual and staff intensive review process for ensuring manufacturer compliance. If we receive additional funding, we plan to work with the IC2 to finalize contracts by September 2022 and need to work with them to prioritize necessary features and complete a large initial update to the system by January 2024 before reporting is due. Most of this work will need to occur between the end of 2022 and June 2023 in order to complete important updates by the end of 2023.

Agency Recommendation Summary

There are over 13,700 sites on Ecology's Confirmed and Suspected Contaminated Sites List, and about 6,000 of these are awaiting further investigation and cleanup. A portion of these sites are located in underserved, small, rural, and/or disadvantaged communities. To facilitate cleanup and encourage reuse of properties in these communities, Ecology requests ongoing funding to offer assessment or limited cleanup of selected properties with high redevelopment potential. Ecology will collaborate with local governments in small, rural communities, along with overburdened or underserved communities in urban areas, to identify publicly-owned properties or ones where private owners will allow site access and investigation. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Operating Expenditures						
Fund 23P - 1	$0	$500	**$500**	$500	$500	**$1,000**
Total Expenditures	**$0**	**$500**	**$500**	**$500**	**$500**	**$1,000**

Decision Package Description

Background and Problem

There are over 13,700 sites are on Ecology's Confirmed and Suspected Contaminated Sites List, and about 6,000 of these are awaiting further investigation and cleanup. Many of these sites can be considered brownfields, abandoned or underutilized properties whose redevelopment is inhibited by known or suspected environmental contamination.

The Washington Brownfields Program helps communities investigate, clean up, and redevelop brownfields across the state. Led by Ecology, and comprised of staff from the Washington State Department of Commerce and U.S. Environmental Protection Agency (EPA), the state's Brownfields Team works closely with local governments, non-profits, Tribes, and community stakeholders who are interested in cleaning up these sites for redevelopment. As a result, Ecology's brownfields staff are uniquely attuned to the challenges local governments face with these sites.

Private property owners may be reluctant to conduct an environmental investigation, or may have potential liability concerns. Prospective purchasers and developers are often wary of buying a property with suspected environmental contamination. Others might own property contaminated by historical uses that has been transferred to family trusts, while other owners might be out of state, with limited ties to the community, and little incentive to clean it up.

Roadblocks such as these mean that many publicly and privately owned properties remain vacant or underutilized, which presents:

- Loss of redevelopment and reinvestment.
- Loss in potential local tax revenue.
- Risk to development on pristine land, which reduces greenspace, requires investment in additional infrastructure, and leaves blighted spaces in place.
- Potential threat to public health and the environment.

Ecology is seeing increased demand for funding to help communities assess, clean up, and redevelop these contaminated properties. While thousands of contaminated sites are located throughout Washington, it is often the small and rural communities and the overburdened or underserved communities in urban areas that are acutely affected. A smaller local tax base, coupled with the loss of revenue from vacant or underutilized properties, limit the local public funding available to clean up these properties. Over the past several months, we have increasingly heard from smaller local governments that they are even more challenged to fund small assessment and cleanup projects on these properties due to the economic and social impacts of the COVID-19 pandemic.

The reason we are seeing a high demand for this type of funding is because people know it works, and over the last two years, Ecology developed a "pipeline" of projects so we can identify the need for this kind of funding. In fall 2019, we began tracking inquiries received by the Washington Brownfields Program asking for assistance with potential brownfield redevelopment projects. We receive an average of two to three new inquiries about projects that need funding every week. We currently have approximately 60 inquiries to follow-up on, many of which we already know are local governments with projects that are ready to move forward as soon as possible. See *Attachment A* for a list of communities that have expressed interest in brownfields funding.

Brownfield projects are usually time-sensitive and can't move forward in the more typical market-based approach we see in other cleanup projects. Once local governments or community stakeholders identify a property for redevelopment, they often must move quickly to assess and acquire it so the interest of potential developers is not lost. We've found that early funding for assessment and cleanup helps stimulate brownfield redevelopment, but consistent funding has been cyclical at best, often with gaps that create uncertainty for local governments and community stakeholders that need stable assistance.

As evidenced through Ecology's work using another popular funding tool – Integrated Planning Grants – we know that early investment in

environmental assessment spurs cleanup and redevelopment. Funding for brownfield cleanup provides another tool to support and help meet the high demand for early environmental assessment. Brownfield projects are often spurred by an opportunity to acquire a key property for local redevelopment. Those opportunities can be fleeting and local stakeholders must act quickly. Ecology's goal is to ensure that quick action doesn't come at the expense due diligence. For this reason, we can best serve these communities by having funding that is readily available.

In the 2020 supplemental operating budget, Ecology received $500,000 in one-time funding to support new brownfields projects and help meet this demand. The following are examples of projects that were funded:

- City of Stanwood – The Sebranke property is located on the eastern edge of Stanwood's main business district, adjacent to the Amtrak train station. This brownfield site functions as a gateway to main street businesses and is an entry point for visitors arriving by train. The city plans to acquire, clean up, and redevelop the site as a small public park that will enhance the experience of visitors to the main street area of Stanwood. EPA, Commerce, and Ecology are evaluating options for funding assistance to the city for site investigation and cleanup at the Sebranke property. The funding provided in 2020 was used for due diligence activities in preparation for the city's purchase of the property, including a Phase I Environmental Site Assessment (ESA), Phase II ESA, and cleanup planning documents. Commerce will provide a grant for cleanup activities after the city has purchased the property. The city is also now ready to apply to enter Ecology's Voluntary Cleanup Program (VCP).
- City of Othello – Mayor Shawn Logan contacted the Brownfields Program about possible funding for assessment and planning activities for a parcel on the west side of Othello, sometimes referred to as the Truman property. The city would like to purchase the 70+ acre parcel to use the southern portion as a waste water treatment plant with seasonal aquifer storage. The northern portion of the parcel includes a wetland, and the city hopes to restore the wetland and create a conservation area with public access. Ecology supported their efforts with 2020 funding for an updated Phase I ESA and Phase II ESA. The city has also been selected for an Integrated Planning Grant award to conduct redevelopment planning activities at the property.
- Mason County PUD 1 – Ecology supported the Mason County PUD 1 with 2020 funding to assist with environmental assessment of the Mason Pole Yard. Mason County PUD 1 had entered this site into the VCP, but cleanup had stalled due to limited funding. Funds from Ecology provided urgently needed additional site investigation, installation of groundwater monitoring wells, and excavation of contaminated material. The PUD will continue the cleanup process under the VCP.

Solution
Ecology recognizes that a small public investment can be the catalyst for local economic development and community improvement. To facilitate cleanup and encourage redevelopment in these communities, Ecology requests ongoing funding to offer assessment or limited cleanup of about 10 selected brownfield properties each year. As noted above, we have more than 60 projects in our queue, most of which have indicated they are ready to proceed.

Ecology will work with communities to identify sites with high redevelopment potential that are ready to go, based on criteria such as location, prospective purchaser interest, environmental justice considerations, and site reuse as identified in a local government's comprehensive plan. Ecology will also collaborate with local governments to identify publicly owned properties, or ones where private owners will allow site access and investigation.

By working with communities to select properties with high redevelopment potential, Ecology will maximize public investment. The results of the assessment and cleanup activities will help dispel stigma associated with the property and allow prospective purchasers to make informed decisions regarding site reuse. Right now, we turn away more projects than we can fund. This request will provide stability and assurance for communities by ensuring that funding remains available to advance crucial brownfields redevelopment.

Impacts on Population Served:
Ecology protects public health and natural resources by cleaning up and managing contaminated sites. Supporting local governments and community stakeholders who are committed to bringing vacant and underutilized properties back into beneficial use with additional funding significantly contributes to the economic prosperity and public health of our communities.

Investing in small projects with high redevelopment potential makes sense. It infuses energy in redevelopment projects that might otherwise fall through the cracks, inspiring both immediate and neighboring communities. It empowers local governments to eliminate an economic chokehold and potential health hazard for their community. And it benefits Washington on a larger scale through a stronger economy, healthier environment, and higher standard of living.

Alternatives Explored:
Ecology has achieved success in assessing and cleaning up select contaminated sites through the Eastern Washington Clean Sites Initiative, Puget Sound Initiative, Integrated Planning Grant Program, and the State and Tribal Response Program (STRP) federal cooperative agreement. This request provides opportunities beyond those existing cleanup initiatives.

- **Compared to Eastern Washington and Puget Sound Initiative Programs:** These brownfields projects will focus on reuse, likely with limited contamination that may have been overlooked in the Eastern Washington or Puget Sound programs where sites are more contaminated and take more effort to clean up. Another mandate for these smaller projects is that Ecology will consider community benefits beyond removing toxic threats, including those that add to quality of life, such as redeveloping spaces for business, affordable housing, or recreational facilities.
- **Compared to the Integrated Planning Grant Program:** The Integrated Planning Grant Program provides funding to local governments for environmental assessment and reuse planning activities through a solicitation process. This funding cannot be used for cleanup activities and only local governments are eligible for funding. Although this is an excellent resource for local governments considering redevelopment of contaminated properties, it does not offer the flexibility needed for small cleanup projects or for properties without a public ownership interest.
- **Compared to STRP program:** STRP funding from EPA may be used on contaminated sites in communities that have a high

redevelopment potential. However, sites are not eligible for EPA funding if there is liability under the federal Superfund law (Comprehensive Environmental Response, Compensation, and Liability Act - CERCLA). Having access to state funding will expand Ecology's resources and technical assistance to communities for sites that would not ordinarily qualify under the federal program.

Consequences of Not Funding This Request:
Between 200 and 300 new contaminated sites are discovered and reported to Ecology each year. This adds to the 6,000 sites already on the list awaiting further investigation and cleanup. Without public investment, many contaminated properties in overburdened communities and underserved communities would remain unaddressed. This negatively impacts economic opportunity, public health, and community pride. Overburdened and underserved communities often have lower median household incomes, limited access to quality affordable housing, and fewer opportunities for good-paying jobs. Properties lying vacant due to suspected contamination reduce the potential for development or expansion of new businesses to replace historic employers.

Without the additional funding, Ecology would not be able to meet demand for early assistance in making the cleanup and redevelopment goals a reality for our more challenged communities throughout Washington.

Assumptions and Calculations

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

This request expands activity A005 - Clean up the Most Contaminated Sites First (Upland and Aquatic) by providing new pass through funding for communities to complete assessment and limited cleanup of about 10 contaminated brownfield sites per year. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A005 Clean Up the Most Contaminated Sites First (Upland and Aquatic)		
	2019-21	**2021-23**
FTEs Total	157.80	164.70
001-2 General Fund – Federal	$7,137,000	$7,003,000
001-7 General Fund – Private/Local	$3,004,000	$3,004,000
176-1 Water Quality Permit - State	$1,583,000	$1,583,000
23P-1 Model Toxics Control Operating – State	$40,848,000	$41,717,000
23P-7 Model Toxics Control Operating - Local	$499,000	$499,000
TOTAL	**$53,071,000**	**$53,806,000**

Detailed Assumptions and Calculations:

In fiscal year 2023 and ongoing, Ecology will require $500,000 per year to contract for assessment or limited cleanups of selected properties in small and rural communities and the overburdened or underserved communities in urban areas. Ecology will evaluate sites currently on the Confirmed and Suspected Contaminated Sites list, but may select one or more properties not on the list, if they meet the selection criteria. Ecology estimates the requested $500,000 will provide funding for 10 sites per year at approximately $50,000 per site. The number of sites and cost per site may vary depending on project needs each year.

Workforce Assumptions:

Expenditures by Object		**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
E	Goods and Services		500,000	500,000	500,000	500,000	500,000
	Total Objects	**0**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**

Staffing							
Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
Total FTEs		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Explanation of costs by object:
Contracts include funding for 10 projects at approximately $50,000 each for a total of $500,000 per year beginning in fiscal year 2023. The number of sites and cost per site may vary depending on project needs each year.

How is your proposal impacting equity in the state?

Unaddressed brownfields can hurt communities throughout Washington. Brownfields are everywhere we live and often in disproportionately impact marginalized communities with economic, social, health, and environmental hazards. Communities with concentrated and untended brownfields face multiple public health threats, including exposure to harmful chemicals, poor air quality, lack of green space or recreation areas, elevated blood lead levels, and asthma prevalence. Adverse health outcomes from concentrated brownfields include excess deaths due to

respiratory illness and cancer.

Cleaning up contamination at brownfield sites has been shown to ensure better health in these communities. A redeveloped former brownfield can dramatically improve quality of life, promote a sense of community in economically distressed areas, change the perceptions of a neighborhood, and set the stage for new development. Overburdened and underserved communities often experience the highest marginal returns from redevelopment. This request will increase funding options for small and rural communities and the overburdened or underserved communities in urban areas throughout the state. To better ensure community benefits, cohesion, and to counter displacement, this request will consider community benefits, such as affordable housing.

Successful redevelopment of brownfield sites demonstrates significant and enduring economic, environmental, and social benefits, including:

- Job retention and creation.
- Local economic growth and investment.
- Revitalization of tax base/tax revenue.
- Leveraging private investment.
- Efficient use of existing infrastructure.
- Affordable housing creation.
- Neighborhood revitalization.
- Reuse of existing commercial properties.
- Property value increases.
- Reduced threats to public health.
- Air and water quality improvements.
- Reduced sprawl.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing all five goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees
- Goal 2: Reduce and prepare for climate impacts
- Goal 3: Prevent and reduce toxic threats and pollution
- Goal 4: Protect and manage our state's waters
- Goal 5: Protect and restore Puget Sound

Brownfield redevelopment can support community efforts to become more resilient to climate change impact. Recent studies (Climate Smart Brownfields Manual (epa.gov): https://www.epa.gov/sites/default/files/2021-06/documents/final_climate_smart_brownfields_manual_6-10-21_508_complaint.pdf, Brownfield Revitalization in Climate-Vulnerable Areas | US EPA: https://www.epa.gov/land-revitalization/brownfield-revitalization-climate-vulnerable-areas) show the importance of including consideration of projected climate change and potential impacts to vulnerable populations when planning, assessing, and redeveloping brownfield sites. Often vulnerable populations, including children, the elderly, low-income communities and tribal communities, live close to brownfield properties. Brownfield redevelopment presents opportunities to reduce contamination and blight resulting in improved quality of life for these vulnerable populations while mitigating the impacts of climate change.

Cleanup of the contamination of brownfield sites helps to prevent and reduce toxic threats and pollution, protect and manage our state's waters, and protect and restore Puget Sound. The funding and technical assistance offered by the Brownfields Program supports local governments and communities in getting their foot in the door to start down the path towards successful cleanup and redevelopment of brownfield sites – an opportunity that they often otherwise don't have.

This request also provides essential support to the Governor's Results Washington Goal 2, Prosperous Economy; Goal 3, Sustainable Energy and a Clean Environment; and Goal 4, Healthy and Safe Communities because it will protect public health and natural resources through cleanup and facilitate redevelopment of contaminated and blighted properties.

Performance Outcomes:

This will prepare blighted properties for reuse, which is essential to the health of residents, environmental health, and the economic prosperity of our communities. Cleaning up and redeveloping contaminated properties will benefit Washington's health, environment, and economy. Depending on the sites selected, cities, counties, ports, and Tribes are anticipated to support the request.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

Cleaning up and redeveloping contaminated properties will benefit Washington's health, environment, and economy. Other jurisdictions are anticipated to support this request. This request was developed in coordination with the Department of Commerce's brownfields staff who participate as members the Washington Brownfields Team and share prospective project inquiries with Ecology. We are have shared this request with Commerce staff are they are supportive.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

Ecology collaborates with private developers, property owners, contractors, technical professionals, and residents to clean up legacy contamination from past industrial practices and accidental spills. Ecology expects all of these partners to support the request.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

Support Brownfields Cleanup - Funding Inquiries Attachment A.pdf

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. E	$0	$500	**$500**	$500	$500	**$1,000**

Agency Contact Information

Angie Wirkkala
(360) 688-3214
angie.wirkkala@ecy.wa.gov

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ATTACHMENT A

Support Brownfields Cleanup - Funding Inquiries

Purpose: Ecology will work with communities to identify sites with high redevelopment potential that are ready to go, based on criteria such as location, prospective purchaser interest, environmental justice considerations, and site reuse as identified in a local government's comprehensive plan. Ecology will also collaborate with local governments to identify publicly owned properties, or ones where private owners will allow site access and investigation. The entities listed below have inquired about potential funding; this list is for informational purposes only, and updates regularly (data as of August 2021).

Inquiring Entity	Property / Site Name	City	County
Swinomish Tribe	Swinomish dioxin outfall	Anacortes	Skagit
Port of Bellingham	Community-wide brownfields inventory	Bellingham	Whatcom
Catholic Housing Services	former Bellingham landfill	Bellingham	Whatcom
Camas, City of	Old Paper Mill	Camas	Clark
Cashmere	Cashmere Wastewater Lagoons	Cashmere	Chelan
Office of Rural and Farmworker Housing	Mountainview Housing Development	Entiat	Chelan
Everett, Port of	Port of Everett Maritime Industrial Expansion/Kimberly-Clark Mill Site	Everett	Snohomish
Private Entity	Go East Corp Landfill	Everett	Snohomish
Paine Field/Snohomish County Airport	TECT Aerospace	Everett	Snohomish
Snohomish County - Airport Division	Precision Engines Building C-1 (former)	Everett	Snohomish
Fircrest, City of - Public Works Dept	Metal Marine Pilot Inc	Fircrest	Pierce
Klickitat County	Klickitat Valley Sawmill	Klickitat	Klickitat
Swinomish Indian Tribal Community	Swinomish Waste Oil & Hazmat Mgmt	La Conner	Skagit
Leavenworth, City of	Osborn Elementary	Leavenworth	Chelan
Lynnwood Public Facilities District	Alderwood Laundry & Dry Cleaners	Lynnwood	Snohomish
Manson Park & Recreation District	Leffler Field	Manson	Chelan
Moses Lake, City of	TBD / near airfield	Moses Lake	Grant
Habitat for Humanity Seattle-King County	Krsak Residence North Bend	North Bend	King
Northport, Town of	Former Le Roi Smelter	Northport	Stevens
Olympia, Port of	Olympia downtown peninsula	Olympia	Thurston
Olympia, City of	West Olympia Landfill	Olympia	Thurston
Colville Tribe / MFA	Omak Mill	Omak	Okanogan
Othello, City of	Truman property	Othello	Adams
Jefferson County Health Department	Anderson Property	Port Hadlock	Jefferson
Port of Whitman County	WSU Power Plant Oil Bulking	Pullman	Whitman
Jefferson County	Jefferson County Quilcene Shop Site	Quilcene	Jefferson
Renton, City of	Cascade Shopping Center	Renton	King
Renton, City of	Next door property to Former Denny's	Renton	King
Skyway Solutions Community Development Association	12600 Renton Ave S	Renton	King
King County	Pillon Property	Renton	King
RESIGHT Holdings	Dennys Restaurant	Renton	King
Davis Wright Tremaine LLP (Microsoft)	Quendall Terminals / MS Housing	Renton	King
Seattle, City of	WA UW Consolidated Laundry	Seattle	King
Delridge Neighborhoods Development Association	Affordable Housing brownfields inventory	Seattle	King
Private Entity	TBD / adjacent to Smith Cove Park	Seattle	King
SCIDpda	Asian Plaza Site	Seattle	King
Private Entity	TBD / Allan Goumas in ISIS	Seattle	King
Department of Natural Resources	Waterway 20	Seattle	King
Shelton, City of	Rails to Trails project	Shelton	Mason
Squaxin Island Tribe	Squaxin Island Tribe brownfields sites	Shelton	Mason
Concerned Citizen	Former School Property - 4th Ave SE & Canna St S	Soap Lake	Grant
Willapa Harbor, Port of	South Bend Boat	South Bend	Pacific
Northeast Public Development Authority (NEPDA)	Wellesley and Broad	Spokane	Spokane
Private Entity	Northside Landfill	Spokane	Spokane

Inquiring Entity	Property / Site Name	City	County
Spokane Housing Authority	960 E 3rd / Daybreak Youth Services	Spokane	Spokane
Spokane, City of City Council Office	Northwest Vermiculite	Spokane	Spokane
Stanwood, City of	Sebranke Property	Stanwood	Snohomish
Skamania County	District Shops #2	Stevenson	Skamania
Sunnyside, Port of	Former Planter's Hotel/KFC	Sunnyside	Yakima
Friends of Tacoma Cushman	Cushman Substation	Tacoma	Pierce
Tacoma, Port of	Former Weyerhaeuser Export Facility	Tacoma	Pierce
Tacoma, Port of	Premier Transport site	Tacoma	Pierce
Tacoma, City of - Tacoma Water	Kapowsin Remediation Project	Tacoma	Pierce
Tumwater, City of	Olympia Brewery Properties	Tumwater	Thurston
Yakama Nation	Red Shirt Mill	Twisp	Okanogan
Vancouver, Port of	Terminal 1 (Waterfront Property)	Vancouver	Clark
Milestone Property Management (Vancouver)	Pinkerton's Auto Repair	Vancouver	Clark
Vancouver, Port of	Terminal 5	Vancouver	Clark
Walla Walla, Port of	2 Old Airport Properties	Walla Walla	Walla Walla
Wenatchee, City of	Lineage Logistics	Wenatchee	Chelan
Westport, City of	Maintenance Yard Property	Westport	Grays Harbor
Westport, City of	Former Ferry Dock/Dump Property	Westport	Grays Harbor
Yakima Housing Authority	1114 Fruitvale Blvd	Yakima	Yakima

Agency Recommendation Summary

Washington has a legacy of mining activity and that history has led to hundreds of abandoned mines across the state. Since 2007, Ecology has worked to create an inventory of mines with known contamination. From an original list of over 500 potential sites, our field assessments have identified approximately 200 abandoned mine sites that currently require cleanup, while many others are likely awaiting discovery. Mine sites have unique aspects and challenges; most are in remote areas, are contaminated with heavy metals, pollute nearby surface water, and lack viable financial resources to support cleanup. To make real progress in cleaning up these sites, staff resources are needed to develop and implement strategies to reduce this backlog of orphan sites. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	2.3	**1.15**	2.3	2.3	**2.3**
Operating Expenditures						
Fund 23P - 1	$0	$352	**$352**	$352	$352	**$704**
Total Expenditures	**$0**	**$352**	**$352**	**$352**	**$352**	**$704**

Decision Package Description

Washington has a legacy of mining, and that history has led to hundreds of abandoned mines across the state. Since 2007, Ecology has worked to create an inventory of mines with known contamination. From an original list of over 500 potential sites, our field assessments have identified approximately 200 abandoned mine sites that currently require cleanup, while many others are likely awaiting discovery. See *Attachment A* for a map of the sites currently requiring cleanup.

Abandoned mine lands present unique challenges and opportunities related to their remediation. While there are some common characteristics (remote locations, heavy metals contamination, surface water pollution, etc.), the scope and scale of individual cleanups can vary drastically, from relatively easy relocation of tailings into environmentally safe repositories, to the much more complicated construction and operation of water treatment facilities designed to manage acid mine drainage for many years (e.g., Holden Mine in Chelan County).

Mine site cleanups that have made progress generally have a viable potentially liable party (PLP). Some examples include Rio Tinto for the Holden Mine; ASARCO for Monte Cristo in Snohomish County; and Teck Cominco for the Upper Columbia. Other successful cleanups are where mines are on public land and have access to public funds. However, sites under either of these two scenarios are few and far between.

Mine sites also require ecologically-focused cleanups because more stringent cleanup standards are usually necessary due to the mine's proximity to nearby to surface water. That focus, in addition to usually being in remote locations, adds to the difficulty and cost of cleanup. However, it is important to make progress with these sites in order to ensure that contaminated fish and sediments impacted by contamination in surrounding surface water don't negatively impact human health and natural resources.

Moving mining sites through the cleanup process on privately owned property is also difficult. Commonly, access to the property is denied, and without access, it is nearly impossible to gather data needed to characterize the site, which is a prerequisite for determining if cleanup is needed. Even with access, the current owners are often many times removed from the owners that developed the mine(s), and do not have financial resources to fund the cleanups.

Other mines are located on federal lands, where legal access is generally not an obstacle, but easy access often is. A good example of this are mine sites within the Lake Roosevelt National Recreation Area, where remote areas pose logistical challenges to completing cleanup. Getting heavy equipment to complete cleanup construction can be difficult and costly. In some cases, roads may need to be built or improved, or aircraft could be needed to access the site.

Washington's abandoned mine sites require a unique strategy if needed cleanups are to be addressed efficiently and effectively. It is not possible, or practical, to evaluate each one on its own and use traditional cleanup approaches like an agreed order or consent decree. Instead, Ecology is looking to develop a comprehensive strategy that can be used on any mine site.

Ecology has used state funding to clean up abandoned mine sites in the past, including those funded from the ASARCO Settlement, which was deposited into the Cleanup Settlement Account. However, these cleanups are very expensive, and relying solely on limited state resources obtained through settlements is not sustainable. Ecology is requesting additional staffing resources to research and find alternative sources of funding, like insurance proceeds or federal opportunities, to support these cleanups.

This request will provide funding for two additional staff within Ecology's Toxics Cleanup Program (TCP) to:

- **Finalize the Mining Model Remedy**
  - Model remedies are standardized methods for cleaning up routine contamination at sites that pose lower risks to people and the environment. The state's cleanup law, the Model Toxics Control Act (MTCA), defines model remedies as: "a set of technologies, procedures, and monitoring protocols identified by Ecology for use in routine types of cleanup projects at facilities that have common features and lower risk to human health and the environment."

    A model remedy for abandoned mine sites is currently in draft form, and has been worked on intermittently over time, but has not been finalized due to the lack of dedicated staff for this work. Finalizing and using a model remedy will allow these cleanups to be streamlined and made more cost effective. This request will support staff needed to finalize the model remedy, which will enable cleanups to be grouped together by geographic area so that overhead and mobilization costs can be reduced.

- **Collaborate with Federal and State Partners**
  - Due to the complexities of land ownership, the number of sites, the various regulatory schemes, and large financial cost, collaboration with our federal and state partners will be key to progress. Strong working relationships with partner agencies, like the U.S. Environmental Protection Agency (EPA), U.S. Forest Service, Bureau of Land Management, National Parks Service, U.S. Fish and Wildlife, Department of Interior, and Washington State Department of Natural Resources, will be important. Communities, environmental groups, and Tribes are also interested in mine cleanups, as it will help enhance current watershed improvement efforts. Finally, the new, federal administration has $16 billion devoted to the cleanup of abandoned mines as part of their current infrastructure proposal. New Ecology staff will work collaboratively with our federal partners to advance efforts in this area, and a state investment now will better position Washington to leverage support and funding from the federal government as it becomes available in the future.

- **Investigate Funding Approaches**
  - Ecology estimates that approximately 600 companies were involved with mine sites in Washington over the past 100 years. Nearly all of these companies have ceased to either exist, or have moved out of the mining business. The result is that the state is now faced with potentially a very large cleanup bill, and few viable PLPs that can be held responsible for the problem and needed cleanup. To address this situation proactively, new staff will assess new funding models and mechanisms, such as insurance archeology, contingency funds, federal funding, or other options to pay for remediation and long-term operations and maintenance at these orphan sites.

- **Work to Identify and Eliminate Policy and Legal Barriers**
  - Often, parties will come to the table intending to work with Ecology on cleanups, only to be stymied by legal or policy barriers. Access is not all that is needed for these cleanups; liability protection is also required for independent cleanups. For example, if a conservation group has funding for cleanup of an abandoned mine site, and the necessary access, they still cannot conduct the cleanup without taking on the liability. This is one example of legal and policy barriers research that the requested staff will do in order to recommend alternatives or different approaches to support these needed cleanups.

Impacts on Population Served:
Most mines were located near lakes and rivers. The contamination originating from the mines affects the local fish population, which many Tribal communities depend on as a food source. Cleaning up these areas will dramatically improve the health of any adjacent surface water and those that use it.

Alternatives Explored:
Ecology works on mine sites on an individual basis, and as time and resources allow. For example, the Holden Mine in Chelan County has a viable PLP that is funding the multi-million dollar cleanup being conducted under Ecology's supervision. However, this approach is not sustainable, nor does it advance the overall cleanup need for mine sites across the entire state. Not every mine site has a viable PLP, and the remote location of these sites reduces the economic cleanup drivers and public awareness of the contamination that needs remediation. To address the large number of mine site cleanups across the state, consistent and dedicated staffing resources are needed.

Consequences of Not Funding This Request:
If this request is not funded, abandoned mine sites will continue to pollute watersheds, leading to contaminated fish water that can negatively impact human health. Tribal leaders remain focused on improving fish health and populations.

Assumptions and Calculations

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

This request expands activity A005 - Clean up the Most Contaminated Sites First (Upland and Aquatic) by adding staffing resources to make progress on the inventory, assessment, and ultimate cleanup of abandoned mine lands. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A005 Clean up the Most Contaminated Sites First (Upland and Aquatic)		
	2019-21	2021-23
FTEs Total	157.80	164.70
001-2 General Fund – Federal	$7,137,000	$7,003,000
001-7 General Fund – Private/Local	$3,004,000	$3,004,000
176-1 Water Quality Permit - State	$1,583,000	$1,583,000
23P-1 Model Toxics Control Operating – State	$40,848,000	$41,717,000
23P-7 Model Toxics Control Operating - Local	$499,000	$499,000
TOTAL	**$53,071,000**	**$53,806,000**

Detailed Assumptions and Calculations:

FINALIZE THE MINING MODEL REMEDY & COLLABORATION EFFORTS ($193,000 and 1.2 FTEs per fiscal year)

Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 direct FTE Environmental Engineer 5 (EE5) to support cleanup and collaboration with partners at abandoned mine sites.

INVESTIGATE FUNDING APPROACHES & WORK TO IDENTIFY AND ELIMINATE BARRIERS ($159,000 and 1.2 FTEs per fiscal year)

Beginning July 1, 2022, and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 direct FTE Environmental Planner 4 (EP4) to research funding alternatives and to identify and eliminate liability concerns hampering cleanup.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		191,868	191,868	191,868	191,868	191,868
B	Employee Benefits		70,416	70,416	70,416	70,416	70,416
E	Goods and Services		8,288	8,288	8,288	8,288	8,288
G	Travel		4,364	4,364	4,364	4,364	4,364
J	Capital Outlays		2,402	2,402	2,402	2,402	2,402
T	Intra-Agency Reimbursements		74,227	74,227	74,227	74,227	74,227
	Total Objects	**0**	**351,565**	**351,565**	**351,565**	**351,565**	**351,565**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
ENVIRONMENTAL PLANNER 4	86,484		1.00	1.00	1.00	1.00	1.00
ENVIRONMENTAL ENGINEER 5	105,384		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.20	0.20	0.20	0.20	0.20
IT APP DEVELOPMENT-JOURNEY			0.10	0.10	0.10	0.10	0.10
	Total FTEs	**0.00**	**2.30**	**2.30**	**2.30**	**2.30**	**2.30**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Most contamination threatens fish, shellfish, and the people who harvest and eat them. Many contaminated sites are in areas that are important to local Tribes, particularly along our state's riverbanks and shorelines. Identifying these sites and their risk is a first step toward cleanup. Tribal

coordination on inventory and assessment will be important. The tributaries of key watersheds, like those of the Upper Columbia, contribute to fish management and recovery – native red band stocks are just one example. The Sanpoil River is one of those tributaries head-watered in a historic mining district of known concern for contamination. Cleaning up additional sites will have a beneficial impact on resources critical to Tribal health, such as subsistence shellfishing, salmon habitat, access, and cultural preservation.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, by protecting nearby communities from direct exposure, as well as the threats posed by spreading contamination.
- Goal 3: Prevent and reduce toxic threats and pollution, by cleaning up orphaned mine sites throughout the state and preventing the further spread of contaminants.
- Goal 4: Protect and manage our state's waters, by preventing the spread of mining contaminants into nearby water bodies and groundwater.

This request provides essential support to the following Governor's Results Washington goals:

- Goal 2: Prosperous Economy, by cleaning up and further protecting remote areas that are used for recreation purposes and stimulate the nearby economy.
- Goal 3: Sustainable Energy and a Clean Environment, by addressing contamination in remote areas, such as national recreation areas, this request ensures that these natural resources are restored and protected from further contamination.
- Goal 4: Healthy and Safe Communities, by removing the threat of exposure to nearby communities through the spread of contamination (including into water) and direct exposure of those using the remote areas for recreation.
- Goal 5: Efficient, Effective, and Accountable Government, by developing a model remedy to more efficiently and effectively cleanup complicated legacy mine sites. Investments in consistent staff resources will allow both the development and consistent deployment of mine model remedies to address the large inventory of orphaned mining sites throughout the state.

This request will allow Ecology to identify abandoned mine sites threatening the environment, the communities near them, and the state's waters. This request will give us information to understand the contamination and viable cleanup strategies and funding options to address it.

Performance Outcomes:

The outcome of this request will be a dedicated, sustainable funding source to support staff focused on the inventory, assessment, and ultimate cleanup of abandoned mine lands.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

This work aligns with the goals of Ecology's Water Quality Program, the Bureau of Land Management, Washington Department of Natural Resources, EPA, U.S. Forest Service, National Parks Service, U.S Fish and Wildlife Service, and Department of the Interior. Ecology expects to collaborate as partners with these intergovernmental agencies to move mine cleanups forward.

Legal or Administrative Mandates:

There is not a legal or administrative mandate for this work, however, the Western Governors' Association policy resolution 2018-11 (https://westgov.org/resolutions/article/policy-resolution-2018-11-cleaning-up-abandoned-mines-in-the-west) calls on Congress to make legislative changes protecting Good Samaritans that voluntarily clean up abandoned mines from potential liability under the Clean Water Act; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); and the Resource Conservation and Recovery Act (RCRA). An update to this resolution is currently being considered by the Western Governors' Association.

Stakeholder Response:

There are a broad range of stakeholders who will benefit from and support this request.

- People in communities across Washington recreate in these remote areas. Cleaning up the old mines will protect them from exposure risk and enhance the natural resource.
- Tribes will benefit from healthier and more abundant fish populations.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

PL KH Abandoned Mine Lands Attachment A.pdf

IT Addendum

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

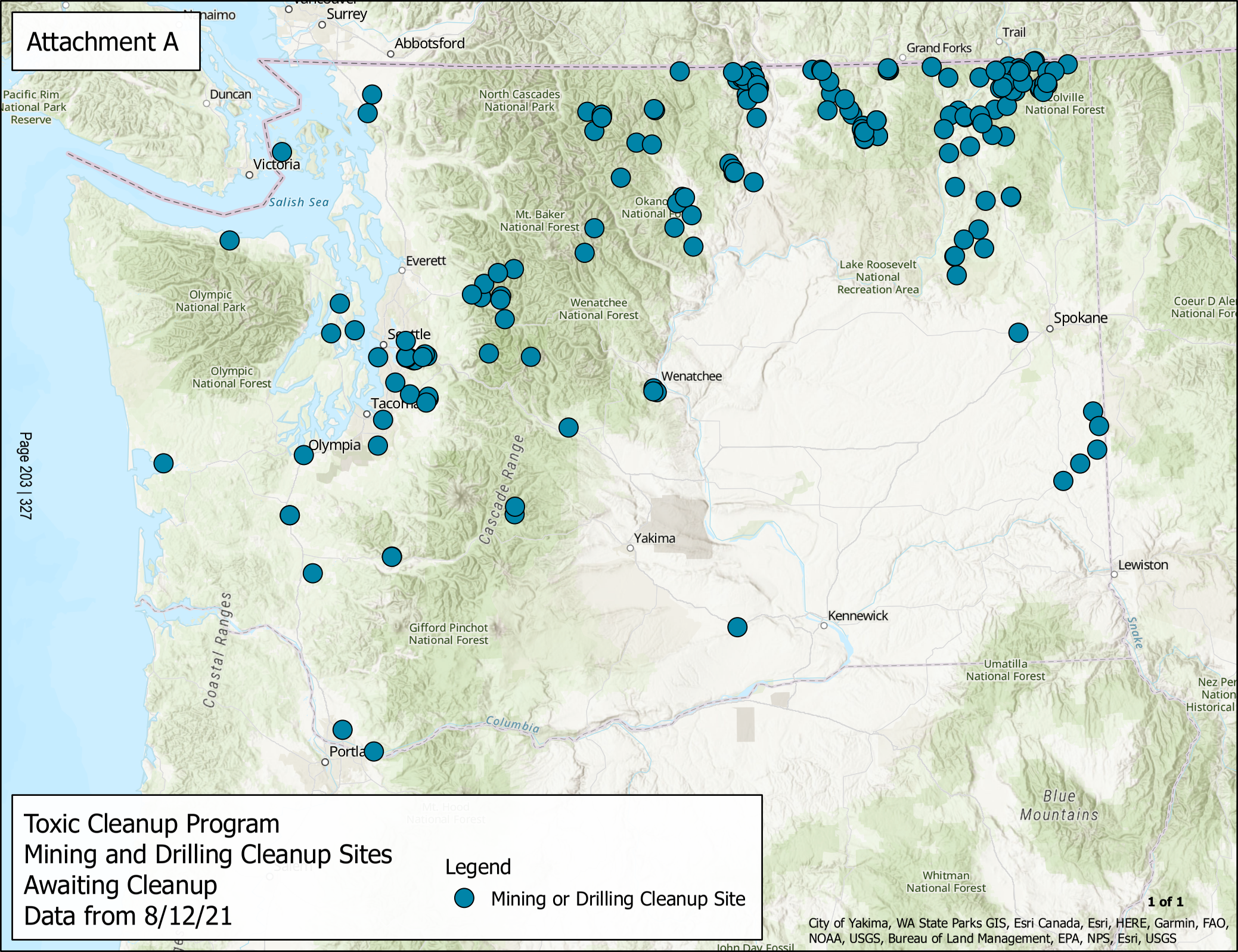
No

Objects of Expenditure

Objects of Expenditure *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$192	**$192**	$192	$192	**$384**
Obj. B	$0	$71	**$71**	$71	$71	**$142**
Obj. E	$0	$8	**$8**	$8	$8	**$16**
Obj. G	$0	$4	**$4**	$4	$4	**$8**
Obj. J	$0	$3	**$3**	$3	$3	**$6**
Obj. T	$0	$74	**$74**	$74	$74	**$148**

Agency Contact Information

Angie Wirkkala
(360) 688-3214
angie.wirkkala@ecy.wa.gov


Attachment A
Surrey
Abbotsford
Trail
Grand Forks
Duncan
Pacific Rim National Park Reserve
North Cascades National Park
Colville National Forest
Victoria
Salish Sea
Mt. Baker National Forest
Okanogan National Forest
Everett
Lake Roosevelt National Recreation Area
Olympic National Park
Wenatchee National Forest
Coeur D Alene National Forest
Spokane
Seattle
Olympic National Forest
Wenatchee
Tacoma
Olympia
Cascade Range
Yakima
Lewiston
Kennewick
Coastal Ranges
Gifford Pinchot National Forest
Snake
Umatilla National Forest
Columbia
Portland
Blue Mountains
Whitman National Forest
Toxic Cleanup Program
Mining and Drilling Cleanup Sites
Awaiting Cleanup
Data from 8/12/21
Legend
Mining or Drilling Cleanup Site
1 of 1
City of Yakima, WA State Parks GIS, Esri Canada, Esri, HERE, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS, Esri, USGS

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Agency Recommendation Summary

Ecology is required to complete annual inspections of the mixed-waste facilities located at Hanford, in accordance with our Performance Partnership Agreement with the U.S. Environmental Protection Agency. Ecology staff currently inspect 29 operating and closure/post-closure facilities each year. However, beginning in 2022, the U.S. Department of Energy will activate six new mixed-waste facilities at Hanford, including the new waste treatment plant, designed to treat 56 million gallons of mixed radioactive/hazardous waste. Ecology is requesting funding for additional staff to complete the required inspections for these new facilities. (Radioactive Mixed Waste Account and Water Quality Permit Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	1.2	**0.6**	1.2	1.2	**1.2**
Operating Expenditures						
Fund 176 - 1	$0	$7	**$7**	$7	$7	**$14**
Fund 20R - 1	$0	$138	**$138**	$138	$138	**$276**
Total Expenditures	**$0**	**$145**	**$145**	**$145**	**$145**	**$290**
Revenue						
20R - 0294	$0	$138	**$138**	$138	$138	**$276**
Total Revenue	**$0**	**$138**	**$138**	**$138**	**$138**	**$276**

Decision Package Description

Under its Performance Partnership Agreement (PPA) with the U.S. Environmental Protection Agency (EPA), Ecology's Nuclear Waste Program is required to complete annual inspections of the mixed-waste facilities located on the Hanford site. Ecology staff currently inspect 15 operating and 14 closure/post-closure facilities each year. The 15 operating facilities store, treat, or dispose of solid and liquid wastes that are a mixture of hazardous chemicals and radioactive elements, while the 14 closure/post-closure facilities, which used to store, treat, or dispose of the same mixed wastes, are now awaiting closure (stabilization of contamination from the former operations), or are being monitored and inspected post-closure.

In their role, Ecology inspectors determine facility compliance with the state's dangerous waste generator regulations and facility treatment, storage, and disposal permits. Work required for these inspections includes, but is not limited to, completing pre-inspection planning, leading and supporting inspections, writing compliance reports, drafting report issuance and response letters, and follow up on all non-compliant facilities, which can include recommendations for formal enforcement.

Thousands of businesses across the country generate non-radioactive hazardous waste each year, and can be inspected every one to five years under simple rules for generator inspections. However, treatment, storage, and disposal (TSD) facilities must be inspected at least every two years under the more complicated TSD regulations, and Ecology's Hanford inspections are made even more complicated by the mixture of radioactivity with the hazardous waste. These types of inspections require a lot time and work to complete them in accordance with EPA standards. When new waste treatment plant facilities come online, it requires even more work for our inspectors, who need to get familiar with the physical layout and processes of the facilities.

Beginning in 2022, the U.S. Department of Energy (USDOE) will activate six new mixed-waste facilities at Hanford, including the new waste treatment plant, to treat 56 million gallons of mixed radioactive/hazardous waste. The new treatment facilities are large – more than a thousand feet long and over 100 feet tall – and have miles of piping that carries liquid waste between different treatment processes. These facilities will be used to mix refractory sand with liquid waste, heat it to high temperature, and then pour it into stainless steel cylinders. When those cylinders cool into a glass that immobilizes the hazardous chemicals and radioactivity, the glass can be safely disposed of in a lined landfill.

Ecology is requesting an additional inspector position to ensure that we can complete the required annual inspection obligations under the PPA for these six new facilities. This position will support the existing dangerous waste compliance program at Hanford by completing the inspections required for the new mixed waste facilities coming online in 2022. They will also coordinate with Ecology's Air Quality and Water Quality Programs to ensure proper implementation of associated permits covering these facilities.

The vast majority of funding for these resources will come from the Radioactive Mixed Waste Account and be reimbursed primarily by USDOE. Ecology has shared this request with USDOE project staff working on the new facilities, and they are supportive of this request.

Impacts on Population Served:

Those that will be impacted by this request include our federal partners (USDOE and EPA) and populations impacted by cleanup of the Hanford site. Hanford is located on the ceded lands of three tribal nations, where they retain treaty rights. Effective Ecology inspections promote the current exercise of treaty rights and promote restoration of future full tribal access to Hanford land. Effective mixed waste, air, and water inspections protect low-income populations in Franklin County (immediately adjacent to Hanford) from emissions of toxic air pollutants and priority pollutants.

Alternatives Explored:
Ecology explored the possibility of assigning this new work to our current inspectors, but those staff are already fully utilized and don't have capacity to take on this work.

Another alternative to this request would be to scale back or delay these inspections and related cleanup work. However, this alternative is not feasible, due to the requirements in our PPA work plan with EPA, which directs the mixed waste inspection work at the Hanford site.

Another alternative considered was to reassign other existing staff on an intermittent basis to try and cover this work. This would not be practical as it would negatively impact other priority environmental work at Hanford, and does not offer the specific level of expertise needed on an ongoing basis to conduct inspections for these six new facilities.

Consequences of Not Funding This Request:
If this request is not funded it would prevent Ecology from inspecting these new facilities on the required annual basis. Less frequent inspections would reduce Ecology's capability to identify and correct issues of non-compliance that could lead to the release (by leak or spill) of hazardous chemicals or radioactivity.

Releases could harm workers, the public, or impact the natural environment. Not inspecting these facilities annually would also place Ecology out of compliance with requirements in the PPA, and could jeopardize our delegation authority to implement the Resource Conservation and Recovery Act (RCRA).

JUSTIFICATION FOR NEW OR INCREASED FEE REQUEST:

1. Fee Name: Mixed Waste Management Fee

2. Current Tax or Fee Rate: $10,283,918 (FY21 Billing)

3. Proposed Rate:

FY 2022: $9,913,160

FY 2023: $10,050,953

4. Incremental Change for Each Year:

FY 2022:

FY 2023: $137,793

5. Expected Implementation Date: July 1, 2022

6. Estimated Additional Revenue Generated by Increase:

FY 2022:

FY 2023: $137,793

7. Justification: The Radioactive Mixed Waste Management Fee is intended to fund Ecology's implementation of the Hazardous Waste Management Act (Chapter 70.300A RCW) at radioactive mixed waste facilities.

8. Changes in Who Pays: No changes, there are three radioactive mixed waste facilities. USDOE (Hanford), US Navy (PSNS), and Perma-Fix Northwest.

9. Changes in Methodology: No change in methodology.

10: RecSum Code: KC

11. Alternatives: No alternatives considered, increasing MWF is appropriate for this.

12. Statutory Change Required? No

Assumptions and Calculations

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

This request expands activity A015 - Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford by adding staff to perform required inspections and compliance work related to six new facilities that USDOE will activate on Hanford starting in 2022 to treat 56 million gallons of mixed radioactive/hazardous waste. Below is a summary of the 2019-21 and 2021-23 funding and FTE levels for the activity this request supports. Administrative Overhead related to this activity is also in the agency's Administration Activity A002, and is not shown in the table below.

A015 - Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford		
	2019-21	2021-23
FTEs Total	12.60	12.85
001-1 General Fund - State	$15,000	$15,000
001-2 General Fund - Federal	$615,000	$679,000
176-1 Water Quality Permit - State	$148,000	$148,000
20R-1 Radioactive Mixed Waste - State	$2,076,000	$2,169,000
216-1 Air Pollution Control - State	$36,000	$36,000
219-1 Air Operating Permit - State	$142,000	$134,000
TOTAL	**$3,033,000**	**$3,181,000**

Detailed Assumptions and Calculations:

Beginning July 1, 2022 and ongoing, Ecology requires salary, benefits, and associated staff costs for 1.0 FTE Environmental Specialist 5 (ES5) to support inspections and compliance work related to six new facilities that USDOE will activate on Hanford starting in 2022. Ecology is required to inspect these new facilities annually, and we need additional staff to ensure we can meet these obligations. The position will support the existing dangerous waste compliance program and complete the additional inspections required for the six new mixed waste facilities coming online in 2022.

This new multi-media inspector position will be funded from the Radioactive Mixed Waste Account (95 percent) and the Water Quality Permit Account (5 percent). Additional Air Operating Permit (AOP) Account (fund 219-1) funding is not needed at this time, and any future change in AOP funding need will be driven by the biennial workload analysis required under RCW 70A.15.2270.

Revenue will be collected through the mixed waste management fee and deposited into the Radioactive Mixed Waste Account to recover the majority of these expenditures.

Workforce Assumptions:

Expenditures by Object		**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
A	Salaries and Wages		78,408	78,408	78,408	78,408	78,408
B	Employee Benefits		28,776	28,776	28,776	28,776	28,776
E	Goods and Services		4,144	4,144	4,144	4,144	4,144
G	Travel		2,182	2,182	2,182	2,182	2,182
J	Capital Outlays		1,201	1,201	1,201	1,201	1,201
T	Intra-Agency Reimbursements		30,334	30,334	30,334	30,334	30,334
	Total Objects	**0**	**145,045**	**145,045**	**145,045**	**145,045**	**145,045**

Staffing							
Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
ENVIRONMENTAL SPECIALIST 5	78,408		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.10	0.10	0.10	0.10	0.10
IT APP DEVELOPMENT-JOURNEY			0.05	0.05	0.05	0.05	0.05
	Total FTEs	**0.00**	**1.15**	**1.15**	**1.15**	**1.15**	**1.15**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits,

and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Timely and comprehensive inspections to identify and address potential environmental and health threats will have direct and critical benefits for Tribes, indigenous populations, and communities of color in the area. Hanford lies on ceded lands of the Yakama Nation, Nez Perce Tribe, and Confederated Tribes of the Umatilla Indian Reservation. The Wanapum Band is not a federally-recognized tribe, but state law recognizes the Tribes right to permits for taking salmon and other freshwater food fish for ceremonial and subsistence purposes. These Tribes and Bands use the natural resources on and adjacent to the Hanford site, and contamination from dangerous waste poses a potential threat to people hunting, gathering, and fishing in the area.

The EPA Environmental Justice Screening tool (EJSCREEN) highlights a number of key demographic indicators for populations around the Hanford. The Hanford site is located in Benton County, where the low-income population is 30 percent, slightly above the state average of 27 percent. The Benton County population is 21 percent Latino/Hispanic and over 28,000 people (16 percent) speak Spanish in the home. In Franklin County, across the Columbia River from the Hanford site, the county population is 59 percent people of color, which is significantly higher than the state average of 31 percent. The Hispanic/Latino population makes up 53 percent of the county, and 45 percent of the county speaks Spanish in the home. Compared to the state, Franklin county also has a significant low-income population (38 percent vs. 27 percent), and people with less than a high school education are more than double the state average (25 percent vs. nine percent).

This request addresses health disparities by reducing environmental and health impacts for overburdened communities and underserved populations. By inspecting Hanford facilities, Ecology can ensure compliance with regulations that avoid releases of hazardous substances to the environment, thereby avoiding impacts to these communities. Ecology meets regularly with tribal nations and directly discusses the permitting of Hanford facilities. Furthermore, in alignment with Ecology's commitment to environmental justice and Title VI compliance, information related to the Hanford, including environmental and health awareness material, is presented in formats that are culturally effective and linguistically appropriate.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's Strategic Plan:

- Goal 1: Support and Engage Our Communities, Customers, and Employees.
- Goal 3: Prevent and Reduce Toxic Threats and Pollution.

This new position will ensure compliance with air, dangerous waste, and water permits for new facilities being activated by USDOE on the Hanford site. The position will ensure that inspections are completed in coordination with Ecology's Air Quality and Water Quality Programs, will produce high quality, timely, and consistent inspection reports for compliance work on the Hanford site.

This request also provides essential support to the Governor's Results Washington Goal 3: Sustainable Energy and a Clean Environment by improving Ecology's ability to:

- Support regulation of air toxics emissions.
- Treat radioactive hazardous waste.
- Treat wastewater before it's reinjected into the groundwater.

Performance Outcomes:

The outcome of this request will be the additional staffing needed to perform inspections and compliance work for six new facilities that USDOE will activate on Hanford starting in 2022.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

Ecology's work at Hanford is of high interest to tribal, regional, county, local city governments, and the state. The benefit of this request to these entities is improved regulatory oversight and operations of the permitted facilities at Hanford, which lessens the threat of an environmental impact due to improper management of radioactive mixed wastes or dangerous wastes. The primary customers of these inspections are Hanford's owner, USDOE, and the contractors/operators of the mixed waste facilities. Ecology has shared this request with USDOE project staff working on the new complexes, and they are supportive of this request.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

Non-governmental stakeholders include the Hanford Advisory Board, representing diverse constituencies throughout Washington. Ecology presents inspection results at the Board meeting and, in the past, has received support for those inspections. Hanford watchdog groups, such as Hanford Challenge and Heart of America Northwest and conservation groups, such as Columbia Riverkeeper, support Ecology in ensuring that work plans and facilities comply with provisions established to protect human health and the environment.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$79	**$79**	$79	$79	**$158**
Obj. B	$0	$29	**$29**	$29	$29	**$58**
Obj. E	$0	$4	**$4**	$4	$4	**$8**
Obj. G	$0	$2	**$2**	$2	$2	**$4**
Obj. J	$0	$1	**$1**	$1	$1	**$2**
Obj. T	$0	$30	**$30**	$30	$30	**$60**

Agency Contact Information

Spencer Good
(509) 537-6749
spgo461@ecy.wa.gov

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Department of Ecology
2022 Supplemental Operating Budget
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Agency Recommendation Summary

The health of Puget Sound is significantly degraded by human sources of excess nutrients that cause low dissolved oxygen, disrupt the food chain, and imperil our orca and salmon populations. With one-time funding provided in fiscal year 2020, Ecology developed a Nutrients General Permit for Puget Sound wastewater treatment plants to reduce nutrient pollution using a coordinated, transparent, public process. The final permit will be issued by the end of 2021, and Ecology requires staff to administer the permit and provide technical assistance to permittees. This request supports orca and salmon recovery and protection, the Puget Sound Action Agenda's Marine Implementation Strategy, and the Puget Sound Nutrient Source Reduction Project. Related to Puget Sound Action Agenda Implementation. (Water Quality Permit Account and Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	3.5	**1.75**	3.5	3.5	**3.5**
Operating Expenditures						
Fund 176 - 1	$0	$439	**$439**	$439	$439	**$878**
Fund 23P - 1	$0	$550	**$550**	$0	$0	**$0**
Total Expenditures	**$0**	**$989**	**$989**	**$439**	**$439**	**$878**
Revenue						
176 - 0286	$0	$439	**$439**	$439	$439	**$878**
Total Revenue	**$0**	**$439**	**$439**	**$439**	**$439**	**$878**

Decision Package Description

The 2020 Legislature provided one-time funding for Ecology to develop a Puget Sound Nutrients General Permit (PSNGP) to help address excess nutrients from Puget Sound municipal wastewater treatment plants (WWTP). A general permit provides a foundation for numerous dischargers to work together toward coordinated, successful implementation of nutrient controls across shared water bodies, accomplishing Sound-wide improvements sooner than would be possible with individual permits alone. Ecology estimates that the final permit will be ready to implement by December 2021, and will need additional resources to issue and administer the permit.

Background: Excess nutrients lead to an unhealthy Puget Sound

Science and modeling show human sources of nutrients are leading to low dissolved oxygen levels and unhealthy water quality in Puget Sound. High nutrient levels act like a fertilizer, causing excessive algal and plant growth. More plants sound like a good thing, but when these algae and plants die, their decomposition uses up oxygen. Just like humans, aquatic organisms need oxygen to survive and thrive. Because of excess nutrients, many parts of Puget Sound may not have enough oxygen for marine life to survive.

Other signs of nutrient pollution and an unhealthy Puget Sound include:

- Intensified fish kill events in sensitive areas of Puget Sound.
- Increased acidity of the water, which threatens shellfish.
- Marine food web shifts that prevent salmon and orca recovery.
- Increases in harmful algal blooms and nuisance species, like jellyfish.

Over the past few years, the Governor and Legislature have made significant investments toward orca and salmon recovery. In 2019, the Legislature supported recommendations from the Southern Resident Orca Task Force to accelerate efforts to reduce toxic pollution and improve nutrient removal through future enhancements to wastewater treatment processes. The Task Force also recognized the stand-alone importance of managing nutrient pollution and requested Ecology provide nutrient reduction recommendations in fall 2019. Those recommendations included developing a National Pollutant Discharge Elimination System (NPDES) permit framework for managing nutrients in wastewater treatment in Puget Sound.

Process: Coordinated approach to reducing nutrients

The Puget Sound Nutrient Source Reduction Project (https://ecology.wa.gov/Water-Shorelines/Puget-Sound/Helping-Puget-Sound/Reducing-Puget-Sound-nutrients/Puget-Sound-Nutrient-Reduction-Project) is a collaborative effort to address human sources of nutrients. Building on nearly two decades of study, Ecology convened the Puget Sound Nutrient Forum in 2018 to engage regularly with stakeholders and the public on the latest science to find solutions to nutrient pollution in Puget Sound.

Since convening, the Forum has hosted regional scientists to present their research on nutrient impacts. Ecology has also worked with the Forum to develop modeling scenarios to understand when, where, and how these impacts occur. The Forum and scientific community are integral in helping develop solutions that reduce nutrients to Puget Sound.

What we have learned from modeling

The state's nutrient reduction strategy is guided by the results of Ecology's Salish Sea modeling. The Salish Sea Model (https://ecology.wa.gov/Research-Data/Data-resources/Models-spreadsheets/Modeling-the-environment/Salish-Sea-modeling) tests the outcomes of different scenarios to help us identify potential solutions for improving Puget Sound water quality. The modeling results, which were phase one of modeling, was peer-reviewed and published in the 2019 Bounding Scenarios Report (https://apps.ecology.wa.gov/publications/documents/1903001.pdf). This shows that:

- WWTPs are the dominant source of land-based dissolved inorganic nitrogen (DIN) discharges to Salish Sea waters, and they contribute the largest proportion (92 percent) of anthropogenic (human sources) DIN loads to Washington waters during the low flow season. (This is consistent with the findings from Mohamedali, T. M. Roberts, B. Sackmann, and A. Kolosseus. 2011a. Puget Sound dissolved oxygen model nutrient load summary for 1999-2008. Washington Department of Ecology. Olympia, WA. Publication No. 11-03-057. https://fortress.wa.gov/ecy/publications/SummaryPages/1103057.html)
- In addition to local impacts from direct discharges, excess nutrients discharged from domestic WWTPs in one location add to dissolved oxygen impairments in other locations due to the water exchange that occurs between basins.
- Human sources of nutrients in watersheds also contribute to this problem, and we need nutrient reductions from both WWTPs and watersheds to improve marine water quality and meet dissolved oxygen standards so we can protect the Puget Sound.

The second phase of modeling (2021-2022) will inform how we set nutrient load targets in the Puget Sound Nutrient Reduction Plan, which will help inform the basis for future water quality based effluent (wastewater discharge) limits. This plan focuses on reducing human sources of nutrients, including WWTPs and watershed sources, and a draft will be released for public comment in late 2022. Ecology will continue to engage the Forum and solicit feedback on elements of this plan as it is developed.

Using science to find solutions

Watershed sources

The near-term strategy to address watershed sources of excess nutrients is to strengthen and focus ongoing efforts to identify and control pollution sources, such as agricultural runoff, septic systems, unmanaged stormwater, and point sources. Over the long-term, Ecology will develop science and watershed models to help prioritize and adaptively manage efforts to reduce watershed sources of nutrients.

Wastewater treatment plants

A general permit is the best tool for controlling nutrients from WWTP discharges. Ecology sought public input on whether to use individual permits or a general permit to control nutrients, and in January 2020, decided a Nutrients General Permit would be the best tool to implement legal mandates necessary to address nutrients from the 58 publicly-owned domestic WWTPs that discharge to Puget Sound. We formed a representative advisory committee to develop recommendations for this general permit. More information on the general permit can be found here: Nutrients General Permit webpage (https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Nutrients-Permit).

The general permit:

- Creates a single, coordinated public engagement process and allows flexibility for communities to collectively address nutrients, including the possibility of developing a trading program for a future permit cycle.
- Places WWTPs on a shared schedule, rather than staggered permit reissuance schedules for individual permits.
- Creates an opportunity to develop consistent facility data by aligning monitoring requirements for permittees.

Issuing individual permits to control nutrients, instead of using a general permit, would take more time and effort, and would not achieve as good an outcome due to staggered implementation.

Ecology envisions the initial version of the general permit will prepare permittees for future nutrient reduction requirements through:

- Effluent monitoring requirements designed to track annual nutrient loads discharged.
- Optimization of existing treatment technology to remove as much nitrogen as possible during the permit term without major facility upgrades.
- Early planning to determine treatment alternatives for meeting future effluent limits.

For more information about the new PSNGP, please see Ecology's Fact Sheet: Focus on: Nutrients General Permit Process (wa.gov) at https://apps.ecology.wa.gov/publications/SummaryPages/2010026.html.

Impacts on Populations Served: How the nutrients general permit will benefit Washington
It has taken decades for Puget Sound to deteriorate to this point, and it will take a long time to restore it. The general permit will focus initially on monitoring, optimizing operations of existing treatment processes, and planning for future improvements. Improvements to infrastructure will require years and capital support; but it starts with having this permit in place. Making these improvements helps ensure future generations will be able to enjoy Puget Sound as a place for recreation, fishing, shellfishing, and wildlife viewing.

Alternatives Explored:
Inaction is not an option. Studies shows many parts of Puget Sound have dissolved oxygen levels that are below what marine life needs to thrive. Local municipalities and Ecology are legally obligated to enhance WWTPs to remove excess nutrients that contribute to dissolved oxygen impairments, and comply with the federal Clean Water Act and Washington's Water Pollution Control Act.

Funding for this work involves some needed changes and some alternatives. RCW 90.48.465 directs Ecology to establish fees to cover the cost of issuing and administering water quality permits. But that same statute limits the amount that can be charged to municipal wastewater dischargers to $0.18 per month, per residential equivalent (RE) ($2.16/year per RE). This rate has been capped in statute since 2009, creating a significant underpaying category within the permits we issue.

This request is related to agency request legislation to remove the fee cap in statute so that PSNGP fees can be assessed for this work. Without a statutory change, Ecology would not be able to charge the appropriate permittees to cover the costs to support PSNGP implementation. However, there is sufficient fund balance in the Water Quality Permit Account to cover the additional costs for a couple biennia, due to the savings acquired from the 2019-21 biennium hiring and contract freezes, should the request legislation not be enacted. Alternately, other state funding could support this ongoing request.

Consequences of Not Funding This Request:
Puget Sound's ecosystem is suffering from low oxygen, acidification, and a disrupted food chain. This results in very visible effects of algae blooms, fish kills, and worse habitat for salmon and orcas. Many conservation and environmental organizations are eager to see improvements in the Sound and have already initiated legal action against Ecology, including a petition to establish technology-based nutrient limits for municipal WWTPs by rule.

By working through the general permit, Ecology will make steady, long-term progress toward Puget Sound's recovery and avoid the painful and costly legal pathway that inaction would likely bring. If this request is not funded, Ecology would have to prioritize this work against all the other water quality issues and stop doing other core, but still critical, work accordingly.

JUSTIFICATION FOR NEW OR INCREASED FEE REQUEST:

1. Fee Name: Water Discharge Permit Fees

2. Current Tax or Fee Rate: The fee for domestic wastewater treatment plants for all water discharge permits is capped in RCW 90.48.465 at $2.16 per residential equivalent (RE) per year ($0.18/RE/month). The statute must be changed for Ecology to charge the Puget Sound Nutrient General Permit (PSNGP) fee in WAC 173-224-040 because all permittees are already charged the fee cap amount.

3. Proposed Rate:

FY 2022: $0.31 per residential equivalent; limited by fee cap in RCW 90.48.465

FY 2023: $0.31 per residential equivalent; limited by fee cap in RCW 90.48.465

4. Incremental Change for Each Year:

FY 2022: none

FY 2023: none

5. Expected Implementation Date: July 1, 2023 pending legislation being passed.

6. Estimated Additional Revenue Generated by Increase:

FY 2022: $0

FY 2023: $439,000

7. Justification: RCW 90.48.465 directs Ecology to establish fees to cover the cost of issuing and administering water quality permits. That same statute limits the amount that can be charged to municipal wastewater dischargers for all permits at $2.16/RE/year. All dischargers are already at this fee cap. The rate has been capped in statute since 2009, creating a significant underpaying category within the permits we issue. This request is related to agency request legislation to remove the fee cap from statute. Unless the fee cap on what municipal wastewater dischargers pay is adjusted, Ecology will not be able to charge the appropriate permittees to cover the costs to support PSNGP implementation.

8. Changes in Who Pays: None

9. Changes in Methodology: None

10: RecSum Code: KB

11. Alternatives: If legislation is not passed to address the fee cap in RCW 90.48.465, other state funds would be needed to fund this work ongoing since Ecology will not be able to charge municipal wastewater dischargers for the new work as their fees are already assessed at the cap under current law.

12. Statutory Change Required? Yes. The fee cap for municipal wastewater discharges must be addressed to allow for the fee increase needed to cover the costs in this request.

Assumptions and Calculations

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

The enacted 2020 Supplemental Budget provided one-time General Fund-State dollars for Ecology to develop the PSNGP. This request expands activity A032 - Prevent Point Source Water Pollution to support implementation of the PSNGP ongoing. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A032 - Prevent Point Source Water Pollution		
	2019-21	**2021-23**
FTEs Total	92.85	100.10
001-1 General Fund - State	$1,160,000	$114,000
001-2 General Fund - Federal	$1,070,000	$305,000
001-7 General Fund - Private/Local	$878,000	$0
176-1 Water Quality Permit Account - State	$21,908,000	$21,228,000
21H-1 Wastewater Treatment Plant Op Cert - State	$0	$511,000
23P-1 MTC Operating - State	$1,370,000	$1,904,000
TOTAL	**$26,386,000**	**$24,062,000**

Detailed Assumptions and Calculations:

Revenue
Assuming 2022 legislation is passed to remove the fee cap for municipal wastewater dischargers in RCW 90.48.465, Ecology will be able to charge for the additional costs in this request starting in Fiscal Year 2023. The recently updated fee schedule in WAC 173-224-040 includes an annual fee of $0.31 per residential equivalent for the PSNGP. If legislation is enacted to allow Ecology to charge WWTPs for the additional costs in this request, the estimated annual increase in revenue is $439,000 beginning in Fiscal Year 2023.

Expenditures
Beginning July 1, 2022, and ongoing, funded by permit fees from the Water Quality Permit Account (fund 176), PSNGP implementation will require:

- 1.0 FTE Environmental Engineer 5 (EE5) to lead general permit implementation. The process requires working with an internal technical team of regional permit managers; providing input and technical review of nutrient model scenario results; permit modification expertise and assessing existing permit requirements; developing technical guidance; and continued research of wastewater treatment technologies, including optimizing existing technologies for nutrient removal. The EE5 will also consult with experts in the field; provide expertise in responding to permittee, stakeholder, and industry inquiries and discussions; and develop requirements learned from the scientific analysis to be included in modifications to the general permit.
- 1.0 FTE Environmental Specialist 3 (ES3) to coordinate administration of the permit and support the public education and outreach

process, including guidance documents, permittee and stakeholder outreach, and collecting feedback from permittees of the new permit. The ES3 will also support the permit modification process to help draft and edit the general permit, perform literature reviews, conduct supporting research, and assist the EE5 in responding to inquiries.

- 1.0 FTE Environmental Specialist 4 (ES4) to serve as a Roving Operator, providing assistance to permittees on plant optimization to remove nutrients, training, and assist with troubleshooting.

In addition, Ecology will require one-time funding in Fiscal Year 2023 from the Model Toxics Control Operating Account (MTCA Operating) for:

- Contractual support for $400,000 to complete the modeling work for the Nutrient Reduction Plan to assign load allocations and wasteload allocations necessary to meet water quality standards. This work will help identify waste load allocation scenarios for point source discharges to Puget Sound using the Salish Sea model and develop a watershed model to identify and prioritize the watershed source reductions. It will provide more refined model runs for marine dischargers and help determine sources of nutrients in each of the watersheds discharging to Puget Sound. This will inform water quality based effluent limits in future versions of the PSNGP.
- Contractual support for $150,000 to an organization (e.g., Association of Washington Cities) for elected official outreach to provide communication tools that support decision makers. Partnering to ensure that local decision-makers have clear messages to build community support for wastewater investments has served us well in the past (e.g., initial launch of municipal stormwater permits in 2007).

Ecology is requesting MTCA Operating funding for the contractual support because these critical costs are not authorized uses of the Water Quality Permit Account under RCW 90.48.465.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		237,564	237,564	237,564	237,564	237,564
B	Employee Benefits		87,186	87,186	87,186	87,186	87,186
C	Personal Service Contract		550,000				
E	Goods and Services		12,432	12,432	12,432	12,432	12,432
G	Travel		6,546	6,546	6,546	6,546	6,546
J	Capital Outlays		3,603	3,603	3,603	3,603	3,603
T	Intra-Agency Reimbursements		91,904	91,904	91,904	91,904	91,904
	Total Objects	**0**	**989,235**	**439,235**	**439,235**	**439,235**	**439,235**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
ENVIRONMENTAL ENGINEER 5	105,384		1.00	1.00	1.00	1.00	1.00
ENVIRONMENTAL SPECIALIST 3	61,224		1.00	1.00	1.00	1.00	1.00
ENVIRONMENTAL SPECIALIST 4	70,956		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.30	0.30	0.30	0.30	0.30
IT APP DEVELOPMENT-JOURNEY			0.15	0.15	0.15	0.15	0.15
Total FTEs		**0.00**	**3.45**	**3.45**	**3.45**	**3.45**	**3.45**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Contractual costs are $550,000 one-time from MTCA Operating Account.
Goods and Services are the agency average of $4,144 per direct program FTE.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Ecology is committed to meaningful and effective community engagement. This general permit for WWTPs will benefit communities located in the greater Puget Sound area, an area with considerable diversity, both culturally and economically. Improving the health of the Puget Sound and the species within it supports social, environmental, and economic health for all those who live, work, worship, and play there.

Ecology encourages full and fair participation by all potentially affected communities through our public permit development process. To comply

with Title VI nondiscrimination obligations, and to promote environmental justice best practices for meaningful community engagement, Ecology will ensure effective communication and outreach that addresses linguistic, cultural, literacy, technology, and accessibility barriers. Ecology maintains a contract for 24/7 interpretation services, and if determined necessary, Ecology will translate written information into the appropriate languages for potentially affected communities.

The water quality improvements tied to this permit will have key benefits for Tribes and indigenous populations, disproportionately impacted communities, and potentially vulnerable populations. The recovery of Puget Sound and the related salmon and orca populations have significant cultural, social and economic, and dietary importance for many people. Fishing and consuming fish are traditional practices and a key protein source for many of Washington's Tribal, Asian-American, Russian, Latino/Hispanic, and immigrant populations. To ensure consideration of highly affected populations, the proposed draft permit requires assessment of how the requirements will affect overburdened communities, address disproportionate impacts, and prioritize benefits to those most at risk.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing all of the goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities and customers through a transparent and inclusive permitting process. Ecology incorporated feedback from public comments received on the preliminary draft permit released earlier this year and adjusted the pace and path for wastewater treatment plants with the smallest nutrient loads reflecting their capacity and ability to implement nutrient reduction requirements over the permit term. This will help mitigate financial impacts to communities with a smaller rate base.
- Goal 2: Reduce and prepare for climate impacts by reducing the amount of nutrients discharged to the Sound to improve water quality, which in turn will help minimize climate impacts and protect and restore Puget Sound.
- Goal 3: Prevent and reduce toxic threats and pollution through advanced treatment technologies designed to remove nutrients and also removing other contaminants of concern so that water quality is improved.
- Goal 4: Protect and manage our state's waters by implementing a collaborative and innovative approach to finding holistic solutions that reduce pollution and improve water quality.
- Goal 5: Protect and restore Puget Sound by moving toward setting numeric limits on nutrient loading in Puget Sound that will improve dissolved oxygen conditions to help restore the natural cycles of the food web and support recovery of shellfish, salmon, and orcas.

This request provides essential support to the Governor's Results Washington goals.

- Goal 3: Sustainable energy and a clean environment by implementing Puget Sound nutrient control requirements in a general water quality permit that will improve dissolved oxygen levels in the Sound to:
  - Improve the health of aquatic life.
  - Protect and improve the health of orca and salmon in the Sound.
- Goal 5: Efficient, effective, and accountable government by implementing a PSNGP that works together with existing individual permit requirements. A general permit has efficiencies over individual permits through consolidated stakeholder involvement and public comment periods, and by establishing a foundation for many different dischargers to work together toward successful implementation of nutrient controls across Puget Sound.

Performance Outcomes:

Over time, this permit will reduce nutrient levels in Puget Sound and increase dissolved oxygen levels. The immediate outcome of this request will be a general permit that keeps nutrient discharges from domestic WWTPs at current or reduced levels so the problem does not get worse while Ecology finalizes the Nutrient Reduction Plan. At the same time, we will complete the modeling work for setting numeric limits that will be incorporated over time. Future permit cycles will establish the pace and path for meeting water quality based limits through compliance schedules.

Other Collateral Connections

Puget Sound Recovery:

This request supports Puget Sound Action Agenda implementation through the following:

- Regional Priority CHIN2.5 - Address and manage water quality parameters, including excess nutrient loading by establishing and enforcing water quality standards that manage excess nutrient loading for all sources. It also supports the Puget Sound Nutrient Reduction Project (https://ecology.wa.gov/Water-Shorelines/Puget-Sound/Helping-Puget-Sound/Reducing-Puget-Sound-nutrients/Puget-Sound-Nutrient-Reduction-Project) and associated Marine Water Quality Implementation Strategy, to address human sources of nutrients impacting the Sound.
- Strategy 14 - Prevent, Reduce, and/or Eliminate Pollution from Centralized Wastewater Systems, specifically Sub-strategy 14.1 -

Reduce the concentrations of contaminant sources of pollution conveyed to wastewater treatment plants through education and appropriate regulations, including improving pretreatment requirements.

- Ongoing Program OGP_ECY34 - Water Quality - Control Stormwater and Wastewater Pollution.
- Orca Task Force Recommendation 39 - Develop a National Pollutant Discharge Elimination System permit framework for advanced wastewater treatment in Puget Sound to reduce nutrients in wastewater discharges to Puget Sound by 2022.

State Workforce Impacts:

N/A

Intergovernmental:

Stakeholders (including Tribal, county, and city governments) participating in the Puget Sound Nutrient Reduction Forum are actively engaged in developing the PSNGP. The broader Puget Sound Nutrient Reduction Project has been proceeding since early 2018, and ongoing stakeholder involvement occurs through the Nutrient Forum.

Ecology staff have routine communications with domestic wastewater treatment permittees associated with existing permit implementation, and permittees will require additional technical support from Ecology to help them comply with the PSNGP. Most WWTPs are owned and operated by municipalities or public utility districts. Infrastructure costs associated with these facilities are primarily borne by the public through local sewer rates. A general permit will allow for a deliberate and durable process to define and allocate infrastructure costs. A general permit may also create more efficient and cost effective options for municipalities to address nutrients under the federal Clean Water Act and state permitting requirements.

Tribal treatment plants discharging to Puget Sound are regulated by the U.S. Environmental Protection Agency (EPA) and not directly affected by this request.

Legal or Administrative Mandates:

Ecology is required by the federal Clean Water Act and state Water Pollution Control Act to control discharges that cause or contribute to water quality impairments.

Ecology was petitioned in November 2018 to establish, by rule, stringent, technology-based limits for nitrogen and phosphorus on discharges from Puget Sound domestic wastewater facilities. That approach would have been more time-consuming and a less efficient way to proceed. In January 2020, Ecology prevailed in its denial of the rulemaking petition with the Thurston County Superior Court, which was appealed, and the Court of Appeals upheld our decision in June 2021.

We are proposing technology and water quality based limits as required by Chapter 90.48 RCW, the Clean Water Act, and NPDES regulation in the draft permit. Given the identified water quality impairments, Ecology cannot issue a legally defensible permit (existing individual or proposed general) without including these requirements.

Stakeholder Response:

Non-governmental stakeholders, including environmental non-profit organizations and Puget Sound residents concerned about the health of Puget Sound (including salmon and orcas), expect immediate actions to reduce nutrients. Ecology anticipates their support for this work. The agricultural community often feels targeted as a source of excess nutrients in water, so they will likely support urban point source dischargers of domestic sewage being required to do their part to restore Puget Sound water quality. Utilities are concerned with the additional cost the permit and future required technology improvements would have on ratepayers.

Changes from Current Law:

Ecology is submitting related agency request legislation to allow recovery of costs from the PSNGP in RCW 90.48.465. The fee cap for municipal wastewater dischargers must be removed if Ecology is to charge permittees for the additional costs in this request. However, if request legislation is not enacted, there is sufficient fund balance in the Water Quality Permit Account to cover the additional costs of this request for a couple biennia, due to the savings acquired from the 2019-21 biennium hiring and contract freezes.

State Facilities Impacts:

Of the nearly 70 wastewater treatment plants that discharge to Puget Sound, two are operated by the Department of Corrections and one by Washington State Parks. Impacts to these state agencies will depend on the specific nutrient reduction requirements written into either a general or individual permit. These smaller plants will benefit from the common foundation that a general permit provides, such as potential future nutrients water quality trading.

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$238	**$238**	$238	$238	**$476**
Obj. B	$0	$87	**$87**	$87	$87	**$174**
Obj. C	$0	$550	**$550**	$0	$0	**$0**
Obj. E	$0	$12	**$12**	$12	$12	**$24**
Obj. G	$0	$6	**$6**	$6	$6	**$12**
Obj. J	$0	$4	**$4**	$4	$4	**$8**
Obj. T	$0	$92	**$92**	$92	$92	**$184**

Agency Contact Information

Jeff Killelea
(360) 407-6460
jkil461@ecy.wa.gov

Agency Recommendation Summary

In 2021, the Legislature appropriated funding in both the operating and capital budgets for Ecology to administer the pilot grant program for water banking strategies to preserve the state's agricultural water supply, maintain productive agricultural lands, protect environmental interests, and support the rural economy. However, because grant funding was appropriated in both budgets, it creates some challenges in being able to effectively use this funding to meet local water needs. To address these challenges and ensure we can effectively and efficiently administer grants during this pilot, Ecology is requesting a technical adjustment to move the operating budget portion of pass through funding to the capital budget so that it can be used in combination with the existing capital budget appropriation for this pilot grant program. (General Fund – State)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Operating Expenditures						
Fund 001 - 1	($4,500)	($4,500)	**($9,000)**	$0	$0	**$0**
Total Expenditures	**($4,500)**	**($4,500)**	**($9,000)**	**$0**	**$0**	**$0**

Decision Package Description

Background
Over the past 100 years, water laws in Washington have changed, as have the number of users and the ways in which water is used. As communities grew, the demand for water has increased, and court decisions have shifted the balance between competing interests, while overall water supply remained relatively static. In particular, significant growth in Washington's population and economy has increased the overall value of water and the competition between different (agriculture, instream flow, recreational, commercial, domestic supply, etc.) users.

Water banks are one tool to facilitate the voluntary exchange of water rights. They're becoming more common throughout Washington, as it becomes increasingly difficult to obtain new water rights to meet growing demands. Water banks exist in many forms and in most western states. Although the approaches may differ, they all share a common goal: to move water between buyers and sellers to where it is needed most.

In general, a water bank provides a mechanism in which a water right holder can "deposit" a water right with a public or private entity (the bank) that can make the water rights available for another person or use in a downstream location. The transactions can be either permanent or temporary. The concept underlying water banks is that facilitating the purchase and sale of water rights through a free market system can help balance the demand for water and lead to a more efficient allocation of water resources.

While anyone may purchase a full or partial water right directly from a willing seller, water banks can streamline the process, provide protection from relinquishment, and allow for greater flexibility. This is especially helpful when a large water right is reallocated to several smaller uses over a large area, which often takes many years to complete. In other cases, water banking is used more like a water swap to transfer one water right to one new water use when the existing right cannot be directly changed to the new use.

One recent development in the competition to secure water supply and own water rights has been the threat of out-of-state purchases by private investment firms. Ecology, the Legislature, the Governor, and public stakeholders share in the concern that after taking ownership of the water right, an out-of-state purchaser will transfer the water right to a use that is not consistent with Washington's priorities. Specifically, there is concern that agricultural water rights will be purchased by an out-of-state entity and transferred from an agricultural purpose to commercial and/or a domestic supply purpose, which would take agricultural lands out of service, fueling further development of the rural landscape and eroding environmental quality statewide.

To address these concerns, in 2021 the Legislature authorized Ecology to create a water banking pilot grant program to establish local water banks to preserve the agricultural water supply, maintain productive agricultural lands, protect environmental interests, and support the rural and local economy. Funding to support the pilot grant program was provided in both section 302(32) of the 2021-23 operating budget ($9 million from General Fund-State (GF-S)), and section 3112 of the 2021-23 capital budget ($5 million from State Building Construction Account (SBCA)). This pilot grant program will allow public entities in Washington to purchase agricultural water rights and protect them from non-state interests that would transfer use to a purpose that would take agricultural lands out of service, develop the rural landscape, and degrade the local environment.

The Legislature directed that the pilot program focus on developing water banks in rural counties, as defined in RCW 82.14.370(5)), that have the headwaters of a major watershed within their borders, and that the grants be only for water banking strategies within the county of origin. Grants issued under this pilot program must be used for purposes that support agricultural use, instream flow for fish and wildlife, and preserve water rights for use in the county of origin through the primary and secondary reaches of the water right.

Please note, in addition to the pass through funding appropriated for these grants, the Legislature also provided $1 million in section 302(33) of

the 2021-23 operating budget for Ecology to develop and implement the pilot program. The Legislature also appropriated $40,000 in section 302(31) for Ecology to develop recommendations and implement actions under existing authority to modify the process for the review of water banks to ensure that key information is made available to the public. Ecology must prepare and issue a report to the Legislature regarding the outcome of implementing this pilot program. These two appropriations will remain in the operating budget, and are not part of this request.

Problem
While the Legislature provided the funding needed to establish this pilot program and award grants for implementing water banking strategies to meet local water needs, the mechanisms by which the funding was provided create a number of challenges for being able to offer this funding and ensure that the it can be successfully utilized under current time constraints. Because it will take time during fiscal year 2022 for Ecology's Water Resources Program to develop the pilot program (criteria, application process, etc.), solicit for projects, and get funding agreements in place, it is unlikely that recipients would be able to spend awarded funding by June 30, 2022, which would be required for half of the grant funding available for the pilot from the operating budget since GF-S is a single-year appropriation.

Furthermore, the lifecycle of these water banking grants, and need to spend the awarded funding, will likely extend beyond a single biennium, requiring the ability to have the funding provided available in future biennia to ensure that the supported work can be completed. If the $9 million portion of this pass through funding remains in the operating budget, it will not be able to cross fiscal year and biennial lines to support the full length of these grants. Without this ability, funds will either go unspent, or Ecology will only be able to offer grants for projects that can be completed by the end of each fiscal year, which will likely limit participation in the grant program, and result in not achieving the goals that the Legislature had intended.

Solution
To address this timing issue, and ensure that Ecology can effectively develop and administer this pilot grant program, Ecology is requesting that the $9 million in pass through funding appropriated in the operating budget be shifted to the capital budget so that it can be used in combination with the existing capital budget appropriation for this pilot grant program. To accomplish this shift, Ecology is proposing the following steps, modeled after how the Legislature provided funding to the Department of Fish and Wildlife for the Hazard Fuel Reductions, Forest Health and Ecosystem Improvement (300000665) project in section 3266 of the 2021-23 capital budget.

- **Step 1:** Create a new dedicated account for water banking grants as part of the 2022 supplemental operating budget (suggested account title: Water Banking Account – State). Suggested language for operating budget bill (modeled after section 958 of the 2021-23 operating budget bill):

  - *A new section is added to chapter 43.79 RCW to read as follows:*

    The water banking account is created in the state treasury. Revenues to the account shall consist of appropriations and transfers by the legislature and all other funding directed for deposit into the account. Moneys in the account may be spent only after appropriation. Expenditures from the account are dedicated to activities that include but are not limited to the development of water banks, acquisition of water rights appropriate for use in a water bank, and any other activity that helps meet local water needs and protect Washington waters.

- **Step 2:** Add a transfer to section 805 – FOR THE STATE TREASURER – TRANSFERS as part of the 2022 supplemental operating budget. Suggested language for operating budget bill (modeled after transfer of GF-S to forest resiliency account trust fund in section 805 of the 2021-23 operating budget bill):

  - *General Fund: For transfer to the water banking account trust fund, $4,500,000 for fiscal year 2022 and $4,500,000 for fiscal year 2023……$9,000,0000*

- **Step 3:** Appropriate the revenue transferred into the new Water Banking Account in a new section in the 2022 supplemental capital budget. Suggested language for capital budget bill (modeled after proviso language in section 302(32) of the 2021-23 operating budget bill and section 3112 of the 2021-23 capital budget bill)

  - *NEW SECTION. Sec. XXXX. FOR DEPARTMENT OF ECOLOGY*

    Water Banking (XXXXXXXX)

The appropriation in this section is subject to the following conditions and limitations:

(1) The appropriations in this section are provided solely for the department to administer the pilot grant program for water banking strategies to meet water needs as described in this section. Grants must be awarded to qualified applicants according to (c) of this subsection. Grant awards must be limited to not more than $2,000,000 per applicant.

(a) Grant awards may only be used for:

(i) Development of water banks in rural counties as defined in RCW 82.14.370(5) that have the headwaters of a major watershed within their borders and only for water banking strategies within the county of origin. A major watershed has the same meaning as shoreline of the state in RCW 90.58.030(2)(f)(v) (A) and (B);

(ii) Acquisition of water rights appropriate for use in a water bank including all costs necessary to evaluate the water right for eligibility for its intended use; and

(iii) Activities necessary to facilitate the creation of a water bank.

(b) For the purposes of a grant pursuant to this section, a water bank must meet water needs, which include but are not limited to agricultural use and instream flow for fish and wildlife. The water bank must preserve water rights for use in the county of origin and for permanent instream flows for fish and wildlife through the primary and secondary reaches of the water right.

(c) To be qualified for these funds, an applicant must also show:

(i) That the applicant has sufficient expertise and capacity to develop and maintain a water bank consistent with the purposes of this appropriation;

(ii) That the applicant has secured a valid interest to purchase a water right;

(iii) That the water rights appear to be adequate for the intended use;

(iv) That the applicant agrees to have one-third of any water right purchased with the funds appropriated under this section to have its purpose of use changed permanently to instream flow benefiting fish and wildlife; and

(v) That the applicant is a public entity or a participant in a public/private partnership with a public entity.

Appropriation:

New Account (Water Banking Account) – State……..$9,000,000
Prior Biennia (Expenditures).....$0
Future Biennia (Projected Costs)…….. $0
TOTAL……..$9,000,000

- **Step 4:** Reduce Ecology GF-S appropriations by $4,500,000 in fiscal year 2022 (EA 001-AR1) and by $4,500,000 in fiscal year 2023 (EA 001-AR2). Eliminate proviso language in section 302(32) of the 2021-23 operating budget.

This request removes operating appropriation for this grant program from Ecology's operating budget, and shifts it to the capital budget under Capital Project Request 40000469 "Water Banking Pilot Grant Program Budget Shift" for $9,000,000. The combined intent of both requests is to shift the operating budget pass through funding for this water banking grant pilot program from the operating budget to the capital budget.

Impacts on Population Served:
Proviso language for the water banking pilot grant program directs that funds go to a public entity and/or an entity that is a participant in a public / private partnership. Ecology anticipates that five to seven counties meeting the definitions prescribed in the budget proviso (a public entity…in rural counties as defined in RCW 82.14.370(5) that have the headwaters of a major watershed (RCW 90.58.030(2)(f)(v) (A) and (B))within their borders))) will apply for and eventually be approved for a water bank.

Ecology anticipates all likely candidates for these water banks will be in counties that reside in Eastern Washington. Funding to begin operating the local water bank will be provided through grant agreements as part of any acquisition initiated by the local water bank. As part of the grant program, Ecology will establish guidance regarding the costs eligible for operating the water bank.

Recipients of these grants will benefit from shifting this funding from the operating budget to the capital so that the funding is available for a long enough timeframe to ensure that it can be effective spent to implement water banking strategies to meet local water needs.

Alternatives Explored:
There are two options for administering the operating budget portion of this water banking pilot program; (1) try to implement the program from the operating budget as enacted; or (2) transfer the funds to the capital budget to ensure successful implementation of the pilot.

- Option 1 – Implementing the pilot, as is, from the 2021-23 operating budget would likely fail. Using GF-S to issue grants is problematic due to funding being limited to fiscal year and biennial expenditure restrictions, where any unspent GF-S would lapse at the end of each fiscal year and not be available over the entire lifecycle of these grants.

- Option 2 – Creating a new capital account for this purpose, and transferring these funds to that new account is the best alternative because it will allow funds to be reappropriated across fiscal year and biennial lines so grant agreements can be implemented without interruption. This option is the most stakeholder responsive, cost effective, and efficient way to implement the entire water banking pilot grant program.

Specific to option 2 above, a sub-alternative to how the funding is appropriated in the capital budget would be to add the shifted funding as an additional appropriation, from the newly established account, to section 3112 of the 2021-23 capital budget, and combine it into the same section that already houses the $5 million in SBCA for this purpose. Ecology is not proposing this sub-alternative, instead proposing to create a new section, and include the same proviso language from the operating budget in that section. Ecology is not aware of why the Legislature included different proviso language between the operating and capital budgets, but we believe that the proposed approach will best honor the different intents of the Legislature from last year.

Consequences of Not Funding This Request:
If this request is not supported, Ecology will be unable to effectively offer the operating budget portion of this pass through funding and ensure that it can be successfully utilized to meet local later needs. Without effective and efficient public investment in these water banks, many agricultural water rights could be purchased by private investment firms and taken out of production. If the water rights are transferred to domestic use or commercial uses, the agricultural capacity of the state would be permanently reduced and the state would lose productive agricultural land, which negatively impacts local economic opportunity, local environmental health, local growth management, and the protection of the rural standard of living.

Loss of agricultural lands and water rights reduces the output and value of the agricultural economy, increases food insecurity, and erodes environmental protection and the rural lifestyle. Without the proposed shift of funding to the capital budget, the state will not be able to meet future water supply demand for predominately agricultural economy driven communities throughout Washington.

Assumptions and Calculations

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

This request does not expand or alter Activity A003 - Implementing Integrated Solutions to Protect Instream Resources. It simply transfers already appropriate funding to provide grants for water banking projects from the operating budget to the capital budget.

Detailed Assumptions and Calculations:

For the 2021-23 biennium, Ecology's biennial operating appropriation will be reduced by $4,500,000 (EA 001-AR1) in fiscal year 2022 and by $4,500,000 (EA 001-AR2) in fiscal year 2023. Under this request, the GF-S revenue freed up by this reduction will be transferred to a new account created in the 2022 supplemental operating budget, and appropriated in a new section in the 2022 supplemental capital budget.

Please note, funding appropriated in sections 302(31) and 302(33) of the operating budget to develop, administer, and report on the water banking pilot grant program will remain in the operating budget.

Workforce Assumptions:

Expenditures by Object		**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
N	Grants, Benefits, and Client Services	(4,500,000)	(4,500,000)				
	Total Objects	**(4,500,000)**	**(4,500,000)**	**0**	**0**	**0**	**0**

Staffing

Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
	Total FTEs	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Explanation of costs by object:
Funding for water banking grants will be reduced by $4,500,000 (EA 001-AR1) in fiscal year 2022 and by $4,500,000 (EA 001-AR2) in fiscal year 2023.

How is your proposal impacting equity in the state?

Effective implementation of the water banking pilot grant program by shifting the operating budget funding to the capital budget will protect rural communities across Washington from potential environmental degradation due to water rights transference from agricultural uses to commercial or domestic uses. Ecology currently anticipates all water banks set up under this pilot grant program will be in Eastern Washington, thereby serving and impacting predominately small, rural areas of the state.

Per the proviso language, and governing statutes, water banks will be established in counties with a population density of less than 100 persons per square mile, or a county smaller than 225 square miles, as determined by the Office of Financial Management (OFM). Creating water banks in these low-density population counties will preserve rural character and economies by preventing water rights from being transferred from agricultural uses to other uses to promote development of previous agricultural lands. Counties eligible for the water banking pilot grant program represent socially and economically diverse populations, and include many Tribal and indigenous populations.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing Goals 1: Support and engage our communities, customers, and employees, and Goal 4: Protect and manage state waters in Ecology's strategic plan because effective implementation of the water banking pilot grant program will enhance the local economy and food supply, protect agricultural water rights and land use, and preserve agricultural lands for future generations.

This request is also essential to support the to the Governor's Results Washington Goal 2: Prosperous Economy and Goal 3: Sustainable Energy and Clean Environment by preserving water rights and land use for agricultural purposes into the future. These grants will protect agricultural water rights so that rural agricultural lands are not converted to other non-agricultural uses in the future. Maintaining agricultural lands for future generations will protect the environment by limiting development and conversion of existing agricultural land to some other commercial, industrial, or domestic use. By limiting agricultural land use and water rights to their current use, these grants will indirectly prevent additional climate impacts from the conversion of agricultural lands and water rights to some other use.

Performance Outcomes:

The outcome of this request will be a more effective and efficient pilot grant program that results in water banking strategies needed to meet local water needs.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

Ecology anticipates the likely candidates for these water banks will be in counties that reside in Eastern Washington. Funding to begin operating the local water bank will be provided through grant agreements as part of any acquisition initiated by the local water bank. As part of the grant program, Ecology will establish guidance regarding the costs eligible for operating the water bank.

Recipients of these grants will benefit from shifting this funding from the operating budget to the capital so that the funding is available for a long enough timeframe to ensure that it can be effective spent to implement water banking strategies to meet local water needs.

Ecology will partner with the State Conservation Commission (SCC) on a separate 2021-23 operating budget proviso (2021-23 operating budget, section 307(3)) that directs the SCC to enter into an agreement to establish a water bank in Okanogan County for protecting agricultural water rights in the county. This proviso in the SCC section of the operating budget is consistent with the anticipated implementation of the water banking grant pilot program that Ecology is establishing.

Legal or Administrative Mandates:

The proviso in section 302(32) of the 2021-23 operating budget will need to be removed if this request, and its corresponding capital project request, are included in the 2022 supplemental operating budget.

Stakeholder Response:

Communities in areas awarded grants will benefit from these water banks. In addition to the overarching goal of facilitating transfers of water rights, Ecology strives to achieve the following objectives through creating water banks:

- Support public health and safety.
- Promote the state's economic well-being.
- Preserve natural resources and aesthetics.
- Create a reliable water supply during dry years.
- Ensure a future water supply for people, farms, and fish.
- Promote water conservation.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. N	($4,500)	($4,500)	**($9,000)**	$0	$0	**$0**

Agency Contact Information

Mary Verner
(360) 280-2826
mary.verner@ecy.wa.gov

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Agency Recommendation Summary

Managing toxic pollutants in discharges from contaminated sites is important to protect human health and Washington waters. Using a system of water quality permits and water cleanup plans, Ecology helps prevent toxic chemicals from entering the environment. But toxic chemicals, including those of emerging concern, may become mobilized during site remediation activities and threaten our ability to achieve state and national goals for fishable waters, salmon recovery, and healthy watersheds. This request will help provide the support needed to address toxics in stormwater runoff from industrial and contaminated sites, in turn getting contaminated properties back into use sooner for affordable housing, economic redevelopment, public access, and overall economic vitality in the community. Related to Puget Sound Action Agenda implementation. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	5.8	**2.9**	5.8	5.8	**5.8**
Operating Expenditures						
Fund 23P - 1	$0	$714	**$714**	$714	$714	**$1,428**
Total Expenditures	**$0**	**$714**	**$714**	**$714**	**$714**	**$1,428**

Decision Package Description

As methods for detecting chemicals have improved, scientists know a lot more about the persistence of chemicals in the environment, and their impact on living organisms at even low concentrations. We also know that wastewater and stormwater discharges can contain toxic pollutants including lead, arsenic, and other heavy metals, polycyclic aromatic hydrocarbons, polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs).

Confirmed and suspected contaminated sites are located throughout Washington, with some areas of the state having very high densities of such sites. As these properties are cleaned up, construction, and sometimes the selected cleanup remedy itself, can pose risks to water quality.

Ecology has the authority under the Water Pollution Control Act (Chapter 90.48 RCW) to protect the waters of Washington State, which includes issuing National Pollutant Discharge Elimination System (NPDES) permits that address construction stormwater pollution. Ecology issues two kinds of permits to protect water quality, individual permits tailored specifically to a facility, and general permits that establish consistent requirements for categories of dischargers with similar types of discharges and operating conditions in a defined geographic area. For example, Ecology uses general permits to regulate discharges of stormwater from construction sites, industrial properties, and sand and gravel facilities. New individual permits take about nine months to develop and issue, while general permits are a cost-effective way to regulate numerous dischargers under one permit development and issuance process. It takes substantially less time (goal of 60 days) to issue permit coverage to permitees under a general permit, such as a construction stormwater general permit applicant. Construction on a contaminated site, however, adds time and process to these actions and timelines.

Under RCW 90.48.120, Ecology can issue administrative orders to put additional requirements in place for a permitted entity, such as additional monitoring and best management practices. For the last decade, Ecology's Water Quality Program has been issuing administrative orders as companions to the general permit overages, such as with the construction stormwater general permit when activities are occurring on sites with known soil and/or groundwater contamination. The combination of the general permit and companion administrative order conditionally authorizes discharges to waters of the state with requirements to protect water quality, sediments, and biota that are specific to the toxic pollutants present at that site. Assessing the risk of toxic discharges from each site, and developing the companion administrative orders when necessary, requires significant "pre-permit" work. This work involves:

1. Review of available soil and/or groundwater chemistry data to identify parameters detected at concentrations that may pose a risk to surface water quality if mobilized by construction activities.

2. Review of stormwater pollution prevention plans to identify scope of planned work and anticipated best management practices.

3. Determination of indicator levels for parameters of concern based on water quality criteria, analytical methods, and receiving water body information.

4. Preparing the final administrative order documenting requirements for monitoring additional parameters, reporting, and treatment to reduce concentrations to indicator levels before discharge.

Throughout the process, there is substantial communication with the permittee, contractors, Ecology's Toxics Cleanup Program, and analytical laboratories. The orders require site-specific monitoring, reporting, and treatment to minimize risks to surface waters. While developing orders is

time consuming, they are critical to timely permitting of construction site discharges and water quality protection.

The increased emphasis on putting contaminated properties (often on shorelines) back into use for affordable housing, economic redevelopment, public access and brownfields redevelopment has created a significant increase in pre-permitting work and the need for companion administrative orders to control toxics in stormwater runoff during cleanup and construction activities. The likelihood of rainfall during construction activities, especially in Western Washington, requires discharge authorization be in place before construction activities begin.

Unfortunately, water quality permitting can be a bottleneck in moving contaminated sites into construction because a permit, most often with accompanying administrative orders, must first be in place. As of June 2021, Ecology's Water Quality Program has 164 active construction stormwater general permit coverages on sites with known soil or groundwater contamination (78 with administrative orders), and another 47 new applications for permit coverage that have not been issued yet. Ecology's Northwest Regional Office alone issued over 40 orders for discharges from contaminated sites between April and December 2020, taking away from other critical permitting work. The Water Quality Program's goal is to issue these orders within 60 days of having a complete permit application, but we rarely achieve that goal because it requires expertise from a limited number of staff who have too many competing priorities. Currently, the program has no staff directly dedicated to this work. Instead, regional permit staff have to draft administrative orders within their existing workload, pulling in expertise from engineers and other technical staff as needed, which interrupts their workload, resulting in delays in drafting the orders and other priority permit work.

Ecology's average turn-around is closer to 145 days once we receive a complete permit application; some of the more complex sites can take up to 12 months. Delays in permitting can result in delays in construction, which means deferral of economic and housing development benefits. With the requested additional staff capacity Ecology will be able to achieve the 60-day turnaround goal for the majority of complete permit applications. In regards to the overall cleanup process timelines managed by our Toxics Cleanup Program, we anticipate these additional resources will help construction cleanup projects get started quicker because the required permits and administrative orders will be in place an average of 12 weeks sooner.

Moving forward, Ecology needs additional toxics-focused staffing resources to address the increased workload to develop administrative orders for discharges from contaminated sites and ensure this work is completed in a consistent and timely manner. Additional staff, with expertise in both toxics-specific chemistry and water quality standards, will improve consistency and efficiency of developing site-specific administrative orders for contaminated construction site discharges by developing and maintaining the internal guidance and procedures to streamline the determination of parameters of concern and indicator levels. A statewide permit coordinator is also needed to help identify permit applications that may require companion administrative orders early in the application process, and then coordinate the issuance of these coverages, and associated electronic reporting requirements, once the administrative orders are finalized. These resources will help improve the timeliness of issuing construction stormwater permit coverages with companion administrative orders for contaminated sites.

In addition to improving construction stormwater permitting for contaminated sites, Ecology needs additional staffing capacity to address region-specific contaminated site toxic discharge issues. Current staff are overburdened with the number of new and existing facilities discharging toxics in industrial-processed wastewater and stormwater. They do not have the capacity to address new toxic threats when developing permits, nor monitor for them once permits are issued. Not being able to perform the necessary pre-permit work on the front end of the issuance process, coupled with insufficient compliance oversight once permits are issued, puts the state's waters at risk from both new and emerging toxics, as well as historical toxics when construction disturbs soil. This request includes the additional engineering support needed to help improve both pre-permitting work and the compliance assurance/enforcement associated with contaminated sites that require individual permits for authorizing non-stormwater discharges to waters of the state, such as from a groundwater treatment system.

Impacts on Population Served:
Ecology works to protect Washington waters from toxics in discharges to sustain healthy watersheds and communities all throughout the state. This work ensures state waters support beneficial uses, including recreational and business activities, supplies for clean drinking water, and the protection of fish, shellfish, wildlife, and public health.

Alternatives Explored:
Ecology considered requesting additional resources through the Water Quality Permit Account for this work, but these costs are not considered part of the overall permit fee schedule, as administrative orders are site specific and in addition the permit coverage. Using permit fees for to support work creates inequity for fee payers that do not benefit directly from managing toxics runoff, especially on contaminated construction sites. Providing Model Toxics Control Operating (MTCA Operating) funding is the most appropriate fund source for toxics-related work like this. In the 2015-17 enacted operating budget, a similar, but more focused budget request for Lower Duwamish River toxics source control work was also funded by MTCA funding.

Consequences of Not Funding This Request:
If this request is not funded, Ecology would not have adequate focused capacity or expertise to develop timely protective discharge requirements for contaminated sites undergoing cleanup and/or redevelopment. This would continue to lead to delays in cleanup projects, or reduced capacity to regulate wastewater and stormwater discharges while staff are pulled away to work on toxics discharges related to contaminated sites. Delays in starting construction activities on contaminated sites can have significant effects to cleanup timelines, including additional delays from missed fish windows for shoreline construction work, longer gaps between selecting a remedial action and implementing that remedy, and longer periods before properties can be put back to beneficial use.

Ecology's Water Quality Program would continue to be a bottleneck in permitting contaminated construction projects because current staffing and expertise are not adequate to ensure that sites covered under the permit properly manage/treat/sample stormwater at redevelopment sites where soil and/or groundwater is contaminated with toxic compounds.

Ecology could experience unnecessary public disclosure requests, litigation, and risk related to public concerns about permitting contaminated construction sites if Ecology is not able to demonstrate, in a timely manner, that the water quality permit coverages and administrative orders protect human health and the environment, and prevent violations of water quality standards.

Ecology has faced expensive legal challenges in the past over construction stormwater permit coverages and the associated administrative orders for contaminated sites. Legal challenges have involved disputes over the selection of parameters of concern, the selection of indicator levels, the geographic extent to which the administrative order is applied, and who is responsible for paying for the cost of treatment.

Assumptions and Calculations

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

This request expands activity A008 – Control Stormwater Pollution by providing expertise on addressing toxics in stormwater and capacity for developing and overseeing administrative orders for construction activities on contaminated sites. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A008 – Control Stormwater Pollution		
	2019-21	**2021-23**
FTEs Total	57.10	49.70
001-2 General Fund – Federal	$141,000	$0
001-7 General Fund - Private/Local	$5,236,000	$6,137,000
23P-1 Model Toxics Control Operating - State	$5,582,000	$5,693,000
176-1 Water Quality Permit Account - State	$11,005,000	$11,579,000
TOTAL	**$21,964,000**	**$23,409,000**

Detailed Assumptions and Calculations:

Beginning July 1, 2022 and ongoing, Ecology requires salaries, benefits, and associated staff costs for:

- **1.0 FTE Environmental Specialist 5 (ES5) – Statewide Contaminated Construction Site Permitting & Compliance Coordinator**

  This position will provide toxics-specific chemistry and water quality standards expertise on contaminated construction sites to assist development of administrative orders for the Construction Stormwater General Permit. The orders address toxics found in soil and/or groundwater that are likely to be mobilized in stormwater or dewatering water during construction activities. The orders require site-specific monitoring, reporting, and treatment to minimize risks to surface waters. While these orders are time consuming, they are critical to timely permitting of construction site discharges and water quality protection. This position will also develop guidance for addressing stormwater discharges from contaminated sites in coordination with the Toxics Cleanup Program and stakeholders.

- **1.0 FTE ES2 – Stormwater Permit Administrator/Contaminated Intake Administrator**

  This position will improve intake of permit applications for construction stormwater discharges from contaminated sites, so that they are identified early in the process, resulting in better control of toxic stormwater discharges and facilitating the redevelopment of cleanup sites to protect undeveloped watersheds. The position will:

  - Identify relevant permit applicants early by reviewing applications as they come in to ensure that those applications involving a site with contaminated soils and/or groundwater are routed to the administrative order process as soon as possible.
  - Coordinate with regional staff, the Toxics Cleanup Program, and permit applicants to ensure site-specific contamination data is provided.
  - Set up the electronic reporting system (Ecology's permitting data system called PARIS) to reflect the specific toxic parameters and indicator levels found in the administrative order consistent with federal eReporting requirements.
  - Issue permit coverage when the administrative order is finalized. This work will speed up the issuing of construction stormwater permit coverages with companion administrative orders for contaminated sites.

- **2.0 FTE ES4 – Water Quality Toxics Specialists (One Eastern Region, one Southwest Region)**

  These positions will focus on redevelopment activities, site cleanup, and toxics in stormwater discharges in the urban areas of Eastern

Washington and within the Tacoma Smelter Plume (Southwest) that are driving the need for additional regional resources for this work. These positions will also coordinate closely with toxics cleanup efforts, provide technical assistance, conduct independent on-site inspections, collect samples for lab analysis, review water quality monitoring data, and write administrative orders for construction projects on contaminated sites. These actions will reduce discharges of toxics in contaminated stormwater and provide water quality-focused technical support to site remediation partner programs and agencies.

- **1.0 FTE Environmental Engineer 3 (EE3) – Industrial Wastewater Permit Manager (Western WA)**

  This position will be responsible for the pre-permitting work (technical assistance, engineering reviews for treatment systems, initial permit development) and compliance assurance/enforcement work associated with contaminated sites that require individual permits for authorizing discharges to waters of the state. One common type of site remedy that requires an individual permit are 'pump and treat' systems for contaminated groundwater.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		371,328	371,328	371,328	371,328	371,328
B	Employee Benefits		136,278	136,278	136,278	136,278	136,278
E	Goods and Services		45,720	45,720	45,720	45,720	45,720
G	Travel		10,910	10,910	10,910	10,910	10,910
J	Capital Outlays		6,005	6,005	6,005	6,005	6,005
T	Intra-Agency Reimbursements		143,652	143,652	143,652	143,652	143,652
	Total Objects	**0**	**713,893**	**713,893**	**713,893**	**713,893**	**713,893**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
ENVIRONMENTAL SPECIALIST 5	78,408		1.00	1.00	1.00	1.00	1.00
ENVIRONMENTAL SPECIALIST 2	55,524		1.00	1.00	1.00	1.00	1.00
ENVIRONMENTAL SPECIALIST 4	70,956		2.00	2.00	2.00	2.00	2.00
ENVIRONMENTAL ENGINEER 3	95,484		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.50	0.50	0.50	0.50	0.50
IT APP DEVELOPMENT-JOURNEY			0.25	0.25	0.25	0.25	0.25
Total FTEs		**0.00**	**5.75**	**5.75**	**5.75**	**5.75**	**5.75**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE and include $25,000 a year for lab supplies and lab sampling costs.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Ecology is committed to meaningful and effective community engagement. This request will beneficially affect communities located in the Puget Sound, Spokane River, and Columbia River basins, areas with considerable diversity, both culturally and economically. Improving the health of these waters and the species within them supports social, environmental, and economic health for all those who live, work, worship, and play there.

The water quality improvements tied to this request will have key benefits for Tribes and indigenous populations, disproportionately impacted communities, and potentially vulnerable populations. The recovery of Puget Sound and the related salmon and orca populations have significant cultural, social and economic, and dietary importance for many people. Fishing and consuming fish are traditional practices and a key protein source for many of Washington's Tribal, Asian-American, Russian, Latino/Hispanic, and immigrant populations. By enhancing our ability to control toxics to Washington's waters from activities on contaminated sites, we are working to address historical inequities that have resulted in greater toxics exposure in overburdened communities.

Ecology supports full and fair participation by all potentially affected communities through our public permit development process. To comply with Title VI nondiscrimination obligations, and to promote environmental justice best practices for meaningful community engagement, Ecology

will ensure effective communication and outreach that addresses linguistic, cultural, literacy, technology, and accessibility barriers. Ecology maintains a contract for 24/7 interpretation services, and if determined necessary, Ecology will translate written information into the appropriate languages for potentially affected communities.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic:

- Goal 1: Support and engage our communities, customers, and employees by writing timely administrative orders for construction site discharges so that contaminated properties can be redeveloped, which leads to economic revitalization
- Goal 3: Prevent and reduce toxic threats and pollution by controlling discharges of toxics from contaminated sites undergoing cleanup and/or redevelopment.
- Goal 4: Protect and manage our state's waters by administering protective industrial wastewater permits and administrative orders for construction site stormwater discharges to achieve clean water, and prevent sediment contamination or re-contamination.
- Goal 5: Protect and restore Puget Sound by reducing toxic chemicals in discharges from contaminated sites that end up in Puget Sound thereby reducing exposure to these chemicals by important aquatic biota including fish, shellfish, and orcas.

This request provides essential support to the Governor's Results Washington Goals:

- Goal 3: Sustainable energy and a clean environment by decreasing the amount of toxics entering waterbodies in Washington and regulating contaminated construction site stormwater discharges that pose threats to water, public health, and fish and wildlife resources.
- Goal 4: Healthy and safe communities by reducing toxics entering the aquatic environment, in turn reducing human health risks from consumption of contaminated fish and shellfish.

Performance Outcomes:

The outcome of this request will be timelier turn-around and consistent approach in developing and enforcing administrative orders to control toxics discharges and protect Washington's waters, public health, and fish and wildlife resources. Ecology will be able to achieve the 60-day turnaround goal for the majority of complete permit applications and will have consistent standards and guidance available to permittees, leading to less toxics pollution contamination and faster economic redevelopment of contaminated properties.

Other Collateral Connections

Puget Sound Recovery:

This request supports Puget Sound Action Agenda implementation through the following:

- Ongoing Program OGP_ECY34: Water Quality - Control Stormwater and Wastewater Pollution.
- Regional Priority CHIN4.8: Evaluate potential threats from emerging contaminants of concern from wastewater and stormwater as they relate to salmon and their food web.
- Regional Priority TIF1.1: Enhance pollutant reduction programs, corrective measures and increase authorities and programs to prevent toxic chemicals from entering Puget Sound.
- Strategy 9: Prevent, reduce, and control the sources of contaminants entering Puget Sound.
    - Sub-strategy 9.1: Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem.
- Strategy 10: Use a comprehensive approach to manage urban stormwater runoff at the site and landscape scales.
    - Sub-strategy 10.3: Fix problems caused by existing development.
    - Sub-Strategy 10.4: Control sources of pollutants.
- Strategy 21: Address and clean up cumulative water pollution impacts in Puget Sound.
    - Sub-strategy 21.2: Clean up contaminated sites within and near Puget Sound by reducing and controlling the sources of pollution.

This request also supports Governor Inslee's Executive Order 18-02, Southern Resident Killer Whale Recovery and Task Force, by reducing toxic contaminants in Puget Sound. The Order lists toxic contaminants in stormwater runoff as a primary factor threatening the Southern Resident orca population.

State Workforce Impacts:

N/A

Intergovernmental:

Businesses, ports, and local governments are responsible for cleaning up contaminated sites, and redevelopment of these sites is a common economic driver for counties and cities. Project proponents are eager to start construction, and are supportive of improved turn-around times and consistency in authorizations to discharge to surface waters from contaminated construction sites.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

Ecology collaborates with private developers, property owners, technical professionals, and others working to address toxics contamination from past industrial practices and accidental spills. Ecology expects partners will support this request to help expedite stormwater discharge permitting actions related to toxics cleanup efforts.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$371	**$371**	$371	$371	**$742**
Obj. B	$0	$136	**$136**	$136	$136	**$272**
Obj. E	$0	$46	**$46**	$46	$46	**$92**
Obj. G	$0	$11	**$11**	$11	$11	**$22**
Obj. J	$0	$6	**$6**	$6	$6	**$12**
Obj. T	$0	$144	**$144**	$144	$144	**$288**

Agency Contact Information

Rebecca Pittman
(360) 870-4643
rpit461@ecy.wa.gov

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Agency Recommendation Summary

Riparian zones play a significant role in supporting water quality, along with the health and diversity of aquatic and terrestrial species throughout Washington. As acknowledged by Governor Inslee and Tribal leaders at the November 2019 Annual Centennial Accord Meeting, growing and protecting trees along the lengths of the state's rivers and streams safeguards our water and builds resilience for our communities. However, in order to better monitor the health of our riparian buffers, the state must significantly improve the accuracy of how our streams are mapped. This request supports a two-year pilot project to identify the technologies, methodologies, datasets, and resources needed to refine and maintain the accuracy of the National Hydrography Dataset for Washington. The State/Tribal Riparian Protection & Restoration Workgroup's Monitoring and Adaptive Management Team identified this request as a top priority for addressing stream-mapping inaccuracies that currently prohibit a statewide riparian assessment and monitoring program. Related to Puget Sound Action Agenda Implementation. (General Fund-State)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	4.6	**2.3**	4.6	0.0	**2.3**
Operating Expenditures						
Fund 001 - 1	$0	$901	**$901**	$661	$0	**$661**
Total Expenditures	**$0**	**$901**	**$901**	**$661**	**$0**	**$661**

Decision Package Description

Background
Hydrography data is the mapped locations of streams and other waterbodies. It is a fundamental dataset used to support the environmental quality and protection of air, land, and water resources across the nation, and is integral to mission critical activities undertaken and managed by government entities (federal, state, regional, county, local, Tribal), nonprofit organizations, and private companies. Hydrography data makes it possible for these groups to:

- Manage water such as stream flow and stormwater.
- Monitor, manage, and report water quality.
- Assess water availability and water rights.
- Model and map flood risk.
- Manage fisheries, rangeland, timberlands, and agricultural lands.
- Assess coastal hazards.
- Restore and protect streamside (riparian) areas.
- Manage critical areas for the Growth Management Act.
- Perform scientific monitoring.
- Prepare for emergency spill response.

The U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) is the federal standard dataset for hydrography, representing surface waters of the United States such as rivers, streams, canals, lakes, ponds, and coastlines. In Washington, Office of the Chief Information Officer (OCIO) Policy 161.03 - Hydrography Data Standard (https://ocio.wa.gov/policy/16103-hydrography-data-standard), directs that the USGS NHD be the data standard for all surface water (hydrography) geospatial datasets in Washington State, and that Ecology serve as the state steward for the NHD in Washington (WA-NHD). This means that all state agencies are required to use the NHD as for their hydrography data, as well as any associated data like fish distribution, culvert locations, environmental monitoring stations, etc. State agencies must have an approved exemption from the OCIO if they do not use the NHD as their primary hydrography dataset.

The WA-NHD has approximately 250,000 miles of mapped watercourses throughout the state, and is a powerful, well-established framework used to analyze and associate critical information about our state's hydrography (Figure 1). Since the adoption of the NHD standard in 2011, Washington has focused its efforts on correcting the most prominent errors in the data, and connecting the hydrography data to the highest priority water resources, water quality, human health, environmental monitoring, and fisheries datasets.

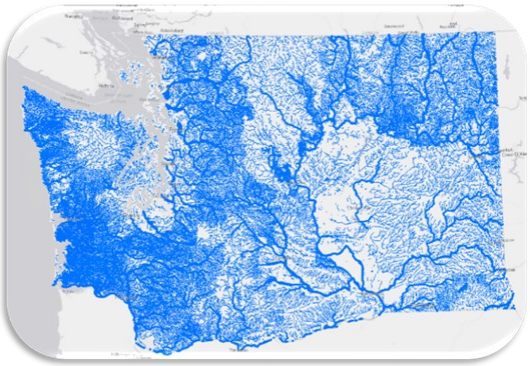

Figure 1- WA-NHD (Ecology) (https://waecy.maps.arcgis.com/apps/Cascade/index.html?appid=4505430ad1f947a5a255001080f6d359)

Ecology has one full-time FTE who serves as the WA-NHD steward, and works with local governments, stakeholders, and other interested parties to update and correct errors within the dataset. When hydrography data is submitted to Ecology for inclusion into the WA-NHD, the steward verifies the accuracy of the data, and once verified, uploads it to USGS so it can be incorporated into the national NHD.

Currently, Ecology is only able to perform large area updates to the WA-NHD when sporadic grant funding opportunities become available, or through interagency agreements with local and state governments, which can create equity issues in how and where hydrography is updated in the state. Due to the complexity of the WA-NHD, and the need to verify the quality and accuracy of updates before they can be incorporated into the dataset, the process to update the WA-NHD can take a very long time. Based on the rate of WA-NHD updates over the last 10 years, and our current staffing levels, Ecology estimates it could take 20-plus years to update the WA-NHD for higher accuracy across the state.

The WA-NHD steward is currently engaging with stakeholders across the state to understand the business needs, priorities, and challenges of these groups as part of developing a WA-NHD Strategic Plan. The goal of the plan is to guide the update and maintenance of the WA-NHD moving forward so that it meets the needs of all users. Ecology's goal is to complete this strategic plan by the beginning of fiscal year 2024.

Problems and Needs

WA-NHD Inaccuracies:
Originally, the NHD was mapped at a coarse nationwide scale, which only provided the ability to do large landscape-level analysis. This means that the WA-NHD is not mapped at a small enough scale to be used for environmental analysis at the local level, which impacts the ability of cities and counties to use the data because in many cases they need more precise hydrography for the streams and other waterbodies in their jurisdictions. Because the WA-NHD is currently unable to meet these needs, many local governments have created, and are maintaining, their own hydrography dataset, separate from the WA-NHD.

While this approach may help meet local needs in certain areas of the state, not all jurisdictions have the ability, nor financial resources, to create and maintain their own datasets, which can create equity issues amongst communities. This has also resulted in data gaps within the WA-NHD, as changes in local hydrography data may not incorporated into the state's dataset, and this can create challenges for state agencies and other resource managers who need to perform regional or statewide analyses, such as riparian and water quality assessments.

The good news is, it is now possible to improve the accuracy of our mapped streams across the state with newer technologies, high-resolution data, and improved computing power and storage. These technologies can produce a highly accurate elevation-derived hydrography (EDH) dataset for large portions of the state (Figure 2). These can then be integrated through a hybrid approach with local datasets, where EDH is not as effective, such as watercourses that have been modified in urban and agricultural areas, or estuaries will little topographic relief, to provide improved stream mapping across the state (Figure 3).

By investing in these new technologies, Ecology will eventually be able to engage with, and incorporate local jurisdiction data more efficiently and equitably, while reducing the timeline for making the WA-NHD more accurate at a local scale. However, before investments in these areas can be made, more needs to be known about the best available datasets, and level of effort needed to incorporate both these new datasets, as well as data from local jurisdictions.

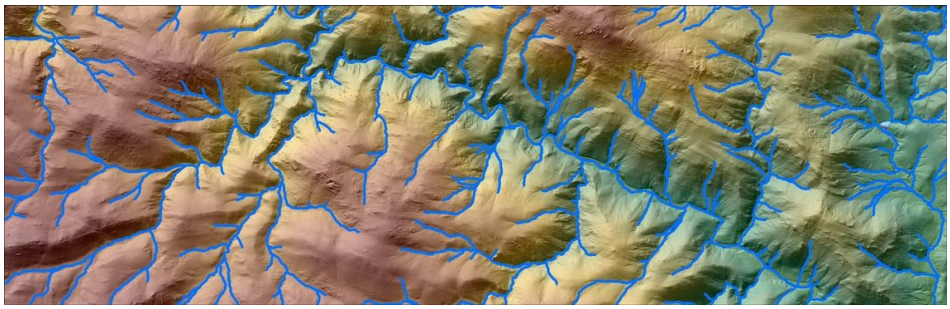

Figure 2-Elevation-derived Hydrography (USGS)

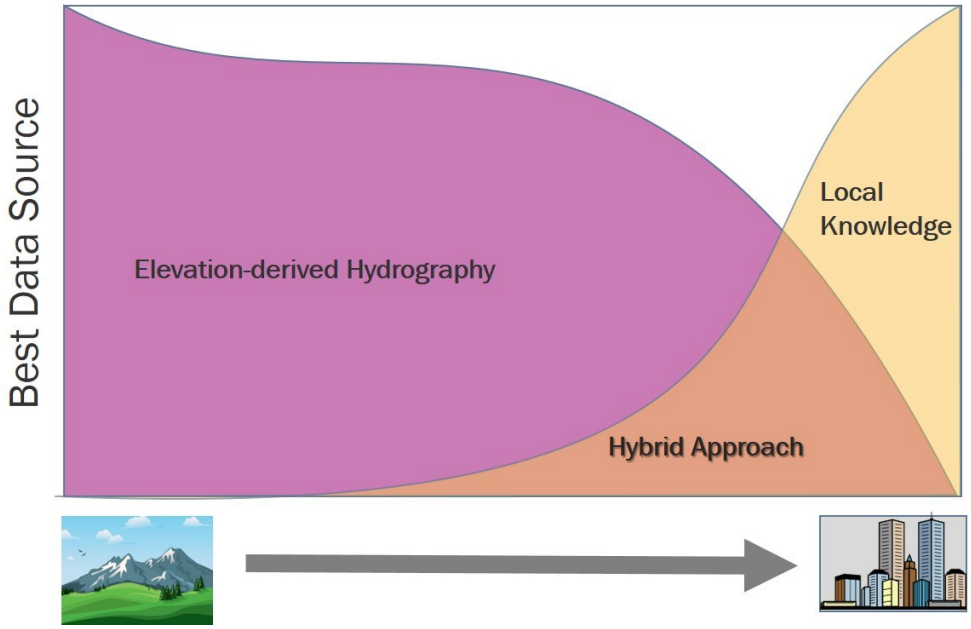

Figure 3- Hydrography Data Sources for different landscapes (Ecology)

State/Tribal Riparian Protection & Restoration Workgroup:
Riparian zones (the areas along streams, rivers, and other waterbodies) play a significant role in supporting water quality, along with the health and diversity of aquatic and terrestrial species throughout Washington. Transforming the state's riparian protection and restoration policies is essential to our rivers, streams and shorelines, as well as to sustain salmon and orcas, tribal treaty rights, and our quality of life.

As acknowledged by Governor Inslee and Tribal leaders at the November 2019 Annual Centennial Accord Meeting, growing and protecting trees along the lengths of the state's rivers and streams safeguards our water and builds resilience for our communities. Coming out the Centennial Accord, the Governor directed his office to convene the state agencies before the end of 2019, and then to work with the tribes to establish a State/Tribal Riparian Protection & Restoration Workgroup to develop recommendations for leadership before the next Centennial Accord.

This state and tribal partnership is currently working to identify both the challenges and opportunities around riparian protection and restoration, while developing recommendations on bold actions that can be advanced, and result in, fully functioning riparian ecosystems statewide. The State/Tribal Riparian Protection & Restoration Workgroup includes five Pathway Teams that have been meeting since 2020:

- Pathway 1 - Use of Existing Authorities.
- Pathway 2 - Need for New Authorities.
- Pathway 3 - Monitoring and Adaptive Management.
- Pathway 4 - Need for Meaningful Incentive Programs.
- Pathway 5 - Need for Adequate and Sustainable Funding.

The Pathway 3 (PW3) Team has developed a Monitoring and Adaptive Management framework, which includes information needs and data gaps identified so far. As part of that framework, PW3 recognized the need to improve the WA-NHD as a top priority in order to address stream-mapping inaccuracies that currently prohibit a statewide riparian assessment and monitoring program. An initial riparian condition assessment done in 2021 by the Northwest Indian Fisheries Commission found that while the WA-NHD is the best available statewide data system to use for the assessment, the accuracy of their assessment was entirely limited by knowing and understanding the locations of riparian

buffers, which is dependent on the accuracy of the WA-NHD. Meaning, the location of riparian zones is only as accurate as the location of our mapped streams.

In order to be an effective tool for assessing riparian conditions throughout the state, the accuracy of the WA-NHD data needs to be improved and existing data gaps need to be filled. As part of its framework, PW3 also identified the need to coordinate with, and provide support to local jurisdictions so that the state can get local hydrography data verified and integrated in the WA-NHD at a faster pace.

Solution
In response to these PW3 recommendations, and need to understand how best to improve the overall accuracy of the WA-NHD, Ecology is requesting funding to conduct a two-year pilot project in the Stillaguamish watershed in order to determine the appropriate resource levels needed to improve and maintain the accuracy of mapped waters across the state. The results of this pilot will be incorporated into the WA-NHD Strategic Plan, currently in development, and inform future funding needed improve and maintain the WA-NHD on an ongoing, statewide basis.

The WA-NHD steward will be the technical team lead for the pilot, and be responsible for directing the work of the technical team. The steward's time will be provided as in-kind resources to this project, and is identified as such in the attached 2021-23 IT Addendum. This request includes funding for a Project Manager position to ensure that the project follows IT project management best practices. A steering committee consisting of federal, state, local and tribal entities will guide the project and provided recommendations for decision-making. It is anticipated that approximately 75-100 participants from federal, local, state and tribal entities will attend stakeholder meetings held by the WA-NHD steward. Conflicts or challenges that arise throughout the project will be discussed with both stakeholders and the steering committee, providing opportunities for feedback and inclusion into the decision-making process.

Ecology selected the Stillaguamish watershed (Figure 4) as the pilot area for the following reasons:

- A varied representation of land types, including forested, agricultural, developed, and shorelands.
- Elevation ranges from mountainous to sea level.
- Existing high resolution Light Detection and Ranging (LiDAR) coverage.
- Variety of stakeholders (federal, Tribal, county, city, state lands).
- Local agency interest in participation.

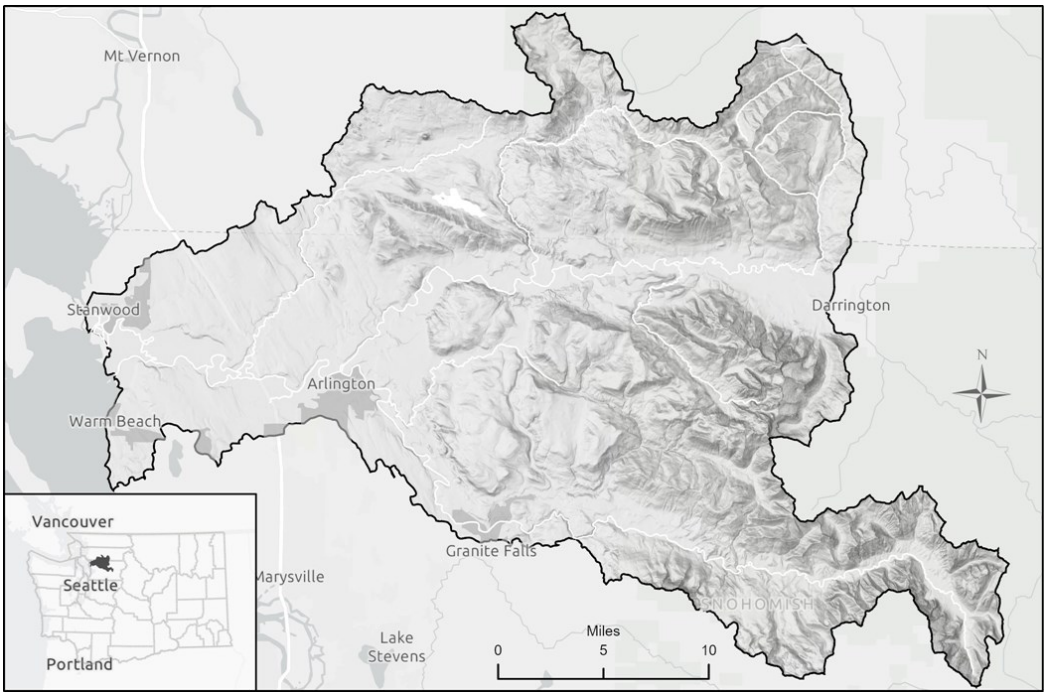

Figure 4. Stillaguamish Watershed (Ecology)

Data and Methods Evaluation
One objective of this pilot is to identify the best methodologies, data, and resources needed to update and maintain the WA-NHD statewide. Work in this area of the pilot will include the evaluation of different methodologies used to create EDH datasets using GIS analysis, and determine which is best for Washington. One method is actively being used in Oregon and other states, while the other method, which uses landforms to help determine the location of water features (https://cbtrust.org/wp-content/uploads/2018_Scope10_FinalReport_wAppendix.pdf), has been used to map Chesapeake Bay in Virginia, and may provide more value in identifying other stream features such as streambanks and wetlands.

This request will support the purchase of two elevation-derived datasets and project staff needed to evaluate them to determine which is more effective and accurate for the diverse landscapes across Washington. This request will also support the purchase and evaluation of high-resolution land cover data to determine if this dataset significantly improves elevation derived models and waterbody mapping. Staff will use the Elevation-Derived Hydrography Specifications published by USGS (https://www.usgs.gov/core-science-systems/ngp/ss/elevation-derived-hydrography-specifications) in completing these evaluations.

Local Hydrography Integration
The other goal of this pilot is determine and document the level of effort needed, at both the state and local level, to incorporate local hydrography data into the WA-NHD framework. Project staff supported by this request will work with local jurisdictions to prepare their data to meet WA-NHD standards, evaluate and verify the accuracy of collected data, and incorporate that into the WA-NHD. The project staff will also work with local jurisdictions to identify and document the impacts and tools needed to assist them with their associated data (such as stormwater outfalls and culverts) and adoption of the WA-NHD for local use. Funding is included in this request to support local jurisdictions in preparing their hydrography data for inclusion into the WA-NHD.

In order to continue making progress on the backlog of WA-NHD updates needed statewide, these staff will also make WA-NHD updates to areas outside of the pilot, as data becomes available. This was identified as a critical need by the PW3 Team to ensure that the state did not fall further behind in updating the WA-NHD in other areas of the state while the pilot project is being conducted. Locations for updates outside of the pilot area will be determined based data availability and feedback from stakeholders on priority.

Impacts on Population Served:
Hydrography data affects all Washington residents because the data is used to assess conditions about, and related to, the state's waters. For example, riparian management decisions need to be based on accurate stream data, so that the resulting regulations are appropriately applied to those living along the stream.

Alternatives Explored:
The alternative considered to this request was to continue to improve the WA-NHD with current resources and apply for grant opportunities when they come around. This is not a viable option to meet the critical needs identified by the State/Tribal Riparian Protection & Restoration Workgroup, nor achieve a reasonable timeline for improving the accuracy of the WA-NHD. By continuing our current our approach there will be an ever-growing backlog of data gaps and needed updates.

Consequences of Not Funding This Request:
If this request is not funded, decisions made by resource managers, including those by the State/Tribal Riparian Protection & Restoration Workgroup, will continue to be based on inaccurate assessments of ecological conditions. With its current resource capacity, Ecology estimates that it would take over 20 years to improve mapped streams across the state, and we would continue struggling to incorporate accurate local hydrography data into the WA-NHD. This will also affect local jurisdictions that do not have funding or resources to contribute to WA-NHD updates.

Assumptions and Calculations

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

This request is not an ongoing expansion or alteration of a current program or service. This request supports a two-year pilot project to determine the appropriate resource levels needed to improve and maintain the accuracy of mapped waters across the state. The results of this pilot will be incorporated into the WA-NHD Strategic Plan, currently in development, and inform future funding needed to improve and maintain the WA-NHD on an ongoing, statewide basis.

Detailed Assumptions and Calculations:

The WA-NHD steward will be the technical team lead for pilot project, and be responsible for directing the work of the technical team, while also working with stakeholders to incorporate the results of the pilot into the WA-NHD Strategic Plan. The steward's time will be provided as in-kind resources to this project, and is identified as such in the attached 2021-23 IT Addendum.

In addition to these in-kind resources, from July 1, 2022 through June 30, 2024, Ecology requires salaries, benefits, and associated staff costs for the following positions to implement the pilot project:

- 1.0 FTE IT Project Management – Journey (Project Manager) – This position is necessary to ensure the pilot project incorporates project management best practices, such as formation of a steering committee, meeting milestones and timelines, and the documenting of deliverables.
- 1.0 FTE IT Data Management – Journey (Lead IT staff) – This higher-level technical position is necessary to train and lead the entry-level technical staff on editing and updating the complex NHD. This position will also work closely with the NHD steward and local jurisdictions to prepare their data, and will help evaluate the purchased EDH datasets.

- 2.0 FTE IT Data Management – Entry (Support IT staff) – These technical position will edit and update mapped streams in the WA-NHD by incorporating local jurisdiction data within the pilot area. These positions will also ensure that the state does not fall further behind in updating the WA-NHD statewide, by incorporating local jurisdiction data from outside the pilot area as it becomes available.

For fiscal year 2023, one-time funding is required for the following resources needed to implement this project:

- Elevation derived datasets ($140,000) – Purchase two elevation-derived datasets based on different methodologies for the pilot area.
- High-resolution land cover data ($50,000) – Purchase high-resolution land cover data for pilot area based on 2021 six-inch imagery to determine if this dataset significantly improves elevation derived models and waterbody mapping.
- Support for local jurisdictions ($50,000) – Support for local jurisdiction data preparation prior to incorporating into the WA-NHD. This funding will be provided through interagency agreements with the local governments participating in the pilot.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		359,496	359,496			
B	Employee Benefits		131,936	131,936			
E	Goods and Services		256,576	16,576			
G	Travel		8,728	8,728			
J	Capital Outlays		4,804	4,804			
T	Intra-Agency Reimbursements		139,074	139,074			
	Total Objects	**0**	**900,614**	**660,614**	**0**	**0**	**0**

Staffing							
Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
IT DATA MANAGEMENT-JOURNEY	101,748		1.00	1.00			
IT DATA MANAGEMENT-ENTRY	78,000		2.00	2.00			
IT PROJECT MANAGEMENT-JOURNEY	101,748		1.00	1.00			
FISCAL ANALYST 2			0.40	0.40			
IT APP DEVELOPMENT-JOURNEY			0.20	0.20			
	Total FTEs	**0.00**	**4.60**	**4.60**	**0.00**	**0.00**	**0.00**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Contracts includes agreements with local jurisdictions to support their data preparation work ($50,000) in fiscal year 2023.
Goods and Services are the agency average of $4,144 per direct program FTE. It also includes the purchase of elevation derived datasets ($140,000) and high-resolution land cover data ($50,000), both in fiscal year 2023.
Travel is the agency average of $2,182 per direct program FTE.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Hydrography data is a fundamental dataset needed to identify where streams and waterbodies are located across Washington, and to understand which communities may live near, have access to, or rely on these local water bodies. Right now, many local jurisdictions use their own hydrography dataset with varying degrees of accuracy. This request has important equity components, both in how this data will be improved, and for who has access to the information.

First, to accurately map our waters, Ecology will engage tribal, county, and local communities to understand how they use hydrography data to assess, monitor, protect, and regulate our environment. Current hydrography data are limited in scope across the state, with notable data gaps for areas with less population density, fewer academic resources, geographically isolated areas, and potentially for areas and populations who are underserved.

Conducting this pilot project will inform Ecology's WA-NHD Strategic Plan on how to significantly improve our mapped waters across the state,

and integrate the needs and expertise of tribes, stakeholders, and underserved communities in this process.

Second, this data will be integrated into our publically available WA-NHD dataset, allowing communities, tribes, students, organizations, and local governments to access important information on the streams and bodies of water near them. Equitable access to data and representation in data are key components of environmental justice and equity efforts. Understanding which communities are potentially impacted by water body impairment can support efforts to understand community cumulative impacts and support local efforts to address environmental and health concerns.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing all the goals in Ecology's strategic plan. WA-NHD is a fundamental dataset that is used to assess, relate, and predict conditions related to watercourses and waterbodies. It provides the framework to relate disparate information to waters of the state and make important correlations in order to support environmental and public health work across the state.

- Goal 1: Support and engage our communities, customers, and employees.
  - The pilot project will engage with local jurisdictions to incorporate their local data.
  - The WA-NHD steward will be engaging with federal, state, Tribal, and local stakeholders to understand their needs and priorities for hydrography data.
- Goal 2: Reduce and prepare for climate impacts.
  - Improving WA-NHD to the local scale will provide more accurate analysis of climate impacts on the rivers, streams, wetlands and other waterbodies.
- Goal 3: Prevent and reduce toxic threats and pollution.
  - An accurate WA-NHD is essential to communicate, map, and analyze the toxic threats and pollution that affects our state's waters.
- Goal 4: Protect and manage our state's waters.
  - Improving WA-NHD will provide better data-driven decisions to help protect and manage our state's waters including riparian and shoreline areas.
- Goal 5: Protect and restore Puget Sound.
  - Improving WA-NHD will provide better data-driven decisions about our watercourses and Puget Sound shoreline to help protect and restore the Puget Sound.

This request provides essential support to the Governor's Results Washington Goal 3 and Goal 5.

- Goal 3: Sustainable Energy and a Clean Environment
  - Improving the accuracy of WA-NHD will support riparian restoration and protection efforts, environmental monitoring, water quality assessment, and water cleanup plans.
- Goal 5: Efficient, Effective, and Accountable Government
  - Outcomes from the pilot project will help determine the most effective and efficient way to improve WA-NHD across the state and provide an accurate assessment of future funding needs.

Performance Outcomes:

The outcome of this request will inform resources, data, and estimated time needed to significantly improve and maintain the WA-NHD that meets stakeholder's needs. Specific performance outcomes include:

- Identify what elevation-derived mapping method most accurately represents Washington water.
- Determine if high-resolution land cover significantly improves mapped hydrography accuracy.
- Document level of effort and process to integrate elevation-derived datasets into WA-NHD.
- Document level of effort, process, and training needed to incorporate local data into WA-NHD.
- Document impacts to WA-NHD users and identify change management tools necessary to mitigate those impacts.
- Determine resources needed to improve the accuracy of WA-NHD on a statewide, ongoing basis.

Other Collateral Connections

Puget Sound Recovery:

This request will support multiple Puget Sound recovery efforts that rely on accurate mapping and analysis of water resources, streams, riparian buffers, and shorelines of Puget Sound. This information will provide a better understanding of current stream and riparian habitat conditions and how they change over time. This improved data and information will accelerate shoreline protection, restoration, and flood hazard management by informing natural resource management priorities and actions.

Puget Sound Regional Priority Approaches supported by this request include:

- CHIN1.5 - Include other key biological attributes such as floodplains, off channel habitats and riverine wetlands.
- CHIN1.9 - Create a balance sheet for habitat gain and loss in the watershed.
- CHIN2.5 - Address and manage water quality parameters.
- CHIN4.8 - Evaluate potential threats from emerging contaminants of concern from wastewater and stormwater as they relate to salmon and their food web.
- EST1.1 - Gain a better understanding of current habitat conditions.
- EST1.5 - Increase human and technical capacity of staff for planning, implementation, and enforcement.
- EST2.2 - Address barriers to improve implementation plans, policies, and regulations.
- EST3.4 - Collect and analyze data to adaptively manage recovery practices.
- FP1.1 - Gain a better understanding of current habitat conditions.

Puget Sound Strategies and Sub-strategies supported by this request include:

- 1.1 - Focus land development away from ecologically important and sensitive areas. Identify and prioritize areas for protection, restoration, and best suitable for (low-impact) development
- 5.1 - Protect and restore floodplain function. Improve data and information to accelerate floodplain protection, restoration, and flood hazard management.
- 8.2 - Focus development away from ecologically important and sensitive nearshore areas and estuaries. Support local governments to adopt and implement plans, regulations, and policies that protect the marine nearshore and estuaries, and incorporate climate change forecasts.
- 8.3 - Improve, strengthen, and streamline implementation and enforcement of laws, regulations, and permits that protect the marine and nearshore ecosystems and estuaries.
- 12.1 - Achieve water quality standards on state and privately owned working forests through implementation of the Forest and Fish Report.
- 24.1 - Implement performance management. Work collaboratively to track and report on implementation performance.
- 25.2 - Coordinate and advance science and monitoring. Implement a coordinated, integrated ecosystem-monitoring program.

State Workforce Impacts:

N/A

Intergovernmental:

This request is being driven and supported by the State/Tribal Riparian Protection & Restoration Workgroup, consisting of state agencies and tribal leadership. The PW3, or the Monitoring and Adaptive Management, Team identified the need for a more accurate NHD early on in their process to allow for accurate status and trends monitoring of riparian areas. PW3 is co-led by the Puget Sound Partnership and Jamestown S'Klallam Tribe, and includes members from:

- Skagit River System Cooperative
- Department of Ecology
- Department of Commerce
- Governor's Salmon Recovery Office
- Department of Natural Resources
- Washington State Conservation Commission
- Northwest Indian Fisheries Commission
- Department of Fish and Wildlife

Any state or local agency that maintains associated data to the WA-NHD will be impacted. This request reflects the resources needed to update the associated data. The county and city governments in the pilot area support this request, and many other governments outside of the pilot area have expressed support for improving our mapped streams.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

There is general support from non-governmental stakeholders, such as environmental consultants and non-profit organizations, for improving the WA-NHD within the pilot area.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

Improved Stream Mapping - IT Addendum.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?

Yes

Objects of Expenditure

Objects of Expenditure *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$360	**$360**	$360	$0	**$360**
Obj. B	$0	$132	**$132**	$132	$0	**$132**
Obj. E	$0	$256	**$256**	$16	$0	**$16**
Obj. G	$0	$9	**$9**	$9	$0	**$9**
Obj. J	$0	$5	**$5**	$5	$0	**$5**
Obj. T	$0	$139	**$139**	$139	$0	**$139**

Agency Contact Information

Christina Kellum
(360) 481-9608
christina.kellum@ecy.wa.gov

2021-23 IT ADDENDUM

NOTE: Only use this addendum if your decision package includes IT costs and DOES NOT relate to implementation of the One Washington project.

Part 1: Itemized IT costs

Please access the 2021-23 IT Fiscal Estimate Workbook imbedded in this document below. Agencies must itemize all IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. When itemizing costs, please consider the total cost of the combined level of effort which includes: the associated costs, from planning through closeout, of state, vendor, or both, in order to purchase, acquire, gather and document requirements, design, develop or configure, plan or conduct testing, and complete implementation of enhancement(s) to an existing system.

Please itemize all IT cost associated with this request where you are not asking for additional funding. These costs are considered in-kind and provided through existing agency base. Detailed costs from existing agency base should be entered on the in-kind tab within the 2021-23 IT Fiscal Estimate Workbook.

21-23 IT Fiscal Estimates Workbook.›

Part 2: Questions that support the reuse of existing state resources

To ensure effective reuse of existing state resources, all IT investments — including project IT expenditures — are expected to comply with IT statutes and policies. The answer to these questions will help OCIO and OFM determine if the decision package will be funded.

A. Does this investment provide for acquisition of, or enhancement to, an administrative or financial system? ☐Yes ☒ No

B. If Yes, has this decision package gone through the Administrative and Financial System review as required in (SAAM) section 80.30.88? ☐Yes ☐ No

   If Yes, attach the approval letter.

   If No, do not submit the decision package. Recommendation will be "Do Not Fund".

C. Does this decision package fund the acquisition or enhancement of equipment or facilities in any agency data centers? (See OCIO Policy 184 for definition.) ☐Yes ☒ No

D. If yes, do you have an approved waiver to proceed with this proposed investment? ☐Yes ☐ No

If Yes, attach a copy of the waiver approval.

If No, do not submit this decision package. Recommendation will be "Do Not Fund".

E. For Health and Human Services agencies (HHS Coalition) DCYF, DOH, DSHS, HCA and Washington Health Benefit Exchange, has this project been screened for inclusion in the HHS Coalition portfolio? ☐Yes ☐ No

If Yes, this is part of the HHS Coalition portfolio, has this project received HHS Coalition project initiation approval? ☐Yes ☐ No ☐ N/A

If answer to the first HHS Coalition question is Yes (or N/A for second question), attach approved HHS Coalition Project Initiation Form.

If No to either HHS question, do not submit the decision package. Recommendation will be "Do Not Fund".

Part 3: Maintenance and policy level decision packages

Answers to these questions will be used in part to determine if the decision package will be evaluated and ranked by the OCIO as required by RCW 43.88.092.

A. Does this decision package fund the acquisition or expansion of computer hardware capacity? ☐Yes ☒ No

If Yes, where will the hardware solution be hosted? ☐ State Data Center ☐ External Cloud

B. Does this decision package fund the development or acquisition of a new or enhanced software solution or service? ☐Yes ☒ No

If Yes, where will the software solution be hosted? ☐ State Data Center ☐ External Cloud

C. If response to question B is Yes, do you expect this to solution to exchange information with the state financial system (AFRS) or the OneWA solution? ☐Yes ☐ No

D. If response to question B is Yes, will this investment renew or procure facial recognition service? ☐Yes ☐ No

E. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If Yes, name the project:

_____

(Project name published on the IT Dashboard)

If you your decision package is maintenance and you answered "yes" to any of the above questions in Part 3, you must answer the questions in Part 4 below to finish the IT Addendum. All policy decision packages must answer question in Part 4.

Part 4: IT Investment Questions

Please provide a response to the following questions. Responses will be evaluated and ranked by the OCIO as required by RCW 43.88.092. Chapter 10 of the operating budget instructions contains the criteria used to evaluate 2021-23 decision packages.

AGENCY READINESS

Due diligence

1. Summarize the feasibility or due diligence work completed in support of this decision package. Attach a copy of the feasibility study or other documentation of due diligence to the decision package.

This request includes evaluating different methodologies to create elevation-derived hydrography (EDH) using Geographic Information Systems (GIS) analysis. One method is actively being used in Oregon and other states, the other method[1] (using Geomorphons) has been used to map Chesapeake Bay, Virginia. Both methods will be evaluated in the Stillaguamish watershed to determine which most accurately maps hydrography in Washington State. The Washington National Hydrography Dataset (NHD) steward has had done extensive research and had multiple discussions with Oregon, Chesapeake Bay Foundation, Washington's GIS coordinator, and United States Geological Survey (USGS) regarding these different methods. NHD staff at USGS and Washington's GIS coordinator are in support of evaluating both methods for this pilot project. This project will use the Elevation-Derived Hydrography Specifications[2] published by USGS.

This request will also work with local jurisdictions to incorporate their hydrography data into the NHD in locations where EDH is not as effective such as water courses that have been modified in urban and agricultural areas, or estuaries will little topographic relief. This requires using existing processes and tools developed by Ecology and USGS. This pilot project will evaluate the level of effort needed to incorporate local data. Level of effort is dependent on multiple factors such as staff expertise, schema of hydrography dataset, and data quality.

Governance and management

2. What governance processes will support this project? Examples of governance processes include appropriately placed executive sponsor, representative steering committee, resourced vendor/contract management, change control, and incorporating stakeholder feedback into decision making processes. Provide examples of how your proposed budget includes adequate funding and planning for governance processes, if applicable.

This request includes funding for a Project Manager A member of Ecology's executive leadership team will be the Executive sponsor and the WA-NHD steward will be the technical team lead responsible for directing work of the technical team. A steering committee consisting of federal, state, local and tribal entities will guide the project and provided recommendations for decision making. It is anticipated that approximately 75-100 participants from Federal, local, state and tribal entities will attend stakeholder meetings held by the WA-NHD steward. Conflicts or challenges that arise throughout the project will be discussed with both stakeholders and the steering committee, providing ample opportunity for feedback and inclusion into decision making. Contracts will be managed by Ecology contract staff.

[1] https://cbtrust.org/wp-content/uploads/2018_Scope10_FinalReport_wAppendix.pdf
[2] https://www.usgs.gov/core-science-systems/ngp/ss/elevation-derived-hydrography-specifications

Planning and readiness

3. Describe how your agency will resource the project management of this project. Will in-house resources be used, or will resources be acquired? How has organizational change management been factored into planning and approach? Has the project requested a project management approach to be used for this project? Describe whether project and organizational change management resources are included in this request or will be provided by in-kind resources. Describe whether the proposed budget includes costs associated with independent quality assurance.

   This request includes funding to hire a project manager for this two year project. A project management plan that includes a communication plan, organizational change management plan (using the ADKAR model), and project governance plan will be developed and used to measure progress.
   Due to the data development/collection nature of this project, it does not fall easily into the Agile approach using minimum viable product. This project will use project management tools to collect business and technical requirements, document milestones and tasks, and report progress and change control requests to the steering committee. Stakeholder meetings will inform business requirements, change management impacts, and help identify the training and tools needed to assist with data transformation and integration with NHD.
   This budget request includes costs associated with independent quality assurance to provide project readiness assessment and monitoring of project if it is determined that the project is under gated funding or OCIO oversight.

Technical alignment

Strategic alignment

4. Using specific examples, describe how this investment aligns with strategic elements of the Enterprise Technology Strategic Plan. Examples of strategic principles that tie back to tenets of the strategic plan include, but are not limited to: buy don't build, solutions hosted on modern hosting solutions, solutions promoting accessibility, early value delivery of functionality throughout the project, and modular implementation of project features.

   Efficient and Effective Government:

   - This requests includes conducting a pilot project to determine appropriate resource levels and data costs needed to improve the accuracy of mapped streams statewide. This will determine the data-driven one-time and on-going request for the 23-25 biennium.

   Accountable IT Management:

   - The project will use standard GIS technology software and will result in improving the accuracy of the state's Hydrography Data Standard[3] – per OCIO Policy 161.03.

Technical alignment

5. Using specific examples, describe how this investment aligns with technical elements of the Enterprise Technology Strategic Plan. Examples of technical principles that tie back to tenets of the strategic plan include, but are not limited to: technology reuse, data minimization,

[3] https://ocio.wa.gov/policy/16103-hydrography-data-standard

incorporating security principles into system design and implementation, publishing open data, and incorporating mobile solutions into systems.

This request aligns with multiple technical elements of the Enterprise Technology Strategic Plan.

Data minimization:

- The intent of this project is to ultimately minimize data by providing a single accurate hydrography dataset that can be used by all state, local, tribal, and federal partners.
- This pilot project will use existing data and also determine the specific data needs in order for a statewide update

Technology reuse:

- The pilot project will identify technical processes needed to improve mapped streams so that they can be applied across the state.
- This pilot project will use existing data and also determine the specific data needs in order for a statewide update.

Publishing open data:

- All updates will be incorporated into NHD and will be published through the geospatial open data portal.[4]

Incorporating mobile solutions into systems:

- Scale-dependent rendered services will be available to integrate into mobile solutions.

Reuse and interoperability

6. Does the proposed solution support interoperability and/or interfaces of existing systems within the state? Does this proposal reuse an existing solution or existing components of a solution already in use elsewhere in the state? If the solution is a new proposal, will it allow for such principles in the future? Provide specific examples.

   This proposal will use existing standard GIS software and NHD schema so that other systems that currently utilize the NHD will not be impacted. The NHD is used in multiple web applications such as Water Quality Atlas, Coastal Atlas, and Wetlands Rating tool. ND is integrated with Ecology's Environmental Information management system (EIM) and Water Quality Standards GIS layer.

Business alignment

Business driven technology

7. What are the business problems to be addressed by the proposed investment? These business problems should provide the basis for the outcome discussion below. Describe how end users (internal and external) will be involved in governance and implementation activities.

The Governor's Riparian Protection & Restoration Workgroup identified the critical need to improve WA-NHD to address data inaccuracies that currently prohibits a statewide riparian

[4] https://geo.wa.gov/

assessment and monitoring program. Members of the riparian workgroup will participate on the steering committee or at stakeholder workshops which will consist of tribal, federal, state, and local entities.

Measurable business outcome

8. Strategic and Performance Outcomes (Chapter 2 - 2021-23 Budget Instructions) of the decision package response will be used to identify how this proposed IT investment improves business outcomes within your agency. The description in the decision package should provide specific examples of business outcomes in use within your agency, and how those outcomes will be improved as a result of this technology investment.

   The outcome of this request will inform resources, data, and estimated time needed to significantly improve and maintain the WA-NHD that meets stakeholder's needs. Specific performance outcomes include:

   - Identify what elevation-derived mapping method most accurately represents Washington water.
   - Determine if high resolution land cover significantly improves mapped hydrography accuracy
   - Document level of effort and process to integrate elevation-derived datasets into NHD
   - Document level of effort, process, and training needed to incorporate local data into NHD
   - Document impacts to NHD users and identify change management tools necessary to mitigate those impacts.
   - Determine resources needed to improve the accuracy of WA-NHD

Decision Package Urgency

9. Address the urgency of implementing the technology investment in this cycle and impacts to business if technology effort doesn't proceed as planned?

This technology investment is needed so that Ecology is prepared to submit a request for one-time and on-going funding the 23-25 biennium. If this request is not approved, policy decisions will continue to be fed with inaccurate assessments due to poor data. Based on the rate of WA-NHD updates over the last 10 years with current staffing levels, it will take over 20 years to improve mapped streams across the state and accurate local hydrography data will continue to struggle to be incorporated into the NHD. USGS is currently evaluating a grant funding opportunity for EDH. This funding opportunity may be missed if a plan to utilize EDH is not clearly defined.

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Agency Recommendation Summary

Chapter 88.40 RCW requires certain vessels and facilities transporting, storing, handling, or transferring oil and hazardous substances in Washington to demonstrate a defined level of financial responsibility for the costs of a spill. In 2021, the Legislature included a proviso in section 302(3) of the 2021-23 enacted operating budget that requires Ecology to adopt rules to implement the provisions of RCW 88.40.025 for oil handling facilities. However, funding was not provided to complete the rulemaking process, so Ecology is now requesting the funding needed to adopt those rules, and establish a Certificate of Financial Responsibility program to ensure compliance with these requirements for both facilities and vessels moving forward. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account and Oil Spill Prevention Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	1.8	**0.9**	2.2	4.6	**3.4**
Operating Expenditures						
Fund 217 - 1	$0	$86	**$86**	$102	$206	**$308**
Fund 23P - 1	$0	$201	**$201**	$237	$482	**$719**
Total Expenditures	**$0**	**$287**	**$287**	**$339**	**$688**	**$1,027**

Decision Package Description

Chapter 88.40 RCW requires certain vessels and facilities transporting, storing, handling, or transferring oil and hazardous substances in Washington to demonstrate a defined level of financial responsibility for the costs of a spill. RCW 80.40.020 explicitly defines the levels of financial responsibility for vessels that transport petroleum products as cargo or as fuel across the waters of the state of Washington, depending on the type, size, and function of the vessel. However, for facilities required to demonstrate financial responsibility, RCW 88.40.025 requires Ecology to conduct rulemaking to determine the levels necessary to compensate the state and affected counties and cities for damages that might occur during a spill of oil from that facility into the navigable waters of the state.

After Chapter 88.40 RCW was enacted 1991, Ecology began a rulemaking process to establish financial responsibility requirements for facilities under RCW 88.40.025, and create a Certificate of Financial Responsibility (COFR) program, to ensure compliance with requirements for both facilities and vessels. However, that rulemaking effort was eventually postponed for the following reasons:

- Adoption of this rule was estimated at the time to cost facilities approximately $6,000,000 per facility for the insurance policies that would have been required.
- Multiple regulatory requirements were issued during this time, including prevention requirements, which created new costs for facilities. Companies sought to focus their resources on compliance with spill prevention requirements because that would reduce risk of spills and their associated costs.
- It was estimated that if spill risks were to decrease over time, insurance prices for companies would also decrease, making demonstration of financial responsibility more affordable for regulated entities in the future. With other pacific coast states now having requirements in place, this has reduced the estimated costs for compliance.

Despite the postponement of the original rulemaking process, Ecology has continued to recognize the need for these requirements over the years, as well as the need to create a COFR program to ensure compliance. Establishing a COFR program was identified as the top unfunded priority in Ecology's Spill Prevention, Preparedness, and Response Program Activity and Funding Report that was submitted to the Legislature in June 2020 (https://apps.ecology.wa.gov/publications/summarypages/2008009.html).

Ecology currently regulates oil spill contingency planning requirements for nearly 20 companies that represent oil handling facilities, and nearly 4,000 regulated vessels. When oil handling facilities and vessel companies cannot adequately cover the cost of a spill to Washington's waters, the costs are then borne by Ecology, the state, and federal government. Without financial responsibility requirements, or a COFR program to ensure compliance, we have no assurances that funds exist to pay for oil spills, which can also delay response actions.

In 2021, the Legislature included a proviso in section 302(3) of the 2021-23 enacted operating budget requiring Ecology to adopt rules to implement the provisions of RCW 88.40.025 and establish financial responsibility requirements for onshore or offshore facilities. However, funding was not appropriated to support this required work in the biennial budget, and Ecology does not have capacity within its existing base operating budget to complete this rulemaking without additional resources.

This request will provide the funding and staff resources needed to complete this rulemaking, as well as establish a COFR program to ensure

facilities and vessels comply with these requirements into the future. While establishing financial responsibility requirements for facilities is an important first step, ensuring ongoing compliance with these requirements, for both facilities and vessels, is just as important, if not more.

Annual certification of financial responsibility will provide the most direct way to confirm that vessels and facilities maintain an ongoing ability to pay for a large oil spill. A COFR program will allow Ecology to review existing documents submitted by vessels and facilities used to verify financial responsibility, such as insurance policies, Protection and Indemnity Club membership documents, surety bonds, guarantees, letters of credit, qualification for self-insurance, or proof of certification from another state meeting Washington's standards. After verifying financial responsibility exists, Ecology will issue certificates to verify compliance with state requirements during compliance inspections.

Due to state's strong prevention and contingency planning practices, spill risk has decreased over the years, while the financial burden of demonstrating financial responsibility has also decreased. California and Alaska both have COFR programs in place, and several companies operating in Washington are already meeting requirements in these, and other jurisdictions. California prepared an economic impact analysis of COFR requirements in 2016, and according to that analysis, the costs would vary depending on the method used to demonstrate financial responsibility. Surety bonds were the least common method because most required high collateral requirements. One marine facility paid $588,000 for a $65 million surety bond in 2013. Insurance policies are a more common method, and prices for coverage to meet California's requirements ranged from about $7,000 per year for a $2 million dollar policy, to $50,000 per year for a $65 million dollar policy, according to the 2016 economic analysis. The other commonly used method in California is self-insurance, in which the company submits audited financial information demonstrating that the company meets the COFR criteria. For one company, costs to demonstrate self-insurance were $15,000.

The programs in California and Alaska demonstrate the feasibility of the COFR program for regulated facilities, and Ecology will be able to use the lessons learned through the creation and implementation of those programs to help implement Washington's COFR program. The current regulatory environment supports the establishment of financial responsibility requirements for facilities, and the development of a COFR program.

Impacts on Population Served:
This request will ensure facilities and vessels handling the largest volumes of oil and petroleum products in our state are financially responsible for the costs of a worst-case discharge spill. The rulemaking and establishment of a COFR program will provide an improved level of certainty that spillers are financially capable of responding to, and containing, a spill as quickly as possible.

According to the National Oceanic and Atmospheric Administration (NOAA) (https://coast.noaa.gov/states/washington.html), 4.7 million people live in the coastal portions of our state, and the coastal economy employs 2.4 million people and contributes $419 billion toward the gross domestic product. Oil spills not only impact coastal areas and waterways, they also impact the health of marine life and contribute toward accumulation of toxic compounds in fish and shellfish. This request will benefit the health of populations that consume fish and shellfish from Washington waters and rely on healthy fisheries.

Alternatives Explored:
The two alternatives to this request would be to continue to delay rulemaking, or redirect existing resources to complete this work. However, both of these alternatives are not feasible options for Ecology. Delaying rulemaking, and therefore the creation of a COFR program to ensure compliance, would continue to place the state at risk of having to bear the costs for a spill response at a facility with inadequate financial capacity to cover the costs of the response. This risk would also extend to vessels if Ecology is unable to establish a COFR program to ensure financial responsibility requirements are met for both facilities and vessels. Existing staff within Ecology's Spills Program could not be redirected to this work without negatively impacting existing work in the areas of spills prevention, preparedness, and response.

Consequences of Not Funding This Request:
If this request is not funded Ecology would be unable to complete the required rulemaking, which would continue to delay implementation of financial requirements for facilities that store, handle, or transfer oil or hazardous substances in bulk on, or near the navigable waters of Washington State. Ecology would also be unable to establish a COFR program to ensure compliance with these requirements for both facilities and vessels. This would continue to place the state at risk of having to bear the costs of a spill from a facility or from a vessel where the owner has inadequate financial capacity to cover the costs of the response.

Assumptions and Calculations

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

This request will expand activity A030 – Prepare for Aggressive Response to Oil and Other Hazardous Material Incidents by providing funding to complete rulemaking to establish financial responsibility requirements for facilities that store, handle, or transfer oil or hazardous substances in bulk on, or near, the navigable waters of the state. Funding will also be used to establish an annual certification program so that Ecology can ensure compliance with these requirements. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

Activity A030 – Prepare for Aggressive Response to Oil and other Hazardous Material Incidents		
	2019-21	2021-23
FTEs Total	22.90	22.90
001-7 General Fund - Private/Local	$112,000	$112,000
217-1 Oil Spill Prevention Account - State	$4,420,000	$3,279,000
23P-1 Model Toxics Control Operating - State	$2,488,000	$3,706,000
TOTAL	**$7,020,000**	**$7,097,000**

Detailed Assumptions and Calculations:

Section 302(3) of the 2021-23 enacted operating budget requires Ecology to adopt rules to implement the provisions of RCW 88.40.025 and establish financial responsibility requirements for onshore or offshore facilities that store, handle, or transfer oil or hazardous substances in bulk on, or near, the navigable waters of the state. Because this rulemaking may result in new costs for regulated entities, and will require and in-depth technical analysis of insurance requirements, Ecology estimates it will take two full years to complete.

Beginning July 1, 2022 through June 30, 2024, Ecology requires salaries, benefits, and associated staff costs for the following positions:

- Marine Transportation Safety Specialist (MTSS) 3: This position will lead the rulemaking process, which includes coordinating rule writing and scoping and rulemaking timelines (0.5 FTE each year in fiscal year 2023 and fiscal year 2024).
- Marine Transportation Safety Specialist 3: This position will provide technical expertise regarding resources at risk from spills, cleanup costs, and worst case spill planning during the rulemaking process. After rulemaking is complete, this position will lead the COFR program and provide maritime expertise for vessel requirements (1.0 FTE in fiscal year 2023 and ongoing thereafter).
- Communications Consultant 3 (CC3): This position will provide outreach support for the rulemaking process (0.1 FTE each year in fiscal year 2023 and fiscal year 2024).
- Economic and Regulatory Analysis of the Rule: Because this rule could create a fiscal impact for the regulated community, estimated staff time needed is 0.25 FTE Economic Analyst 3 and 0.10 FTE Regulatory Analyst 2 in fiscal year 2024 to complete an economic and regulatory analysis of the rule.

Additional costs for this rulemaking, between July 1, 2022 and June 30, 2024, include:

- Attorney General's Office Rulemaking Support: Per discussion with Ecology's assistant attorney general, costs are estimated at $10,000 per year in fiscal year 2023 and fiscal year 2024 (nearly 0.05 FTE AAG time each year). Costs are shown in Object E.
- Rulemaking Meetings Facility Costs: Estimates include two meetings each year, estimated to be $1,000 per meeting. Total estimates are $2,000 in fiscal year 2023 and fiscal year 2024. Costs are shown in Object E.

Once rulemaking is complete, additional ongoing staff are needed, beginning in fiscal year 2025, to implement the COFR program in order verify compliance with the requirements, and recommend enforcement actions when a facility or vessel is out of compliance. In addition to the ongoing MTSS3 position described above, Ecology requires salaries, benefits, and associated staff costs for the following FTEs to provide statewide technical assistance and document auditing to ensure all facilities and vessels meet financial responsibility requirements.

- 1.0 FTE Environmental Planner 4 (EP4) – This position will provide ongoing planning and coordination support for the COFR program, track compliance with annual certification requirements, and serve as enforcement lead in the event of non-compliance (1.0 FTE EP4 in fiscal year 2025 and ongoing each fiscal year thereafter).
- 2.0 FTEs Regulatory Analyst 3 (RA3) – These positions will provide the primary financial expertise to review appropriate financial documents and certify they demonstrate ability to take financial responsibility for the cost of a spill (2.0 FTEs RA3 in fiscal year 2025 and ongoing each fiscal year thereafter).

Travel costs include $5,000 per year for each ongoing FTE starting in fiscal year 2025 for participation in drills and site visits for financial responsibility reviews, for a total of $20,000 each year in supplemental travel costs. These costs are shown in Object G.

Funding requested for these resources is split between the Oil Spill Prevention Account (30%) and the Model Toxics Control Account – Operating (70%), based on how similar work is funded within Ecology's Spills Program.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		149,659	178,274	363,744	363,744	363,744
B	Employee Benefits		54,926	65,428	133,495	133,495	133,495
E	Goods and Services		18,630	20,080	16,576	16,576	16,576
G	Travel		3,491	4,255	28,728	28,728	28,728
J	Capital Outlays		1,921	2,341	4,804	4,804	4,804
T	Intra-Agency Reimbursements		57,899	68,968	140,721	140,721	140,721
	Total Objects	**0**	**286,526**	**339,346**	**688,068**	**688,068**	**688,068**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
MARINE TRANSPORTATION SAFETY SPEC 3	95,484		1.50	1.50	1.00	1.00	1.00
COMMUNICATIONS CONSULTANT 3	64,332		0.10	0.10			
ECONOMIC ANALYST 3	82,344			0.25			
REGULATORY ANALYST 2	80,292			0.10			
ENVIRONMENTAL PLANNER 4	86,484				1.00	1.00	1.00
REGULATORY ANALYST 3	90,888				2.00	2.00	2.00
FISCAL ANALYST 2			0.16	0.19	0.40	0.40	0.40
IT APP DEVELOPMENT-JOURNEY			0.08	0.10	0.20	0.20	0.20
	Total FTEs	**0.00**	**1.84**	**2.24**	**4.60**	**4.60**	**4.60**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE, and also include facility costs for rulemaking meetings of $2,000 each year in FY 2023 and FY 2024, and ATG legal consultation costs of $10,000 each year in FY 2023 and FY 2024.
Travel is the agency average of $2,182 per direct program FTE, plus $20,000 in FY 2025 and ongoing each year thereafter for drill participation and site visits for financial reviews.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Ecology's Spills Program has reviewed the locations of our regulated oil handling facilities on the Department of Health's (DOH) Environmental Health Disparities Map. This map ranks census tracts on a scale of 1 to 10, with 1 representing the lowest environmental health disparities in the state, and 10 representing the highest. These rankings are based on each census tract's environmental exposures and disparities, sensitive populations with indicators for poor health outcomes, and socioeconomic disparities. The four primary criteria and elements included are:

- Environmental Exposures (NOx-diesel emissions; ozone concentration; PM2.5 Concentration; populations near heavy traffic roadways; toxic release from facilities (RSEI model)).
- Environmental Effects (lead risk from housing; proximity to hazardous waste treatment, storage, and disposal facilities (TSDFs); proximity to National Priorities List sites (Superfund Sites); proximity to Risk Management Plan (RMP) facilities; wastewater discharge).
- Sensitive Populations (death from cardiovascular disease; low birth weight).
- Socioeconomic Factors (limited English; no high school diploma; poverty; race - people of color; transportation expense; unaffordable housing; unemployed).

At least seven of the regulated oil handling facilities in Washington (not including pipelines) are located in areas that rank seven or higher on the DOH Environmental Health Disparities Map. Five locations have rankings of nine or 10, while also having demographic indexes above the 75th percentile on the U.S. Environmental Protection Agency's (EPA) Environmental Justice Screen map, which means these areas tend to be home to more people of color and people with lower incomes.

In addition to these locations, key pipelines traverse census tracts with high environmental health disparity rankings and higher demographic indices. This is important because these facilities not only tend to be near Tribal communities that rely heavily on fishing, but also near communities of color and low income populations, whose residents are already experiencing disproportionate health impacts and socioeconomic pressures. Residents of these communities may supplement their incomes and diets with fish and shellfish harvested from areas that are at risk for

impacts from oil spills. A poorly contained spill at one of these facilities would place a greater pollution burden on already overburdened and underserved communities. It is critical that all facilities demonstrate the financial capacity to deploy a rapid and aggressive response and promptly contain a spill.

Tribes with treaty-protected fishing and usual and accustomed areas (U&A) have been experiencing losses for decades related to the transport of crude by vessel, including the loss of gear, time on the water during open fishing days, and safety risks, just by fishing near vessel routes. Fishing, including shellfish farming, is part of the cultural heritage of Tribes with U&A areas near oil handling facilities. A spill of any size will apply additional pressure on Tribal communities if traditional fishing areas are inaccessible for long periods of time due to a spill response and cleanup.

Additionally, there may be persistent environmental impacts related to a spill that could have lasting cultural and economic impacts to communities that rely on fishing and shellfish. Certifying financial responsibility will ensure a low risk of delay during a response, which is important to minimize environmental impacts by controlling the source of the spill, identifying and protecting resources at risk quickly, and deploying equipment to contain and recover oil as quickly as possible to limit the area impacted.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 3: Prevent and reduce toxic threats and pollution.
- Goal 4: Protect and manage our state's waters.
- Goal 5: Protect and restore Puget Sound.

It will support these goals by requiring oil handling facilities and vessels to certify that they can cover the costs associated with an oil spill. This will support rapid and aggressive spill responses without delays related to funding considerations. Timeliness is important in minimizing damages to our state's waters through the release of toxic pollution in an oil spill. This request will also ensure that facilities and vessels can cover the costs of damages to resources.

This request provides essential support to the following Governor's Results Washington Goals:

- Goal 2: Prosperous Economy
- Goal 3: Sustainable Energy and a Clean Environment
- Goal 4: Healthy and Safe Communities

Certification of financial responsibility is a critical component in spill contingency planning. In the event of an oil spill, a strong plan and financial resources to support a rapid and aggressive response will minimize impacts to the local communities and important economic and cultural resources that depend on healthy waterways.

Performance Outcomes:

The outcome of this request will be the establishment of financial responsibility requirements for facilities that store, handle, or transfer oil or hazardous substances in bulk on or near the navigable waters. This request will also create an annual certification of financial responsibility program for all covered oil handling facilities in Washington and all regulated vessels transporting oil and petroleum products in Washington waters. This request will ensure that companies have the financial resources to cover the costs of a spill.

Other Collateral Connections

Puget Sound Recovery:

This request supports Puget Sound Action Agenda implementation through the following Ongoing Program, Regional Priority Approach, and Strategies:

- Ongoing Program: OGP_ECY2Y: Oil Spill Preparedness.
- Regional Priority Approach CHIN6.2: Strengthen local oil spill preparedness and response plans; integrate with Federal, State, and tribal programs and planning; and allocate resources.
- Strategy 20 to effectively prevent, plan for, and respond to oil spills.
    - Sub-strategy 20.1 to prevent and reduce the risk of oil spills.

This request also supports efforts under the Governors' Executive Order 18-02, Southern Resident Orca Recovery and Task Force through the following recommendation: 24: Reduce the threat of oil spills in Puget Sound to the survival of Southern Residents.

State Workforce Impacts:

N/A

Intergovernmental:

The U.S. Coast Guard (USCG) and EPA are expected to support this request, since they share responsibility with Ecology to manage spill response in both marine and inland areas. Both the USCG and EPA are members of the Northwest Area Committee that works on policy for northwest states oil spill preparedness and response. Local governments should also support this request as it will help ensure that oil handling facilities and vessels have the financial capacity to cover the cost of a spill response, minimizing the risk of economic impacts to communities that depend on healthy waterways.

Legal or Administrative Mandates:

This request is in response to an unfunded proviso in section 302(3) of the 2021-23 enacted operating budget, requiring Ecology to adopt rules to implement the provisions of RCW 88.40.025 and establish financial responsibility requirements for onshore or offshore facilities that store, handle, or transfer oil or hazardous substances in bulk on, or near, the navigable waters of the state.

Stakeholder Response:

This request will support implementing statutory requirements that have been in place since the early 1990s, and will strengthen compliance monitoring of these requirements into the future. It will require oil handling facilities and vessels to demonstrate financial capacity to cover the cost of a spill. For some oil handling facilities, this may require they obtain insurance coverage, but many of the facilities in Washington are operated by companies that already meet financial responsibility requirements in California or Alaska. Because the rulemaking supported by this request could potentially create new financial obligations for the regulated entities, we will ensure that the rulemaking process provides adequate time and resources for public engagement and stakeholder involvement, as well as economic analysis of the rule's impacts.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$150	**$150**	$178	$364	**$542**
Obj. B	$0	$55	**$55**	$66	$133	**$199**
Obj. E	$0	$19	**$19**	$20	$16	**$36**
Obj. G	$0	$3	**$3**	$4	$29	**$33**
Obj. J	$0	$2	**$2**	$2	$5	**$7**
Obj. T	$0	$58	**$58**	$69	$141	**$210**

Agency Contact Information

Linda Pilkey-Jarvis
(360) 280-7209
linda.pilkey-jarvis@ecy.wa.gov

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Agency Recommendation Summary

The Northwest Area Contingency Plan is Washington State's master spill contingency plan for emergency response, and has served as the Northwest region's portion of the National Contingency Plan for over 20 years. On October 27, 2020, the U.S. Coast Guard announced that it will no longer recognize that plan as their coastal Area Contingency Plan for Sector Columbia River and Sector Puget Sound, and directed the Captains of the Port for these two sectors to exclusively recognize USCG-developed, sector-specific plans moving forward. In response to the Coast Guard's decision, Ecology is requesting funding to support additional staff needed to develop new state emergency response plans for these two areas, integrate them with those now being used by our federal partners, and update them annually per requirements in RCW 90.56.060. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account and Oil Spill Prevention Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	0.0	2.3	**1.15**	2.3	2.3	**2.3**
Operating Expenditures						
Fund 217 - 1	$0	$100	**$100**	$100	$100	**$200**
Fund 23P - 1	$0	$233	**$233**	$232	$232	**$464**
Total Expenditures	**$0**	**$333**	**$333**	**$332**	**$332**	**$664**

Decision Package Description

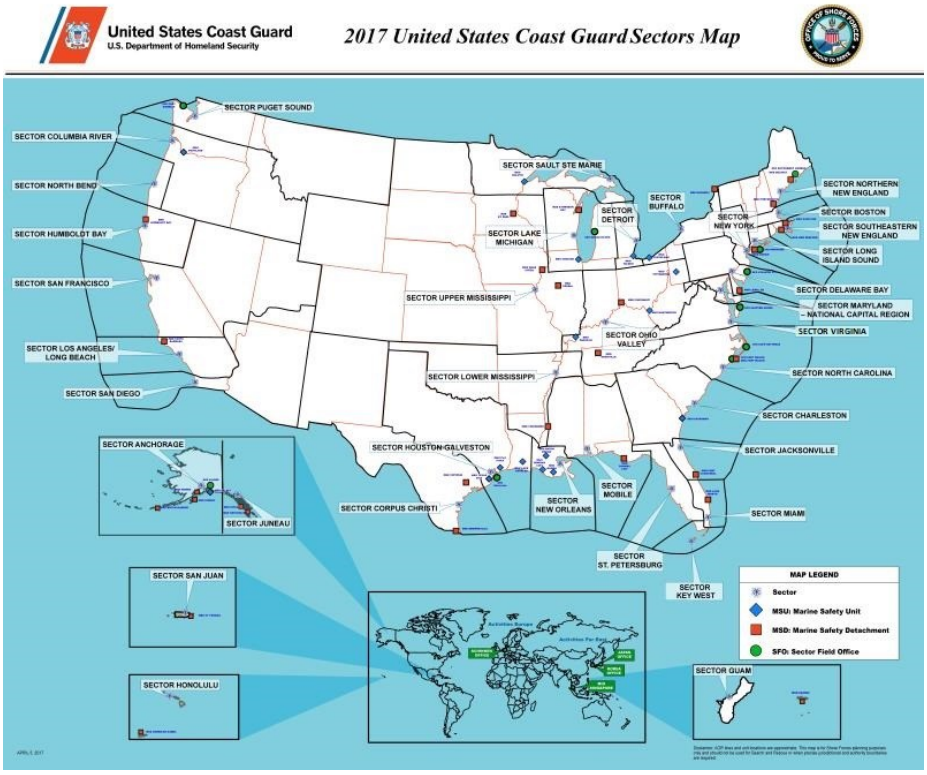
Background

The Northwest Area Contingency Plan (NWACP) is Washington State's official state master oil and hazardous substance spill contingency plan for emergency response under to RCW 90.56.060. Historically, the NWACP served as the official combined plan for Washington, Oregon, and Idaho, as well as the Region 10 area response plan for the U.S. Coast Guard (USCG) and the Environmental Protection Agency (EPA). The plan is developed and maintained under the guidance of the Regional Response Team (RRT) 10, and Ecology is a participating member. The NWACP has been the foundational plan for state coordination with our federal partners on spill response contingency planning for the entire Northwest area for over two decades. In recent years, several northwest tribes have also joined the RRT 10 to show support for the NWACP's consideration of environmental justice concerns and the protection of tribal resources and sovereignty.

For large oil spills, an incident command structure is established to support an organized and coordinated response with the spiller (if known), local governments, and impacted tribes. Ecology serves as the state on-scene coordinator, and USCG or EPA serve as the federal on-scene coordinator, depending on the location of the spill. In the past twenty years, the NWACP has provided a single plan for all response partners, which provides for seamless state and federal coordination on a spill response. When all partners are using the same planning document, it reduces decision time, which is critical when responding to a large oil spill.

The USCG has federal jurisdiction over the coastal zones covered by the NWACP. In Washington, the Puget Sound Captain of Port is responsible for the coastal zones of Puget Sound and Washington's coastal waters north of Quinault. The Columbia River Captain of Port is responsible for the coastal zones south of Quinault, and the Columbia river, up to the Bonneville Dam. Below is a map of the USCG's sectors (https://homeport.uscg.mil/Pages/Sector-Map.aspx).

Figure 1: USCG Sectors: This map shows the boundaries of Sector Puget Sound and Sector Columbia River. USCG has federal jurisdiction over oil spill responses in the coastal zones in these sectors. For Puget Sound, this includes all near-shore areas in the Puget Sound and outer coast. For Sector Columbia River, this includes the western coastal zones and the Columbia River, up to the Bonneville Dam.



Problem and Proposed Solution

On October 27, 2020, the USCG issued Marine Safety Information Bulletin MER-MSIB Number: 22-20 (*Attachment A*), announcing that the NWACP will no longer function as the USCG's coastal Area Contingency Plan (ACP) for Sector Columbia River and Sector Puget Sound. The Bulletin directed the Captains of the Port for these two sectors to exclusively recognize USCG-developed, sector-specific ACPs, moving forward, instead of the NWACP. Because the NWACP still serves as Washington State's master response plan under RCW 90.56.060, the USCG's shift away from a combined plan has important impacts on how our state plans are prepared and updated moving forward. It impacts our ability to develop consistent content for these different plans, while still protecting the best practices, response standards, and policies that Washington relies on.

While the USCG's new ACPs meet federal requirements, they do not account for Washington's statutory contingency planning and response requirements and best practices, nor the protection of tribal resources and sovereignty. As acknowledged in the USCG's bulletin, these new ACPs are federally mandated/managed plans, but a state may set standards (independent of ACPs) for facilities and vessels operating in state waters, which may be more stringent than federal standards. Such is the case in Washington.

Due to the significant impacts of the USCG's decision, not only to Washington's planning requirements, but also to those of Oregon and Idaho, the RRT 10 has been discussing the potential implications of this change since the UGSG first proposed it back in 2017. With support from impacted tribes, EPA, and our partner states in the NWACP, Ecology has been working with the USCG for the last four years to negotiate a path forward, with the goals of meeting USCG federal sector response requirements, while maintaining consistency with the NWACP as the official oil spill contingency plan for the Northwest area and Washington State.

Unfortunately, those efforts ultimately proved unsuccessful, and in June 2021, the USCG published their new ACPs for the Puget Sound and Columbia River Sectors (https://rrt10nwac.com/). Because the USCG is still a primary federal partner in oil spill response, moving forward, Ecology will need to draft new sectors plans for the state that will align with the USCG's new ACPs, as well as the NWACP for inland spills. Ecology will also need to provide technical assistance and frequent communication to our regulated entities so that they are able to keep their own contingency plans aligned with these changes.

The NWACP is still recognized by the EPA, which has jurisdiction over all inland spills, while the USCG has federal jurisdiction for coastal spill responses, and now recognizes the new USCG-developed ACPs for the Puget Sound and Columbia River sectors. Moving forward, the addition of two new state ACPs will essentially triple Ecology's oil spill contingency planning requirements, and we need additional staff to manage this increased workload. Specific work required by these changes include the need for increased coordination with all of our RRT 10 partners and participating tribal nations, the development of two new state ACPs, and the integration of these new plans with the NWACP and new USCG ACPs. These changes will also require Ecology to provide an increased level of technical assistance to our regulated community to help them prepare their own applicable contingency plan updates. The new Ecology staff will also have to develop and deploy drills to test plan integration, as well as state and federal coordination for coastal responses.

This request will support the resources needed to ensure that Washington's spill response standards, and tribal nations' interests, are incorporated into new federally-recognized contingency plans for these two sectors. Because the state's official contingency plan must be updated annually per RCW 90.56.060, Ecology will need to provide ongoing coordination with our federal, tribal, and state contingency planning partners, and the regulated community for these new plans. This budget request will support this new by adding two new positions with planning and maritime oil transportation expertise and providing funding capacity for drill-related travel.

Impacts on Population Served:
This request will support effective, coordinated contingency planning for the areas within USCG Puget Sound and Columbia River sectors, which include all of Puget Sound, all of Washington's western coast, and the Columbia River up to the Bonneville Dam. By ensuring strong federal and state coordination on spill response strategies that meet Washington policy objectives and requirements, this request will support communities that rely on these waters for fishing, shellfish harvesting, wildlife, and other natural and cultural resources. According to the National Oceanic and Atmospheric Agency's (NOAA) Office for Coastal Management, 4.8 million people live in Washington's coastal zones, and these areas support an estimated $419 billion in gross domestic product annually. This proposal supports integrated spill response planning, protecting the people, natural resources, and economic production that depend on healthy coasts.

Alternatives Explored:
Now that the USCG ACPs have been drafted, it is critical that Ecology and our response partners move forward with the development of new state ACPs to meet state requirements, and that those plans are integrated into both new and existing federal plans to ensure maximum preparedness for an oil spill in Washington coastal waters.

The only alternative to this request would be a reprioritization of current staff resources, reducing capacity to support other program priorities. This is not be a feasible option. The program is already fully tasked with implementing critical oil transportation safety legislation. Reductions in other areas would equate to reduced staffing to review industry contingency plans to ensure preparedness for an oil spill, or staff to review and update geographic response plans that allow us to quickly identify resources at risk and site specific response strategies based on the location of a spill. All program funding is being used to prevent spills through inspections and risk assessments, prepare for spills through contingency planning on drill deployment, respond to spills when they occur, or provide foundational administrative and communications support for these key functions.

Consequences of Not Funding This Request:
Right now, we have a gap in contingency plan coverage for Washington. While the NWACP will provide effective response strategies for inland spills and support coordination with the EPA, we do not have state plans that are recognized by the USCG for spills in the Puget Sound and Columbia River Sectors. Washington is at risk for a poorly coordinated response in the event of a significant oil spill in the Puget Sound, anywhere along Washington's Pacific Coast, or in the Columbia River.

Federal and state coordination is an important foundation for an effective emergency response. The current gap between state and federal plans could result in costly delays to containment and increased risk of extensive environmental, social, and economic harm. Ecology must develop plans that will be recognized by USCG in these sectors, which are home to over four million people and are important contributors to Washington's economy. Failure to fund the planning resources needed for this region risks preventable damage to cultural resources, natural resources, and livelihoods, in the event of a significant coastal oil spill.

Assumptions and Calculations

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

This request will support Activity A030 – Prepare for Aggressive Response to Oil and other Hazardous Material Incidents. Integration of the NWACP with USCG response strategies will meet foundational preparedness needs in Puget Sound and the Columbia River.
Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

Activity A030 – Prepare for Aggressive Response to Oil and other Hazardous Material Incidents		
	2019-21	**2021-23**
FTEs Total	22.90	22.90
001-7 General Fund - Private/Local	$112,000	$112,000
217-1 Oil Spill Prevention Account - State	$4,420,000	$3,278,000
23P-1 Model Toxics Control Operating - State	$2,488,000	$3,707,000
TOTAL	**$7,020,000**	**$7,097,000**

Detailed Assumptions and Calculations:

Requested funding will support the development of state plans to align with USCG sector-specific plans. Ongoing resources will support plan testing and coordination with USCG and our other partners through oil spill drills and annual plan updates.

Beginning July 1, 2022 and ongoing, Ecology requires salaries, benefits, and associated staff costs for the following positions:

- 1.0 FTE Environmental Planner 3 (EP3) to draft the new state ACPs for integration with the NWACP, and to develop the organizing processes around plan development, which includes communication and outreach with industry, tribes, agencies, and communities concerned with oil spill impacts.
- 1.0 FTE Marine Transportation Safety Specialist 2 (MTSS2) to provide maritime knowledge and technical expertise for drafting, updating, and testing the ACPs and NWACP. This position will also support the extended governance process, providing ongoing coordination with our federal, Tribal, and state partners to ensure seamless and effective plan verification through oil spill drills.

One-time Hazwoper training costs of $650 per ongoing FTE are included in fiscal year 2023. These costs are shown in Object E.

Specialized travel costs are included in this request for each of the requested positions and are estimated as follows in Object G:

- $4,995 per FTE per year for Worst Case Discharge Drills
- $12,320 per FTE per year for Table Top Drill Exercises

Funding requested for these resources is split between the Oil Spill Prevention Account (30%) and the Model Toxics Control Account – Operating (70%), based on how similar work is funded within Ecology's Spills Program.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		160,752	160,752	160,752	160,752	160,752
B	Employee Benefits		58,996	58,996	58,996	58,996	58,996
E	Goods and Services		9,588	8,288	8,288	8,288	8,288
G	Travel		38,994	38,994	38,994	38,994	38,994
J	Capital Outlays		2,402	2,402	2,402	2,402	2,402
T	Intra-Agency Reimbursements		62,188	62,188	62,188	62,188	62,188
	Total Objects	**0**	**332,920**	**331,620**	**331,620**	**331,620**	**331,620**

Staffing							
Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
ENVIRONMENTAL PLANNER 3	78,408		1.00	1.00	1.00	1.00	1.00
MARINE TRANSPORTATION SAFETY SPEC 2	82,344		1.00	1.00	1.00	1.00	1.00
FISCAL ANALYST 2			0.20	0.20	0.20	0.20	0.20
IT APP DEVELOPMENT-JOURNEY			0.10	0.10	0.10	0.10	0.10
	Total FTEs	**0.00**	**2.30**	**2.30**	**2.30**	**2.30**	**2.30**

Explanation of costs by object:
Salary estimates are current biennium actual rates at Step L.
Benefits are the agency average of 36.7% of salaries.
Goods and Services are the agency average of $4,144 per direct program FTE, and also include initial hazwoper training costs for new staff, estimated to be $1,300 in fiscal year 2023.
Travel is the agency average of $2,182 per direct program FTE, plus $34,630 in fiscal year 2023 and ongoing each year thereafter for drill implementation and evaluation.
Equipment is the agency average of $1,201 per direct program FTE.
Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.3% of direct program salaries and benefits, and is shown as object T. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development-Journey.

How is your proposal impacting equity in the state?

Several Northwest Tribes participate in NWACP work and support the combined plan because of the environmental justice consideration inherent to a collaboratively developed regional plan. The new USCG plans were not developed with stakeholder input, including tribes or state partners. Additional FTEs dedicated to reconciling the new marine plans with the state master plan will ensure tribal engagement through the state master plan preparation and revision process, which will be closely affiliated with the federal plans. Ecology is working on proposed legislation to require engagement with tribes in developing our statewide contingency plan.

As noted above, this request impacts oil spill planning and response coordination for all of Puget Sound, all of Washington's outer coast, and the Columbia River. This request will support communities that rely on these waters for fishing, shellfish harvesting, wildlife, and other natural and cultural resources, by ensuring a strong contingency plan framework and coordination between federal and state agencies in the event of an oil spill.

Below are views of the Department of Health (DOH) Environmental Health Disparities Map for the census tracts adjacent to Puget Sound and the Columbia River. This map ranks census tracts on a scale of one to 10, with one representing the lowest environmental health disparities in the state, and 10 representing the highest health disparities in the state.

The rankings are based on each census tract's environmental exposures and disparities, sensitive populations with indicators for poor health outcomes, and socioeconomic disparities. The four primary criteria and elements included are:

- Environmental Exposures (NOx-diesel emissions; ozone concentration; PM2.5 Concentration; populations near heavy traffic roadways; toxic release from facilities (RSEI model)).
- Environmental Effects (lead risk from housing; proximity to hazardous waste treatment, storage, and disposal facilities (TSDFs); proximity to National Priorities List sites (Superfund Sites); proximity to Risk Management Plan (RMP) facilities; wastewater discharge).
- Sensitive Populations (death from cardiovascular disease; low birth weight).
- Socioeconomic Factors (limited English; no high school diploma; poverty; race - people of color; transportation expense; unaffordable housing; unemployed).

Both Puget Sound and the Columbia River feature communities on their shores that are ranked as being heavily impacted by environmental health disparities. This request will minimize harmful outcomes from an oil spill in Puget Sound or the Columbia River for communities that live near these waterways and may depend on them for subsistence, as illustrated in the figures below.

Figure 2: Environmental Health Disparities, Puget Sound: This view of the DOH Environmental Health Disparities Map shows the extent of Puget Sound shoreline populations that are already highly burdened with environmental health disparities. This request supports oil spill response effectiveness in the Puget Sound to reduce oil-spill-related toxic burdens for all of these communities.

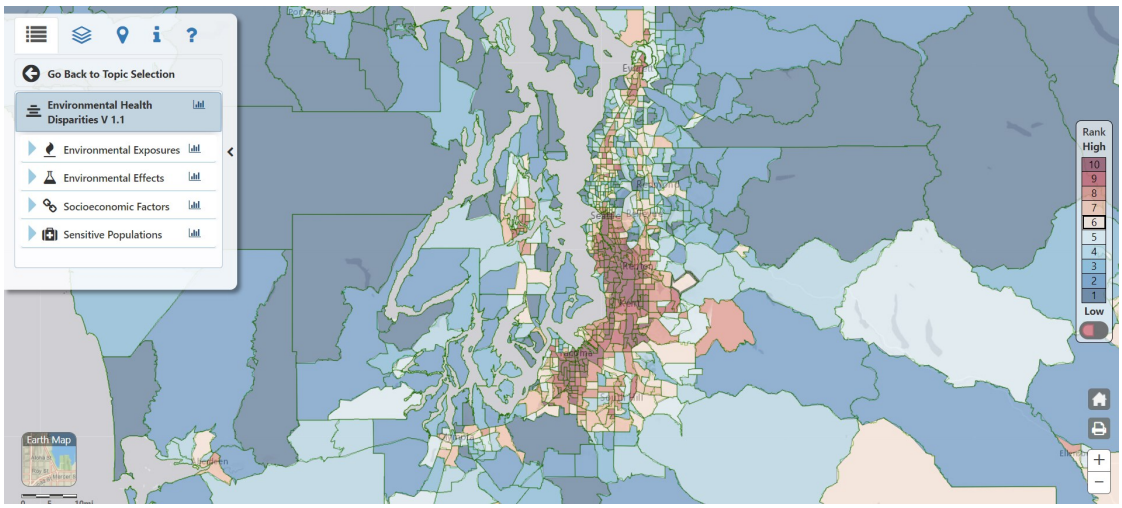
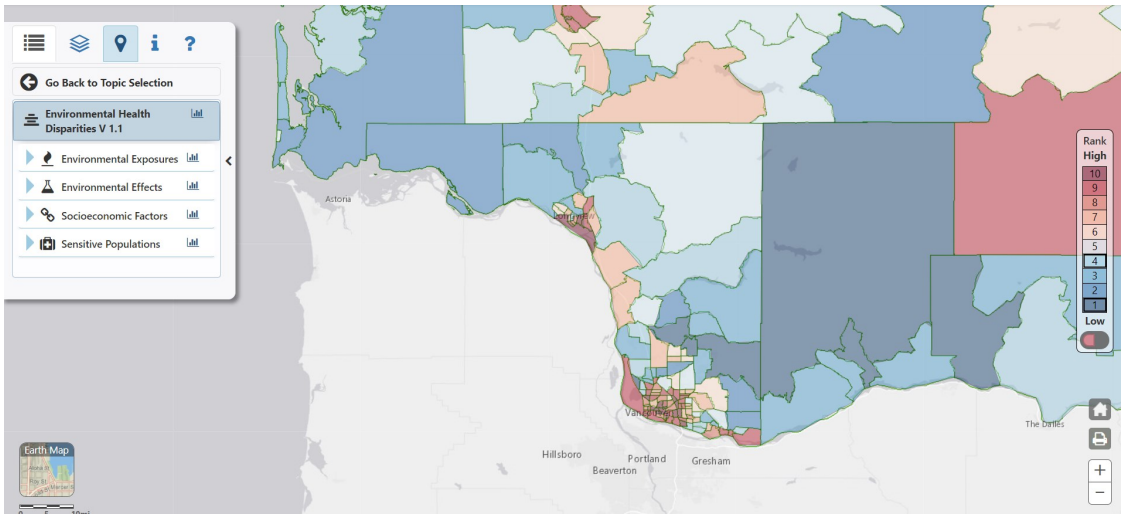


Figure 3: Environmental Health Disparities, Washington Shores of the Columbia River: This view of the DOH Environmental Health Disparities Map shows the extent of Columbia River shoreline populations in Washington that are already highly burdened with environmental health disparities. This request supports oil spill response effectiveness in the Columbia River to reduce oil spill-related toxic burdens for all of these communities.



Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 3: Prevent and reduce toxic threats and pollution.
- Goal 4: Protect and manage our state's waters.
- Goal 5: Protect and restore Puget Sound.

It will directly support these goals by supporting integration of Washington's spill response contingency plan with USCG's sector plans for a well-coordinated and effective response in the event of an oil spill. Seamless coordination with our federal response partners is a critical component in rapidly containing a spill to minimize the risk of persistent toxic threats and pollution. Integration of this plan is particularly critical for oil spills in Washington's outer coast, in the Columbia River, and in Puget Sound.

This request provides essential support to the following Governor's Results Washington Goals:

- Goal 2: Prosperous Economy
- Goal 3: Sustainable Energy and a Clean Environment
- Goal 4: Healthy and Safe Communities

Based on the National Oceanic and Atmospheric Administration's (NOAA's) (https://coast.noaa.gov/states/washington.html) valuation of Washington's coastal economy, a large spill could cost the state over $400 billion in gross domestic product and 2.4 million jobs. The Puget Sound and Columbia River Sectors cover the full area of coastal territory in Washington State. The NWACP is our official document to guide an effective response and support coordination with our federal, Tribal, state, and local partners. This request ensures the USCG area plans work seamlessly with the state plans to eliminate any potential gaps in our readiness or coordination. A well-coordinated response reduces the environmental, social, and economic impacts of a spill.

Performance Outcomes:

The outcome of this request will be two state contingency oil spill response plans covering Puget Sound, coastal Washington, and Columbia River, which will support well-coordinated communications and response actions with our federal, local, and Tribal partners in the event of a spill in these geographic areas.

Other Collateral Connections

Puget Sound Recovery:

This request supports Puget Sound Action Agenda implementation through the following Ongoing Program, Regional Priority Approach, and Strategy and Sub-strategy:

- Ongoing Program: OGP_ECY27: Oil Spill Preparedness.
- Regional Priority Approach CHIN6.2: Strengthen local oil spill preparedness and response plans; integrate with Federal, State, and tribal programs and planning; and allocate resources.
- Strategy 20 to effectively prevent, plan for, and respond to oil spills.
    - Sub-strategy 20.1 to prevent and reduce the risk of oil spills.

This request also supports efforts under the Governors' Executive Order 18-02, Southern Resident Orca Recovery and Task Force through the following recommendation: 24: Reduce the threat of oil spills in Puget Sound to the survival of Southern Residents.

State Workforce Impacts:

N/A

Intergovernmental:

Ecology plans to advocate for maximum tribal engagement in developing new state contingency plans. Because the NWACP is the official statewide spill contingency response plan, it is a valuable reference for local government and nonprofit emergency response organizations. This plan is also the official plan for Oregon and Idaho, both of which have areas within the USCG planning sectors that are impacted by this change. This request will support coordination with the Emergency Management Division, Washington Department Fish and Wildlife, and other agencies that rely on the NWACP.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

Ecology maintains strong working relationships with all of the partners in the Region 10 Regional Response Team (RRT), and has advocated for inclusion of tribal nations in the planning process. This request will support the resources needed to facilitate a comprehensive and inclusive approach to meeting Washington's statutory planning requirements and response policies and standards. This process will include coordination and support for Oregon's and Idaho's planning needs, USCG and EPA requirements and procedures, and the priorities and recommendations of interested tribal nations. The necessary changes supported by this request will not create new regulatory requirements for current contingency plan holders, and they will help to ensure the costs of an oil spill in Washington's coastal areas, the Puget Sound, or the Columbia River are not increased by poor coordination between federal and state coordinators and other response partners. This request directly supports communities in coastal Washington, Puget Sound, and Columbia River by ensuring strong oil spill contingency planning.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

PL KV Oil Spill Contingency Planning Attachment A.pdf

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$161	**$161**	$161	$161	**$322**
Obj. B	$0	$59	**$59**	$59	$59	**$118**
Obj. E	$0	$10	**$10**	$8	$8	**$16**
Obj. G	$0	$39	**$39**	$39	$39	**$78**
Obj. J	$0	$2	**$2**	$3	$3	**$6**
Obj. T	$0	$62	**$62**	$62	$62	**$124**

Agency Contact Information

Linda Pilkey-Jarvis
(360) 280-7209
linda.pilkey-jarvis@ecy.wa.gov

Marine Safety Information Bulletin

Commandant
U.S. Coast Guard
Office of Marine Environmental Response
2703 Martin Luther King Jr Ave, SE, STOP 7501
Washington, DC 20593-7501

MER-MSIB Number: 22-20
Date: October 27, 2020
Contact: Mr. Jonathan Smith
Phone: (202) 372-2675
E-Mail: Jonathan.R.Smith@uscg.mil

FRP-ACP Relationships in Pacific Northwest Region

Changes to Area Contingency Planning Construct

This Bulletin serves to alert all facility response plan (FRP) holders with facilities operating within the United States Coast Guard (USCG) Sector Columbia River and Sector Puget Sound Captain of the Port (COTP) Zones of structural changes to the area contingency planning construct and physical location of applicable Area Contingency Plans (ACPs).

Over the past 20 years, Area Contingency Planning functions for all USCG COTP Zones covering Oregon and Washington have been managed at the Federal Region 10 level. This regional (versus more local) approach, resulted in the creation/maintenance of a large single plan known as the Northwest Area Contingency Plan (NWACP). The NWACP has served as multiple, federally mandated plans, including the Regional Contingency Plan, EPA inland zone ACP and two USCG coastal zone ACPs.

USCG Sector Columbia River and Sector Puget Sound are specifically designated as separate and unique COTP Zones. Each Sector Commander is delegated Federal On-Scene Coordinator (FOSC or OSC) authorities for their area of responsibility (33 CFR Part 3). Pursuant to the National Contingency Plan (NCP), the FOSCs are "responsible for overseeing the development of the ACP in the area of the OSC's responsibility" [40 CFR § 300.120(e)]. Furthermore, "under direction of the [F]OSC," Area Committees are responsible for developing ACPs for each designated area [40 CFR §§ 300.105(c)(4), 300.210(c)(1)].

To restore and facilitate area contingency planning and management activities at the local COTP/FOSC level (as discussed above and so directed by the NCP) and to align with the rest of the service, distinct coastal zone ACPs and associated area committees will now be maintained/managed by the pre-designated FOSCs at both Sector Columbia River and Sector Puget Sound. The coastal zone ACPs will no longer be managed as a subordinate component/function of the NWACP. However, the USCG will work with Regional Response Team 10 to ensure the new stand-alone coastal zone ACPs for both Sector Columbia River and Sector Puget Sound are appropriately aligned with the EPA inland ACP and the RCP for Region 10. Please keep in mind, while ACPs are federally mandated/managed plans, a State may set standards (independent of ACPs) for facilities and vessels operating in State waters, and that those standards may be more stringent than federal standards.

The current NWACP will no longer function as the USCG coastal ACP for Sector Columbia River and Sector Puget Sound. Names and locations of relevant ACPs (inland and coastal) are detailed below. The information contained in a FRP must maintain consistency with relevant ACPs pursuant to 33 CFR § 154.1030(f). Therefore it may be necessary to make minor changes to affected FRPs as part of the annual FRP review process in order to achieve consistency with the new ACPs. Such changes must be noted on the record of changes page in conjunction with the annual FRP review as required by 33 CFR § 154.1065.

Links to relevant Area Contingency Plans in Oregon and Washington	
For the Sector Columbia River coastal zone:	https://homeport.uscg.mil/port-directory/columbia-river
For the Sector Puget Sound coastal zone:	https://homeport.uscg.mil/port-directory/seattle-(puget-sound)
For the EPA inland zone, continue to use:	https://rrt10nwac.com/NWACP/Default.aspx

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Agency Recommendation Summary

Ecology's complex information technology systems that support water quality permit coverage and monitoring reports are antiquated and inefficient. Permittees are frustrated by the poor user system interface, and compliance data is not flowing to the Environmental Protection Agency properly, making permitted facilities appear out of compliance at an alarming rate. Ecology staff are currently struggling to maintain existing functionality and are unable to resolve or improve many long-standing system challenges. This request for one-time resources will use dedicated water quality permit funding to hire a contractor to make critical improvements to the usability and reporting accuracy of Ecology's water quality permitting systems. (Water Quality Permit Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Operating Expenditures						
Fund 176 - 1	$0	$500	**$500**	$500	$0	**$500**
Total Expenditures	**$0**	**$500**	**$500**	**$500**	**$0**	**$500**

Decision Package Description

Reporting Requirements and Data Systems
Water quality permit holders are required to report monitoring and permit data to Ecology as a condition of their permits. These reports must be electronically signed by an authorized user of the permitted facility, per the Environmental Protection Agency's (EPA) electronic reporting rules, and stored in Ecology's Permit and Reporting Information System (PARIS), per our delegated authority from EPA to operate the National Pollutant Discharge Elimination System (NPDES) permitting program in Washington.

PARIS is open to the public and contains all of Ecology's water quality permit information, including the actual permit issued, and the associated monitoring and reporting data reported to the agency. PARIS is a resource that many rely on – both inside and outside of Ecology. The system also links to EPA's website, which, due to current issues with how data flows between the two systems, shows Washington as having the worst water quality compliance in the country, which is not accurate.

There are four different systems that interact when permittees upload permitting data to PARIS:

1. PARIS Portal - permit holders use the PARIS Portal to submit required monitoring data, application and renewal documents, reports, and other information.
2. Cross-Media Electronic Reporting Rule (CROMERR) - application stores electronically signed data and replicates it to the last two large data systems below.
3. Internal PARIS - for internal use by Ecology staff with full author and editing ability. Staff use this permit system to record permit information, store records, and communications.
4. Public PARIS - with read only access that contains permit information such as application documents, inspections, discharge monitoring data, and enforcement actions.

To help permit holders comply with their reporting requirements, the submission process for reporting required data needs to be easy to use and problem-free. Based on frequent feedback from our customers, it is not.

Problems
There are several problems with the existing system components of PARIS that need to be fixed and modernized to align with current technology. Problems include:

- Users having to navigate two authentication systems to submit reports: SAW (Secure Access Washington) and CROMERR. Users need a separate account for each system because they are not integrated, which is confusing for permit holders.
- CROMERR (created over 12 years ago) has an aging user interface that does not let users unlock their own accounts, or be reminded what their user name is. If an account is locked after three incorrect password attempts, or a user forgets their password, they have to contact an Ecology staff person for help during business hours. This leads to delays and frustration with meeting monthly and quarterly submission deadlines because accounts have to be manually unlocked by Ecology IT staff. Staff currently unlock an average of 350 accounts per month. An update to the CROMERR interface will allow end users to securely unlock their own accounts and recover forgotten user names and passwords. The difficulty in managing accounts has also encouraged people to share accounts and passwords in order for them to more efficiently report data if their account is locked and can't be remedied in a timely manner. An updated interface with email and text message support for account management will reduce instances of credential sharing and improve security for both Ecology and our permittees.

- PARIS is the database of record for water quality permits. As a result a previous migration of the database from an ORACLE to SQL platform, the PARIS system (PARIS, Public PARIS, and PARIS Portal) has a complex backend that is outdated and inefficient, with business processes that require numerous manual updates. For example, the updating of permit deactivation statuses and dates does not currently flow between the system components automatically. PARIS is a complex system that has evolved over time, which also makes it difficult to generate accurate and complete reports around compliance and data integrity.

Ecology is required to send permitting data to EPA in accordance with national reporting requirements, but that data flow and its translation is a complex operation because Ecology and EPA data structures and permit designs are so different. Missing data elements in PARIS, combined with data structure and data flow issues between the two systems, recently resulted in over 70 percent of Washington permittees being listed as significantly non-compliant in the category of water quality reporting, which is not a true reflection of permit compliance in our state. In reality, only about 10 percent of active permits are missing required reporting information. Ecology has temporarily stopped sending any information to EPA while we work on reconstructing the data flow, but that means that right now, all permittees currently appear noncompliant.

Solution
Accessibility, modernization, process improvement, and mobile platform support for PARIS are key areas of improvement needed for permit holders and Ecology to meet federal and state reporting requirements. Fixing and modernizing the integrated system components within PARIS will require:

- Rewriting the CROMERR application to use EPA web services, which is more robust, durable, and easier to maintain. Several states are now using EPA web services for their CROMERR requirements, and are better able to securely meet EPA data reporting requirements. The rewrite will improve:
  - Accessibility and security by providing a modern and intuitive interface for permit holders.
  - Timeliness of water quality discharge monitoring reports.
  - Usability by allowing users to reset their own accounts and passwords. This will reduce interruptions for Ecology IT staff so they can focus on higher priority work, like assisting permit holders with reporting submission issues.
- Updating the PARIS system comments to address inefficiencies, allow for mobile data collection and query expansion, and correct the data flow issues from our system to EPA's. This work will require consolidating redundant data tables and rationalizing SQL scripts and data replication.
- PARIS was rewritten three years ago to move from ORACLE to SQL, but that rewrite only cloned the existing data structures and CROMERR tools. Through that rewrite, and more recent reviews, Ecology has uncovered additional issues and inefficiencies related to the linkages between the PARIS system components, CROMERR, and EPA.

Ecology is requesting $500,000 per year in fiscal years 2023 and 2024 to make the upgrades needed to improve the accessibility, usability, and efficiency of PARIS, and resolve the issues with how data flows from our systems to EPA. This cost estimate is based on prior IT contracting experience and an average hourly rate of $125.00, which is consistent with the hourly costs of two other recent IT contracts. Ecology's Water Quality Program believes it will take two full-time contracted staff approximately 24 months to complete this project. If this request is funded, the official bid process will determine the final cost.

Impacts on Population Served:
Close to 7,000 water quality permits in Washington help Ecology protect our waters to sustain healthy watersheds and communities throughout the state. This work ensures state waters support beneficial uses, including recreational and business activities, supplies for clean drinking water, and protection of fish, shellfish, wildlife, and public health. Our IT systems for permitting are a foundational element of our environmental protection work, and if this IT infrastructure is not working well, it can limit the effectiveness of our protection work through waste, inefficiencies, and lost opportunities. Having accurate and timely water quality data available is important to the businesses we permit and the people and communities across the state that those businesses serve.

Alternatives Explored:
Ecology could continue to delay these improvements, but that is not feasible because we already cannot meet federal data reporting requirements. Ecology meets quarterly with EPA on the status of the dataflow issues, and getting the issue resolved is high priority for EPA. They expect Washington to expedite a solution to the problem.

Using current staff to do the work is not a viable option, because we have deadline-driven deliverables currently using all of our staff capacity. Priorities include state-required updates for IT security and accessibility, modifications for permit reissuance work, non-point pollution data collection support to capture information critical to water pollution issues, such as toxics and nutrient discharges, and financial system support for revenue generating activities.

Consequences of Not Funding This Request:
If this request is not funded, our permitting systems would continue to be inefficient, outdated, a challenge to navigate, and plagued with data flow issues and erroneous reporting. These consequences are not hypothetical, as we currently experience:

- Incorrect data about water quality permittees on EPA's website. Having incorrect data means some permittees are excluded from industry-specific awards and contracts because they appear to not be in compliance. It also means the public is misled about the status of water quality protection in their communities, which could result in third party lawsuits based on inaccurate information.
- Time spent responding to public concerns about the apparent non-compliance, or responding to facilities concerned about inaccurate data on EPA's website, which takes time away from our environmental protection priorities.
- Time spent resetting user names and passwords.
- Poor IT security due to permittees sharing account credentials.
- Lost IT capacity (and falling behind on other IT maintenance and system improvements) to do patch work fixes to keep the existing permit systems functional.

Assumptions and Calculations

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

This request expands activity A032 – Prevent Point Source Water Pollution using available fund balance in the Water Quality Permit Account in fiscal years 2023 and 2024 to make changes needed to improve Ecology's water quality permitting systems. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for these activities. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

A032 - Prevent Point Source Water Pollution		
	2019-21	**2021-23**
FTEs Total	92.85	100.10
001-1 General Fund – State	$1,160,000	$113,000
001-2 General Fund - Federal	$1,070,000	$305,000
001-7 General Fund – Private/Local	$878,000	$0
176-1 Water Quality Permit Fees - State	$21,908,000	$21,228,000
21H-1 Wastewater Treatment Plant Op Cert - State	$0	$512,000
23P-1 Model Toxics Control Operating - State	$1,370,000	$1,904,000
TOTAL	**$26,386,000**	**$24,062,000**

Detailed Assumptions and Calculations:

Ecology requires $500,000 per year in fiscal years 2023 and 2024 to fix and modernize our water quality permitting systems. All funding will be passed through as a competitively-bid IT contract, and costs are shown in Object C, Personal Service Contracts.

Workforce Assumptions:

Expenditures by Object		**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
C	Personal Service Contract		500,000	500,000			
	Total Objects	**0**	**500,000**	**500,000**	**0**	**0**	**0**

Staffing

Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
Total FTEs		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

How is your proposal impacting equity in the state?

Having accurate and timely water quality permit data available through Public PARIS will help contribute to meaningful engagement with communities impacted by permitted entities, and adds transparency to around the agency's policy decisions and actions.

Ecology is committed to meaningful and effective community engagement. This request will beneficially affect communities located in Puget Sound, Spokane River, and Columbia River basins – all areas with considerable diversity, both culturally and economically. Continuing to improve the health of these waters and the species within them will support social, environmental, and economic health for all who live, work, worship, and play there.

The water quality improvements tied to this request will have key benefits for Tribes and indigenous populations, disproportionately impacted communities, and potentially vulnerable populations. The recovery of Puget Sound and the related salmon and orca populations have significant cultural, social, economic, and dietary importance for many people. Fishing and consuming fish are traditional practices and a key protein source for many of Washington's Tribal, Asian-American, Russian, Latino/Hispanic, and immigrant populations.

Ecology supports full and fair participation by all potentially affected communities through our public permit development process. To comply with Title VI nondiscrimination obligations, and to promote environmental justice best practices for meaningful community engagement, Ecology will continue to ensure effective communication and outreach that addresses linguistic, cultural, literacy, technology, and accessibility barriers. Ecology maintains a contract for 24/7 interpretation services, and if determined necessary, Ecology will translate written information into the appropriate languages for potentially affected communities.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees through an efficient, user-friendly permitting system that contains and transmits accurate water quality permit data that is available to the public.
- Goal 4: Protect and manage our state's waters through an improved system for capturing, storing, and reporting water quality permit data that directly impacts Ecology's ability to ensure state waters support beneficial uses, including recreational and business activities, clean drinking water, and the protection of fish, shellfish, wildlife, and public health.

This request provides essential support to the Governor's Results Washington Goal 3: Sustainable energy and a clean environment through an improved system for capturing, storing, and reporting water quality permit data that directly impacts Ecology's ability to protect the state's waters and communities.

It also supports Goal 5: Efficient, Effective, and Accountable Government by improving data quality and reporting capabilities in Public PARIS, which increases transparency and accountability for water quality permit holders.

Performance Outcomes:

The outcome of this request will be an improved suite of water quality permitting systems for collecting, storing, and reporting accurate water quality permit data. Specifically, on-time discharge monitoring reporting will increase, data provided for ingestion into EPA website will be more accurate, time spent responding to errors or problems (work that does not result in a product) will be freed up for higher priority work, the need for constant patch work fixes will decline, and IT staff productivity will increase.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

Ecology issues NPDES and state waste discharge permits to many governmental entities, including municipalities and federal and state agencies. It is important to them to have accurate and timely data in PARIS, and especially in transmitting compliance reporting to EPA that show they are meeting state and federal requirements to protect and manage the water bodies in our state.

Legal or Administrative Mandates:

The use of Ecology's water quality permitting systems is required by our NPDES permits and delegation agreement with EPA for implementing the federal Clean Water Act.

Stakeholder Response:

Permit holders are frustrated with Ecology's current permitting systems and their poor user interfaces, while EPA needs water quality permit data to flow correctly, so Ecology anticipates support for the improvements supported by this request.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

Fix-Modernize WQ Permit Systems - IT Addendum.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?

Yes

Objects of Expenditure

Objects of Expenditure *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. C	$0	$500	**$500**	$500	$0	**$500**

Agency Contact Information

David Giglio
(360) 407-6489
dgig461@ECY.WA.GOV

2021-23 IT ADDENDUM

NOTE: Only use this addendum if your decision package includes IT costs and DOES NOT relate to implementation of the One Washington project.

Part 1: Itemized IT costs

Please access the 2021-23 IT Fiscal Estimate Workbook imbedded in this document below. Agencies must itemize all IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation), or IT staff. When itemizing costs, please consider the total cost of the combined level of effort which includes: the associated costs, from planning through closeout, of state, vendor, or both, in order to purchase, acquire, gather and document requirements, design, develop or configure, plan or conduct testing, and complete implementation of enhancement(s) to an existing system.

Please itemize all IT cost associated with this request where you are not asking for additional funding. These costs are considered in-kind and provided through existing agency base. Detailed costs from existing agency base should be entered on the in-kind tab within the 2021-23 IT Fiscal Estimate Workbook.

21-23 IT Fiscal Estimates Workbook.›

Part 2: Questions that support the reuse of existing state resources

To ensure effective reuse of existing state resources, all IT investments — including project IT expenditures — are expected to comply with IT statutes and policies. The answer to these questions will help OCIO and OFM determine if the decision package will be funded.

A. Does this investment provide for acquisition of, or enhancement to, an administrative or financial system? ☐ Yes ☒ No

B. If Yes, has this decision package gone through the Administrative and Financial System review as required in (SAAM) section 80.30.88? ☐ Yes ☐ No

If Yes, attach the approval letter.

If No, do not submit the decision package. Recommendation will be "Do Not Fund".

C. Does this decision package fund the acquisition or enhancement of equipment or facilities in any agency data centers? (See OCIO Policy 184 for definition.) ☐ Yes ☒ No

D. If yes, do you have an approved waiver to proceed with this proposed investment? ☐Yes ☐ No

If Yes, attach a copy of the waiver approval.

If No, do not submit this decision package. Recommendation will be "Do Not Fund".

E. For Health and Human Services agencies (HHS Coalition) DCYF, DOH, DSHS, HCA and Washington Health Benefit Exchange, has this project been screened for inclusion in the HHS Coalition portfolio? ☐Yes ☐ No

If Yes, this is part of the HHS Coalition portfolio, has this project received HHS Coalition project initiation approval? ☐Yes ☐ No ☐ N/A

If answer to the first HHS Coalition question is Yes (or N/A for second question), attach approved HHS Coalition Project Initiation Form.

If No to either HHS question, do not submit the decision package. Recommendation will be "Do Not Fund".

Part 3: Maintenance and policy level decision packages

Answers to these questions will be used in part to determine if the decision package will be evaluated and ranked by the OCIO as required by RCW 43.88.092.

A. Does this decision package fund the acquisition or expansion of computer hardware capacity? ☐Yes ☒ No

If Yes, where will the hardware solution be hosted? ☐ State Data Center ☐ External Cloud

B. Does this decision package fund the development or acquisition of a new or enhanced software solution or service? ☒Yes ☐ No

If Yes, where will the software solution be hosted? ☒ State Data Center ☐ External Cloud

C. If response to question B is Yes, do you expect this to solution to exchange information with the state financial system (AFRS) or the OneWA solution? ☐Yes ☒ No

D. If response to question B is Yes, will this investment renew or procure facial recognition service? ☐Yes ☒ No

E. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) ☐Yes ☒ No

If Yes, name the project:

_____

(Project name published on the IT Dashboard)

If you your decision package is maintenance and you answered "yes" to any of the above questions in Part 3, you must answer the questions in Part 4 below to finish the IT Addendum. All policy decision packages must answer question in Part 4.

Part 4: IT Investment Questions

Please provide a response to the following questions. Responses will be evaluated and ranked by the OCIO as required by RCW 43.88.092. Chapter 10 of the operating budget instructions contains the criteria used to evaluate 2021-23 decision packages.

AGENCY READINESS

Due diligence

1. Summarize the feasibility or due diligence work completed in support of this decision package. Attach a copy of the feasibility study or other documentation of due diligence to the decision package.

The WQ Permitting systems were moved from an Oracle based architecture to a SQL based one. The scope of the project was to replicate the system in the new standardized database architecture. During this transformation, and the associated move to the state data center several fundamental issues were exposed. The remedy of those key issues was out of scope for the SQL transformation project. As part of the rewrite, the ICIS dataflow to the EPA was analyzed and replicated. As it was put back in to service the new architecture and code base surfaced several key flaws with the integration with the EPA systems. In the time since the initial dataflow was created, the EPA has started to use a proprietary calculation to generate a significant noncompliance rate for water quality permit holders. Based on the information sent to the EPA, the calculation is incorrect and shows a far higher rate of noncompliance than is accurate.

Over the last year the Water Quality Program has been working with the lead contractor for the EPA ICIS dataflow to perform a gap analysis and identify missing and incorrectly calculated data. The engagement over the past year has identified the body of work required to fix the data flow, and what work is needed to correct issues with data stored in PARIS. Based on past experience contracting, our identified work is the optimal course of action. Water Quality has confidence the solution planned out over the last year for technical debt reduction, CROMERR update, and ICIS dataflow remediation will solve the issues with the permitting systems. The minimum viable product for the solution has been identified, and initial user requirements have been documented.

Governance and management

2. What governance processes will support this project? Examples of governance processes include appropriately placed executive sponsor, representative steering committee, resourced vendor/contract management, change control, and incorporating stakeholder feedback into decision making processes. Provide examples of how your proposed budget includes adequate funding and planning for governance processes, if applicable.

The project will follow agile project management best practices per the Project Management Body of Knowledge (PMBOK). The WQ IT Unit Scrum Master will manage the engagement, with oversight by the Deputy Director of the Water Quality Program, and by the WQ Permit Section Manager in the role of Product Owner. The Water Quality IT unit has a track record of successful agile implementation and of executing work on time, on budget, and in scope. The team uses a four-week long sprint, and has completed over 35 successful sprints. The project will be run within the existing agile framework that the team uses for all WQ IT development projects.

Planning and readiness

3. Describe how your agency will resource the project management of this project. Will in-house resources be used, or will resources be acquired? How has organizational change management been factored into planning and approach? Has the project requested a project management approach to be used for this project? Describe whether project and organizational change management resources are included in this request or will be provided by in-kind resources. Describe whether the proposed budget includes costs associated with independent quality assurance.

The project will use an established agile project methodology. The Water Quality IT Unit will have oversight of this project, and will integrate it into its normal sprint process. The team has prior experience of integrating contract developers into their agile process. Ecology has a well-established Project Management Office, and the PMBOK artifacts have been incorporated into agency templates. Though the engagement will be agile in nature, a project management plan that includes a charter, a communications plan, and organizational change management plan (using the ADKAR model) will be developed. Progress will be measured by the incremental delivery of functionality up to and beyond the delivery of the minimal viable product. Monthly sprint meetings will inform business requirements and managed prioritized work items. Quality assurance will be managed within the existing agile framework, and by the monthly delivery of incremental functionality improvements.

Technical alignment

Strategic alignment

4. Using specific examples, describe how this investment aligns with strategic elements of the Enterprise Technology Strategic Plan. Examples of strategic principles that tie back to tenets of the strategic plan include, but are not limited to: buy don't build, solutions hosted on modern hosting solutions, solutions promoting accessibility, early value delivery of functionality throughout the project, and modular implementation of project features.

Efficient and Effective Government

- This project will improve permit data quality and flow of data to the EPA
- The solution aligns with "solutions promoting accessibility" as it improves both the quality of the data, and access to it
- This solution also aligns with other tenants of the Enterprise Technology Strategic Plan

Accountable IT Management

- The project will replace custom written code with EPA provided API calls
- Security will be enhanced by the use of LexisNexis identity management tools
- Agile project management will be used for early value delivery and modular implementation
- This solution aligns with "solutions hosted on modern hosting solutions" as the PARIS, and CROMERR data will be housed in a system at the modern State Data Center
- The project will result in improved accuracy of WQ Permit data reporting for the state

Enterprise Architecture

- The legacy code for CROMERR is over 12 years old, and written on an obsolete version of .net
- CROMERR and PARIS UIs will be updated to meet accessibility standards
- CROMERR and PARIS UIs will be updated to support access by mobile devices

Technical alignment

5. Using specific examples, describe how this investment aligns with technical elements of the Enterprise Technology Strategic Plan. Examples of technical principles that tie back to tenets of the strategic plan include, but are not limited to: technology reuse, data minimization, incorporating security principles into system design and implementation, publishing open data, and incorporating mobile solutions into systems.

This project aligns with multiple elements of the Enterprise Technology Strategic Plan:

Data minimization

- The intent of this project is to address technical debt in the permitting systems, and to consolidate redundant and orphan tables

Technology reuse

- Improved security will be achieved by using EPA hosted LexisNexis user identify management tools for verification and self-service tasks such as password reset and account unlock
- Custom code will be replaced with the use of EPA hosted REST APIs leveraging existing EPA solutions

Publishing open data

- ICIS data flow will be refactored to ensure that EPA ICIS/ECHO public databases accurately reflect the data stored in PARIS
- A refactor and simplification of the PARIS and Public PARIS databases and associated data mart will ensure public access to higher quality data

Incorporating mobile solutions into systems

- Responsive design will be used for all interface pages to integrate into mobile solutions

Reuse and interoperability

6. Does the proposed solution support interoperability and/or interfaces of existing systems within the state? Does this proposal reuse an existing solution or existing components of a solution already in use elsewhere in the state? If the solution is a new proposal, will it allow for such principles in the future? Provide specific examples.

The solution is refinement of the current standalone database of record for Statewide Water Quality Permits. It will reuse existing tables and schema. It builds on the existing components of the Water Quality Permitting Systems including the PARIS databases, the Public PARIS DataMart, and CROMERR database. The new CROMERR user interface will replace custom code with EPA hosted and managed APIs for electronic signing, user management, account management, and document upload. This will result in a smaller more robust system that is easier to maintain.

Business alignment

Business driven technology

7. What are the business problems to be addressed by the proposed investment? These business problems should provide the basis for the outcome discussion below. Describe how end users (internal and external) will be involved in governance and implementation activities.

Water Quality permit holders are required to report monitoring and permit data to Ecology, and it must be electronically signed by an authorized user of the facility, as required by the Environmental Protection Agency (EPA) electronic reporting rules and Ecology's delegation of National Pollutant Discharge Elimination System (NPDES) permitting authority from EPA. Ecology's Permit and Reporting Information System (PARIS) is open to the public and contains all of Ecology's permit information including the actual permit issued and monitoring and reporting data. It is a resource that many rely on both within and outside of the agency. The system links to EPA's website and, due to issues with how data flows between the two systems, currently shows Washington as having the worst water quality compliance in the country, which is inaccurate.

There are four different systems that interact when permittees upload data, which revolve around PARIS:

1. PARIS Portal - permit holders use PARIS Portal to submit required monitoring data, application and renewal documents, reports, and other information.
2. Cross-Media Electronic Reporting Rule (CROMERR) application stores electronically signed data and replicates it to the last two large data systems:
3. PARIS for internal use by Ecology staff with full author and editing ability. This is the permit system staff use to record permit information, records, and communications.
4. Public PARIS with (read only access) that contains permit information like application documents, inspections, discharge monitoring data, and enforcement actions.

To help permit holders comply with their reporting requirements, the submission process needs to be easy to use and problem-free. Based on frequent feedback from our customers, it is not.

There are several problems with the existing system components of PARIS, which need to be fixed and modernized to align with current technology. Problems include:

- Users having to navigate two authentication systems to submit reports: SAW (Secure Access Washington) and CROMERR. Users need a separate account for each system because they are not integrated, which is confusing for permit holders.
- The CROMERR tool (created over 12 years ago) has an aging user interface that does not let users unlock their own accounts or be reminded what their user name is. If an account is locked after three incorrect password attempts, or a user forgets their password, they have to contact an Ecology staff person for help during business hours. This leads to delays and frustration with meeting monthly and quarterly submission deadlines, because accounts have to be manually unlocked by Ecology IT staff. Staff currently unlock an average of 350 accounts per month. An update to the CROMERR interface will allow end users to securely unlock their own accounts and recover passwords. The difficulty in managing accounts has also encouraged people to share accounts and passwords in order for them to more efficiently report data if their account is locked and can't be unlocked in a timely manner. An updated interface with email and text message support for account management will reduce credential sharing and improve security for both Ecology and our permittees.
- PARIS is the database of record for water quality permits. As a legacy of the migration from an ORACLE database to a SQL database, the PARIS system (PARIS, Public PARIS, and PARIS Portal) has a complex backend that is outdated and inefficient, with business processes that require manual updates. For example, updating permit deactivation and deactivation dates do not automatically flow between the system components.

- PARIS is a complex system that has evolved over time, making it difficult to generate accurate and complete reports around compliance and data integrity.
- Ecology is required to send data to EPA in accordance with national reporting requirements, but the data flow and its translation is a complex operation, because Ecology and EPA data structures and permit designs are so different. Missing data elements in PARIS, combined with data structure and data flow issues between the two systems, recently resulted in over 70 percent of Washington permittees being listed as significantly non-compliant in water quality reporting, which is not a true reflection of permit compliance in our state. In reality, only about 10 percent of active permits are missing required reporting information. Ecology has temporarily stopped sending any information to EPA while we work on reconstructing the data flow, so right now, all permittees currently appear to be noncompliant.

Measurable business outcome

8. Strategic and Performance Outcomes (Chapter 2 - 2021-23 Budget Instructions) of the decision package response will be used to identify how this proposed IT investment improves business outcomes within your agency. The description in the decision package should provide specific examples of business outcomes in use within your agency, and how those outcomes will be improved as a result of this technology investment.

Accessibility, modernization, process improvement, and mobile support for the systems are key areas of improvement needed for permit holders and Ecology to meet federal and state reporting requirements. Fixing and modernizing the integrated permit systems within PARIS will require:

- Rewriting the CROMERR application to use EPA web services, which is more robust, durable, and easier to maintain. Several states are now using EPA web services for their CROMERR requirements and are better able to securely meet EPA data reporting requirements. The rewrite will improve:
    - Accessibility and security by providing a modern and intuitive interface for permit holders.
    - Timeliness of water quality discharge monitoring reports.
    - Usability by allowing users to reset their own accounts and passwords. This will reduce interruptions to Ecology IT staff so they can focus on higher priority work, like assisting permit holders with reporting submission issues.
- Updating the PARIS systems to address inefficiencies and allow for mobile data collection and query expansion and correct the data flow issues from our system to EPA's. This work will require consolidating redundant data tables and rationalizing SQL scripts and data replication.
    - PARIS was rewritten three years ago to move from ORACLE to SQL, but that rewrite only cloned the existing data structures and CROMERR tools. Through that rewrite, and more recent reviews, Ecology has uncovered additional issues and inefficiencies related to the linkages between the PARIS system components, CROMERR, and EPA.

Decision Package Urgency

9. Address the urgency of implementing the technology investment in this cycle and impacts to business if technology effort doesn't proceed as planned?

If this request is not funded, our permitting system would continue to be inefficient, outdated, challenging to navigate, and plagued with data flow issues and erroneous reporting. These consequences are not hypothetical, because we currently experience:

- Incorrect data about water quality permittees on EPA's website. Having incorrect data means some permittees are excluded from industry-specific awards and contracts, because they appear to not be in compliance. It also means the public is misled about the status of water quality protection in their communities, which could result in third party lawsuits based on inaccurate information.
- Time spent responding to public concerns about the apparent non-compliance, or responding to facilities concerned about inaccurate data on EPA's website, which takes time away from our environmental protection priorities.
- Time spent resetting user names and passwords.
- Poor IT security due to permittees sharing account credentials.
- Lost IT capacity (and falling behind on other IT maintenance and system improvements) to do patch work fixes to keep the existing permit systems functional.

Agency Recommendation Summary

Ecology has the primary responsibility under Chapter 90.56 RCW to respond to and contain spills of oil, petroleum products, and other hazardous substances to waters of the state. Ecology spill responders provide year-round, statewide, 24-hour a day response to these incidents, but require specialized vehicles and equipment to safety and effectively do so. Ecology does not have an adequate dedicated equipment budget for the periodic replacement or acquisition of responder equipment, nor a sufficient base budget to ensure the timely replacement of our response vehicles. To ensure that our spill responders are outfitted with the vehicles and equipment needed to safely and effectively respond and do their jobs, Ecology is requesting funding to establish a response vehicle replacement program, and acquire safety equipment that is needed this biennium. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Operating Expenditures						
Fund 23P - 1	$0	$662	**$662**	$225	$225	**$450**
Total Expenditures	**$0**	**$662**	**$662**	**$225**	**$225**	**$450**

Decision Package Description

Ecology has the primary responsibility under Chapter 90.56 RCW to respond to and contain spills of oil, petroleum products, and other hazardous substances to waters of the state. Ecology spill responders, who are based in Bellevue, Bellingham, Olympia, Spokane, Union Gap, and Vancouver to provide year-round, statewide, 24-hour a day response to oil and hazardous substance spills, require specialized vehicles and equipment to safety and effectively respond to these incidents.

Spill response vehicle and equipment needs continue to change over time, as the nature of responses themselves evolve, and technology supporting our vehicles and equipment continues to mature. Ecology does not currently have a dedicated equipment budget for the periodic replacement or acquisition of responder equipment, nor a sufficient base budget to ensure the timely replacement of our response vehicles. To ensure that our spill responders are outfitted with the vehicles and equipment needed to safely and effectively respond to oil and hazardous substance spills, Ecology is requesting funding to establish a response vehicle replacement program, and acquire response equipment that is needed this biennium.

Spill Response Vehicle Program

Background
Spill response vehicles are equipped with personal protective gear, equipment to identify and measure hazards at a spill site, and supplies to contain an active spill. These vehicles must be capable of carrying heavy loads of hazardous materials collected at a response, and be equipped with LED lighting for visibility and safety during night-time responses. A fully up-fitted response vehicle currently costs $75,000 on average (not including the associated equipment and supplies needed for responders, some of which are described later in this request).

Due to their unique attributes, Ecology purchases its spill response vehicles instead of leasing them through the Department of Enterprise Services, as is done for the rest of the agency fleet. Just as the geography of Washington State is highly variable, so too are needs and functions of our response vehicles in each region. Responders in our eastern, central, and southwest regions benefit from multipurpose primary response vehicles with service bodies. Many times vehicles in these areas of the state are accompanied by a smaller secondary vehicle when deploying to a spill that tows a trailer with sorbent materials or a boom. In the northwest region, a smaller vehicle with towing capability is primary response vehicle of choice, as it provides for better mobility in urban areas with higher traffic.

In 2015, the Legislature passed Engrossed Substitute House Bill (ESHB) 1449 – Oil Transportation Safety Act, which established a grant program to fund equipment caches and training for Washington tribes and local response organizations. The Act also provided $75,000 per year for Ecology to purchase and replace response vehicles. This was, and still is, the only dedicated, ongoing funding Ecology has to purchase and replace these vehicles. Base funding for Ecology's spill responders comes from the Model Toxics Control Operating Account (MTCA Operating), and is used to support base staff costs, supplies, and equipment. When responding to a spill of oil or petroleum products to the waters of the state, responder overtime and contractor costs to support the response are funded by the Oil Spill Response Account, but for all other hazardous materials responses, all costs, base, overtime, and contractor costs, are supported by MTCA Operating.

Prior to 2015, and is still the case currently, if Ecology needs to replace more than one vehicle per year, the Spills Program has had to identify savings within the program's base budget near the end of a biennium that can be reprogrammed and used for the purchase these vehicles. This approach to fleet management is inefficient, as the program is unable to effectively plan for and secure replacement vehicles over time. Many times, the Spills Program is unable to identify sufficient savings for a vehicle purchase until it is too late in a biennium to secure the vehicles and outfit them with the needed modifications for deployment prior to the end of a biennium.

In addition to this timing issue, there are some biennia where savings may not be available to repurpose for vehicle replacements, as the program must weigh and manage the need for vehicles and equipment against the possibility of a large and expensive spill response at the end of a biennium. This lack of dedicated funding for vehicle replacements has resulted in an aging fleet for the Spills Program, with eight vehicles (nearly 30 percent of the current fleet) currently at least 10 years old, and six of these vehicles (over 20 percent of the fleet) 15 years old or older.

Current Fleet Size

Ecology began the 2019-21 biennium with a fleet of 23 spill response vehicles and 25 full-time responders. The fleet consists of primary response trucks, equipped with service bodies, and trucks without service bodies that are used to tow trailers with equipment and supplies to support a response. In December 2020, the Spills Program used its base budget of $150,000 per biennium ($75,000 per year) to purchase two new vehicles to replace older, high-mileage trucks needing to be decommissioned. In addition to those vehicles, the program was able to purchase eight additional response vehicles by the end of last biennium, using one-time savings that had accumulated due to the COVID-19-related spending freezes that had been in place for much of the 2019-21 biennium. Three of the eight vehicles also went to replace older, high-mileage trucks, while the other five were purchased to support mobile response capacity and after-hours response capabilities. With these additional vehicles, Ecology currently has 28 spill response vehicles statewide that are used by both full-time and standby/after-hours responders.

Proposed Fleet Replacement Program

Ecology is requesting funding to establish a standardized vehicle replacement program to ensure maximum reliability of the vehicles and safety for our spill responders. Ecology's goal is to replace each response vehicle every seven years, consistent with industry standards, federal guidance, and other state agencies' practices. The U.S. General Services Administration's Fleet Minimum Vehicle Replacement Standards recommend truck replacements every 7-12 years or 70,000-150,000 miles, depending on type and use of vehicle. California's Department of General Services recommends that vehicles be replaced every 5-7 years, depending on the type and use of vehicle. The Washington State Department of Natural Resources has identified their ideal timeframe for replacing wildland fire response vehicles, which are typically deployed on a seasonal basis, to be between 100,000-120,000 miles, or every 10-12 years. The Washington State Department of Transportation's Incident Response program replaces roadside response fleet vehicles every five years, and towing vehicles every seven years.

In order to operationalize a seven-year replacement schedule for our current 28-vehicle fleet, Ecology will need to replace four response vehicles each year on average. At a cost of $75,000 per up-fitted vehicle, the replacement of four vehicles will cost $300,000 per year, or $600,000 per biennia. As noted above, Ecology has a base budget of $150,000 per biennia for response vehicle replacement. Therefore, Ecology is requesting $225,000 in fiscal year 2023, and $450,000 per biennia ongoing, to supplement program's current base budget, and allow for the replacement of four vehicles per year. The Spills Program's planned replacement schedule for its current fleet can be found in *Attachment A*.

Specialized Response Equipment Needs

In addition to safe and reliable response vehicles, Spill responders depend on specialized equipment to ensure their safety in all response scenarios. Unlike vehicles, which can be replaced regularly to maintain a safe and effective fleet, equipment needs vary in terms of replacement schedules, costs per item, and utility over time as technology evolves. Similar to response vehicles, equipment purchases and replacements have been made only when funding is available through savings near the end of a given biennium.

Because the Spills Program does not have a dedicated budget for the specialized response equipment, Ecology is requesting one-time funding for new and replacement equipment that is needed to ensure spill responders can operate safely and effectively during a spill response. Because the lifecycles of response equipment can vary between 5-15 years, depending on the type of equipment needed, Ecology is requesting this funding as one-time, and will plan to make future budget requests for equipment needs every five or six years, starting in the 2027-29 biennium, as current equipment reaches end of life and needs to be replaced, or as technology and responder safety needs change over time. The equipment needs for this request are described below:

Mercury Vapor Analyzers

Mercury is a highly toxic heavy metal, which in its elemental form can evaporate to create an odorless, colorless toxic gas. As a naturally occurring element, mercury can be present in oil and wood, and burning of these materials can emit mercury vapors. A mercury vapor analyzer is a handheld device that detects the presence of mercury vapor at concentrations as low as 0.5 micrograms per cubic meter (µg/m3).

The National Institute for Occupational Safety and Health (NIOSH) recommends different protective measures against mercury inhalation hazards at varying concentrations, starting with a respirator with mercury protective cartridges for concentrations up to 1 µg/m3. This device helps responders detect mercury inhalation hazards during a response and ensure appropriate safety precautions for those in the area. Ecology currently has two of these instruments, but we need a total of four (one per regional office) to provide sufficient coverage and availability for responders statewide. Ecology is requesting funding to purchase two additional analyzers at an estimated cost of $12,104 per unit, including tax, for a total of $24,208.

Jerome J405 Mercury Vapor Analyzer

Multi-Gas Meters

Handheld multi-gas meters measure concentrations of Carbon Monoxide, Hydrogen Sulfide, Oxygen, and volatile organic chemicals. Each response vehicle should be equipped with a multi-gas meter, and they have roughly a five-year useable life-span. This request will support the purchase of 10 new meters for the recently acquired response vehicles at the end of the 2019-21 biennium, and five more to replace the oldest meters currently being use in the program. Estimated price per meter is $4,428 including tax. Total estimated cost for these units is $66,420.

Multigas Meter – RAE Systems MultiRAE Lite

Exposure Sampling (Particulate Air Samplers and Radiation Meters)

Particulate air sampling devices and radiation meters measure responder exposure to airborne hazards and radiation. The program currently has two of each device (two air samplers, and two radiation meters), but we need to have four total of each so that we can have one of each in each region. Estimated cost is $5,000 per device, for a total estimated cost of $20,000 for two of each device.

Radiation meter – Ludlum model 3001-3RK2 Emergency Response Kit

Particulate Air Sampler – Dusttrak 8534 (handheld) and 8535 (benchtop)

Self-Contained Breathing Apparatus

In the event that breathing conditions at a response are unsafe, each responder requires a Self-Contained Breathing Apparatus (SCBA), which is required by law to be replaced every 15 years. Each of Ecology's response vehicles working out of the Northwest and Southwest Regional Offices (NWRO/SWRO) should be equipped with one SCBA, while each full-time responder vehicle working out of the Central and Eastern Regional Offices (CRO/ERO) should be equipped with two, given the larger distances that these responders have to travel, and the greater likelihood that a primary and after-hours responder may travel together to a response in these two regions.

This request will support a total of 17 new SCBAs, 12 for the new response vehicles purchased at the end of the 2019-21 biennium (two each for the two new response vehicles in CRO/ERO; and one for each of the eight vehicles for NWRO and SWRO), and five to replace the oldest devices that are currently in service and need to be decommissioned. Based on an estimated cost of $6,480 per assembly, including tax, total funding requested for the new SCBAs is $110,160.

SCBA being used as part of a training exercise - SCBA usage must be certified quarterly

Handheld FTIR/Raman Analyzers

In addition to responding to oil and petroleum product spills, Ecology responds to releases of other hazardous substances. We also support state and federal law enforcement agencies in responding to, and cleaning up, illegal drug operations, and in recent years, the nature of these sites has changed rapidly, posing new toxic threats to law enforcement personnel, spill responders, and the public.

Some spill responses are for unknown substances, for which field identification is critical for ensuring safe handling procedures. Fourier-transform infrared (FTIR)/raman spectroscopy technology, which is now available in handheld devices, is critical to safely determining whether an unknown substance is flammable or explosive, highly reactive, or acutely toxic. The Spills Program currently has two of these devices, but needs two more so we can equip each of the four regional offices to support identification of unknown substances by responders in the field. Based on a recent bid process, the estimated cost per unit with tax is $108,000. This request will support the purchase of two FT-IR/Raman handheld analyzers at a total cost of $216,000.

Thermo Fisher Gemini FTIR/Raman Handheld Analyzer

Impacts on Population Served:
This request supports the safety of spill responders, who work directly with the public and respond to spills of oil and other hazardous substances wherever they occur. Ecology's spill responders ensure the safety for others at the site of a spill or an illegal drug operation hazardous materials response, and safely contain, remove, and dispose of these hazards, reducing risks of exposure and contamination. Spills occur in varied locations throughout the state, and prompt response and containment reduces the toxic burden of spills for those who live, work, and recreate in areas where spills occur.

Alternatives Explored:
The two alternatives to this request would be to continue to rely end of biennium savings for the purchase and replacement of vehicles and equipment; or reduce positions to create additional funding capacity to support these needs. These approaches are not feasible or sustainable for the following reasons:

- Many times, the Spills Program is unable to identify sufficient savings for a vehicle or equipment purchase until it to too late in a biennium. In addition to this timing issue, there are some biennia where savings may not be available to repurpose for vehicles or equipment, as the program must weigh and manage these needs against the possibility of a large and expensive spill response occurring near the end of a biennium.
- It is not feasible to reduce positions, as the workload for the Spills Program is driven by state law. The program is required to review a certain number of contingency and geographic response plans annually, evaluate plans through drills, perform a certain number of vessel and annual facility inspections, and provide a field response for all spills requiring technical assistance or investigation. The ideal case load for a spill responder is 150 cases per year. This allows time for response preparation, call-taking, responding to the scene, cleaning up the spill, the investigation, case documentation, and follow-up activities such as enforcement actions.
- Recent caseloads due to pandemic hiring freeze last biennium rose to as high as 292 calls per responder, resulting in high overtime costs, and increased levels of stress and burnout for our responders. In order to replace four vehicles per year and establish a standardized replacement schedule, the program would need to reduce the number of our responders by two positions. Over the past two fiscal years, Ecology has received an average of 4,100 spill response calls per year. Based on our current staffing level of 25 full-time responders, this workload equates to 164 incidents per responder per year. If the number of responders were reduced to 23 in order to repurpose that funding for an ongoing fleet and equipment budget, caseloads would be closer to 178 per responder per year.

Consequences of Not Funding This Request:
If this request is not funded, it risks the safety of our responders and the public they serve. Per RCW 90.56.020, Ecology's director has the "primary authority…to oversee prevention, abatement, response, containment, and cleanup efforts with regard to any oil or hazardous substance spill in the navigable waters of the state." This request supports Ecology's efficient and safe fulfillment of these, and other requirements, by ensuring that our spill responders have the resources needed to do their jobs. Without dedicated funding to support proper fleet management, vehicles may incur increased maintenance costs, not support state's emissions reduction targets, and could potentially create safety hazards for responders. The equipment supported by this request will help ensure the safety of all individuals at the scene of a response. This benefits not only our spill responders, but also other state, local, federal, tribal response partners, as well as the public who may be present at a spill event.

Assumptions and Calculations

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

This request expands activity A054 – Rapidly Respond to and Clean Up Oil and Hazardous Material Spills by providing dedicated funding for the purchase and replacement of spill response vehicles and equipment. Below is a summary of the 2019-21 and 2021-23 base funding and FTEs for this activity. Administrative Overhead related to this activity is in the agency's Administration Activity A002, and is not included in the totals below.

Activity A054 – Rapidly Respond to and Clean Up Oil and Hazardous Material Spills		
	2019-21	**2021-23**
FTEs Total	39.70	39.60
001-7 General Fund – Private/Local	$114,000	$114,000
217-1 Oil Spill Prevention – State	$2,200,000	$0
223-1 Oil Spill Response – State	$8,576,000	$7,076,000
23P-1 Model Toxics Control Operating – State	$15,443,000	$13,706,000
	$26,333,000	**$20,896,000**

Detailed Assumptions and Calculations:

In order to operationalize a seven-year replacement schedule for response vehicles, Ecology will need to replace four vehicles on average per year (28 vehicles ÷ 7 years = 4 vehicles per year). At a cost of $75,000 per vehicle (including up-fitted costs, such as such as a service body, LED lighting, and lift gates), the replacement of four vehicles per year will cost $300,000, or $600,000 per biennia. As noted early in this request, Ecology has a base response vehicle budget of $150,000 per biennia. Therefore, Ecology is requesting $225,000 in fiscal year 2023, and $450,000 per biennium ongoing, to supplement program's current base budget, and replace four vehicles per year.

Because the lifecycles of response equipment can vary between 5-15 years, depending on the type of equipment needed, Ecology is requesting the remaining funding in this request as one-time, and will plan to submit future budget requests for equipment needs every five to six years, starting in the 2027-29 biennium, as current equipment reaches end of life and needs to be replaced, or as technology and responder safety needs change over time.

Cost estimates for this request are based on known equipment costs from purchase experience, and current catalog pricing. Items and estimated costs for this request are summarized in the table below. All costs are estimated in Object J.

Equipment Item	Quantity Requested	Unit Price	Requested Funding, FY 2023	On-going/One-Time
Response Vehicles	3	$ 75,000	$ 225,000	On-going
Mercury Vapor Analyzers	2	$ 12,104	$ 24,208	One-Time
Multi-Gas Meters	15	$ 4,428	$ 66,420	One-Time
Air Sampling Pumps	2	$ 5,000	$ 10,000	One-Time
Radiation Samplers	2	$ 5,000	$ 10,000	One-Time
Self-Contained Breathing Apparatus (SCBA)	17	$ 6,480	$ 110,160	One-Time
Handheld FTIR/Raman Spectrometers	2	$ 108,000	$ 216,000	One-Time
Total			**$ 661,788**	

Workforce Assumptions:

Expenditures by Object			**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
J	Capital Outlays			661,788	225,000	225,000	225,000	225,000
	Total Objects		**0**	**661,788**	**225,000**	**225,000**	**225,000**	**225,000**
Staffing								
Job Class		**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
	Total FTEs		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Explanation of costs by object:
Equipment includes an ongoing cost of $225,000 each fiscal year, starting in fiscal year 2023, for response vehicles, and one-time costs of $400,799 to purchase new safety equipment for our responders.

How is your proposal impacting equity in the state?

Ecology's spill responders deploy to incidents statewide, and their work ensures that hazardous materials are contained and safely disposed, reducing toxic hazards wherever they respond. Prompt responses to spills affecting water help reduce the impacts to those waterways and their valuable economic and cultural resources. This work supports people who rely on fishing and shellfish harvest for their livelihoods or for subsistence, and reduces the toxic impacts of spills wherever they occur. This request ensures that responses are as prompt and safe as possible, not only for our responders and partner agencies, but for members of the public who may also be present at the site of a spill.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees, by ensuring that our spill responders have the vehicles and equipment needed safely and reliably do their jobs.
- Goal 3: Prevent and reduce toxic threats and pollution, by ensuring that our spill responders have the resources needs to rapidly and aggressively respond to spill incidents in order to minimize the environmental impacts they can cause.
- Goal 4: Protect and manage our state's waters and Goal 5: Protect and restore Puget Sound by ensuring responds can rapidly and aggressively respond to spills of oil or other hazardous substances to the waters of the state, including Puget Sound.

This request also provides essential support to the following Governor's Results Washington Goals:

- Goal 3: Sustainable Energy and a Clean Environment and Goal 4: Healthy and Safe Communities, by support rapid and aggressive responses to spill incidents that occur throughout the state.
- Goal 5: Efficient, Effective, and Accountable Government, establishing a regular replacement schedule for spill response vehicles, which will ensure timely replacement and the efficient use of these state resources.

Performance Outcomes:

The outcome of this request will be the establishment of a vehicle replacement program to ensure that spill response vehicles are replaced on a regular rotation, increasing their reliability and helping to ensure our spill responders can deploy rapidly and aggressively to spill responses. The equipment supported by this request will help ensure the safety of our responders, partner agencies, and the public.

Other Collateral Connections

Puget Sound Recovery:

74 percent of spill responses benefit the Puget Sound and its watersheds. This request supports the implementation of the Puget Sound Action Agenda through the following Ongoing Programs, Regional Priority Approaches, Strategies, and Sub-strategies:

- Ongoing Program ECY28: Spill Response.
- Regional Priority Approach CHIN6.2: Strengthen local oil spill preparedness and response plans; integrate with Federal, State, and tribal programs and planning; and allocate resources.
- Strategy 9: Prevent, reduce, and control the sources of contaminants entering Puget Sound.
  - Sub-strategy 9.5: Control wastewater and other sources of pollution such as oil and toxics from boats and vessels
- Strategy 20: Effectively prevent, plan for, and respond to oil spills.
  - Sub-strategy 20.1: Prevent and reduce the risk of oil spills.
  - Sub-strategy 20.3: Respond to spills and seek restoration using the best available science and technology.

This request also supports efforts under the Governors' Executive Order 18-02, Southern Resident Orca Recovery and Task Force through the following recommendation: 24: Reduce the threat of oil spills in Puget Sound to the survival of Southern Residents.

State Workforce Impacts:

N/A

Intergovernmental:

This request will support our responder's ability to assess health and safety hazards during a response, which will benefit our federal response partners, such as the U.S. Coast Guard and Environmental Protection Agency, as well as local response partners and tribes who may also respond to a spill. A primary objective in providing hazardous materials support to law enforcement agencies at illegal drug operations sites is to ensure the safety of everyone at the scene, and the equipment supported in this request is critical to that objective.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

In 2018, the Legislature passed the Strengthening Oil Transportation Safety Act (E2SSB 6269), which required Ecology to prepare a report describing the activities performed by the Spills Program, revenue source and funding recommendations for partner agencies, and a forecast of the department's funding needs in the future. The Spill Prevention, Preparedness, and Response Program Activity and Funding Report that was submitted to the Legislature in June 2020 (https://apps.ecology.wa.gov/publications/summarypages/2008009.html), and included four areas of legislatively mandated work that the Spills Program has been unable to fully undertake, due to a lack of funding:

- Developing rules for the Certificate of Financial Responsibility Program.
- Enhancing engagement and outreach with tribes, citizens, and agencies.
- Increasing inspection and response capacity in the Port Angeles area.
- Securing appropriate funding for hazardous substance spill response work.

Ecology conducted extensive outreach with tribes, partner agencies, and non-governmental stakeholders during the development of that report, and we have received strong support from stakeholders, such as Western States Petroleum Association, for seeking strategies for how to better fund responses to hazardous materials spills. We anticipate stakeholders will support this request to ensure our spill responders have the vehicles and equipment needed to do their jobs.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

PL KR Spill Response Vehicles & Equipment Attachement A.pdf

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. J	$0	$662	**$662**	$225	$225	**$450**

Agency Contact Information

David Byers
(360) 790-6899
david.byers@ecy.wa.gov

Attachment A - Ecology Spill Responder Primary Vehicle Fleet - Current Inventory and Planned Replacement

Purpose: This table outlines the planned replacement of Ecology's current spill response vehicle fleet over the first seven years of the proposed replacement schedule. This schedule is based on the following criteria and considerations: (1) specific vehicle needs at each regional/field office - this is influenced by the number of full-time and after-hours responders deployed from each location, and the number and types of field responses currently at each location; (2) the mechanical health and projected maintenance needs for each vehicle (3) the current and projected vehicle mileage at the time of schedule replacement; and (4) age of vehicle. Please note, this replacement schedule will be adjusted, as needed, in the future to ensure the safety and reliability of our spill response vehicles.

August 2021

#	Vehicle Assigned Location	Plate #	Model Year	Make	Model	Fiscal Year for Planned Replacement	Categorical Reason(s) for Replacement
1	Southwest Region	20693E	2006	Ford	F450 CC	2023	Mechanical Issues
2	Southwest Region - Vancouver Field Office	20580E	2006	Ford	F450 CC	2023	Mileage, Mechanical Issues
3	Central Region	16957E	2001	Ford	Expedition	2023	Age, Limited Utility for Response
4	Eastern Region	08267E	2001	Ford	F350 Quad	2023	Age, Gross Vehicle Weight Rating*
5	Eastern Region	16982E	2002	Ford	F350 CC	2024	Age, Gross Vehicle Weight Rating*
6	Southwest Region	24381E	2011	Ford	F350 CC	2024	Age
7	Northwest Region	24380E	2011	Ford	F-350	2024	Age
8	Northwest Region	26918E	2015	Nissan	Titan	2024	Scheduled Replacement
9	Southwest Region - Vancouver Field Office	12335E	1997	Chevy	Silverado 2500	2025	Age
10	Southwest Region - Vancouver Field Office	26986E	2015	DODGE	RAM 4500	2025	Scheduled Replacement
11	Central Region	28145E	2017	Ford	F350	2025	Scheduled Replacement
12	Northwest Region - Bellingham Field Office	27800E	2017	Dodge	2500	2025	Scheduled Replacement
13	Northwest Region	27791E	2017	Dodge	2500	2026	Scheduled Replacement
14	Headquarters**	26811E	2016	Ford	F350	2026	Scheduled Replacement
15	Northwest Region	28917E	2018	Ford	F-150	2026	Scheduled Replacement
16	Northwest Region	29611E	2019	Ford	F-150	2026	Scheduled Replacement
17	Southwest Region	29612E	2018	Ford	F450	2027	Scheduled Replacement
18	Headquarters**	28136E	2017	Ford	F150	2027	Scheduled Replacement
19	Central Region	30324E	2021	Chevrolet	Silverado 2500	2027	Scheduled Replacement
20	Northwest Region	30325E	2021	Chevrolet	Silverado 2500	2027	Scheduled Replacement
21	Southwest Region	30352E	2019	Ford	F550	2028	Scheduled Replacement
22	Southwest Region	30353E	2019	Ford	F550	2028	Scheduled Replacement
23	Eastern Region	30326E	2021	Chevrolet	Silverado 2500	2028	Scheduled Replacement
24	Northwest Region	30339E	2021	Nissan	Titan	2028	Scheduled Replacement
25	Southwest Region	30338E	2021	Nissan	Titan	2029	Scheduled Replacement
26	Statewide Natural Resource Damage Assessment (NRDA) Vehicle	30340E	2021	Nissan	Titan	2029	Scheduled Replacement
27	Northwest Region	30341E	2021	Nissan	Titan	2029	Scheduled Replacement
28	Northwest Region	30327E	2021	Chevrolet	Silverado 2500	2029	Scheduled Replacement

*These vehicles are close to their gross vehicle weight ratings, which is the maximum weight at which the vehicle can safely operate. Exceeding these ratings by adding weight from hazardous materials collected at a response can cause road handling issues and safety hazards.

**Vehicles assigned to headquarters are prioritized for later replacement compared to existing regional and field office vehicles.

Agency Recommendation Summary

Shoreline aerial photographs are an important tool for managing thousands of miles of marine and freshwater shorelines across Washington. Ecology's current collection of shoreline aerial photography is used by resource managers from across the state as a unique source of information for documenting shoreline change over time. They provide important data points for ongoing implementation, evaluation, and improvement of local shoreline master programs, and allow resource managers to better understand development patterns, the locations of critical habitats, and ecosystem changes over time. The last set of photos was taken in 2016, and Ecology's goal is to update these photos every five years. This request will support the collection of 15,000-20,000 new aerial photographs of Washington's 3,300 miles marine shorelines, and around 1,000 miles of large river and lake shorelines throughout the state. Related to Puget Sound Action Agenda Implementation. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Operating Expenditures						
Fund 23P - 1	$0	$200	**$200**	$0	$0	**$0**
Total Expenditures	**$0**	**$200**	**$200**	**$0**	**$0**	**$0**

Decision Package Description

The task of monitoring shorelines and evaluating the effectiveness of resource management tools such as Shoreline Management Plans (SMP) is difficult without aerial photographs. Washington has more than 3,300 miles of marine shoreline and tens of thousands of miles of freshwater shorelines. Much of this area is difficult to access and survey because of challenging terrain, limited access points, and private property. Most shoreline development is small-scale construction projects dispersed across a complex landscape. It is impossible to document relatively modest, but often widespread modifications to shorelines, such as the building or replacing of bulkheads, docks, and piers; or to characterize changes in riparian vegetation or coastal habitat without consistent, high quality aerial imagery collected at relatively consistent intervals.

Oblique aerial photographs – photos taken at an angled viewpoint from a plane flying slightly offshore at a low altitude – are key tools for managing and evaluating our shorelines. Ecology's current repository of shoreline oblique aerial photos are a unique source of information for documenting shoreline change in Washington over time. The oblique angle and high resolution of these photos allow coastal managers the ability to identify relatively small changes to the shoreline, such as tree removal, bulkhead construction, or modifications to piers and docks.

In addition to providing important information for resource management professionals, these photos are also used by residents, visitors, volunteer groups, and educators for learning about our shorelines, planning recreational trips, or for just exploring Washington's natural resources. Most people are more comfortable with photos from this oblique perspective, rather than traditional vertical images, or even the oblique views offered through Google or Bing, which often have a distorted appearance or uncomfortable viewing angle.

Specifically, these oblique photographs:
1. Provide an important and foundational resource for day-to-day implementation of shoreline master programs. For example, Island County uses the photos for documenting existing conditions when reviewing permit applications; identifying permit violations and determining when they occurred; and tracking shoreline physical processes, such as erosion and accretion.

2. Play a critical role in shoreline master program updates, including preparing shoreline inventory and characterization reports; developing restoration plans; and informing and engaging residents in public meetings and on local planning web sites.

3. Can be used in combination with other information, such as Washington Department of Fish and Wildlife's High Resolution Change Detection data to determine whether jurisdictions have met Ecology's standard of ensuring "no net loss of shoreline ecological functions." Together, these two data sources help provide a quantitative and defensible means of evaluating SMP effectiveness monitoring to ensure regulations meet "no net loss."

4. Are used to map landslides and identify areas vulnerable to other hazards, such as floods and erosion. The oblique view provides an important perspective for mapping geologic features on steep slopes, which are often obscured in traditional vertical aerials.

Ecology has invested in oblique photos since the 1970's when the original series was flown, and has provided access to these photos through our user-friendly Coastal Atlas (https://apps.ecology.wa.gov/coastalatlas/). To date, the atlas includes photographs from the 1970s, 1990s, 2001, 2006, and 2016. Ecology's goal is to update these photos every five years.

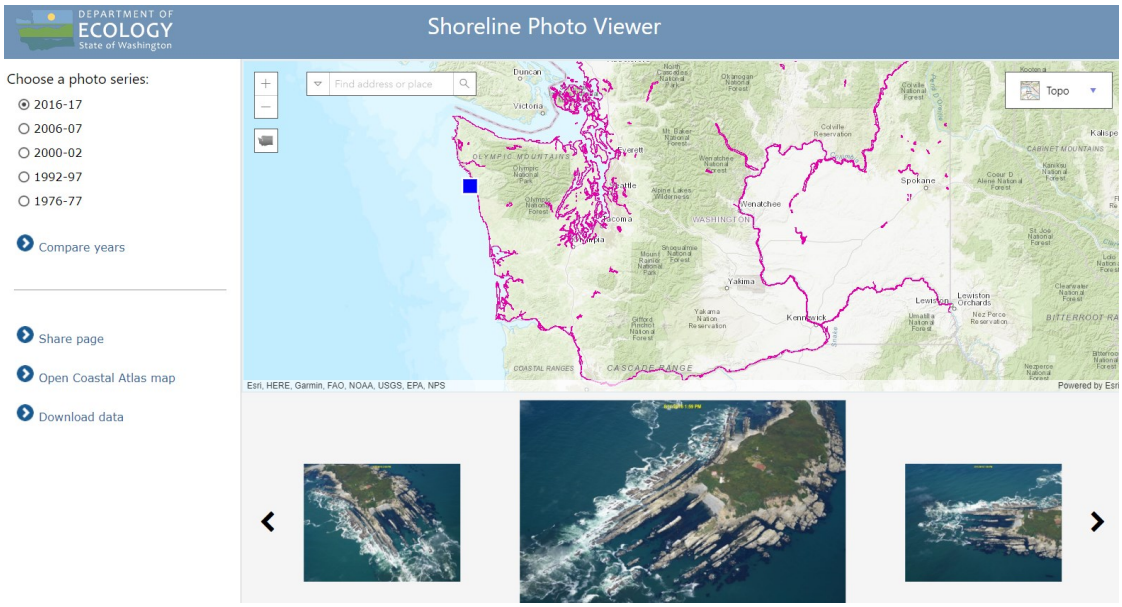

Figure 1. Ecology's Coastal Atlas allows instantaneous viewing of high resolution photos of all marine shorelines and major rivers statewide.

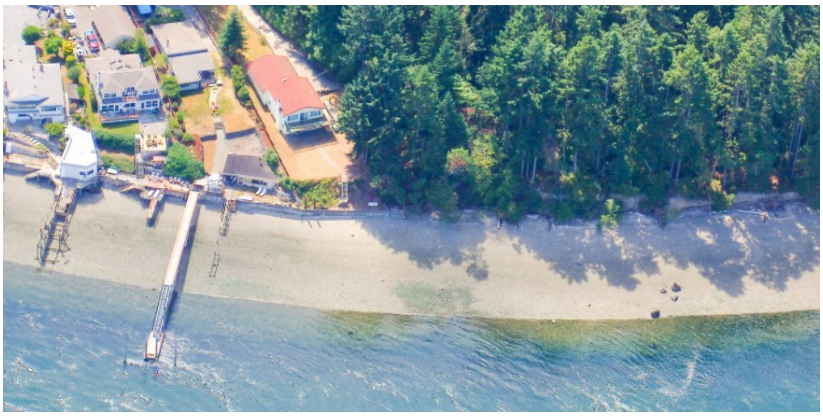

Figure 2. The high resolution and oblique angle allows agencies to identify features such as bulkheads beneath trees that cannot be discerned with conventional air photos.

In 2016, Ecology reassessed its methods for both acquiring photos and making them readily accessible. We spoke to a wide range of users in a variety of different sectors to better understand both, how they used the photos, and what they would like to see improved. Several factors have contributed to the widespread popularity and use of Ecology's oblique shoreline aerial photos, despite the increasing availability of other sources of online imagery, such as Google or Bing Maps. These factors included, but were not limited to, the intuitive nature of the discrete images and the ease with which users can view and redistribute them; the clear association of an accurate date and time with each image; and the availability of multiple time series of photos. The findings from this assessment were synthesized into the following report, *"Washington Oblique Aerial Photography"* (Ecology Publication No. 17-06-026). The overarching result of our assessment in 2016: No other image source available provides comparable comprehensive coverage of our shorelines.

Prior to 2016, Ecology had primarily used federal Coastal Zone Management (CZM) grant funds to acquire these photos. However, because that fund source has remained relatively flat over time, Ecology must now use these funds primarily to support staffing costs, which have continued to increase over time, and now require a greater amount of this grant funding than they used to. In 2016, Ecology was awarded a CZM Program Enhancement Grant for a "project of special merit" to collect aerial photos. Unfortunately, these competitive grants are typically used for one-time improvements to state CZM programs, and NOAA staff have advised Ecology that they would not fund these photos again through that grant program.

This request will provide one-time funding for a contractor to collect 15,000-20,000 oblique aerial photographs of about 3,300 miles of all marine shorelines and around 1,000 miles of large river and lake shorelines throughout the state. This comprehensive collection of images, gathered from a consistent height (and at low tide for marine shorelines), will continue to be an essential tool for monitoring shoreline activity for

regulatory compliance. The images will also provide a unique view of natural changes, such as landslides, shoreline erosion, and changes in estuarine marshes, as well as progress of restoration actions such as dike removals, beach restoration, and opening of stream channels and tidal inlets. The combination of high-quality, region-wide visual imagery, and an accessible distribution platform, has been a powerful resource for local, state, and federal resource professionals.

Ecology will plan to request one-time funding every five years so that we can continue to update these photos on a regular cycle moving forward.

Impacts on Population Served:
This request will support local governments in implementing and updating their SMPs, which are required under state law. Oblique aerial photos are also used by other state, federal, and Tribal resource managers, whose planning, regulatory, compliance, and restoration work affects a wide range of customers, including businesses and property owners.

Our experience with providing oblique aerial photography, and the information gathered from the wide range of users in 2016, tells us these images are also quite valuable to volunteer organizations, educators, and residents. Photos are used to inform the public about proposed shoreline projects, teach students about shoreline ecology and geology, help people plan boating trips and other recreational activities, etc.

Figure 3, shown below, illustrates how Ecology's photos are regularly used in public settings to illustrate a wide variety of coastal features, in addition to hazards such as landslides. They provide a familiar, easy to understand view of shoreline habitats, development practices, and waterfront industries.

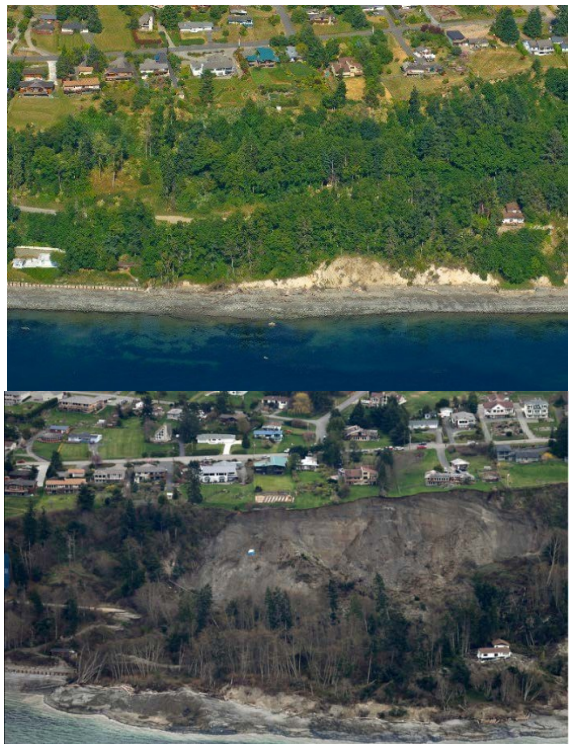

Figure 3. After the 2013 Ledgewood landslide on Whidbey Island, the New York Times used a photo from Ecology's oblique shoreline aerial photo database. This photo was used for baseline comparison purposes in a side-by-side slider arrangement allowing readers to move from viewing the 2006 oblique aerial photo (on the left) to one captured soon after the slide (on the right). (http://archive.nytimes.com/www.nytimes.com/interactive/2013/03/29/us/whidbey-landslide.html)

Alternatives Explored:
CZM federal grant funding had been used to acquire photos in the past, but as describe above, that is no longer an option, as those funds are needed to primarily support existing staff. We could choose to delay taking new photos, but that would push us out passed our target goal of updating these photos every five years.

This request could be scaled to photograph only marine shorelines (this would reduce the request by about $40,000), but that not advised, as it would not allow for the entire photo set to be updated at the same time, limiting resource managers' ability to use these for comparison and evaluating change over time.

Consequences of Not Funding This Request:
If this request is not funded, Ecology would lose an opportunity to update a valuable data set that supports the agency's strategic priorities and provides a helpful resource to state, local, Tribal, and federal resources managers working on environmental protection and risk reduction

projects. The more out of date these photos get, the less value they have in evaluating current conditions or assessing shoreline change from a regulatory or scientific perspective. In general, the less time that elapses between each set of photographs, the better. Enabling comparison of shorelines over time is one of the most important functions of these photos, and adding additional data points over time increases the specificity of comparisons.

Assumptions and Calculations

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

This is not an expansion or alteration of a current program or service. Ecology does not have a permanent fund source for acquiring oblique aerial photography every five years.

Detailed Assumptions and Calculations:

Ecology requires $200,000 in fiscal year 2023 for a contractor to take the new set of oblique aerial photographs along specified shorelines. The contractor will be selected through a competitive solicitation process in accordance with state procurement requirements. The cost estimate for this request is based on the cost of the 2016 photo project, adjusting for inflationary costs such as, increased fuel costs for the plane, etc.

Workforce Assumptions:

Expenditures by Object		**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
	Personal Service						
C	Contract		200,000				
	Total Objects	**0**	**200,000**	**0**	**0**	**0**	**0**

Staffing							
Job Class	**Salary**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
Total FTEs		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Explanation of costs by object:

Contracts are $200,000 in fiscal year 2023 for a photographer.

How is your proposal impacting equity in the state?

Photos will be taken of all marine shorelines (about 3,300 miles) and around 1,000 miles of freshwater shorelines along some of our largest waterbodies in the state. These shorelines comprise a wide range of communities and populations, including Tribal and non-Tribal lands, urban cities, rural, underserved communities, and areas that represent the full range of rankings (1-10) on Washington's Environmental Health Disparities (EHD) map. This map compares census tracts across Washington to better understand communities' health as well as the social, economic, and environmental impacts that influence them. The Governor's Environmental Justice Task Force recommends using the map to ensure a more equitable distribution of environmental benefits across communities. Some of Washington's shoreline areas (e.g. areas around the Port of Tacoma) have a high environmental health risk factor (9 or 10); while other areas (e.g. much of Whidbey Island) have a low risk factor of 1 or 2).

The photos supported by this request will be specifically provided to local governments and Tribes through portable digital storage devices, or secure file transfer. They will also be available to all Washington residents and visitors through the Washington Coastal Atlas, providing a unique way for everyone to access Washington's shorelines.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing the following goals in Ecology's strategic plan by providing an important data resource for managing activities on Washington's shorelines. In particular, they are a key tool used in developing, implementing, and evaluating shoreline master programs.

- Goal 1: Support and Engage our Communities, Customers, and Employees: The shoreline photos are available to all governments, residents, visitors, and businesses in the state. They are used for a wide variety of purposes beyond land-use planning and regulation, including recreational planning, education, and property evaluation.
- Goal 2: Reduce and Prepare for Climate Impacts: Local governments are encouraged to plan and adapt to the long-term effects of sea level rise. These photos provide a series of images over time that help identify areas of change and potential vulnerability to sea level rise.
- Goal 3: Prevent and Reduce Toxic Threats and Pollution: Shoreline regulations help prevent toxins from entering state waters. For example, vegetated buffers required for new development help reduce toxic inputs to state waters. Shoreline master programs also set forth a plan for restoration of degraded shorelines.
- Goal 4: Protect and manage our state waters and Goal 5: Protect and restore Puget Sound: Shoreline master programs protect freshwater and marine shorelines throughout the state, setting standards for shoreline development and protecting important habitats. The photos help resource managers better understand development patterns, locations of critical habitats, and ecosystem changes over time.

This request also provides essential support to the Governor's Results Washington Goal 3: Sustainable Energy and a Clean Environment and Goal 4: Healthy and Safe Communities. Oblique shoreline aerial photographs support activities that protect the environment and Washington residents. They are used by:

- Ecology and local governments in administering the Shoreline Management Act.
- Ecology's Spills Program in developing spill response plans.
- The Washington Department of Natural Resources in mapping geologic conditions and assessing geologic hazards.
- The Washington Department of Fish and Wildlife in their regulatory role administering the state Hydraulic Code and for scientific studies.
- Other resource managers in Washington.

Performance Outcomes:

The outcome of this request will be the collection of a large shoreline aerial photo set that will be used by government entities and the public to protect and manage Washington's shorelines and aquatic environments. Photos will support spill response planning, help communities prepare for climate impacts such as sea level rise, and better understand environmental conditions and geological hazards. This work will result in increased habitat protection, improved water quality, and increased public safety from climate impacts and coastal hazards.

This request will result in 15,000 to 20,000 new photos of Washington's shorelines, accompanied by a photo database that includes the date/time of each photo, and GPS coordinates documenting the location of the photos. Full sets of each county and tribe's shoreline photos will be available via portable storage device or secure file transfer. All photos will also be added to the Washington Coastal Atlas as a new data layer and b available to the public.

Other Collateral Connections

Puget Sound Recovery:

This request will support Puget Sound Action Agenda implementation by creating a data set that will be used in a variety of work that helps protect and restore Puget Sound. In particular, this request will benefit the following ongoing programs, regional priorities, and sub-strategies:

Ongoing programs

- OGP_ECY12: Shorelands - Shoreline Master Programs (Department of Ecology)
- OGP_ECY15: Shorelands - Coastal Hazards resilience network (Department of Ecology)
- OGP_ECY18: Regional Oil Spill Planning (Department of Ecology)
- OGP_ECY11: Shorelands - Northwest Straits Commission (Department of Ecology)
- OGP_ECY52: Beach Environmental Assessment, Communication, and Health (BEACH) (Department of Ecology)

Regional Priority Approaches

- CHIN1.10: Enforce and improve compliance with existing regulations.

- CHIN2.4: Effectively implement and enforce existing regulations and report periodically.
- CHIN7.1: Protect and/or restore critical habitat for salmon populations.
- EST1.1: Gain a better understanding of current habitat conditions.
- SA3.2: Implement plans and priorities to protect habitat
- SA2.1: Collaborative, multi-benefit groups develop a plan that prioritizes locations to restore or protect
- SHELL1.3: Increase compliance with and enforcement of environmental laws, regulations and permits
- ORCA1.1: Implement the Governor's Orca Task Force recommendations and other plans

Strategies and Sub-strategies

- Sub-strategy 1.1: Identify and prioritize areas for protection, restoration, and best suitable for (low impact) development
- Sub-strategy 1.2: Support local governments to adopt and implement plans, regulations, and policies consistent with protection and recovery targets, and incorporate climate change forecasts
- Sub-strategy 1.3: Improve, strengthen, and streamline implementation and enforcement of laws, plans, regulations, and permits consistent with protection and recovery targets
- Sub-strategy 8.1: Use complete, accurate and recent information in shoreline planning and decision-making at the site-specific and regional levels
- Sub-strategy 8.2: Support local governments to adopt and implement plans, regulations, and policies that protect the marine nearshore and estuaries, and incorporate climate change forecasts
- Sub-strategy 8.3: Improve, strengthen, and streamline implementation and enforcement of laws, regulations, and permits that protect the marine and nearshore ecosystems and estuaries
- Sub-strategy 18.2: Increase access to and knowledge of publicly owned Puget Sound shorelines and the marine ecosystem
- Sub-strategy 20.2: Strengthen and integrate spill response readiness of the state, tribes and local governments

State Workforce Impacts:

N/A

Intergovernmental:

Local governments are required by statute to implement and periodically update their SMPs (Chapter 90.58 RCW). This request will provide photos that serve as an important data point for ongoing implementation, evaluation, and improvement of the required SMPs, which help Ecology, local and Tribal governments, and other partners effectively manage shorelines. Ecology will coordinate with other state agencies and local and Tribal governments in planning this project to ensure we are best meeting our partners' needs, from whom we anticipate broad support.

We know from conversations and correspondence that our shoreline oblique photos are widely used by government entities and we have received positive feedback and support from tribal, local, state, and federal agencies. Here are a couple of examples we've received over the years:

> "… In summary, I cannot adequately stress the value of these photos. Simply put, they make it possible for us to manage our shorelines and coastal resources in a way that would not be possible without this valuable resource. Having an up-to-date series of photos is essential for tracking changes over time and determining compliance with our recently updated Shoreline Master Program." - *Brad Johnson, Community Development Director, City of Burlington*

> "… The ability to compare recent Ecology oblique shoreline photos with multiple series of historical Ecology shoreline photos has permitted a depth of analysis that simply would not otherwise have been possible. The historical photo series document how vegetation patterns, landslide activity, sediment production rates, and land use have changed over the decades. Although shoreline photos from other sources (e.g., Google) have become freely available in recent years, they provide no substitute for Ecology's datasets." - *Jessica Czajkowski, Assistant State Geologist, and the Assistant Director of Science and Research for the Washington Geological Survey.*

> "…We also used the photos extensively in evaluating proposed restoration projects to assess "on-the-ground" conditions against proposals. In short, the oblique aerial photo series is a widely used, unique data source for nearshore protection and restoration. The periodic update of these photos is essential to our ability to understand trends in Puget Sound shoreline development." - *Curtis Tanner, Assistant Field Supervisor, US Fish and Wildlife Service.*

Legal or Administrative Mandates:

N/A

Stakeholder Response:

The shoreline aerial photos are used by many non-governmental stakeholders, including businesses (e.g. realtors, insurance companies, and environmental consulting firms), scientists, teachers, volunteer organizations, property owners, and other individuals throughout the state and beyond. We expect broad support for this proposal from these stakeholders.

Here are some examples of feedback we've received over the years:

"I would like to thank Ecology, and your section in particular, for the information made available on the Web. We are environmental engineers and scientists, and have found the shoreline aerial photos very valuable in our work. I was talking about them with a colleague earlier today, and she pointed out that we should let you know that we appreciate this service. Thank you!" - *Environmental engineer at a Seattle-based consulting firm*

"Excellent, excellent site. As a boater I'm interested in maintaining what we have - as an environmentalist, I'm interested in preventing it from degrading. My wife and I have enjoyed spotting the places we "have walked"." - *Washington resident*

"Your photos have brought back a lot of memories for me of some wonderful years growing up in the Northwest and using Puget Sound as my playground. I am now in my sixties and living in Utah... My sincere thanks to you for providing and maintaining a wonderful website and allowing me to retain some 50 year-old memories... THANK YOU!!!" - *Former Washington resident*

"The aerial photo site ...is outstanding. For the first time I can get really detailed close-ups of what our study area at Salt Creek looks like from a vulture's viewpoint. Great photos. I'm going to download some of the photos just for the book I keep about the study...it's just so nice to see some great photos of what the vultures are actually seeing as they come into the land." - *Scientist studying vultures in Washington State*

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. C	$0	$200	**$200**	$0	$0	**$0**

Agency Contact Information

Brian Lynn
(360) 407-6224
blyn461@ecy.wa.gov

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Department of Ecology
2022 Supplemental Operating Budget
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Agency Recommendation Summary

Washington Conservation Corps (WCC) collaborates with organizations to complete environmental stewardship projects statewide. WCC's cost-share requires partners fund 75 percent of crew costs, while WCC funds the remaining 25 percent with state appropriations and an AmeriCorps grant. While this cost-share is the best approach for funding the core WCC program in a marketplace of similar programs, it presents barriers for organizations in under-resourced areas. To further the state's goals around environmental justice, Ecology requests funding for a two-year pilot project to provide five WCC crews with no partner-provided cost-share for projects in areas of the state where assistance is most needed. (Model Toxics Control Operating Account)

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Operating Expenditures						
Fund 23P - 1	$0	$738	**$738**	$984	$246	**$1,230**
Total Expenditures	**$0**	**$738**	**$738**	**$984**	**$246**	**$1,230**

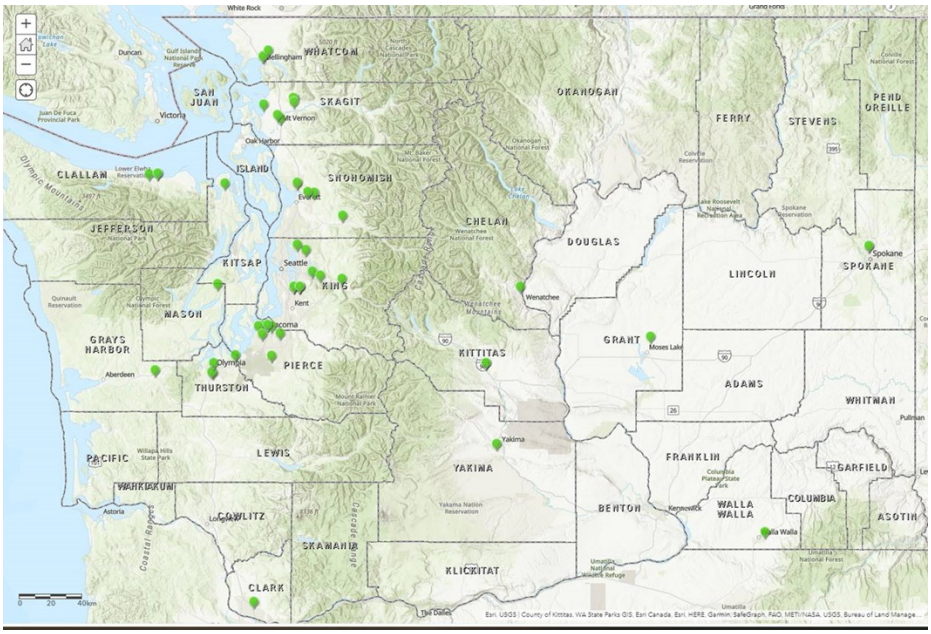
Decision Package Description

Background
The Washington Conservation Corps (WCC) is an AmeriCorps program that creates leaders in environmental and disaster services through robust training, hands-on experience, community involvement, field skills development, and mentoring of young adults between the ages of 18 and 25 and military veterans. The majority of the positions are 11.5-month AmeriCorps crew positions, in which members serve on five-member crews led by a WCC crew supervisor. We also provide 15 11.5-month Individual Placement AmeriCorps positions, in which members serve individually with natural resource partner organizations across the state.

Our members complete projects for our partners, which include a diverse network of federal, local, state, and non-profit organizations. National forests, national parks, conservation districts, state and local natural resource agencies, tribes, and other entities that work in partnership with WCC to accomplish projects for public and ecological benefit, such as recreational upgrades, environmental restoration, and enhancement projects. Our AmeriCorps members also engage in disaster response as needed, both nationally and locally.

Current WCC Crew Distribution
WCC crews are distributed across the state as noted on the map below. For the upcoming 2021-22 crew year, which runs from October 2021 to September 2022, WCC will have 54 crew equivalents comprised of 51 crews and 15 Individual Placement members. As the map below indicates, WCC base locations are currently concentrated in the highly resourced I-5 corridor of Western Washington, with 22 percent of total crews for the upcoming year based in King County.

Figure 1: WCC Locations for Upcoming 2021-22 Service Year (October-September)



WCC Cost-Share Model

WCC completes projects in partnership with nearly 90 local and Tribal governments, nonprofit entities, and state and federal agencies. Under WCC's cost-share model, partners pay 75 percent of WCC's crew and intern costs, while the remaining 25 percent cost-share is funded by a combination of WCC's state appropriation and a federal AmeriCorps grant. In addition to WCC crews, there are 15 interns placed as AmeriCorps Individual Placements at partner organizations each year who are funded on a 75/25 basis.

Please note that the 25 percent costshare is different from the percentage of state funding supporting total WCC costs. State appropriation funds 100 percent of 8.5 FTEs headquarters staff who are not part of the 75/25 costshare model. In addition, state or federal funds support 100 percent of costs related to disaster response deployments (e.g. COVID support through Department of Health, wildfire response through Department of Natural Resources, or hurricane response through the Federal Emergency Management Agency).

Problem

While WCC's current 75/25 cost-share model is the best approach for funding the core WCC program in a marketplace of other AmeriCorps programs, this model can present barriers to partnering with new organizations who may operate in under-resourced areas of the state, and/or are not able to participate under the standard cost-share. Many communities in our state are currently experiencing economic hardships and/or a range of environmental health disparities, and they could benefit from the services provided by WCC crews to promote and improve environmental and public health for those that live there.

Proposed Solution

To further the state's goals around environmental justice, and increase WCC assistance in communities across the state where it is needed most, Ecology is proposing a two-year pilot project to provide WCC services for up to five crews with no partner-provided cost-share for projects that advance environmental justice priorities in areas of the state that need assistance. The proposed pilot will be conducted during service years 2022-23 (October 2022 – September 2023) and 2023-24 (October 2023 – September 2024). WCC's service years align with the federal fiscal year (October through September), as required by our federal AmeriCorps grant.

WCC must maintain a minimum of 54 crew equivalents each year in order to meet its AmeriCorps program size requirements, but our current funding model is designed to support a maximum of 59 crew equivalents each year. The number of crews per year can fluctuate between 54 and 59 based on partner availability. Outside of the proposed pilot, WCC will continue to maintain a minimum of 54 crews under its standard 75/25 cost-share model to ensure that we can meet AmeriCorps requirements. At the same time - through the pilot - we will establish five crews with no cost-share requirement in order to prioritize partners and projects that advance environmental justice outcomes in areas of the state where assistance is most needed. If this request is supported, Ecology will be providing 100 percent of the funding required for these 5 pilot crews through state appropriation, instead of the standard 25 percent.

This approach will ensure that WCC can continue to meet its minimum size requirements with crews supported under the current 75/25 cost-share model, and stay within our maximum size of 59 crews approved by AmeriCorps. WCC has informed the Office of Financial Management's *Serve Washington*, the state reviewing body for AmeriCorps programs, about this proposed pilot to advance environmental justice initiatives, and they have expressed their support for this request. Ecology's Shorelands and Environmental Assistance Program and WCC have both confirmed that adjusting WCC's cost-share model for this pilot will not result in any complications related to existing AmeriCorps requirements, logistics, or the core WCC program and its current standard cost-share model.

Beginning in fiscal year 2022, one crew will cost $262,400 per crew year. To support this pilot, Ecology is requesting the 75 percent cost-share normally provided by partner organizations ($262,400 per crew X 0.75 = $196,800 per crew). Please note, because the proposed pilot does not expand the total number of WCC crews beyond the program's maximum of 59, Ecology already has the 25 percent cost-share that is normally provided through a combination of existing state appropriation and AmeriCorps grant funding for these pilot crews. For this reason, we are only requesting the 75 percent cost-share that is normally provided by the partner organizations.

This 75 percent cost-share equates to $16,400 per month, per crew ($196,800 per crew / 12 months = $16,400 per crew). Ecology will need the following amounts per fiscal year to operate these five crews during the pilot (October 1, 2022 – September 15, 2024):

- Fiscal Year 2023 (9 months; 10/1/22 – 6/30/23): $738,000 ($16,400 per month, per crew, x 5 crews x 9 months = $738,000).
- Fiscal Year 2024 (12 months; 7/1/23 – 6/30/24): $984,000 ($16,400 per month, per crew, x 5 crews x 12 months = $943,000).
- Fiscal Year 2025 (3 months; 7/1/24 – 9/30/24): $205,000 ($16,400 per month, per crew, x 5 crews x 3 months = $205,000).

Prioritizing Projects for Reduced Cost Share that Advance Environmental Justice

To select projects that are eligible for this pilot, WCC will expand our current competitive application process, which occurs each spring, to add additional selection criteria designed to prioritize projects and locations that promote improvements in environmental justice. WCC will rely on the criteria below to select projects and partners for the pilot. These criteria were selected to advance projects from organizations with limited resources that will have the greatest benefit in the areas with the greatest need.

Projects will earn points based on how they address each criteria, consistent with WCC's Draft Scoring Matrix (see *Attachment A*). Federal and state agencies will not be eligible for the pilot in order to ensure that smaller nonprofits and local/Tribal governments are the beneficiaries. This pilot is intended to incentivize requests from new partners, and/or new projects from qualifying existing partners. Current partners requesting

support for existing projects are ineligible for the pilot, but will continue to be eligible under the standard 75/25 cost-share model.

Partner Based Criteria:

- Partner Organization Size and Resources
  WCC will prioritize projects from partners with small operating budgets ($500,000 or less) and with few staff (five or less). This criteria is designed to prioritize organizations that would not ordinarily be able to partner with WCC under the standard 75/25 cost-share. Incentivizing projects from smaller organizations expands the pool of organizations that can receive WCC support, and helps to provide support in communities with fewer resources. The $500,000 budget threshold is a new parameter for WCC's application process, and was selected because it is used to identify small organizations in other grant programs, such as Ecology's Public Participation Grants.

- Tribal Community Support
  The goal of this criteria is to prioritize projects from tribal partners to expand WCC's partnership and service with Tribes. Tribes have reduced partnership with WCC crews in recent years as they have experienced reductions in funding, and over the past three crew years, tribal partners have made up less than five percent of our overall partners and crews:
  - Crew Year 2021-22: 5 tribal partners for the equivalent of 1.5 crews (2.77% of all WCC crews)
  - Crew Year 2020-21: 6 tribal partners for the equivalent of 2.5 crews (4.61% of all WCC crews)
  - Crew Year 2019-21: 5 tribal partners for the equivalent of 3 crews (5.39% of all WCC crews)

  WCC is currently aware of Tribes that have projects ready for implementation, but lack the funding to partner at the standard 75/25 cost-share. WCC seeks to expand partnerships with tribal communities to address environmental health disparities and reduce exposures to environmental hazards on tribal lands, which is an explicit goal of Engrossed Second Substitute Senate Bill (E2SSB) 5141 – HEAL Act. Increasing our partnerships with Tribes also enables WCC to serve in large sections of the state where crews currently have little presence. Finally, when WCC partners with Tribes, we can build relationships so that tribal community members are aware of the program and may choose to enroll in the future. This helps WCC ensure member demographics are representative of the state's population, and provides training and experience for tribal members.

- New WCC Partner
  WCC will prioritize projects from new partners for the pilot. Existing WCC partners seeking to continue existing projects will not be eligible for this pilot to prevent undermining WCC's highly successful 75/25 cost-share model. The goal of applying this criteria is to incentivize participation from organizations who have not partnered with WCC in the past. This will broaden and expand WCC's pool of project partners and assist organizations who have not previously benefited from WCC services.

Project-Based Criteria

- Located in an Economically Distressed County
  WCC will prioritize projects located in counties identified as economically distressed by the Employment Security Department (ESD) (https://esd.wa.gov/labormarketinfo/distressed-areas). The goal of this criteria is to ensure that we provide WCC services in areas of the state experiencing economic hardship. For crew year 2021-22, only 27 percent of WCC crews are based in counties currently identified by ESD as economically distressed.

- Located in Rural Counties
  WCC will prioritize projects in rural counties as defined by the Washington Department of Health's (DOH) Rural & Urban Counties Map (https://www.doh.wa.gov/Portals/1/Documents/Pubs/609003.pdf). This criteria will support projects in rural counties that typically have fewer resources, and, as a result, may not have been able to partner with WCC in the past. For crew year 2021-22, only 33 percent of WCC crews are based in rural counties.

  Please note, WCC crews do complete projects outside of their home county, and a partner entity may have projects in several counties. WCC does not currently track project sites by county, but will do so for projects supported by this pilot, and we hope to expand this tracking to projects funded through the core WCC program in the future.

- Located in a Census Tracts Experiencing High Levels of Environmental Health Disparity
  Addressing environmental health disparities is the central focus of the HEAL Act, and WCC will prioritize projects located in census tracts that have high environmental health disparity scores, based on DOH's Environmental Health Disparities Map, Information by Location | Washington Tracking Network (https://fortress.wa.gov/doh/wtn/WTNIBL/). WCC does not currently track project completion by census tract, but adding this parameter to the pilot project will ensure that WCC is completing projects in areas that have high environmental health disparity needs. As an example, many census tracts in Yakima County, and in Lewis County, near Centralia, have environmental health disparity scores ranging from 8 to 10, with 10 being the highest possible, but for crew year 2021-22, WCC has only one crew in Yakima County and no crews stationed in Lewis County.

- Located on Tribal Lands
  One explicit goal of the HEAL Act is to reduce environmental hazards on tribal lands. This criteria prioritizes projects that will have a direct impact on Tribal lands, by encouraging non-tribal partners, such as a non-profits, conservation districts, or counties to partner with Tribes to complete needed projects on tribal land. This criteria is distinct from, and in addition to, the partner-based criteria for tribal partnership above. Projects in this category, supported directly by Tribes, will further assist in WCC's outreach and recruitment efforts with tribal members, helping to ensure that WCC's makeup is representative of the state that we serve.

- Benefits Vulnerable Populations
  WCC will prioritize projects that directly benefit vulnerable populations. The definition of "vulnerable populations" is set by the HEAL Act and includes population groups that are more likely to be at higher risk for poor health outcomes in response to environmental harms. Vulnerable populations include, but are not limited to, racial or ethnic minorities, low-income populations, populations disproportionately

impacted by environmental harms, and populations or workers experiencing environmental harms. WCC does not currently track project impacts based on vulnerable populations, but will do so as part of this pilot, and that will provide a basis to better understand how WCC can best provide assistance to these populations moving forward.

- Mitigates Environmental Harm in Overburdened Communities
  WCC will prioritize projects that directly mitigate environmental harms occurring in communities that are overburdened. "Environmental harm" is defined in the HEAL Act as the heath impacts caused by exposure to pollution, adverse environmental effects, loss of ecosystem functions, and health and economic impacts of climate change. An "overburdened community" is defined in the HEAL Act as a geographic area where vulnerable populations face combined environmental harms and health impacts. WCC does not currently track whether projects completed by our crews mitigate environmental harms in overburdened communities, but will do so as part of this pilot, and that will provide a basis to better understand how WCC's efforts can better mitigate environmental harms on overburdened communities moving forward.

On a separate, but related note, WCC is aware that two other state agencies, Departments of Natural Resources and Fish and Wildlife, are submitting budget requests for the 2022 supplemental in order to partner with WCC's core program under the current 75/25 cost-share model. WCC has space to support these partnerships under our core program beginning next fiscal year, if not before, and we are very supportive of these requests.

Impacts on Population Served:
This two-year pilot will allow WCC to establish new partnerships with organizations that have limited resources. In addition, each WCC crew provides five AmeriCorps members, and one full-time WCC crew supervisor, with a full-time income. WCC prioritizes hiring members from the communities where crews are located and AmeriCorps members are paid a living allowance that is aligned with the state's minimum wage. They receive months of on-the-job training, earn licenses and certifications, and leave the program after a year of service with an education award that can be used for repaying student loans, or to further their education in the future.

WCC is a pipeline to professional environmental positions in state government and our partner organizations. WCC members today are the leaders at Ecology and other environmental organizations tomorrow. A strategic investment to expand WCC services in areas of the state that are marginalized builds the pool of experienced candidates for recruitment and advancement at Ecology and other natural resource organizations.

Alternatives Explored:
WCC could continue to operate as we have for decades, and partner only with organizations that have secure funding, and can participate under the current 75/25 cost-share model. This would mean continued partnerships with more highly-resourced organizations, and/or in communities that already have a strong WCC crew presence. However, this alternative would only further solidify existing disparities in environmental restoration, recreation enhancement, and disaster response services.

Consequences of Not Funding This Request:
This request represents a unique opportunity to advance the state's goals around environmental justice by investing in a time-limited pilot project with a nationally-recognized program that has the infrastructure in place to develop and deploy it statewide. If WCC does not find ways to prioritize and support projects from resource-limited organizations, we will likely continue to have crews concentrated in the highly-resourced portion of the I-5 corridor. This would continue the unintended consequence of WCC's cost-share model limiting services to only those that can afford them.

Assumptions and Calculations

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

The pilot project supported by this request will not expand Ecology's WCC crews beyond our current maximum size of 59 crews. WCC is required to maintain a minimum of 54 crews to meet AmeriCorps requirements, but our current funding model is designed to support a maximum of 59 crew equivalents each year. Outside of the proposed pilot, WCC will continue to maintain a minimum of 54 crews under the standard 75/25 cost-share model to ensure that we can meet AmeriCorps requirements. At the same time, we will establish five pilot crews with no cost-share requirement in order to prioritize partners and projects that advance environmental justice in areas of the state where assistance is most needed. Ecology will provide 100 percent of the funding required through state appropriation, instead of the standard 25 percent for these five pilot crews.

Detailed Assumptions and Calculations:

Beginning October 2022 through September 2024, Ecology requires salaries, benefits, and associated staff costs for five WCC crews participating in a two-year, no partner cost-share pilot to support projects that advance environmental justice priorities in areas of the state that need assistance the most.

Workforce Assumptions:

Expenditures by Object		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
A	Salaries and Wages		141,345	188,460	47,115		
B	Employee Benefits		117,531	156,708	39,177		
E	Goods and Services		36,180	48,240	12,060		
G	Travel		46,001	61,335	15,334		
N	Grants, Benefits, and Client Services		361,800	482,400	120,600		
T	Intra-Agency Reimbursements		35,143	46,857	11,714		
	Total Objects	**0**	**738,000**	**984,000**	**246,000**	**0**	**0**

Staffing

Job Class	Salary	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Total FTEs	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Explanation of costs by object:
All costs are on a based on a per-crew/per-month basis for 24 months (October 2022 – September 2024) multiplied by the 75 percent share required. Please note, no FTE authority is needed as WCC already has FTE authority for up to 59 crew supervisors.
Salary estimates are based on current biennium actual rates for five WCC crew supervisors (one per crew) at Step L.
Member living allowances for 25 members (five members per crew) are shown in Object N at an average of $2,144 per month, per member. Please note, for calculating the costs for this budget request, the full-term living allowances earned over members' 11.5-month terms have been divided evenly over 12 months.
Benefits are the agency average of 50.7 percent of salaries for WCC crew supervisors. This benefits rate is higher than Ecology's standard benefit costs because WCC crew supervisors earn less than the agency average, so items like health insurance represent a higher percentage of employees' salaries. Benefits associated with living allowance for members are calculated at 12.68 percent and include Old Age and Survivors Insurance/OASI (6.2%), Hospital Insurance/Medicare (1.45%), Medical Aid and Industrial Insurance (hourly rate), and health insurance (monthly rate).
Goods and Services are $1072 per month per crew based on current WCC averages.
Travel is $1,363 per month per crew based on current WCC averages.
Agency Administrative Overhead is calculated at the indirect rate of 5% specified in RCW 43.220.231. The 5% agency indirect is applied to total direct costs.

How is your proposal impacting equity in the state?

Environmental justice considerations are at the core of this request. By eliminating the cost-share requirement for eligible organizations, it will provide a route to complete environmental restoration and recreation enhancement projects that have an immediate positive impact for communities that are in the greatest need, but possess fewer resources. As a result, the pilot will establish WCC crews in new communities that need WCC services the most, and better position the program to provide services to these communities in the future. In addition, because WCC prioritizes hiring crew members from the communities where crews are located, this request will provide employment opportunity and on-the-job training to crew members in these communities, while also advancing long-term goals of diversifying the environmental services workforce across the state.

Based on equity criteria, WCC will establish an application process for organizations to apply for WCC services with no partner-provided cost-share. WCC's draft evaluation criteria prioritizes projects that are located in underserved counties, help address environmental health disparities, and mitigate environmental harms for traditionally underserved populations. See *Attachment A* for a Draft Scoring Matrix.

Strategic and Performance Outcomes

Strategic Framework:

This request is essential to implementing all goals in Ecology's strategic plan:

- Goal 1: Support and engage our communities, customers, and employees.
- Goal 2: Reduce and prepare for climate impacts.
- Goal 3: Prevent and reduce toxic threats and pollution.
- Goal 4: Protect and manage our state's waters.
- Goal 5: Protect and restore Puget Sound.

WCC crews engage in environmental restoration projects such as installing native plantings, removing invasive species, adding woody debris to streams to improve salmon habitat, spreading salmon analogs to improve the health of streams and rivers, and more. WCC crews engage in the actual, boots-on-the-ground work of reducing and preparing for climate change. Last year, WCC crews improved or cleared 3,265 acres of land across Washington. Crews spent 16,000 hours collecting environmental data, helping improve our understanding of environmental problems and outcomes of restoration projects.

WCC crews reduced toxic threats and protected the Puget Sound as well. WCC crews removed creosote-treated debris from beaches, marine and estuarine waters, immediately eliminating a source of pollution. Last year, WCC installed more than 500,000 trees or shrubs, which filter toxins from watersheds and sequester carbon. In addition, the plants cool and clean rivers and streams waters, essential for salmon and other wildlife.

WCC also contributes to long-term environmental protection goals by making nature more accessible for the public. We know that when people engage with nature through hiking, camping, boating, etc., it builds an environmental ethic that makes residents more likely to commit to protecting nature in the future. Last year, WCC crews installed or improved 681 miles of public trails and nearly 2,000 campsites.

This request supports the Governor's Results Washington Goals of Sustainable Energy and Clean Environment. WCC members are the on-the-ground resources who restore salmon and wildlife habitat, plant trees and shrubs, and remove invasive species. Last year, WCC crews planted more than 500,000 trees or shrubs, shading wetlands and streams to reduce water temperatures, restoring wetlands, and stabilizing stream banks to control erosion and reduce the chance of floods.

This request also supports the Governor's Results Washington Goals of Healthy and Safe Communities and a Prosperous Economy by increasing access to living wage jobs. Each year, WCC provides real world job training to 315 members. The training provided during their time in WCC readies our members for employment in environmental restoration, natural resource management, and environmental policy. For our members without college degrees (approximately 50%), the AmeriCorps education award provides an opportunity to pursue college coursework. For members with student loans, the education award helps them pay down these loans as they begin their professional careers. This request directly supports 25 AmeriCorps members and 5 WCC crew supervisors.

Performance Outcomes:

The outcome of this request will be five crew equivalents dedicated to projects that advance environmental justice initiatives, and continue the legacy of a nationally recognized Washington Conservation Corps. This funding will help WCC continue to meet our state and federal performance goals, but do so in areas of the state that do not currently benefit as much as other areas:

- Remove invasive species and install native plants to improve habitat for fish and wildlife.
- Increase public access and safety by constructing or improving trails.
- Reduce the risk of floods and wildfires through forest health management.
- Assist in disaster response.
- Provide service opportunities for young adults and military veterans.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

This request will provide a direct benefit to county, city, and tribal government partners. Through the partner and project criteria discussed above, these local and Tribal governments would be eligible for WCC services at a reduced cost for projects that benefit underserved communities. By providing reduced cost-share requirements, this request will lower barriers to access, helping WCC build working relationships with new partners in new communities to expand our pool of partner organizations.

WCC also partners with other state agencies including the departments of Fish and Wildlife, Health, Military, Natural Resources, Transportation, and the State Parks and Recreation Commission. Although WCC would exclude other state agencies from eligibility for reduced cost share, we anticipate these agencies would be supportive of this request. This request will help establish crews in underserved communities where WCC has a limited presence. Part of WCC's statutorily-required mission is to be available to respond to emergencies. In this capacity, we support other state agencies.

For example, WCC responds to wildfires under the direction of Department of Natural Resources and responds to floods and landslides with the Emergency Management Division of the Washington Military Department. WCC helped to deploy field hospitals and staff COVID-19 vaccine distribution centers for the Department of Health. This request would expand our partnerships in communities where WCC has a limited presence who would be available to state partners for localized disaster response services. When WCC responds to disasters, our partnering state agencies do not follow our traditional 75/25 cost share model. Instead, they support 100 percent of costs for disaster response. In addition, this proposal would help train WCC members from these communities, providing hands-on experience for the next generation of environmental leaders.

Legal or Administrative Mandates:

N/A

Stakeholder Response:

In Fiscal Year 2021, WCC partnered with 24 cities and counties, 14 conservation districts, six regional fishery enhancement groups, 17 nonprofit organizations, and six Tribal governments to complete environmental restoration projects. If funded, this request will allow WCC to expand outreach with nonprofit organizations, local jurisdictions, and Tribal governments that have little or reduced funding.

By providing WCC crew services with no partner-provided cost-share, WCC can form new partnerships and build capacity with under-resourced and marginalized communities, while providing direct environmental and disaster services and building the local environmental workforce. Several organizations have indicated they have reduced their support for WCC in recent service years due to budgetary concerns, including the Confederated Tribes of the Umatilla Reservation, Yakama Nation, and Snoqualmie Indian Tribe. If this request is funded, WCC may be able to partner with these entities on projects that align with the pilot.

Changes from Current Law:

N/A

State Facilities Impacts:

N/A

Reference Documents

PL KY WCC Community Support - Attachment A.pdf

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 *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	$0	$141	**$141**	$189	$47	**$236**
Obj. B	$0	$118	**$118**	$157	$39	**$196**
Obj. E	$0	$36	**$36**	$48	$12	**$60**
Obj. G	$0	$46	**$46**	$61	$15	**$76**
Obj. N	$0	$362	**$362**	$482	$121	**$603**
Obj. T	$0	$35	**$35**	$47	$12	**$59**

Agency Contact Information

Bridget Talebi
(360) 480-2293
brim461@ecy.wa.gov

Attachment A: Draft WCC No Cost-Share Pilot Project Scoring Matrix

August 2021

Purpose: Provide a draft of the scoring matrix currently in development for the WCC No-Cost Share Pilot Project that would run October 2022 – September 2024. Department of Ecology is requesting funding in the 2022 supplemental operating budget to support this pilot.

Prior to WCC's solicitation for partners and projects for this pilot in spring 2022, this draft scoring matrix will be refined and finalized in consultation with WCC's Diversity Equity and Inclusion Committee, which was created in 2015, to advise WCC on topics related to diversity, equity and inclusion. This committee is comprised of WCC management team members and crew supervisors who directly supervise AmeriCorps members and complete projects in partnership with community organizations.

(1) Partner-based criteria:

(a) Does the organization lack the funds or institutional support to participate in WCC's standard 75/25 cost-share model?

Organizational budget of $500,000 or less: 5 points
Organizational budget of $500,000 or more: 0 points

Full-time regular employees of 5 or fewer: 5 points
Organizational budget of more than 5 employees: 0 points

This criteria prioritizes small organizations that would not ordinarily be able to partner with WCC to complete projects. This information would be requested from the applicant in the form of a copy of the organization's annual budget and an organizational chart showing staffing structure.

(b) Is the applicant a Tribal government?

Yes = 10 points
No = 0 points

The goal of this criteria is to prioritize projects from Tribes to expand WCC's partnership and service with Tribes. Applicant information will be verified against the Washington State Tribal Directory from the Governor's Office of Indian Affairs (https://goia.wa.gov/tribal-directory).

(c) Does the organization have a history of partnering with WCC?

Not partnered with WCC in 5 or more years = 20 points
Not partnered with WCC in the past 1 to 5 years = 10 points
Partnered with WCC in the past year = 0 points
Partnered with WCC in the past year for this project = Ineligible for consideration in pilot

The goal of applying this criteria is to incentivize participation from organizations who have not partnered with WCC in the past to broaden and expand WCC's pool of partners. This information will be requested from the applicant and be verified by WCC staff through a review of past records.

(2) Project-based criteria:

(a) Is the project located in a county designated as an economically distressed area?

Yes = 10 points
No = 0 points

This criteria prioritizes projects located in counties defined as economically distressed so that WCC projects will provide a benefit in areas of economic hardship. Information on project location will be requested from the applicant and verified against Employment Security Department's distressed areas list (https://esd.wa.gov/labormarketinfo/distressed-areas).

(b) Will the project be completed in a rural county?

Yes = 10 points
No = 0 points

This criteria prioritizes projects in rural counties that may not have been able to partner with WCC in the past due to lack of resources or project location. Information on the county the project is located in will be gathered from the applicant and verified against the Rural and Urban Counties Map from the Washington Department of Health (https://www.doh.wa.gov/Portals/1/Documents/Pubs/609003.pdf).

(c) Is the project located in a census tract experiencing high levels of environmental health disparity?

Score of 10 = 10 points
Score of 8 or 9 = 5 points
Score of 7 or lower = 0 points

This criteria prioritizes projects located in census tracts that have high environmental health disparity scores (Environmental Health Disparities Map, Information by Location | Washington Tracking Network (WTN)) (https://fortress.wa.gov/doh/wtn/WTNIBL/) so that WCC projects can provide a benefit in specific tracts that have high levels of environmental health disparity. Information on project location will be requested from the applicant and verified against the environmental health disparities map.

(d) Will the project be completed on Tribal lands?

Yes = 10 points
No = 0 points

This criteria prioritizes projects that will have a direct impact on Tribal lands. The definition of Tribal lands will be consistent with the HEAL Act (The HEAL Act, E2SSB 5141.SL Section 2.13). Information on project location will be requested from the applicant as well as whether the project occurs in a location that meets the definition of Tribal lands.

(e) Will the project provide a benefit to vulnerable populations?

Yes = 10 points
No or the benefit is unclear/not well-defined = 0 points

The goal of this criteria is to prioritize projects that directly benefit vulnerable populations. The definition of "vulnerable populations" is set by the HEAL Act and includes population groups that are more likely to be at higher risk for poor health outcomes in response to environmental harms. Vulnerable populations include but are not limited to racial or ethnic minorities, low-income populations, populations disproportionately impacted by environmental harms and populations or workers experiencing environmental harms (The HEAL Act, E2SSB 5141.SL Section 2.14). Applicants will be asked to describe the benefit to vulnerable populations in a narrative form.

(f) Will the project mitigate environmental harms in overburdened communities?

Yes = 10 points
No or the mitigation's impact is unclear/not well-defined = 0 points

The goal of this criteria is to prioritize projects that directly mitigate environmental harms occurring in communities that are overburdened. "Environmental harm" is defined in the HEAL Act as the heath impacts caused by exposure to pollution, adverse environmental effects, loss of ecosystem functions, and health and economic impacts of climate change (The HEAL Act, E2SSB 5141.SL Section 2.5). An "overburdened community" is defined in the HEAL Act as a geographic area where vulnerable populations face combined environmental harms and health impacts (The HEAL Act, E2SSB 5141.SL Section 2.11). Applicants will be asked to describe the ways the project mitigates environmental harms for overburdened communities in a narrative form.

Total possible points: 100

Minimum score to be eligible for cost-share: 60

All questions will include space for additional explanation to ensure applicants can describe scenarios where data alone may not represent a complete picture of their organization or the project details or location. WCC will exclude other state agencies from eligibility for this reduced cost share to ensure that smaller nonprofits and local and Tribal governments are the primary beneficiaries.

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Department of Ecology
2022 Supplemental Operating Budget
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Dollars in Thousands

ABS 029 Summarized Revenue by Account and Source
Department of Ecology
Agency Level
2022 First Supplemental Budget Session

S1 - Supplemental 2022

	Maintenance Level		Policy Level		Annual Totals		
	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023	Biennial Total
176 - Water Quality Permit							
0286 - Water Quality Fees - S							
KB - Reduce Nutrients in Puget Sound	0	0	0	439			
Total - 0286 - Water Quality Fees - S	0	0	0	439		439	439
176 - Water Quality Permit - State				**439**		**439**	**439**
Total - 176 - Water Quality Permit						**439**	**439**
20R - Radioactive MW Acct							
0294 - Hazardous Waste Fees - S							
KC - Hanford Dangerous Waste Inspections	0	0	0	138			
Total - 0294 - Hazardous Waste Fees - S	0	0	0	138		138	138
20R - Radioactive MW Acct - State				**138**		**138**	**138**
Total - 20R - Radioactive MW Acct						**138**	**138**
Agency: 461 ECY - State				**577**		**577**	**577**
Total - Agency: 461 ECY				**577**			

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State of Washington
Request for Fees and Taxes
2021-23 Biennium - 2022 Supplemental

	Code	Title
AGENCY	461	Department of Ecology

							Incremental Revenue Dollars in Thousands						
							GF-S		Other Funds				
Agy #	Agency Name	Fee Code	Name of Fee/Tax	Is a bill required?	Z-Draft # (or Pending)	New, Increased, Continued?	FY 2022	FY 2023	FY 2022	FY 2023	Tied to Expenditure Change?	Fee Payer Position	Explanation of Change
461	Dept. of Ecology	F004	Wastewater Discharge Permit Fee	Yes	Z-0307.2	Increased				439	Yes See PL KB	Fee payers understand that Ecology is required to assess fees to cover the cost of permit administration per RCW 90.48.465. Utilities are concerned about having to charge ratepayers for increased permit costs.	RCW 90.48.465 directs Ecology to establish fees to cover the cost of issuing and administering water quality permits. But that same statute limits the amount that can be charged to municipal wastewater dischargers to $0.18 per month, per residential equivalent (RE) ($2.16/year per RE). This rate has been capped in statute since 2009, creating a significant underpaying category within the permits we issue. Ecology is proposing agency request legislation to remove the fee cap in statute so that Ecology can assess fees for implementing the new Puget Sound Nutrient General Permit. Without a statutory change, Ecology would not be able to charge the appropriate permittees to cover the costs to support permit implementation.
461	Dept. of Ecology	K003	Mixed Waste Management Fee	No	No Legislation	Increased				138	Yes See PL KC	Fee payers are aware of the annual adjustment. Adjustments to billing are communicated to facilities.	Chapter 70A.300.460 RCW authorizes the department to assess the Mixed Waste Management Fee for regulation of radioactive mixed waste facilities. The Nuclear Waste Program bills the US Department of Energy at Hanford and three other mixed waste facilities. The Mixed Waste Management Fee is adjusted annually to fund program costs to implement 70A.300 RCW and WAC 173-303 at radioactive mixed waste facilities.
Additional Comments:													

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2022 Supplemental Requested Fund Transfers

Department of Ecology

September 2021

Purpose: This table summarizes Treasurer fund transfers identified by Ecology for inclusion in the 2022 supplemental budget.

Item	Budget Reference	Account From	Account To	FY 22 Amt	FY 23 Amt	Biennium Total	Explanation & Statutory Citation
1	Capital Project Request- Water Banking Pilot Budget Shift	General Fund – State (001)	NEW	$4.5 million	$4.5 million	$9 million	Ecology is requesting a $9,000,000 transfer of GF-S revenue to a newly created dedicated account in the capital budget to implement the pilot water banking grant program previously created in the 2021-23 enacted operating budget. In 2021, the Legislature authorized Ecology to create a water banking pilot grant program to establish local water banks to preserve the agricultural water supply, maintain productive agricultural lands, protect environmental interests, and support the rural and local economy. Funding to support the pilot grant program was provided in both section 302(32) of the 2021-23 operating budget ($9 million from General Fund-State (GFS)), and section 3112 of the 2021-23 capital budget ($5 million from State Building Construction Account (SBCA)). Having funding in the operating budget, supported by GF-S is problematic because the need for grant funding will exceed the fiscal-year/ biennial spending limits of GF-S in the operating budget. The revenue transfer is being requested through Decision Package PL LB - Water Banking Pilot Budget Shift. Funding will then be appropriated in a new section of the 2022 supplemental capital budget through Capital Project Request 40000469 - Water Banking Pilot Grant Program Budget Shift.

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Department of Ecology
2022 Supplemental Operating Budget Requests Supporting the Puget Sound Action Agenda

September 7, 2021

Decision Package	Sub-strategy and Near Term Action (NTA)	Ongoing Program	Orca Task Force Recommendation	2018 Regional Priority Approach	Federal Leveraging	Local Leveraging	Puget Sound Dollars	Total Request Dollars
1. PL KB Reduce Nutrients in Puget Sound	**14.1:** Ensure all centralized wastewater treatment plants meet discharge permit limits through compliance monitoring, technical assistance, and enforcement, where needed.	**OGP_ECY34:** Water Quality - Control Stormwater and Wastewater Pollution	39	CHIN2.5			$ 989,000	$ 989,000
2. PL KF Shoreline Aerial Photography	**1.1:** Identify and prioritize areas for protection, restoration, and best suitable for (low-impact) development. **1.2:** Support local governments to adopt and implement plans, regulations, and policies consistent with protection and recovery targets, and incorporate climate change forecasts. **1.3:** Improve, strengthen, and streamline implementation and enforcement of laws, plans, regulations, and permits consistent with protection and recovery targets. **8.1:** Use complete, accurate and recent information in shoreline planning and decision-making at the site-specific and regional levels. **8.2:** Support local governments to adopt and implement plans, regulations, and policies that protect the marine nearshore and estuaries, and incorporate climate change forecasts. **8.3:** Improve, strengthen, and streamline implementation and enforcement of laws, regulations, and permits that protect the marine and nearshore ecosystems and estuaries. **18.2:** Increase access to and knowledge of publicly owned Puget Sound shorelines and the marine ecosystem. **20.2:** Strengthen and integrate spill response readiness of the state, tribes and local governments.	**OGP_ECY11:** Shorelands - Northwest Straits Commission **OGP_ECY12:** Shorelands - Shoreline Master Programs **OGP_ECY15:** Shorelands - Coastal Hazards resilience network **OGP_ECY18:** Regional Oil Spill Planning **OGP_ECY52:** Beach Environmental Assessment, Communication, and Health (BEACH)	3	CHIN1.10, CHIN2.4, CHIN7.1, EST1.1, SA2.1, SA3.2, SHELL1.3, ORCA1.1			$ 150,000	$ 200,000
3. PL KG Reduce Food Waste & Prevent Litter	**9.4:** Provide education and technical assistance to prevent and reduce releases of pollution.			CHIN1.10, CHIN7.1, EST3.1, EST3.2, SA3.1, FUND1.1, SHELL1.3		Ecology will work closely with local governments to further implement the We Keep WA Litter Free campaign using local contacts and strategies. Ecology is providing a comprehensive litter prevention partner toolkit full of resources for local governments. Many local governments, and non-profits, will incorporate these toolkit materials into their ongoing education and outreach work and will run additional local advertising. Ecology will also work with local governments to support and implement the Secure Your Load for Safer Roads effort in their communities and solid waste facilities.	$ 1,080,000	$ 1,800,000

Department of Ecology
2022 Supplemental Operating Budget Requests Supporting the Puget Sound Action Agenda

September 7, 2021

Decision Package	Sub-strategy and Near Term Action (NTA)	Ongoing Program	Orca Task Force Recommendation	2018 Regional Priority Approach	Federal Leveraging	Local Leveraging	Puget Sound Dollars	Total Request Dollars
4. PL KI Protect State Waters from Toxics	**9.1:** Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem. **10.3:** Fix problems caused by existing development. **10.4:** Control sources of pollutants. **21.2:** Clean up contaminated sites within and near Puget Sound by reducing and controlling the sources of pollution.	**OGP_ECY34:** Water Quality - Control Stormwater and Wastewater Pollution		CHIN4.8 TIF1.1			$ 428,400	$ 714,000
5. PL KJ Affordable Housing Cleanup Program	**4.3:** Enhance and expand the benefits of living in compact communities. **9.1:** Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem. **10.3:** Fix problems caused by existing development. **10.4:** Control sources of pollutants. **21.2:** Clean up contaminated sites within and near Puget Sound by reducing and controlling the sources of pollution.			TIF 1.1 TIF 3.1			$ 330,076	$ 330,076
6. PL KK Certifying Financial Responsibility	**20.2**: Strengthen and integrate spill response readiness of the state, tribes and local governments.	**OGP_ECY27**: Oil Spill Preparedness	24	CHIN6.2			$ 200,568	$ 286,526
7. PL KP Improved Stream Mapping	**1.1:** Focus land development away from ecologically important and sensitive areas. Identify and prioritize areas for protection, restoration, and best suitable for (low-impact) development. **5.1:** Protect and restore floodplain function. Improve data and information to accelerate floodplain protection, restoration, and flood hazard management. **8.2:** Focus development away from ecologically important and sensitive nearshore areas and estuaries. Support local governments to adopt and implement plans, regulations, and policies that protect the marine nearshore and estuaries, and incorporate climate change forecasts. **8.3:** Improve, strengthen, and streamline implementation and enforcement of laws, regulations, and permits that protect the marine and nearshore ecosystems and estuaries. **12.1:** Achieve water quality standards on state and privately owned working forests through implementation of the Forest and Fish Report. **24.1:** Implement performance management. Work collaboratively to track and report on implementation performance. **25.2:** Coordinate and advance science and monitoring. Implement a coordinated, integrated ecosystem monitoring program.		1, 3, 5, 48	CHIN1.5, CHIN1.9, CHIN2.5, CHIN4.8, EST1.1, EST1.5, EST2.2, EST3.4, FP1.1			$ 1,545,628	$ 1,561,228

Department of Ecology
2022 Supplemental Operating Budget Requests Supporting the Puget Sound Action Agenda

September 7, 2021

Decision Package	Sub-strategy and Near Term Action (NTA)	Ongoing Program	Orca Task Force Recommendation	2018 Regional Priority Approach	Federal Leveraging	Local Leveraging	Puget Sound Dollars	Total Request Dollars
8. PL KR Spill Response Vehicles & Equipment	**9.5:** Control wastewater and other sources of pollution such as oil and toxics from boats and vessels. **20.1:** Prevent and reduce the risk of oil spills. **20.3:** Respond to spills and seek restoration using the best available science and technology.	**OGP_ECY28:** Spill response	24	CHIN6.2			$ 489,723	$ 661,788
9. PL KS Prioritize and Complete Cleanups	**9.1:** Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem. **9.6:** Increase compliance with and enforcement of environmental laws, regulations, and permits. **10.3:** Fix problems caused by existing development. **10.4:** Control sources of pollutants. **21.2:** Clean up contaminated sites within and near Puget Sound by reducing and controlling the sources of pollution.		31	TIF 1.1 TIF 3.1			$ 549,518	$ 915,863
10. PL KU UST/LUST Inspection/Cleanup Backlog	**9.1:** Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem. **9.6:** Increase compliance with and enforcement of environmental laws, regulations, and permits. **10.3:** Fix problems caused by existing development. **10.4:** Control sources of pollutants. **21.2:** Clean up contaminated sites within and near Puget Sound by reducing and controlling the sources of pollution.		31	TIF 1.1 TIF 3.1			$ 1,053,867	$ 1,756,445
11. PL KV Oil Spill Contingency Planning	**20.1:** Prevent and reduce the risk of oil spills.	**OGP_ECY27:** Spill Preparedness	24	CHIN 6.2			$ 233,044	$ 332,920
12. PL KZ Hazardous Waste & Toxics IT Systems	**9.1:** Implement and strengthen authorities and programs to prevent toxic chemicals from entering the Puget Sound ecosystem. **9.2:** Promote the development and use of safer alternatives to toxic chemicals.		30	TIF1.1			$ 165,299	$ 204,073
Total Operating Request in Support of the Puget Sound Action Agenda							**$ 7,215,123**	