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Cover photo

Left to right: Cam Penner-Ash (Site Manager/Hydrogeologist) and Sam Meng (Site Manager/Engineer) of the Toxics Cleanup Program meet with Norman Gilbert (Port Construction Site Manager) from the Port of Tacoma to look at the permeable reactive barrier installation work being done at the Portac site in Tacoma. They are observing the installation of reactive media in the trench that will be used to treat arsenic contaminated groundwater.

Contact Information

Financial Services

PO Box 47600
Olympia, WA 98504-7600
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Website[1]: Washington State Department of Ecology

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To request an ADA accommodation, contact Ecology by phone at 360-970-2688 or email at Diane.Schenk@ecy.wa.gov. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website for more information.

[1] www.ecology.wa.gov/contact

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Message from the Director

At the Washington Department of Ecology, we're putting plans into action.

In the past year, we've launched our state's cap-and-invest program — and begun to invest the funds raised through that program into projects designed to protect our state's communities and environment; to help Washington prepare for a future that carries new risks from droughts, floods, wildfires, and rising seas; and to address longstanding disparities in the environmental results we deliver to our state's most vulnerable populations.

In this edition of the Budget and Program Overview Book for the 2023-2025 biennium, we introduce the Climate Pollution Reduction Program — now Ecology's 11th environmental program and the first new program our agency has added in decades. This new team will guide the cap-and-invest program, as well as oversee the broader suite of climate policies Washington adopted to meet its emission reduction limits.

Ecology's response to our warming climate doesn't begin or end with our work to reduce carbon pollution. Our Water Resources Program leads our drought response efforts — a duty it is called upon to fulfill with increasing frequency. Washington has seen four droughts in the past nine years. Along with this troubling new reality comes the responsibility and new tools to address it, including recently passed legislation and a new account that provides funding immediately upon a drought declaration, allowing us to deliver rapid assistance when needed. A separate account provides funding to help local communities develop plans and implement projects to improve resilience to drought conditions.

More broadly, the Legislature called for Ecology to update and relaunch our state's Climate Resilience Strategy — intended to help us identify major gaps in our work so we can recognize, prepare for, and adapt to climate change. We're working with partner agencies across the state, as well as local governments, community groups and individuals, to prioritize steps and investments we can take to build a stronger, more resilient environment and economy in the face of these changes.

Part of those efforts — and part of all of Ecology's work — is a commitment to recognizing and addressing disparities in delivering a clean and healthy environment to every Washington community. That promise was at the heart of the Healthy Environment for All Act in 2021, and Ecology is joining other state agencies in implementing this landmark law by incorporating environmental justice into our strategic plans, budget development processes, and funding and grant decisions.

Ecology is continuing Washington's long history of leading the way nationally in environmental protections. Nowhere is that clearer than in our work to protect our state's threatened salmon runs and restore the habitats they depend on. Washington scientists first identified 6PPD-quinone (6PPD-q) as a culprit in coho salmon mortality. 6PPD-q is a toxic chemical released

from automotive tires that ends up in roadway dust and can run into streams. Ecology has been a leader in developing testing methods and management practices to deal with this toxic chemical, and to identify potential safer alternatives.

As we navigate the challenges and opportunities that lie ahead, Ecology — with our partners and the communities we serve — will build a future where the beauty of Washington's natural heritage is restored and preserved for generations to come.

Thank you for your continued support and partnership in this vital journey.

Laura Watson
Director

Introduction – Agency Budget

Strategic Framework

Vision

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

Mission

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

This book provides an overview of Ecology's 2023-25 biennial budget—where the money comes from, how it will be used, and what we want to see happen as a result of our work. The book starts with a broad, agencywide view, and continues with profiles of individual programs.

Our work is incredibly complex and diverse, and that is reflected in our budget. We use up to 73 separate accounts and are the administrator of 65 of those accounts. Every even-numbered year, we submit a request to the Governor for our capital and operating budgets. These requests support our two-year strategic plan, and each individual budget request is tied to our strategic priorities and statewide performance goals. This ensures our resources support carefully planned and vetted activities and items. In odd-numbered years, we submit supplemental budget requests to address changing needs.

Ecology's 2023-25 operating and capital budgets reflect an economy that is largely recovered from the impacts of the COVID-19 pandemic 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.

The 2023 Legislature passed a $862.6 million 2023-25 operating budget for Ecology. This includes funding to continue implementing the Climate Commitment Act and Clean Fuel Standard to achieve state greenhouse gas emission limits and reduce air pollution in overburdened communities and implementing legislation passed in 2023 for permitting, siting, and developing clean energy projects. This budget addresses climate resiliency by making $8 million of funding available for rapid response to deliver help immediately when a drought emergency is declared.

Ecology's 2023-25 capital budget includes $2.96 billion in spending authority for priority investments throughout Washington State. This budget is supported by dedicated environmental funds, federal dollars, and state bonds for projects throughout the state.

Over 70 percent of Ecology's total budget is passed through to local partners for work in communities throughout Washington. Most of this money is provided directly to local governments and communities through grants, loans, and contracts to help them make environmental improvements. Pass-through funds directly create jobs, reduce air pollution and greenhouse emissions, deliver water for fish, farms, and people, improve economic development through cleaning up contaminated sites for redevelopment, and address local environmental and public health priorities through projects like addressing flood hazards and protecting and restoring Puget Sound.

In this book, each program's profile includes context for its work and descriptions of the activities funded in the 2023-25 operating and capital budgets, including the intended results and how performance will be measured. Throughout the book, pie charts and tables are used to show the source of funding and how it is allocated. Information about our accounts is in the back of the book.

Executive Leadership Team – Directory

Director and Deputy Director

Director	Laura Watson	360-407-7001
Confidential Assistant	Teri North	360-407-7009
Deputy Director	Heather Bartlett	360-407-7011
Confidential Assistant	Judy Decker	360-407-7014
Office of Equity & Environmental Justice	Millie Piazza	360-407-6177

Office of the Attorney General

Assistant Attorney General for Ecology	Andy Fitz	360-586-6752

Administration Program Directors

Administrative Services	James Pendowski	360-407-6829
Communications	Dustin Terpening	360-515-8888
Executive Adviser for Tribal Affairs	Tyson Oreiro	360-485-3970
Financial Services	Erik Fairchild	360-407-7005
Governmental Relations	Adam Eitmann	360-480-1991
Human Resources	Sandi Stewart	360-407-6218
Information Technology Services	Scott West	360-515-8593
Office of Chehalis Basin	Jeff Zenk	360-338-5864
Office of Columbia River	Tom Tebb	509-952-5080
Special Assistant to the Director	Jennifer Hennessey	360-972-5887
Special Assistant to the Director	Sharlett Mena	360-688-6229

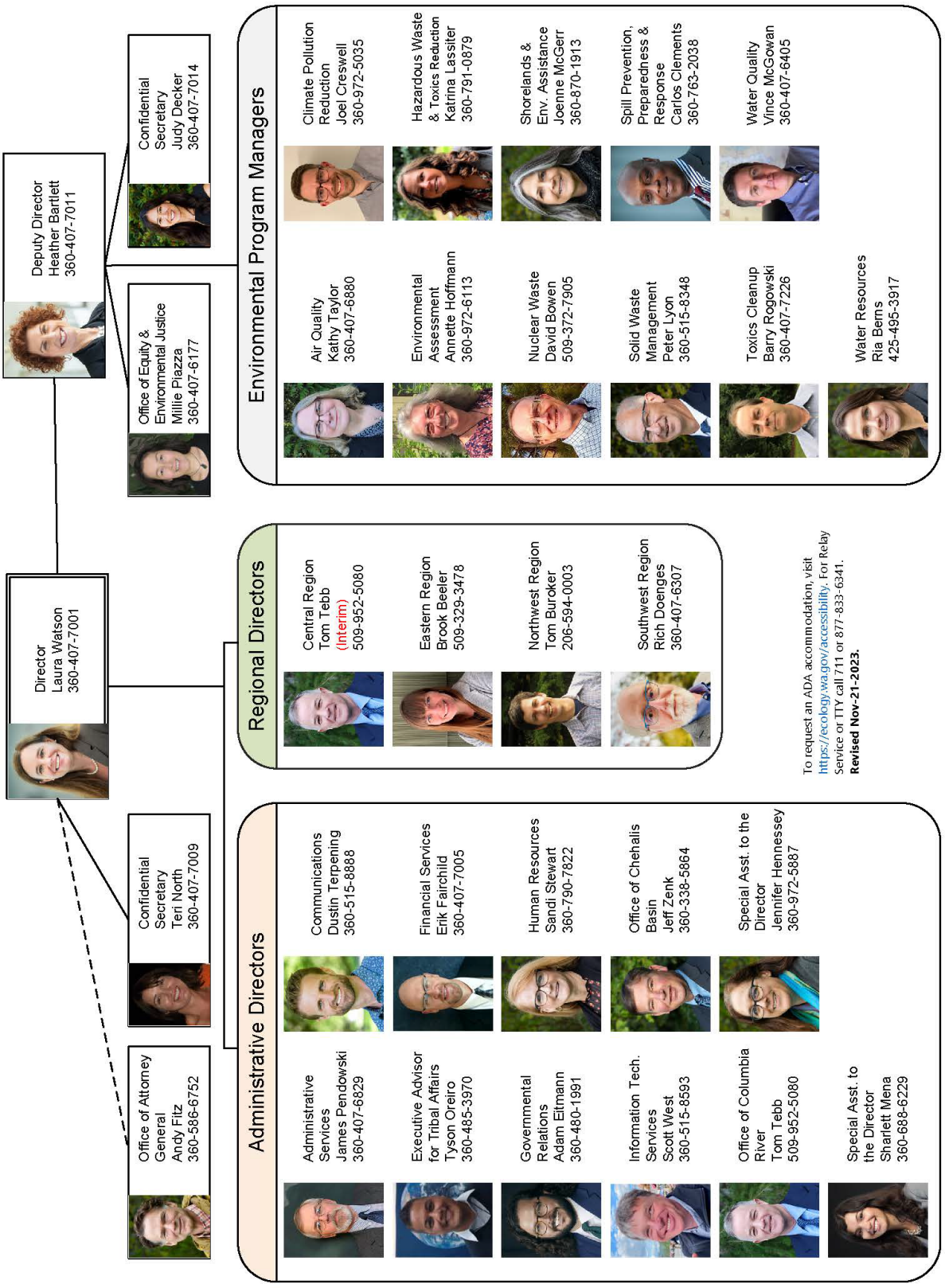
Regional Office Directors

Central	Tom Tebb (Interim)	509-952-5080
Eastern	Brook Beeler	509-329-3478
Northwest	Tom Buroker	206-594-0003
Southwest	Rich Doenges	360-407-6307

Environmental Program Managers

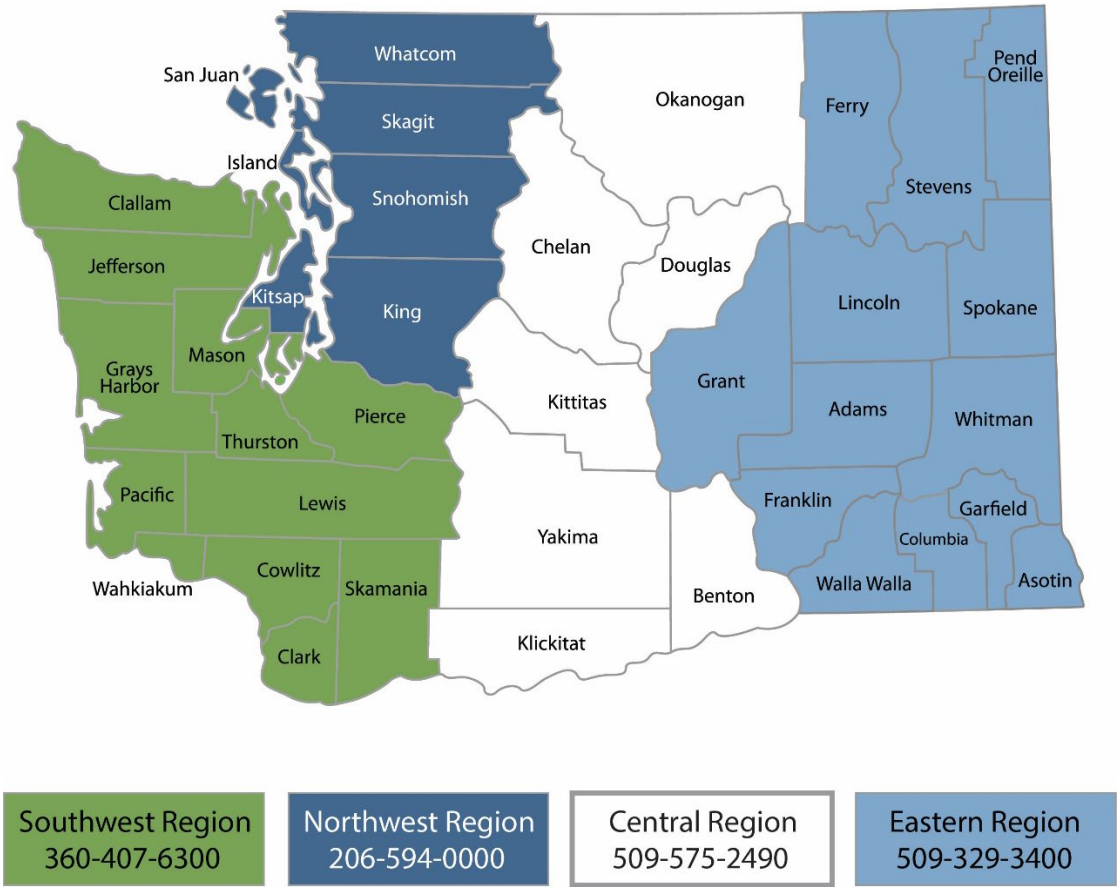
Air Quality	Kathy Taylor	360-407-6880
Climate Pollution Reduction	Joel Creswell	360-972-5035
Environmental Assessment	Annette Hoffmann	360-972-6113
Hazardous Waste and Toxics Reduction	Katrina Lassiter	360-791-0879
Nuclear Waste	David Bowen	509-372-7905
Shorelands & Environmental Assistance	Joenne McGerr	360-870-1913
Solid Waste Management	Peter Lyon	360-515-8348
Spills Prevention	Carlos Clements	360-763-2038
Toxics Cleanup	Barry Rogowski	360-407-7226
Water Quality	Vince McGowan	360-407-6405
Water Resources	Ria Berns	425-495-3917

Executive Leadership Team – Organizational Chart



Ecology Offices and Program Locations

Map of Counties Served



Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
Headquarters	Across Washington	PO Box 46700 Olympia, WA 98504	360-407-6000

Headquarters and Regional Offices

Headquarters

Street: 300 Desmond Drive SE, Lacey, WA
Mailing Address: PO Box 46700, Olympia, WA 98504
Phone: 360-407-6000

Northwest Regional Office

Street: 15700 Dayton Avenue North, Shoreline, WA 98133
Mailing Address: PO Box 330316, Shoreline, WA 98133-9716
Phone: 206-594-0000

Central Regional Office

Street/Mailing Address: 1250 West Alder Street, Union Gap, WA 98903-0009
Phone: 509-575-2490

Southwest Regional Office

Street: 300 Desmond Drive SE, Lacey, WA
Mailing Address: PO Box 47775, Olympia, WA 98504
Phone: 360-407-6300

Eastern Regional Office

Street/Mailing Address: 4601 N. Monroe Street, Spokane, WA 99205-1295
Phone: 509-329-3400

Field Offices, Program Locations, and Limited Purpose Locations

Field Offices

Bellingham Field Office
Street/Mailing Address: 913 Squalicum Way, Suite 101, Bellingham, WA 98225-2078
Phone: 360-255-4400

Vancouver Field Office
Street/Mailing Address: 12121 NE 99th Street, Suites 2100-2120, Vancouver, WA 98682-2346
Phone: 360-690-7171

Program Locations

Nuclear Waste Program, Richland Office
Street/Mailing Adress: 3100 Port of Benton Boulevard, Richland, WA 99354-1670
Phone: 509-372-7950

Office of Chehalis Basin[2]
Street: 300 Desmond Drive SE, Lacey, WA
Mailing Address: PO Box 46700, Olympia, WA 98504
Phone: 360-407-6000

Office of Columbia River[3]
Street/Mailing Address: 1250 West Alder Street, Union Gap, WA 98903-0009
Phone: 509-575-2490

Padilla Bay National Estuarine Research Reserve[4]
Street/Mailing Address: 10441 Bayview-Edison Road, Mt. Vernon, WA 98273-9668
Phone: 360-428-1558

Limited Purpose Locations (staff available by appointment only in these offices)

Manchester Environmental Laboratory
Street/Mailing Address: 7411 Beach Drive East, Port Orchard, WA 98366
Phone: 360-871-8800

Laboratory Accreditation Office
Street: 7411 Beach Drive East, Port Orchard, WA 98366
Mailing Address: PO Box 488; Manchester, WA 98353-0488
Phone: 360-871-8840

Environmental Assessment Program, Operations Center
Street: 8270 28th Court, NE; Lacey, WA 98516-7148
Mailing Address: PO Box 47710; Olympia, WA 98504-7710
Phone: 360-280-8289

Walla Walla Water-Master Office at the Walla Walla Community College
Street/Mailing Address: 500 Tausick Way, Walla Walla, WA 99362-9270
Phone: 509-329-3400

[2] The Office of Chehalis Basin is located within the Headquarters Office located in Lacey.

[3] The Office of Columbia River is located within the Central Regional Office located in Union Gap.

[4] The Reserve is managed by Ecology's Shorelands and Environmental Assistance Program.

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Budget Overview

2023-25 Biennium Budget – Operating and Capital by Program

Operating = $862.6 Million | Capital = $2.0 Billion | Total $2.8 Billion | FTEs = 2,136.5

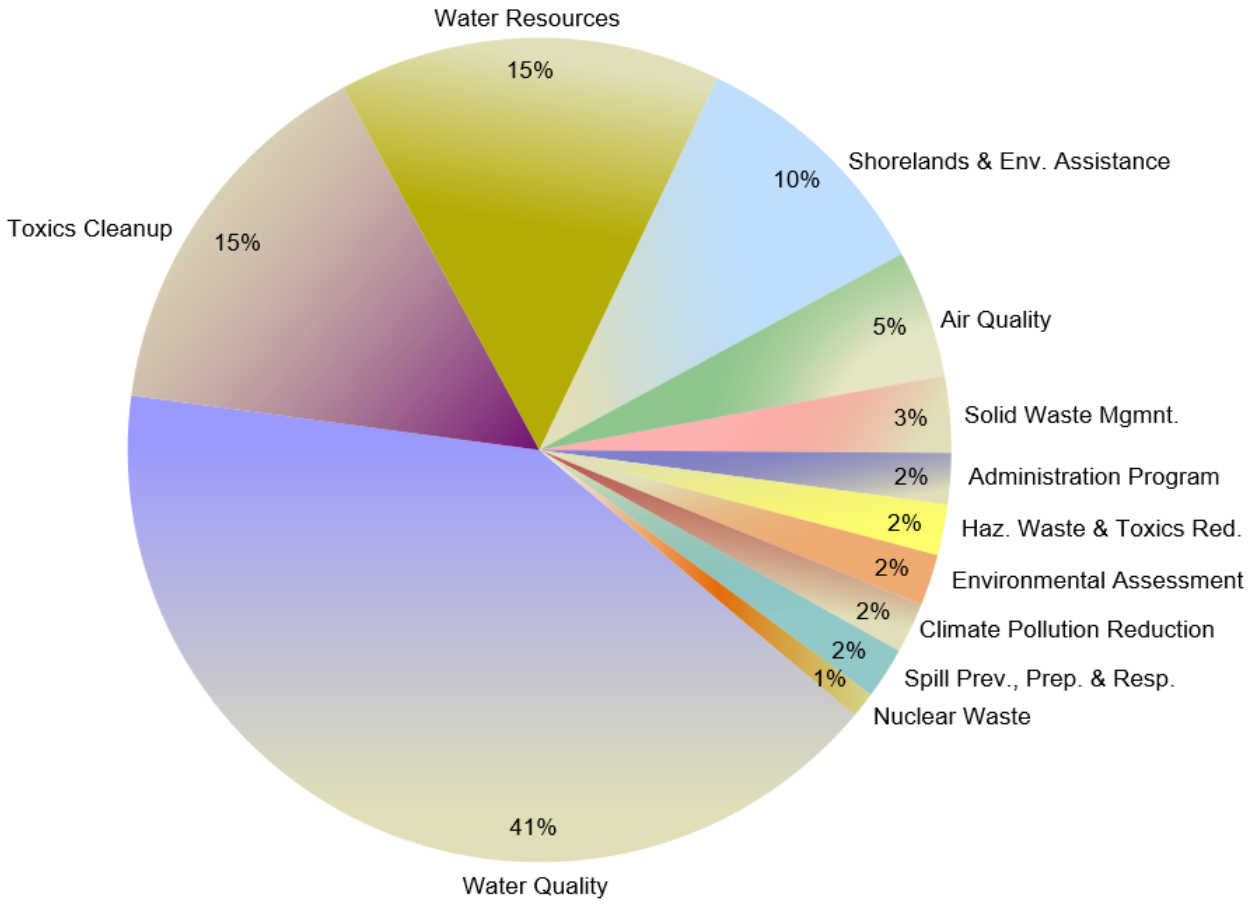
Ecology carries out its mission through 11 environmental programs, plus agency administration. Our combined operating and capital budget is divided among these programs and includes funds Ecology will pass-through to other entities.[5]

Programs	FTEs	Operating	Capital	Operating + Capital	%
Water Quality	346.1	$147,195,000	$999,845,986	$1,147,040,986	41%
Toxics Cleanup	252.4	84,402,000	330,275,032	414,677,032	15%
Water Resources	180.2	72,667,000	338,212,801	410,879,801	15%
Shorelands & Environmental Assistance	234.0	105,742,000	186,473,430	292,215,430	10%
Air Quality	118.9	48,514,000	77,098,289	125,612,289	5%
Solid Waste Management	141.3	93,257,000	3,702,869	96,959,869	3%
Administration Program[6]	209.8	57,928,000	10,537,105	68,465,105	2%
Hazardous Waste & Toxics Reduction	155.6	57,511,000	10,723,359	68,234,359	2%
Environmental Assessment	185.6	60,554,000	298,414	60,852,414	2%
Climate Pollution Reduction	102.5	54,337,000	0	54,337,000	2%
Spill Prevention, Preparedness & Response	106.6	48,023,000	0	48,023,000	2%
Nuclear Waste	103.5	32,441,000	1,653,755	34,094,755	1%
Total	**2,136.5**	**$862,571,000**	**$1,958,821,040**	**$2,821,392,040**	**100%**

[5] See the *Pass-Through Funding* section for more detail.

[6] The agency *Administration Program* is funded by operating and capital budgets and is a small percentage (2%) of the total budget. See the agency *Administration Program* section for more detail.

Operating = $862.6 Million | Capital = $2.0 Billion | Total $2.8 Billion | FTEs = 2,136.5



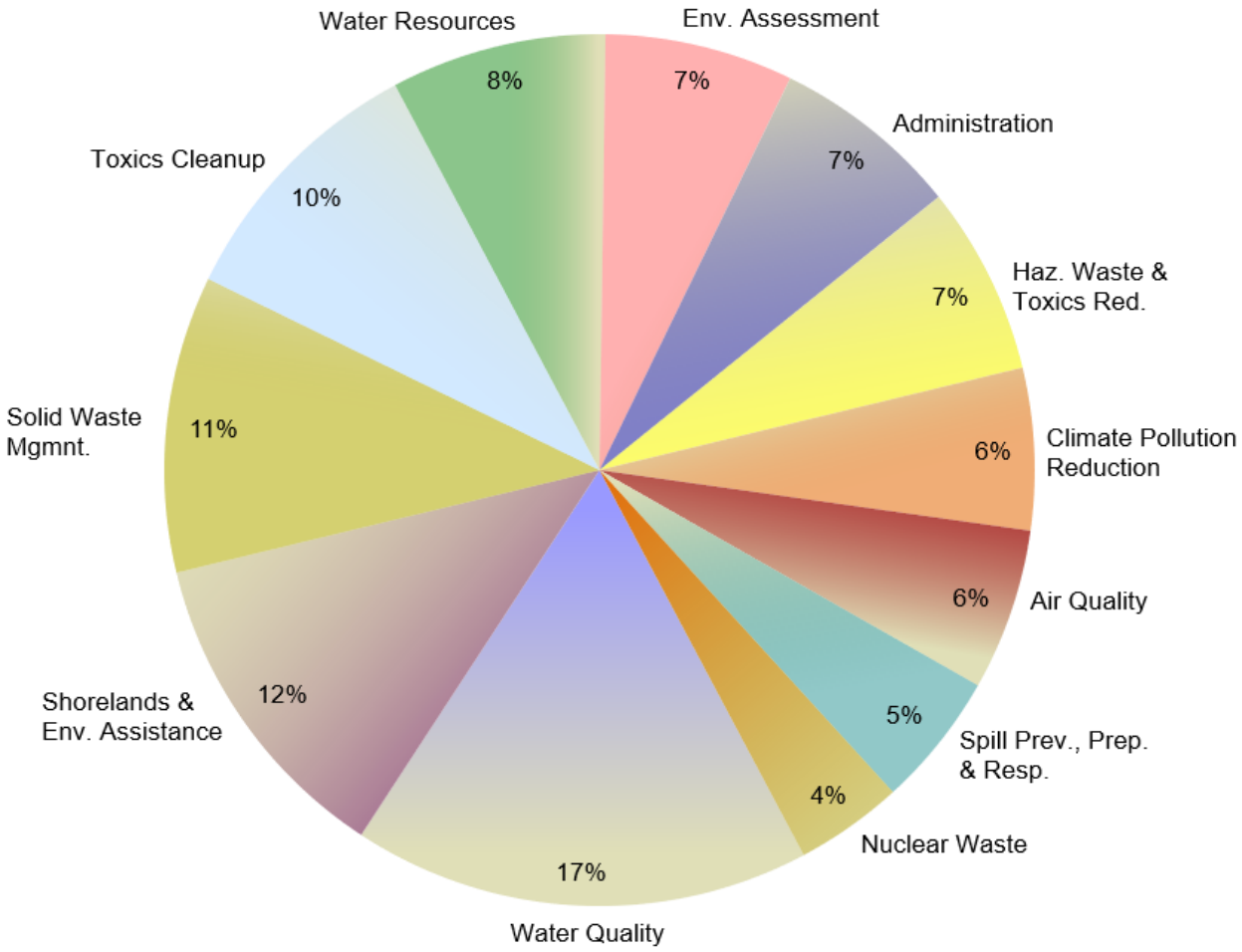
2023-25 Biennium Budget – Operating by Program

Operating = $862.6 Million

Programs	Operating	%
Water Quality	$147,195,000	17%
Shorelands & Environmental Assistance	105,742,000	12%
Solid Waste Management	93,257,000	11%
Toxics Cleanup	84,402,000	10%
Water Resources	72,667,000	8%
Environmental Assessment	60,554,000	7%
Administration Program[7]	57,928,000	7%
Hazardous Waste & Toxics Reduction	57,511,000	7%
Climate Pollution Reduction	54,337,000	6%
Air Quality	48,514,000	6%
Spill Prevention, Preparedness & Response	48,023,000	5%
Nuclear Waste	32,441,000	4%
Total	**$862,571,000**	**100%**

[7] The agency *Administration Program* is funded by operating and capital budgets and is a small percentage (2%) of the total budget. See the agency *Administration Program* section for more detail.

Operating = $862.6 Million



2023-25 Biennium Budget – Operating by Fund Source

Operating = $862.6 Million

General Funds	Amount	%
General Fund – Federal (001)	$108,485,000	12.6%
General Fund – State (001)	76,637,000	8.9%
General Fund – Private/Local (001)	29,544,000	3.4%
Dedicated Accounts	**Amount**	**%**
Model Toxics Control Operating (23P)	$342,888,000	39.8%
Water Quality Permit (176)	65,774,000	7.6%
Climate Investment (26B)	50,290,000	5.8%
Waste Reduction, Recycling & Litter Control (044)	33,866,000	3.9%
Radioactive Mixed Waste (20R)	23,955,000	2.8%
Model Toxics Control Stormwater (23R)	16,991,000	2.0%
Climate Commitment (26C)	14,792,000	1.7%
Natural Climate Solutions (26D)	12,795,000	1.5%
Hazardous Waste Assistance (207)	9,393,000	1.1%
Water Pollution Control Revolving Administration (564)	8,506,000	1.0%
Oil Spill Prevention (217)	8,485,000	1.0%
Oil Spill Response (223)	7,076,000	0.8%
Emergency Drought Response (28E)	6,000,000	0.7%
Air Operating Permit (219)	5,510,000	0.6%
Flood Control Assistance (02P)	5,041,000	0.6%
Underground Storage Tank (182)	4,987,000	0.6%
Clean Fuels Program (25Q)	4,801,000	0.6%
Reclamation (027)	4,753,000	0.6%
Air Pollution Control (216)	4,706,000	0.5%
Biosolids Permit (199)	3,054,000	0.4%
Refrigerant Emission Management (25T)	2,795,000	0.3%
Worker & Community Right-to-Know (163)	2,212,000	0.3%

Dedicated Accounts	Amount	%
State Drought Preparedness (05W)	2,204,000	0.3%
Recycled Content (25R)	1,125,000	0.1%
Coastal Protection (408)	1,064,000	0.1%
Electronic Products Recycling (11J)	899,000	0.1%
Wastewater Treatment Plant Operator Certification (21H)	801,000	0.1%
Wood Stove Education & Enforcement (160)	605,000	0.1%
Site Closure (125)	582,000	0.1%
Model Toxics Control Operating – Private/Local (23P)	499,000	0.1%
Voluntary Cleanup (23V)	344,000	<0.1%
Product Stewardship Programs (16T)	252,000	<0.1%
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	186,000	<0.1%
Basic Data (116)	170,000	<0.1%
Paint Product Stewardship (23W)	151,000	<0.1%
Aquatic Lands Enhancement (02R)	150,000	<0.1%
Photovoltaic Module Recycling (22G)	76,000	<0.1%
Water Rights Tracking System (10G)	48,000	<0.1%
State Emergency Water Projects Revolving (032)	40,000	<0.1%
Water Rights Processing (16V)	39,000	<0.1%
General Funds & Dedicated Accounts		
Total	**$862,571,000**	**100.0%**

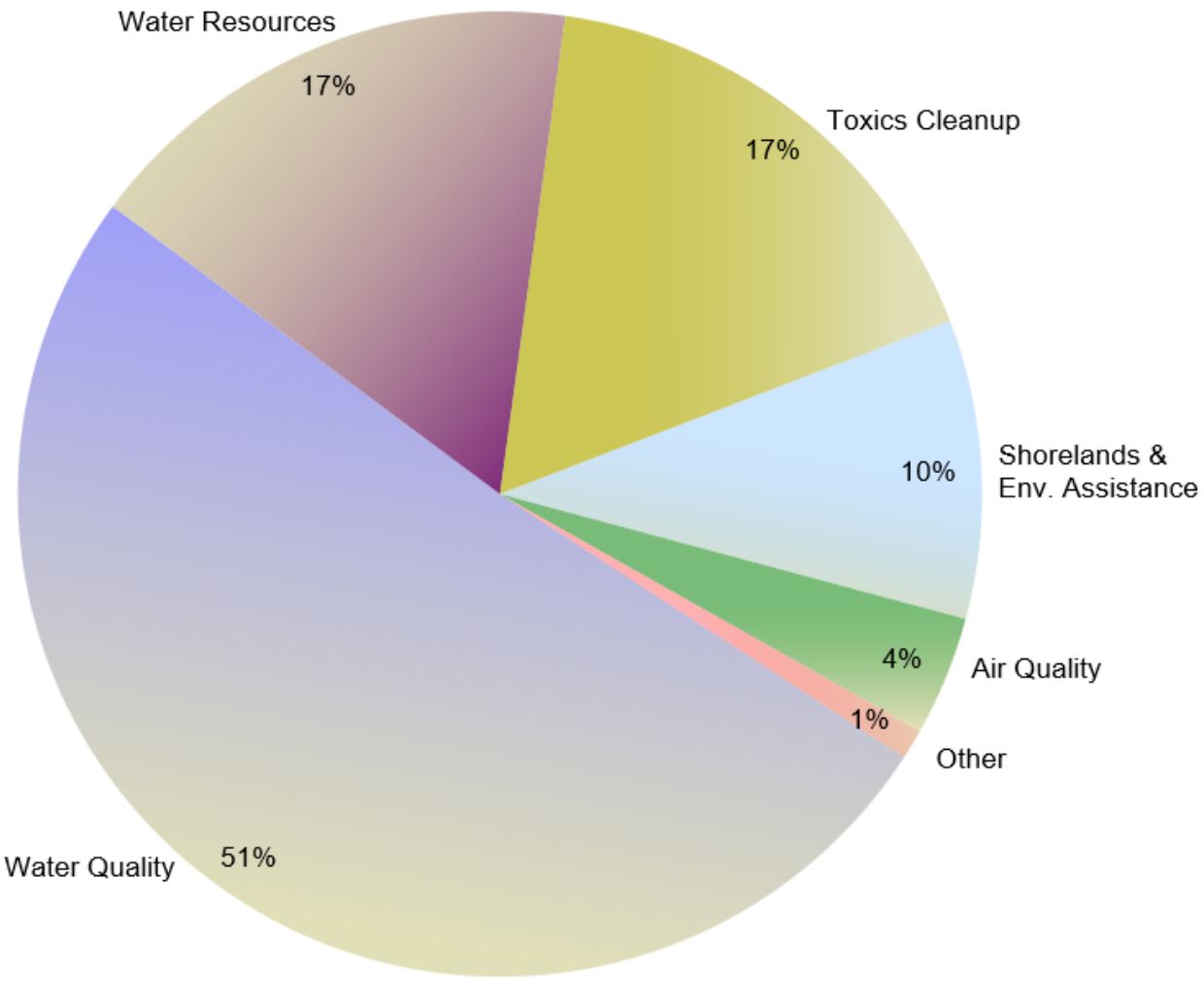
2023-25 Biennium Budget – Capital by Program

Capital = $2.0 Billion

Programs	Capital	%
Water Quality	$999,845,986	51%
Water Resources	338,212,801	17%
Toxics Cleanup	330,275,032	17%
Shorelands & Environmental Assistance	186,473,430	10%
Air Quality	77,098,289	4%
Other:		
Hazardous Waste & Toxics Reduction	10,723,359	<1%
Administration Program[8]	10,537,105	<1%
Solid Waste Management	3,702,869	<1%
Nuclear Waste	1,653,755	<1%
Environmental Assessment	298,414	<1%
Total	**$1,958,821,040**	**100%**

[8] The agency *Administration Program* is funded by operating and capital budgets and is a small percentage (2%) of the total budget. See the agency *Administration Program* section for more detail.

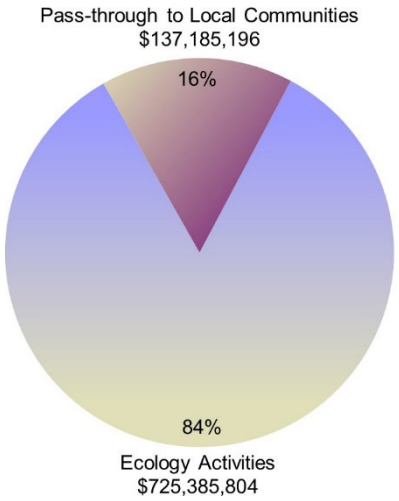
Capital = $2.0 Billion



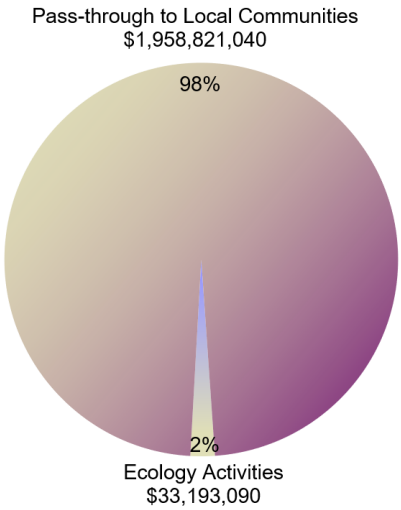
2023-25 Biennium Budget – Pass-through Funding[9]

Most of the money Ecology manages is "passed through" to local governments and communities to do environmental work. This money is awarded as grants or loans and is also contracted directly for things such as floodplain management and habitat improvement, water supply development and instream flow protection, local solid waste management and air toxics prevention, building water pollution control facilities, cleaning up publicly owned and orphaned or abandoned contaminated sites, local Washington Conservation Corps placements, and supporting community awareness and involvement in hazardous waste management and pollution prevention.

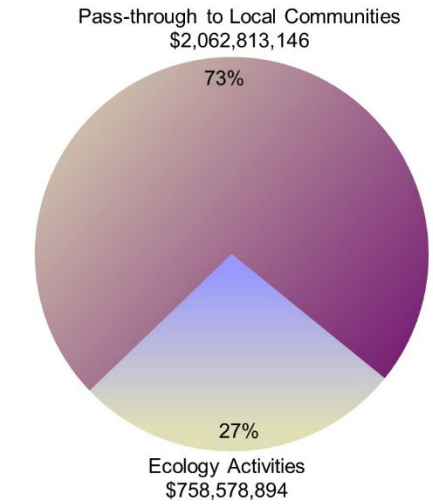
Operating Budget = $862.6 Million



Capital Budget = $1.96 Billion



Combined
Operating + Capital = $2.82 Billion



[9] Later in this publication is additional information on pass-through funding; see *Ecology's Data – Where It Comes From.*

Sean Hopkins (Central Region Smoke Team Lead) works with Averie Morgan of Klickitat County Environmental Health to install a temporary wildfire smoke sensor in the City of Goldendale. Ecology's Air Quality Program builds, deploys, and maintains these SenseWA monitors to ensure Washington communities have real-time data on the regional air quality air pollution that can affect health and wellbeing.

Air Quality Program

Program Mission

The mission of the Air Quality Program is to protect and improve air quality in Washington.

Environmental Threats

Air pollution is a significant threat to public health. Exposure to air pollution can cause lung disease, worsen existing heart and lung diseases, increase chronic breathing problems, elevate cancer risks, and decrease lung function. Air pollution can also contribute to early death. Ecology estimates conservatively that approximately 1,100 people die each year in Washington due to fine particle air pollution, and that air pollution leads to hundreds of millions of dollars in societal costs each year in Washington.

Children, elderly people, people with existing heart and lung problems, and pregnant people are especially vulnerable to health risks from exposure to air pollution. Low-income communities and communities of color also face greater exposure and health risks because of proximity to large industrial facilities and major roadways and due to environmental, social, and economic factors.

The U.S. Environmental Protection Agency (EPA) sets National Ambient Air Quality Standards (or federal standards) for six types of air pollutants commonly found in the outdoor air. These federal standards are set at levels to protect people's health, including those most vulnerable, and to reduce harmful environmental impacts. Meeting federal standards is very important. It reduces illnesses and health care costs associated with air pollution and lowers the risk of substantial financial and economic impacts on the state, local communities, businesses, and residents.

Studies consistently show that air pollution, mainly fine particle pollution and ground-level ozone pollution, is more dangerous to human health than previously thought. Exposure to levels of pollution well below EPA's existing federal standards can result in a range of diseases and, in some cases, premature death. Many communities that meet federal standards may still

have pollution levels multiple times a year that expose residents to significant health risks. The health risks tied to inhaling the extremely fine particles in smoke and diesel engine exhaust are the primary air pollution health concern in Washington.

In addition to extremely fine particles and diesel engine exhaust, there are hundreds of other chemicals, known as toxic air pollutants, that enter the atmosphere from a wide variety of sources. Regulations require emission controls for many sources that emit air toxics, but there are currently no health-based outdoor air standards for these chemicals. Studies increasingly show air toxics pose significant risks to human health and the environment. We partner with local clean air agencies to identify and monitor these pollutants.

Air pollutants also contaminate man-made materials, property, and soil; damage vegetation, crops, animals, and wildlife; and impair visibility and affect the climate. Toxic air pollutants are not only emitted to the air and breathed by people but also deposited to the land and waters of the state. Studies show this air deposition is a significant pollution source that can damage water quality and contaminate marine and river sediments.

Washington has already experienced more extreme heat and drought conditions, and studies predict climate change will result in more frequent and severe wildfires. Wildfires pose a threat to public safety and result in unhealthy levels of fine particle pollution. Climate change is also linked to higher levels of ozone near the ground, which harms people's health and puts areas in Washington at risk of failing to meet the more stringent federal standards.

Authorizing Laws

- Federal Clean Air Act
- Chapter 70A.15 RCW, Washington clean air act
- Chapter 70A.25 RCW, Motor vehicle emission control
- Chapter 70A.30 RCW, Motor vehicle emission standards
- Chapter 70A.55 RCW, Diesel emissions—Air pollution reduction
- Chapter 70A.65 RCW, Greenhouse gas emissions—Cap and invest program
- Chapter 70A.540, Landfills —Methane emissions

Constituents/Interested Parties

- Businesses
- General public
- Local governments and state and federal agencies
- Transportation agencies and businesses
- Tribal governments
- Wood stove and fireplace users, manufacturers, and related businesses

- Agricultural businesses
- Public health community

Focus Areas

Prevent Unhealthy Air and Violations of Air Quality Standards

The Environmental Protection Agency (EPA) is required to use the most current scientific information to set federal standards that protect public health. Ecology must continue to assess and adapt our air pollution prevention and control policies, tools, and approaches to meet federal standards, limit public exposure to air pollution, and avoid the economic sanctions that come when areas violate federal standards. Ecology works with local public agencies and communities to prevent violations of federal ambient air quality standards before they occur. This helps avoid costly and demanding regulatory interventions needed to return communities to clean air status.

In 2010, EPA set a more protective federal standard for sulfur dioxide pollution. A small area in Whatcom County near an aluminum smelter does not meet the federal standard (known as "nonattainment"). The aluminum smelter stopped operating and permanently closed in 2023. Ecology and the Northwest Clean Air Agency are working on a plan to redesignate the area as attaining the standard.

Eight communities in Washington are at risk of violating the federal standard for fine particle pollution ($PM_{2.5}$), and two communities are at risk of violating the federal standard for coarse particle pollution (PM_{10}). Another threat comes from ozone; in late 2015, EPA tightened its ground-level ozone federal standard. Two large areas, one surrounding Seattle and the other surrounding Tri-cities, are at risk of violating the federal ground-level ozone standard.

In the 2021-23 biennium, Ecology awarded $2 million in grants to 11 projects statewide that provided locally led solutions to protect air quality and avoid the public health and economic consequences of nonattainment. This grant funding supported local projects to reduce outdoor burning, reduce dust on agricultural lands, support anti-idling and vehicle emission reduction programs, to conduct outreach and education, and improve forecasting tools. In the 2023-25 biennium, Ecology will continue to award grants to local governments and community organizations that work with communities most at risk of violating federal standards.

Improve Air Quality in Overburdened Communities

Ecology is taking action to expand air quality monitoring and reduce air pollution in communities that bear a disproportionate burden of air pollution. This effort is a key part of the Climate Commitment Act, the 2021 law that established the cap-and-invest program to reduce greenhouse gas emissions in Washington.

In 2023, after conducting an analysis and significant community engagement, Ecology took the first step of identifying 16 communities in Washington that are overburdened and highly

impacted by criteria air pollutants. Criteria air pollutants are six common substances known to harm human health and the environment; carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution, and sulfur dioxide.

Although the list of communities does not include any Tribal communities, Ecology continues to invite consultation with Tribal governments to identify Tribal areas overburdened by air pollution.

In the 2023-25 biennium, Ecology will continue to reach out to the identified communities and, with local air agencies and other partners, expand our air monitoring network in those areas. Starting in 2023 and every two years thereafter, Ecology will conduct an environmental justice review to evaluate criteria pollutant emissions, greenhouse gas emissions, and health impacts in each identified overburdened community.

Ecology also plans to begin developing a plan to reduce criteria pollutants in these communities. Ecology will implement a new $10 million grant program in the 2023-25 biennium to award funds for local projects that reduce criteria pollutants in the overburdened communities. These actions will help ensure communities that bear the greatest burdens from air pollution today benefit from healthier air as the state cuts greenhouse gases and criteria pollutant emissions.

Measure Air Pollution Levels and Emissions

Ecology works with EPA, Tribes, and local air agencies to maintain a network of more than 75 air monitoring stations and 15 portable air sensors that continuously measure air pollution. We use this data to communicate when air pollution reaches unhealthy levels. Based on this information, people can adjust their daily activities to minimize unhealthy effects. Air monitoring data also helps Ecology track long-term trends and identify areas where we need to do more to reduce air pollution.

Monitoring air quality and forecasting smoke levels is especially critical during wildfire season. Wildfire smoke is a major threat to human health. Smoke from wildfires is the largest source of particle pollution in Washington. Breathing smoke causes wheezing and coughing, heart and lung disease, and death. The number of acres burned by wildfires each year is increasing as climate change reduces winter snowpack and produces hotter and drier summers.

Ecology adds temporary air quality monitors during major wildfire smoke events to improve information on air quality conditions. We also work with the Washington departments of Natural Resources and Health, the U.S. Forest Service, and the National Weather Service to forecast and track wildfire smoke. In the 2023-25 biennium, Ecology will continue to roll out customized low-cost sensors for coarse and fine particles to support expanded monitoring needs.

In addition to monitoring air quality, Ecology collects data on emissions of air pollution from various sources in the state. We compile this data into an air emissions inventory, which

provides information on the sources and amount of air pollution, emission trends over time, and the effectiveness of emission control strategies. In the 2023-25 biennium, Ecology will work with local air agencies and sources to compile annual point source emissions inventories and will compile emissions data for the 2023 National Emissions Inventory.

Ecology also conducts special studies on air pollution in Washington. In the 2023-25 biennium, Ecology will publish a study on premature deaths associated with wildfire smoke, as well as an assessment of premature deaths associated with high levels of wood smoke in residential areas. Ecology will also study air toxics in Washington to evaluate additional toxics monitoring and analysis needs.

Innovative and Effective Control of Commercial and Industrial Emissions

Commercial and industrial air pollution is well controlled in Washington. Ecology issues permits for new construction and modifications of existing air pollution sources and provides ongoing permit management, technical assistance, and compliance inspections. These activities ensure permit conditions are met and air pollutants are controlled appropriately at commercial and industrial facilities within Ecology's jurisdiction.

Ecology continues to explore new and better ways to streamline permitting and emission tracking processes. Because businesses rarely operate in the same way or use the same materials, Ecology usually tailors permits for each air pollution source. However, where businesses are relatively similar (e.g., rock crushers and auto body shops), we use general orders (categorical permits), which make permitting easier, quicker, cheaper, and more certain for small businesses. In the 2023-25 biennium, Ecology will continue to update and maintain seven general orders and create another general order for compost facilities.

Each year, businesses must submit information about their emissions to Ecology and pay a fee based on those emissions. Ecology continues to streamline this reporting and billing through the online Source Management System (SMS). Businesses log into the system to record their information, submit emission data, and see electronic versions of their documents and correspondence. This system increases Ecology's efficiency by electronic invoicing and data collection and review. The businesses benefit by having immediate access to their emission data and invoice information, and by streamlining the reporting process. Ecology plans to expand SMS to include tracking facilities' control and generating equipment. In the future, Ecology plans to provide businesses with the ability to submit online registration applications and pay the application fee electronically, which currently must be paid by check.

Ecology regularly surveys its permitting and inspection clients. We also seek feedback on our web pages to promote continuous improvement and dialogue with our customers. Ecology also works with EPA to respond to requirements for increased compliance oversight and reporting for the largest pollution emitting facilities in the state.

In the 2023-25 biennium, Ecology will also take action to reduce methane, a potent greenhouse gas, from municipal landfills. Ecology is developing new rules required under HB 1663 (Chapter 179, Laws of 2022) to reduce methane emissions and issue new reporting, testing, and monitoring requirements. In addition, Ecology is creating a new grant program with funding from the 2023-25 capital budget to award $15 million in funding to municipal landfills to comply with the 2022 law.

Ecology's Air Quality Program is also working with the Solid Waste Management Program to conduct a statewide compost emissions study. Using funds from the 2023-25 operating budget, this study will provide important emissions data to help improve the quality of our air permitting decisions, support state goals to reduce organic waste in landfills, and reduce climate change impacts.

Reducing Harmful Diesel Pollution

Ecology has identified diesel exhaust fine particles as the air pollutant most harmful to public health in Washington. Seventy percent of the cancer risk from airborne pollutants is attributable to the fine particles in diesel exhaust. It puts healthy people more at risk for respiratory disease and worsens the symptoms of people with health problems such as asthma, heart disease, and lung disease. Nearly five million people in Washington live or work close to highways, ports, and other major transportation corridors where they are most likely to be exposed to diesel exhaust.

Ecology's diesel strategy seeks to decrease the amount of diesel pollution emitted into the air and reduce the negative health effects of diesel pollution—especially for children, the elderly, those with existing health problems, and communities that are already exposed to high levels of air pollution.

Ecology's clean diesel grant program provides funding to replace older, high-polluting vehicles and equipment with newer, zero-emission vehicles and charging infrastructure. In the 2023-25 biennium, Ecology plans to award $14 million in grants to speed transformation of Washington's diesel-powered school bus fleet to a zero-emission fleet. Ecology will award an additional $1 million in grants to replace old diesel trucks, transit buses, and marine engines with all-electric or hybrid engines and develop and implement vocational training pilot programs.

The clean diesel grant program has already upgraded over 15,700 diesel engines since the start of the program in 2005 through June 30, 2023, resulting in reductions of more than 75 tons of diesel particulates each year. And school bus retrofits and replacements have reduced exposure of toxics emissions for children.

Ecology also continues to invest $141 million from the Volkswagen federal settlement and state penalty funds into projects that reduce greenhouse gas emissions and toxic diesel pollution. These projects will help Washington accelerate its transition to a zero-emission transportation system. To date, approximately $100 million of the settlement funds has been invested to

reduce over 6,400 tons of harmful nitrogen oxides and nearly 432,945 tons of greenhouse gas emissions.

The benefits to human health outweigh the costs of reducing diesel pollution. The California Air Resources Board has found that every dollar invested in reducing diesel emissions results in $3 to $8 in savings in improved health, avoided health problems, and lowered operating and maintenance costs for diesel fleets. In all, the Union of Concerned Scientists estimates that, for every dollar invested in diesel retrofits, $9 to $16 are returned to society.

Reducing Harmful Smoke Pollution

Ecology has determined that fine particle smoke pollution from residential wood-burning and similar activities is the second greatest health threat from air pollution in Washington. In addition, burning household trash (which is illegal in Washington), yard waste, debris from land clearing, and agricultural and forest waste materials all create significant amounts of air pollution that harm public health. Washington's clean air law defines which types of outdoor burning are allowed and where.

The most significant public health concern comes from using wood for home heating. During winter months, stagnant weather conditions and smoke from wood heating devices contribute to serious air quality problems in multiple communities throughout the state. Pollution from this source is a major factor in violations of the federal fine particle standard and for areas that measure levels close to the federal standard.

Ecology and local air quality agencies are taking steps to reduce this pollution by issuing home-heat burn bans on days when pollution levels spike upward. Ecology also partners with local entities to incentivize residents in the most affected areas to scrap older, more-polluting wood stoves and replace them with newer, cleaner models, or switch to alternative forms of heat.

Since 2007, Ecology and its local air agency partners have changed out nearly 7,000 older, uncertified stoves in communities that are violating, or at risk of violating, federal standards. Over 3,600 more uncertified wood stoves have been collected, rendered inoperative, and recycled through successful decommission-incentive programs that remove the dirtiest stoves from the secondary market. These combined strategies have resulted in lower air pollution measurements and significantly improved air quality, especially in two of Washington's worst polluted communities – Tacoma/Pierce County and Yakima County.

Many farmers in Washington practice agricultural burning to manage their agricultural waste and prevent diseases. Ecology works to balance the needs of farmers to practice agricultural burning with communities' needs to protect clean air and public health. Through permitting, we ensure that agricultural producers burn in ways that mitigate the negative health effects from smoke. We also monitor the impact of agricultural burning on air quality through a network of air monitors and by tracking complaints from the public. Ecology also partners with research institutions to find alternatives to agricultural burning that work for farmers, the public, and the environment.

There is increased interest in prescribed burning to prevent or reduce the risk of wildfire. The Washington Department of Natural Resources (DNR) is responsible for issuing and regulating burn permits for waste forest material. DNR issues permits in urban growth areas for outdoor burning that reduce the risk of wildfire. Ecology is working with DNR to help reduce smoke impacts to communities and implement the statewide Smoke Management Plan, which was recently updated and approved by EPA in 2023. In the 2023-25 biennium, Ecology will collaborate with DNR on community engagement and outreach related to wildfire smoke risks and impacts, as required under 2SHB 1578 (Chapter 385, laws of 2023).

Improve Visibility and Reduce Haze

Residents complain when air pollution haze affects scenic views like Mount Rainier, the Olympics, and the Columbia Gorge. Federal law requires the state to eliminate human-caused visibility impairment in our national parks and wilderness areas by 2064. Ecology evaluated pollution sources that contribute to haze and submitted our first plan to EPA in 2010, which was updated in 2022. The plan includes industrial source controls and other strategies to achieve and maintain federally required visibility goals. In the 2023-25 biennium, Ecology will provide a progress report to EPA, continue to make updates to the plan as required, and continue to implement the visibility plan to ensure the state makes further progress toward the federal goals.

Activities, Results, and Performance Measures

Prevent Unhealthy Air and Violations of Air Quality Standards

This activity supports the work the agency does to develop and implement State Implementation Plans to maintain healthy air, prevent violations, and clean up areas that violate standards, as quickly as possible.

Expected Results

Washington meets federal air quality standards, and health problems linked to unsafe air are minimized. Communities have the tools to restore their air quality, and violations are prevented.

Performance Measures

- Number of areas in Washington measuring air quality levels that are not in compliance with national standards.
- Percentage of population living in areas that meet national ambient air quality standards.

Measure Air Pollution Levels and Emissions

This activity supports the work the agency does to collect and monitor air quality and emissions data used to assess trends; assist compliance; and assess control strategies, health effects, and environmental damage from air pollution.

Expected Results

- The agency uses comprehensive and high-quality data to make policy decisions about how to manage air pollution in the state.
- Washington meets state and federal air quality standards.
- Public health and the environment are protected.

Performance Measure

- Percentage of monitoring data that is valid.

Reduce Air Pollution from Industrial and Commercial Sources

This activity supports the work the agency does to ensure new and existing industrial and commercial facilities that emit significant levels of air pollution comply with state and federal air quality standards.

Expected Results

Facilities receive permits, technical assistance, and inspections so federal and state laws are met and public health and the environment are protected.

Performance Measure

- Average number of days it takes to process Notice of Construction permit applications.

Reduce Health and Environmental Threats from Smoke

This activity supports the work the agency does to:

- Administer the state's smoke management program that oversees outdoor burning and wood stoves.
- Assist communities, local health organizations, and fire suppression agencies with health impact messaging and recommendations during large-scale wildfire events.

Expected Results

- Smoke from outdoor burning and wood burning for residential heat are managed through permitting, daily burn ban forecasts, curtailments, and wood stove exchange programs.
- Public health and environmental threats from smoke are minimized.

Performance Measures

- Percentage of the population exposed to air quality that does not meet healthy levels for fine particles.
- Number of times fine particle pollution is measured above a healthy level.
- Number of wood stoves replaced with cleaner burning technologies.

Reduce Health and Environmental Threats from Motor Vehicle Emissions

This activity supports the work the agency does to implement Washington's Clean Car standards and provide grants to incentivize cleaner motor vehicles and fuels.

Expected Results

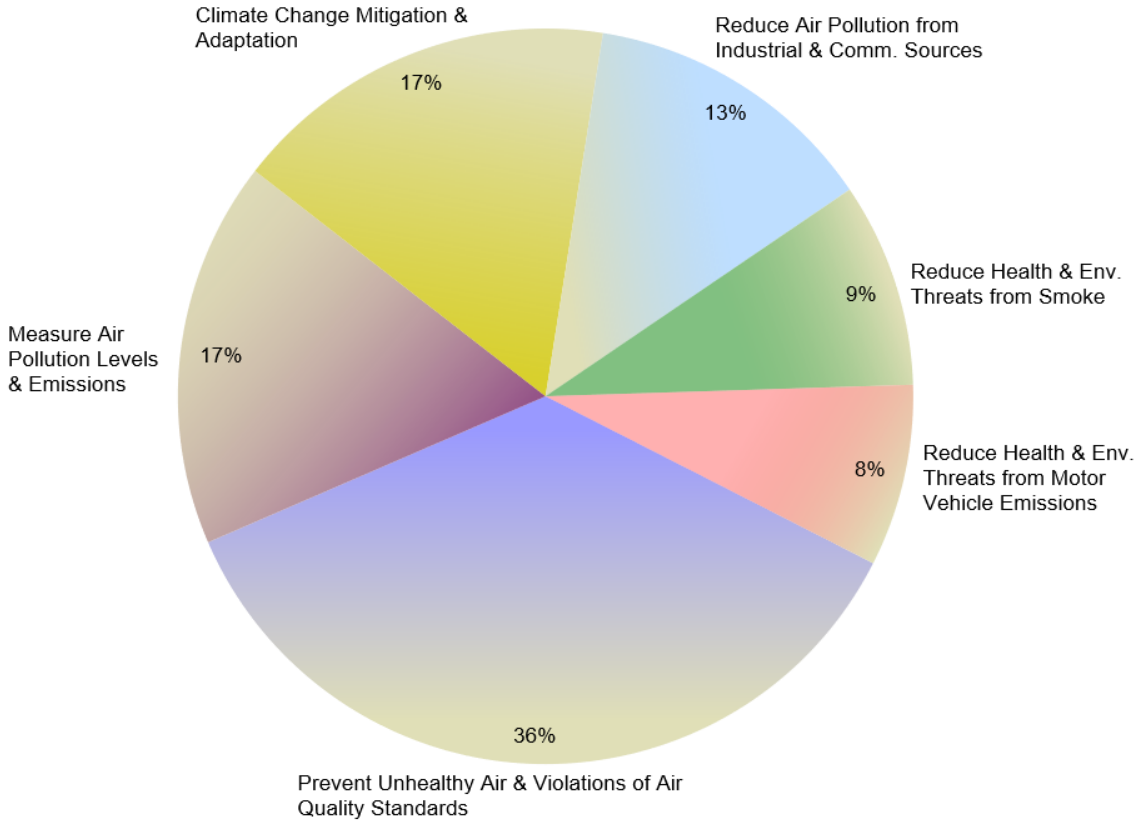
- New vehicles sold in Washington meet the state's emission standards.
- An increasing percentage of vehicles sold in Washington State are zero-emission vehicles.
- Diesel engines are replaced with cleaner options or upgraded with better exhaust controls and idle reduction devices.
- Exposure to toxic diesel emissions is reduced in high exposure areas.
- Public health and the environment are protected from motor vehicle emissions.

Performance Measure

- Tons of diesel particulate (soot) emissions produced statewide.

Air Quality Program 2023-25 Biennium Budget by Activities

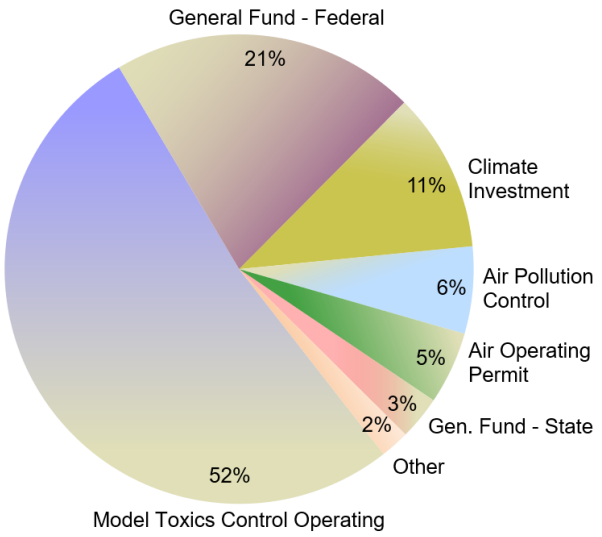
Operating = $48.5 Million | Capital = $77.1 Million | Total $125.6 Million | FTEs = 118.9

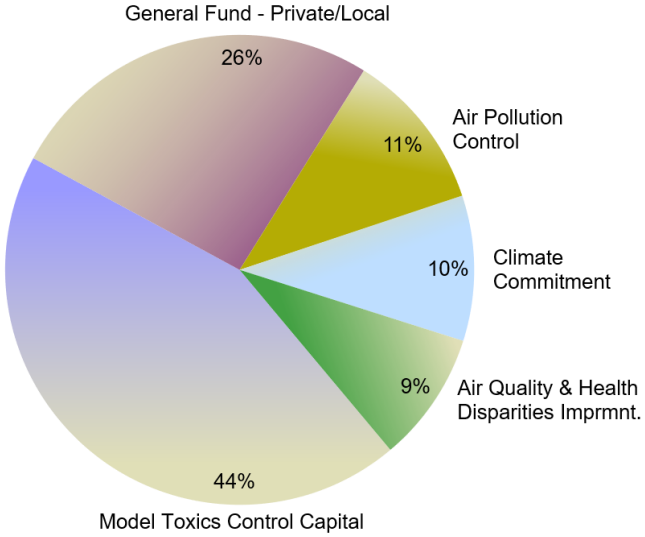


Activities	Amount	%	FTEs
Prevent Unhealthy Air & Violations of Air Quality Standards (A034)	$17,540,000	36%	32.8
Measure Air Pollution Levels & Emissions (A025)	8,518,000	17%	24.7
Climate Change Mitigation & Adaptation (A063)	7,928,000	17%	16.8
Reduce Air Pollution from Industrial & Commercial Sources (A045)	6,240,000	13%	19.9
Reduce Health & Environmental Threats from Smoke (A048)	4,354,000	9%	16.4
Reduce Health & Environmental Threats from Motor Vehicle Emissions (A047)	3,934,000	8%	8.3
Air Quality Operating Budget Total	**$48,514,000**	**100%**	**118.9**

Air Quality Program 2023-25 Biennium Budget by Fund Source

Operating = $48.5 Million | Capital = $77.1 Million | Total $125.6 Million | FTEs = 118.9





Operating Fund	Amount	%	Uses
Model Toxics Control Operating (23P)	$25,247,000	52%	Develop strategies to respond to and prevent violations of national ambient air quality standards (nonattainment) in Washington communities. Ambient air monitoring, grants to local air authorities, new source permitting, modeling and meteorology, outdoor and agricultural burning permitting.
General Fund – Federal (001)	10,589,000	21%	State and local air authority grants for ambient air monitoring, emission inventory, modeling, meteorology, grants to support diesel emissions reduction, and other air quality activities.
Climate Investment (26B)	5,186,000	11%	Implementation of the Climate Commitment Act provisions to improve air quality in overburdened communities highly impacted by air pollution.

Operating Fund Sources	Amount	%	Uses
Air Pollution Control (216)	2,825,000	6%	Minor source and new source permitting, agricultural burning permitting, agricultural burning alternatives research, and rulemaking for Hydrofluorocarbon reporting requirements.
Air Operating Permit (219)	2,258,000	5%	Permitting of major air pollution sources, and related small business technical assistance.
General Fund – State (001)	1,194,000	3%	Development and implementation of rules to reduce methane from landfills.
Other:			
Wood Stove Education & Enforcement (160)	573,000	1%	Enforcement of and education regarding proper wood stove use, grants to local air authorities.
General Fund – Private/Local (001)	326,000	<1%	Private/local agreements associated with ambient air monitoring and telemetry systems.
Climate Commitment (26C)	316,000	<1%	Clean energy permitting.
Operating Budget Total	**$48,514,000**	**100%**	
Capital Fund Sources	**Amount**	**%**	**Uses**
Model Toxics Control Capital (23N)	$34,209,847	44%	Reducing harmful emissions from wood stove burning and heavy-duty diesel engines.
General Fund – Private/Local (001)	20,001,310	26%	Statewide grants, funded through the Volkswagen (VW) federal settlement, which are managed by a private trust. Grants follow the state of Washington VW Beneficiary Mitigation Plan to reduce Nitrogen Oxide emissions in disproportionately impacted communities, achieve public health and

Capital Fund Sources	Amount	%	Uses
			other positive air quality outcomes, and promote electric transportation technologies.
Air Pollution Control (216)	8,610,808	11%	Use three large one-time penalty payments for the following: (1) legislatively directed grant programs using Volkswagen penalty funds. (2) Clean Diesel Grants to support diesel engine retrofits and replacements, installment of idle reduction technologies, and other diesel emissions reduction projects. (3) Woodsmoke Reduction Grants to support installation of cleaner home-heating alternatives in homes that use uncertified wood stoves as their primary source of heat, and buyback programs for uncertified wood stoves.
Climate Commitment (26C)	7,573,508	10%	Grants to reduce methane at landfills and to assist landfills in complying with new statutory and regulatory requirements.
Air Quality and Health Disparities Improvement (26E)	6,702,816	9%	Statewide grants to improve air quality in overburdened communities, and funding to conduct additional air monitoring in these communities.
Capital Budget Total	**$77,098,289**	**100%**	
Air Quality Operating & Capital Budget Total	**$125,612,289**		

Ecology staff working to implement Washington's climate policies join Governor Jay Inslee during a visit to the Ecology building in April 2022.

Climate Pollution Reduction Program

Program Mission

The Climate Pollution Reduction Program's (CPRP) mission is to implement policies and programs to reduce carbon emissions in the state of Washington.

Environmental Threats

Increasing levels of carbon dioxide and other greenhouse gases contribute to climate change. Greenhouse gases pose a major threat to public health and the environment in Washington. Studies show climate change contributes to more extreme weather events, like droughts and floods, and leads to sea-level rise. These impacts of climate change threaten our state's public safety, critical infrastructure, and biodiversity. Climate change has also been tied to more frequent wildfires, posing a threat to public safety and resulting in hazardous levels of particle pollution. Climate change is linked to higher levels of ozone near the ground, which harms people's health and puts areas in Washington at risk of failing to meet federal air quality standards.

Authorizing Laws

- Chapter 19.405 RCW, Washington clean energy transformation act
- Chapter 70A.05 RCW, Integrated climate change response strategy
- Chapter 70A.30 RCW, Motor vehicle emission standards
- Chapter 70A.45 RCW, Limiting greenhouse gas emissions
- Chapter 70A.60 RCW, Hydrofluorocarbons—Emissions reduction
- Chapter 70A.65 RCW, Greenhouse gas emissions—Cap and invest program
- Chapter 70A.535 RCW, Transportation fuel—Clean fuels program
- Chapter 80.80 RCW, Greenhouse gas emissions—Baseload electric generation performance standard

Constituents/Interested Parties

- Business, industry, and affiliated trade associations
- Environmental and social justice organizations
- General public
- Industrial and manufacturing facilities, power plants, utilities, petroleum producers, and suppliers
- Motorists, transportation fuel suppliers, and motor vehicle-related businesses
- Public health community

- Refrigeration and air conditioning equipment users, manufacturers, and related businesses.
- State and local governments
- Tribal communities and governments

Focus Areas

Responding to Climate Change

In 2020, the Washington Legislature set new greenhouse gas emission limits to combat climate change. Under the law, the state is required to reduce emission levels by specified milestones:

- 2020 – reduce to 1990 levels.
- 2030 – 45 percent below 1990 levels.
- 2040 – 70 percent below 1990 levels.
- 2050 – 95 percent below 1990 levels and achieve net zero emissions.

New Program at Ecology

In 2023, Ecology established the Climate Pollution Reduction Program (CPRP) as an independent program separated from the Air Quality Program. It is focused on meeting the state's greenhouse gas emission limits by implementing the cap-and-invest program, reducing carbon pollution from transportation, minimizing hydrofluorocarbon emissions, and reporting progress on emissions reductions.

Greenhouse gas inventory

To make meaningful reductions in greenhouse gas (GHG) emissions, the public, industry, and policymakers must know what activities emit those gases and how much they emit. Ecology's role is to create a high-level emissions inventory that catalogues emissions for the state. The inventory allows us to view emissions data over time, by industry, and by other economic sectors. This information is used to track progress on meeting state limits and helps us design policies to reduce GHG emissions across Washington.

In 2023, the program will expand its emissions inventory team to enhance Washington's economy-wide emissions tracking. This happens by identifying data sets and incorporating them into a new inventory data system. The expanded team will also build a natural and working lands carbon inventory. This will track biogenic emission sources and sinks (sinks are carbon withdrawals from the atmosphere) in the state, which will be used to coordinate the climate action planning process.

Climate Commitment Act

In 2021, the Washington Legislature passed the Climate Commitment Act (CCA), which establishes a comprehensive, market-based program to reduce carbon pollution and achieve

the GHG limits set in state law. The program started on January 1, 2023, and the first emissions allowance auction was held on February 28, 2023.

Businesses covered by the program must obtain allowances equal to their emissions and submit them to Ecology according to a staggered four-year compliance schedule.

The first compliance deadline is November 1, 2024, at which time businesses need to have allowances to cover just 30 percent of their 2023 emissions.

Ecology is now conducting several rulemakings to modify elements of the program, including:

- A rulemaking to identify and establish compliance obligations for entities that import electricity to Washington from centralized electricity markets.
- A rulemaking to address new and revised cap-and-invest offset protocols.
- A rulemaking to clarify two aspects of the Allowance Price Containment Reserve (APCR) auctions.

Funds raised through auctions are subject to legislative appropriation, and Ecology is required to report annually on the way the appropriated funds are spent. Ecology has announced the CCA Funds Reporting rulemaking, which will set reporting requirements for direct recipients of auction revenue.

Clean Fuel Standard

Ecology also works to curb carbon pollution from transportation through its Clean Fuel Standard. Transportation is the largest source of GHG emissions in Washington. The Clean Fuel Standard is designed to decrease the carbon intensity of Washington's transportation fuels. It will provide an increasing range of low-carbon and renewable alternatives that reduce dependency on petroleum and improve air quality. The 2021 Legislature adopted requirements for fuel suppliers to gradually reduce the carbon intensity of transportation fuels to 20 percent below 2017 levels by 2038. Conventional fuel suppliers can achieve these reductions by improving the efficiency of their fuel production processes, producing or blending low-carbon biofuels they sell, and purchasing credits generated by low-carbon fuel providers. Ecology adopted the Clean Fuels Program rule in November 2022, and registration and reporting for the program began in 2023.

Senate Bill 5447, Promoting the alternative jet fuel industry in Washington, was signed into law in May 2023. The bill requires Ecology to accept applications for carbon intensity pathways so sustainable aviation fuel (SAF) producers can obtain credits from fuel used in Washington. There is high interest in SAF from both the Legislature and the aviation fuels industry. Multiple large SAF production facilities are planned in Washington. Ecology is planning rulemaking to implement this law.

Zero-emission Vehicles

Ecology also works to reduce transportation emissions through its zero-emission vehicles program. In March 2020, the Legislature passed the Motor Vehicle Emission Standards law (RCW 70A.30.010), which directs us to adopt California's vehicle emission standards. This includes new requirements to gradually increase the number of new zero-emission vehicles (ZEV) sold in Washington, until all new vehicles sold in the state are ZEV by 2035.

The law does not ban any gas or diesel vehicle currently on the road, but steadily replaces sales of new fossil fuel-powered vehicles with zero-emission models. Plug-in hybrid vehicles, which combine a gas engine with a battery-electric system, will qualify for the 2035 ZEV standard if they can travel at least 50 miles on battery power.

Ecology adopted fleet reporting requirements in rule in December 2022 and began collecting reports in 2023. The purpose of the reporting requirement is to gather information on medium and heavy-duty vehicles and their operations throughout the state. As the transportation sector continues to electrify and transition to lesser-polluting fuels, the collected information will be useful in designing and targeting policies and incentive programs. This is used to assist fleet owners and operators in electrifying their fleets and transitioning to low-pollution technologies.

Hydrofluorocarbons

Ecology is also taking action to help the state transition away from the use of potent GHGs known as hydrofluorocarbons, or HFCs. These gases, often used in refrigeration systems, can have thousands of times the impacts of carbon dioxide, the most common GHG.

Ecology adopted a new rule in December 2020 that requires manufacturers to notify Ecology of products and equipment using HFCs restricted under a 2019 law and phase out the restricted HFCs starting January 1, 2020.

In 2021, the Legislature expanded on the 2019 law and directed Ecology to set new requirements for HFCs used in certain air conditioning, refrigeration equipment, and ice rinks. Ecology is working to adopt rules establishing a refrigerant management program starting in 2024. The rules aim to reduce refrigerant emissions from large air conditioning and refrigeration equipment and develop recommendations for managing the end-of-life disposal of refrigerants.

Clean Energy Transformation

In January 2021, Ecology adopted a rule to establish energy transformation project requirements under the Washington clean energy transformation act (Chapter 19.405 RCW). This law will transition the state to a 100 percent carbon-free electricity supply by 2045. The Washington Department of Commerce and the Washington Utilities and Transportation Commission are leading this effort. Ecology will continue to provide support by identifying categories of projects eligible as energy transformation projects and calculating the GHG content of electricity.

Activities, Results, and Performance Measures

Climate Change Mitigation and Adaptation

This activity supports the work the agency does to conduct a biennial greenhouse gas emissions inventory, administer the state's mandatory greenhouse gas reporting program, and help state agencies and higher education institutions identify and report their greenhouse gas emissions and develop strategies to reduce those emissions.

It also supports the work the agency does to implement a portfolio of policies to reduce greenhouse gas emissions to meet the state's greenhouse gas emission limits.

Expected Results

The state's greenhouse gas emissions are reduced overall to:

- 1990 levels by 2020.
- Forty-five percent below 1990 levels by 2030.
- Seventy percent below 1990 levels by 2040.
- Ninety-five percent below 1990 levels by 2050.

Public health and the environment are protected.

Performance Measure

- Metric tons of greenhouse gas emissions produced statewide.

Climate Pollution Reduction Program 2023-25 Biennium Budget by Activities

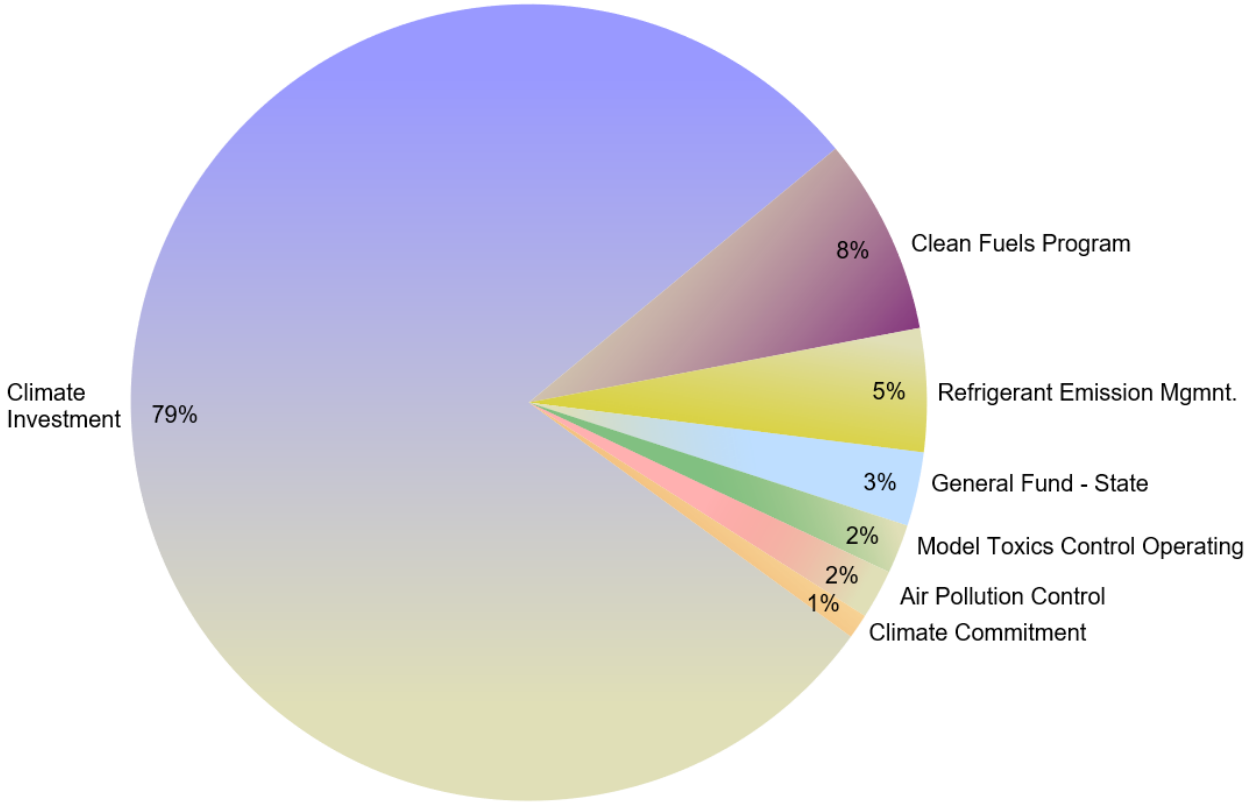
Operating[10] = $54.3 Million | No Capital | Total $54.3 Million | FTEs = 102.5

Activities	Amount	%	FTEs
Climate Change Mitigation and Adaptation (A063)	$54,337,000	100%	102.5
Climate Pollution Reduction Operating Budget Total	**$54,337,000**	**100%**	**102.5**

[10] The Climate Pollution Reduction Program is funded entirely by operating dollars.

Climate Pollution Reduction Program 2023-25 Biennium Budget by Fund Source

Operating[11] = $54.3 Million | No Capital | Total $54.3 Million | FTEs = 102.5



Operating Fund Sources	Amount	%	Uses
Climate Investment (26B)	$42,812,000	79%	Allowance Auction proceeds used to fund the Climate Commitment Act Cap and Invest program, including policy and implementation; emissions reporting and verification; Cap and Invest auctions; statewide greenhouse gas inventories.
Clean Fuels Program (25Q)	4,510,000	8%	Monitoring of businesses required to report fuel production; maintenance of reporting platform for trading of low emission fuel credits to offset high emission fuels.

[11] The Climate Pollution Reduction Program is funded entirely by operating dollars.

Operating Fund Sources	Amount	%	Uses
Refrigerant Emission Management (25T)	2,531,000	5%	Review of commercial refrigerators to ensure compliance with regulations; ensure compliance of product restrictions on new refrigerant equipment entering Washington commerce; provide technical assistance.
General Fund – State (001)	1,666,000	3%	Hydrofluorocarbon regulation and work with refrigerant management systems.
Model Toxics Control Operating (23P)	1,243,000	2%	Technical assistance for small refrigerant systems and other hydrofluorocarbon products entering Washington commerce; rule making technical support; enacting and implementing Washington state clean vehicle polices.
Air Pollution Control (216)	1,205,000	2%	Technical work for reporting on greenhouse gas emissions; calculation of greenhouse gas fees.
Climate Commitment (26C)	370,000	1%	GHG emissions reduction grant application assistance for Puget Sound Clean Air Agency.
Operating Budget Total	**$54,337,000**	**100%**	
Climate Pollution Reduction Operating & Capital Budget Total	**$54,337,000**		

Environmental Assessment Program scientists, Callie Mathieu (left) and Katelyn Foster (right), collect samples from a sediment core in Mason Lake in Mason County. Sediment cores can tell us how the concentrations of chemicals have changed over time in the environment.

Environmental Assessment Program

Program Mission

The mission of the Environmental Assessment Program is to measure, assess, and communicate environmental conditions in Washington State.

Environmental Threats

The Environmental Assessment Program focuses on providing credible science and interpretation for Ecology. We conduct monitoring for action. Our monitoring programs, scientific studies, and models measure and evaluate water quality (marine, ground, and freshwater), stream flow, aquatic habitat, and contaminants in sediments, marine benthic communities, and fish tissue across the state. We also conduct science around consumer products and accredit laboratories that analyze environmental samples. We use data to evaluate threats ranging from conventional pollutants—such as bacteria, nutrients, and temperature—to toxic contaminants and invasive aquatic plants. Our wide range of scientific expertise provides for efficient responses and creative solutions when new threats and complex questions arise.

We conduct monitoring to identify impairments in water and soil quality, aquatic habitat, and biological communities. These data provide essential information on environmental threats by helping us identify contamination sources and understand contaminant fate and transport. We partner with other agencies and entities for many of our scientific studies, which support Ecology's environmental programs and guide regulatory actions.

Authorizing Laws

- Federal Clean Water Act
- Federal Safe Drinking Water Act
- RCW 39.26.280, Preference—Products and products in packaging that does not contain polychlorinated biphenyls—Limitations—Products and products in packaging containing polychlorinated biphenyls
- RCW 43.21A.230, Certification of environmental laboratories authorized—Fees—Use of certified laboratories by persons submitting data or results to department
- RCW 43.21A.736, Cannabis product testing—Fees—Rules
- RCW 70A.125.080, Drinking water program

- Chapter 70A.222 RCW, Packages containing metals and toxic chemicals
- Chapter 70A.230 RCW, Mercury
- Chapter 70A.305 RCW, Hazardous waste cleanup—Model toxics control act
- Chapter 70A.335RCW, Bisphenol A—Restrictions on sales
- Chapter 70A.340 RCW, Brake friction material
- Chapter 70A.350 RCW, Toxic pollution
- Chapter 70A.400 RCW, Firefighting agents and equipment—Toxic chemical use
- Chapter 70A.405 RCW, Polybrominated diphenyl ethers—Flame retardants
- Chapter 70A.430 RCW, Children's safe products
- Chapter 70A.435 RCW, Replacement of lead wheel weights
- Chapter 70A.440 RCW, Stormwater pollution—Coal tar
- Chapter 70A.445 RCW, Recreational water vessels—Antifouling paint
- Chapter 90.48 RCW, Water pollution control
- Chapter 90.54 RCW, Water resources act of 1971
- Chapter 90.71 RCW, Puget Sound water quality protection

Constituents/Interested Parties

- Businesses
- Environmental organizations
- Federal, Tribal, and local governments
- General public
- Internal clients
- State agencies

Focus Areas

Puget Sound Water Quality

Puget Sound is vulnerable to impacts from climate change, excess nutrient inputs, and ocean acidification. In the 2019-21 biennium, Ecology received funding to enhance water quality monitoring of Puget Sound and the freshwater rivers flowing into Puget Sound. Ecology now monitors ocean acidification conditions across our long-term marine monitoring network, spanning greater Puget Sound, Willapa Bay, and Grays Harbor. These data support scientific research to understand the risks posed by changing ocean conditions, and acidification data are digested into an annual indicator to communicate trends to the public.

Ecology is in the process of completing the installation of new continuous monitoring equipment in eight Puget Sound tributaries. Data collection began in 2022 and 2023. These data will be included in modeling assessments of nitrogen and carbon loading to Puget Sound to better understand the impact of excess nutrients on the ecosystem.

Toxic Threats in the Environment

Toxic chemicals are widespread in the environment. There is growing interest in learning more about toxic chemicals that cause harm to human health and aquatic life.

Compounds in Rubber Tires

A chemical in tire rubber, 6PPD-quinone (6PPD-q), was recently linked to Coho salmon death. Ecology received funding in the 2021-23 biennium to collaborate with several organizations to identify priority areas of concern and develop an accredited laboratory method to measure 6PPD-q in water. This information was summarized in a report[12] to the Legislature in fall 2022. Ecology received additional funding in the 2023-25 biennium to develop a laboratory method to measure 6PPD-q in sediment and to evaluate the most appropriate and effective methods for measuring rubber-derived contaminants in water and sediment. As with most new compounds, verified methods are needed for detecting toxic amounts of 6PPD-q in coho, steelhead, and Chinook habitat. Work for this project began in fall of 2023.

Juvenile Chinook and Steelhead

Ecology continues work to identify contaminant sources along the migratory pathway of juvenile Chinook salmon in the Puget Sound Basin. We are using advanced sampling techniques and methods to measure toxic chemicals in water, sediments, and biota. Toxics monitoring will assist in identifying and resolving sources and pathways of chemicals. This informs the source control and remediation actions needed to improve juvenile Chinook survival and help support the Southern Resident killer whale population.

In 2022, we completed work identifying sources of polybrominated diphenyl ether (PBDE) flame retardants affecting juvenile Chinook in the Snohomish River watershed. The source assessment identified localized areas of increased PBDE concentrations within the river system. PBDE concentrations in these areas were elevated in water, sediment, and biofilms. The source of these elevated concentrations is municipal wastewater treatment plant outfalls, which discharge treated wastewater into the river. Ecology will use the results of this source assessment to guide the next steps in reducing the inflow of PBDEs to wastewater treatment plants discharging to the Snohomish River watershed. We are currently beginning work to look at sources of PBDEs and polychlorinated biphenyls (PCBs) in the White-Puyallup watershed that may be affecting juvenile Chinook out-migrating from natal watersheds.

PFAS in Lake Washington

Per- and polyfluoroalkyl substances (PFAS) are used in many products because of their water, stain, and grease-resistant properties. However, these chemicals persist in the environment and cause reproductive and developmental issues in humans and wildlife. Ecology began a study in 2020 to monitor PFAS in Lake Washington. The study's goal is to understand how these

[12] https://apps.ecology.wa.gov/publications/SummaryPages/2203020.html

chemicals enter the lake and the types of sources they come from. Our initial sampling shows that PFAS are widespread in the Lake Washington watershed. In the second phase of this study, we assessed parts of the watershed with high concentrations of PFAS to distinguish between different sources. This work was completed in 2023, and the report will be available in 2024.

Statewide PCB Monitoring

The settlement from the State of Washington v. Monsanto Company lawsuit for damages and cleanup costs caused by polychlorinated biphenyls (PCBs) provided funding for monitoring and characterizing PCBs in major Washington rivers. The PCB monitoring program has two components: long-term monitoring in major Puget Sound rivers and exploratory monitoring.

The long-term monitoring program is establishing stations in eight rivers draining into Puget Sound, and we are leveraging the infrastructure used in our Puget Sound Nutrient monitoring program discussed above. PCBs in these rivers affect the early life stages of juvenile Chinook in the nearshore environment and enter the marine food web, affecting adult salmon and the Southern Resident killer whale population. These long-term monitoring stations will regularly monitor PCB loads from the major Puget Sound rivers. The exploratory monitoring study will collaborate with regional partners such as the Washington State Department of Fish and Wildlife to investigate sources, pathways, modeling, and food webs. PCB data generated through this project will be used to identify sources of contamination for future cleanup efforts.

Laboratory Method Research and Development

Ecology's Manchester Environmental Laboratory (MEL) is the state's primary environmental and consumer product testing laboratory. MEL is the preferred laboratory for Ecology scientists and has the expertise to assist with groundbreaking projects.

MEL received funding from the Legislature during the 2021-23 biennium to develop new laboratory methods to analyze water and solids for PCBs and water and sediments for 6PPD-quinone (6PPD-q). The methods for PCBs in water and solids and 6PPD-q in water were developed and are in use. MEL received continued funding in the 2023-25 biennium to complete the method development for analyzing 6PPD-q in sediments, which is expected to be completed by December 2023.

Beach Monitoring

Local health agencies use bacteria monitoring data to determine when public beaches must be closed to protect swimmers from unsafe contamination. Using BEACH Act grant funds from the U.S. Environmental Protection Agency (EPA), Ecology works with the Washington Department of Health and local health agencies to monitor bacterial contamination at many marine swimming beaches in Washington. Federal funding for this long-standing program has been threatened in the past but currently runs through 2024. Ecology is working with EPA to extend the grant through 2025. If EPA ends the grant, Ecology will likely submit a budget request for state funding to continue the program after federal funding ends.

Nitrate in Groundwater

Groundwater in the Lower Yakima Valley aquifer is contaminated with elevated nitrate concentrations. Nitrate contamination can impact infants, pregnant women, and people with compromised immune systems. EPA designated the Lower Yakima Valley as an Environmental Justice Showcase Community; its aquifer is the principal drinking water source for over 56,000 area residents. Ecology played a vital role in carrying out recommendations to reduce groundwater nitrate contamination. Ecology established an extensive groundwater monitoring network to measure the nitrate levels over time and has completed two years of baseline sampling.

Ecology received additional funding and resources in the 2022 legislative session to build on the successful groundwater monitoring work by including analyses of soil samples for nitrate, pilot projects to study land use best management practices, and providing outreach and education to area residents on the changes needed to reduce nitrates. Ecology expects to provide scientific expertise in this collaborative work with the Washington Department of Agriculture and the South Yakima Conservation District.

Product Testing

There are toxic chemicals in everyday products, such as metals in children's jewelry and chemicals in packaging, that are unknown to consumers. Ecology's product testing team uses cutting-edge science to test for toxics in consumer products available for retail or online sale. This science helps support regulatory actions against products and manufacturers not in compliance with state laws. Ecology received funding in the 2021-23 biennium to expand testing capacity for toxics in children's products and other consumer goods.

In addition to increasing our staff, Ecology needs to expand the Product Testing Lab space at our Lacey headquarters building to handle the lab analysis work. Without more capacity to conduct laboratory research, project scope is limited and may be unable to support emerging priorities. Consumer products tend to contain high levels of toxic chemicals that pose a risk to instruments. Processing consumer product samples with high concentrations of toxic chemicals can contaminate an instrument, rendering it unfit for detecting low levels of contamination when used to process environmental samples. Ecology received funding in the 2023-25 budget for planning and pre-design work in preparation for a future funding request to turn the existing space at Ecology headquarters into a laboratory space that can handle all lab analysis for consumer products.

Environmental Laboratory Accreditation

Ecology accredits and audits drinking water laboratories through a memorandum of agreement with the Washington Department of Health. The increased technical assistance our staff provides for emerging issues has affected the accreditation program, and Ecology has not had sufficient funding to hire the number of staff needed to conduct audits within the required three-year timeframe. This created a backlog of drinking water laboratories that have not been audited in compliance with the federal Safe Drinking Water Act.

To bring the drinking water accreditation program up to date on audits, Ecology sought and received funding for a stopgap solution to hire audit staff for two years, and those staff are being hired and trained. The long-term solution included rulemaking to adjust the accreditation fees to align staff resources with the number of laboratories seeking accreditation. The rulemaking was completed, and the new rule was effective October 2023. The updated fee schedule is designed to support staff into the future, with the goal of making the two-year positions permanent.

Cannabis Laboratory Accreditation

The cannabis industry needs lab quality standards to improve the accuracy and consistency of product information, both of which will help improve consumer protection. In 2019, the Legislature passed HB 2052, establishing a Cannabis Science Task Force (CSTF) and transferring the authority for cannabis lab accreditation from the Liquor and Cannabis Board to Ecology in 2024.

Ecology led the CSTF, a partnership between several state agencies and cannabis industry scientists. CSTF was tasked with recommending lab quality standards. The CSTF prepared two reports to the Legislature with recommendations for lab quality standards, and their work revealed the critical collaboration needed to implement their recommendations. Successful transfer of accreditation to Ecology depends on 1) an interagency cooperative team (ICT) adopting lab quality standards in rule; and 2) the availability of proficiency tests that mirror the regularly tested cannabis products. The ICT was renamed the Cannabis Laboratory Analysis Standards Program, which plans to complete and adopt standards before July 2024. Proficiency tests that mirror cannabis are not yet available. Ecology will only be able to issue qualified accreditations based on a waiver of the requirement until such proficiency tests are available.

Ecology does not have funding in our budget to support cannabis lab accreditation. We have submitted a 2024 supplemental budget request for funding for staff to accredit and provide technical assistance to labs and design, develop, and implement a data management system to house information on all the accredited labs.

Activities, Results, and Performance Measures

Conduct Environmental Studies for Pollution Source Identification and Control

Ecology conducts pollution identification 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 assessing the amount of nutrients in large watersheds. Many projects support development of water quality cleanup plans or Total Maximum Daily Load (TMDLs) to assess how much of a pollutant a waterbody can absorb without exceeding water quality standards.

Expected Results

- Polluted waters are studied to identify pollution sources or cleanup success, so resource managers have credible scientific information to make decisions to protect the environment and public health.
- All study reports are peer reviewed, completed on schedule, and published to the Internet so that the information is shared with the public and can be used to make regulatory and policy development decisions.

Performance Measure

- Number of polluted waters assessed to identify pollution sources or cleanup success.

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.

Expected Results

- Trends, conditions, and changes in water quality of major freshwater rivers, Puget Sound, and the largest coastal estuaries are tracked so Ecology staff and the public are alerted to emerging water quality problems.
- Credible environmental monitoring data are produced so Ecology, other agencies, and the public can make better informed decisions.

Performance Measures

- Percentage of monitored stream flows below critical flow levels.
- Statewide river and stream water quality index score.
- Percentage of individual sample data collected annually that are reliable and valid for use by other programs, agencies, and the public.
- Percentage of continuous monitoring data collected annually that are reliable and valid for use by other programs, agencies, and the public.

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.

Expected Results

The Manchester Environmental Laboratory provides accurate and defensible analytical support so that clients can make environmental and enforcement decisions.

Performance Measures

- Percentage of acceptable proficiency testing analyses completed by Ecology's Manchester Environmental Laboratory.
- Number of chemical analyses completed for clients by Ecology's Manchester Environmental Laboratory.

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.

Expected Results

Laboratories accredited by Ecology maintain successful, quality programs so that accurate and defensible analytical data are available for environmental and public health decisions.

Performance Measure

- Percentage of acceptable proficiency testing analyses completed by accredited laboratories.

Improve the 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.

Expected Results

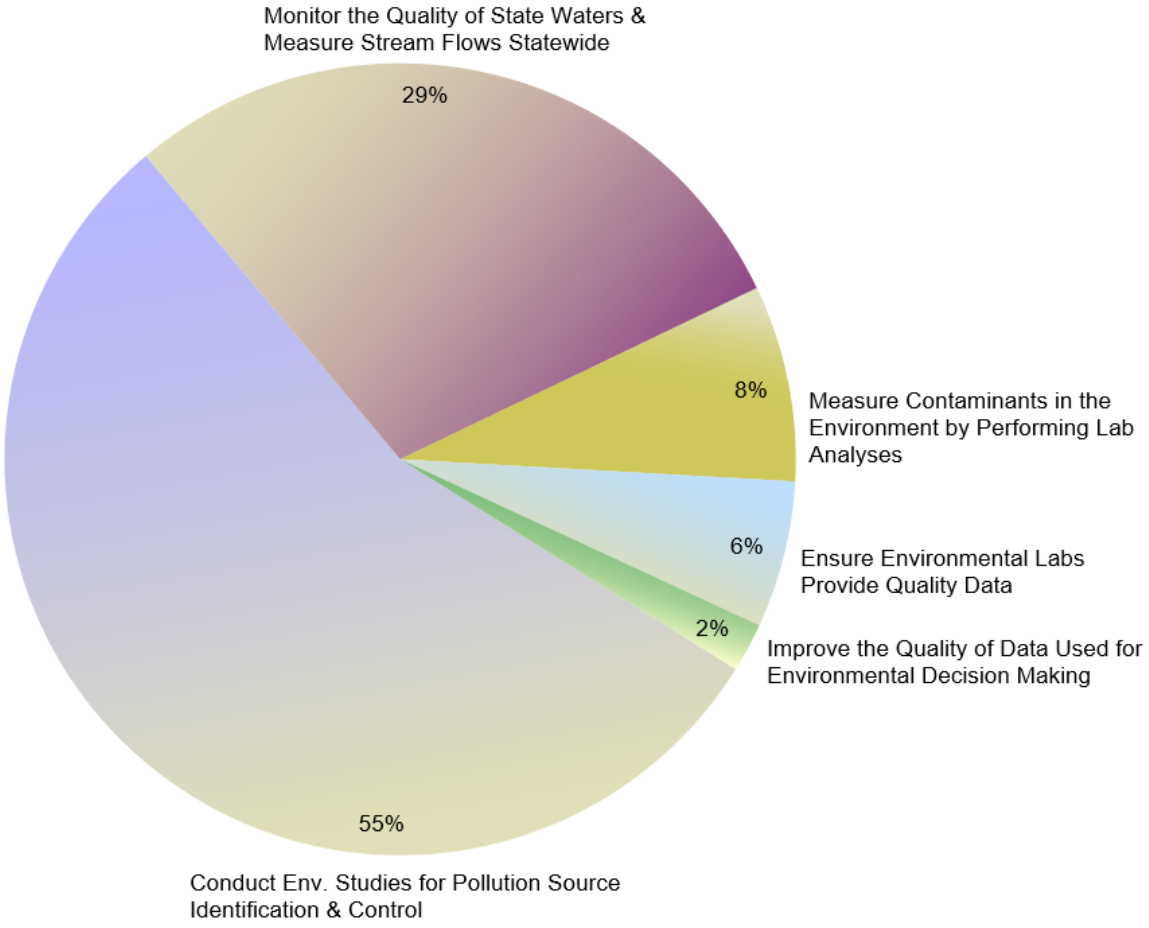
- Standard operating procedures are up-to-date and approved for quality assurance so that environmental policy and agency decisions are based on accurate, reliable, and timely data.
- Quality assurance project plans are completed for all scientific studies before sampling begins so that the quality and credibility of data generated for decision-making is documented.
- Entities receiving funding for work involving environmental data can continue to receive EPA funds.

Performance Measure

- Percentage of technical standard operating procedures that are up to date and approved for quality assurance.

Environmental Assessment Program 2023-25 Biennium Budget by Activities

Operating = $60.6 Million | Capital = $0.3 Million | Total $60.9 Million | FTEs = 185.6

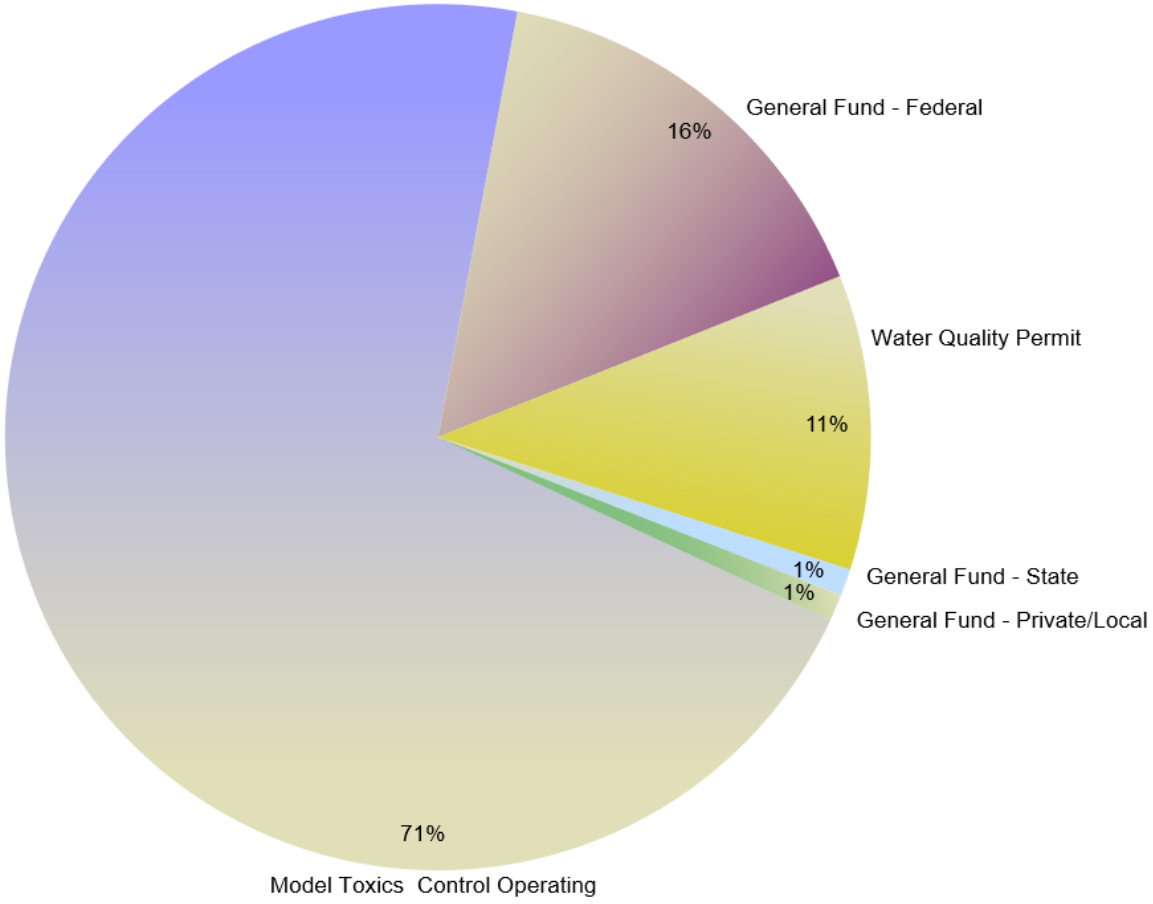


Activities	Amount	%	FTEs
Conduct Environmental Studies for Pollution Source Identification & Control (A007)	$32,977,000	55%	82.4
Monitor the Quality of State Waters & Measure Stream Flows Statewide (A027)	17,733,000	29%	55.1
Measure Contaminants in the Environment by Performing Laboratory Analyses (A026)	5,019,000	8%	30.7
Ensure Environmental Laboratories Provide Quality Data (A012)	3,508,000	6%	12.8

Activities	Amount	%	FTEs
Improve Quality of Data Used for Environmental Decision Making (A020)	1,317,000	2%	4.6
Environmental Assessment Operating Budget Total	**$60,554,000**	**100%**	**185.6**

Environmental Assessment Program 2023-25 Biennium Budget by Fund Source

Operating = $60.6 Million | Capital[13] = $0.3 Million | Total $60.9 Million | FTEs = 185.6



Operating Fund Sources	Amount	%	Uses
Model Toxics Control Operating (23P)	$42,880,000	71%	Water quality monitoring, toxics monitoring, marine sediment monitoring, stream flow monitoring, groundwater investigations, water cleanup studies.
General Fund – Federal (001)	9,667,000	16%	Water quality monitoring, groundwater investigations, water cleanup studies, effectiveness monitoring.

[13] Funded entirely by Freshwater Aquatic Weeds (222).

Operating Fund Sources	Amount	%	Uses
Water Quality Permit (176)	6,908,000	11%	Water cleanup studies, groundwater investigations, technical assistance, compliance monitoring.
General Fund – State (001)	763,000	1%	Monitoring for ocean acidification.
General Fund – Private/Local (001)	336,000	<1%	Stream flow monitoring, laboratory analytical work.
Operating Budget Total	**$60,554,000**	**100%**	
Capital Fund Sources	**Amount**	**%**	**Uses**
Freshwater Aquatic Weeds (222)	$298,414	100%	Technical assistance, monitoring for invasive freshwater aquatic weeds.
Capital Budget Total	**$298,414**	**100%**	
Environmental Assessment Operating & Capital Budget Total	**$60,852,414**		

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Maryflor Garcia (Toxics Reduction Specialist in the Central Regional Office) provides technical assistance to a manufacturing facility in Kennewick, WA.

Hazardous Waste & Toxics Reduction Program

Program Mission

The mission of the Hazardous Waste and Toxics Reduction (HWTR) Program is to protect Washington's residents and environment by reducing the use of toxic chemicals, safely managing dangerous waste, preventing new contaminated sites, and overseeing cleanups of previously contaminated sites.

Environmental Threats

Preventing and reducing toxic threats and pollution is one of Ecology's four strategic goals, including a focus on health equity and environmental justice. There are risks in using and storing—not just disposing of—hazardous substances. Some chemicals (such as cleaning products or yard chemicals) can pose an immediate health threat during use. Others pose a risk as they break down or when they are discarded. Some chemicals, like persistent, bio-accumulative toxics and heavy metals, gradually build up in our bodies and the environment.

The risk from hazardous substances is not only from leaking drums at an industrial site. Each of us affects the environment, our own health, and the health of others when we buy and use products that contain toxic chemicals. Researchers find hazardous chemicals in our air, water, soil, and in our bodies. In part, this is because they are ingredients found in the products we use in our homes, yards, and businesses. HWTR's focus is on helping the public and businesses make informed choices about the use, storage, and safe disposal of hazardous substances.

Hazardous substances in consumer goods

Avoiding the use of hazardous chemicals is the smartest, cheapest, and healthiest way to protect human health and the environment. HWTR leads Ecology's efforts to find safer alternatives for chemicals in consumer products and business practices. These efforts help protect Washington's land, water, and air from the dangers associated with toxic substances and other hazardous chemicals. HWTR is responsible for enforcing restrictions on toxic

chemicals in children's and other consumer products under several statutes and a variety of administrative regulations. The scope of this work has gradually increased since 2008, and we expect this workload will continue to grow as additional restrictions on toxic chemicals are adopted.

Hazardous waste from businesses

When hazardous substances are no longer usable, they become hazardous waste, or "dangerous waste," as they are known in Washington.[14] Washington's regulation of dangerous waste provides additional environmental protection not afforded by the federal hazardous waste rules. Washington's more protective standards help reduce spills, protect workers, and safeguard businesses that rely on a clean environment for their livelihood. They also create recycling and waste reduction opportunities for Washington businesses. For more details, see Focus on State Dangerous Waste Regulations Protect Human Health and the Environment[15].

HWTR addresses the problems associated with dangerous waste and other hazardous substances using a variety of strategies. We conduct inspections and provide compliance and pollution prevention technical assistance around the state. Technical assistance helps businesses address hazardous waste compliance, reduce waste generation, prevent pollution, and reduce use of toxic substances. Approximately 1,000 businesses and facilities statewide produce most of the state's dangerous waste, totaling about 100 million pounds of recurrent dangerous waste each year. These recurrent wastes are planned, predictable by-products and spent materials from industrial processes, such as manufacturing.

The rest of the dangerous waste produced in Washington comes from thousands of smaller businesses that each produce less than 220 pounds of dangerous waste per month. These businesses are known as Small Quantity Generators. HWTR partners with local jurisdictions to provide technical assistance to these small businesses to help them adopt safer practices and avoid environmental contamination.

When dangerous wastes are mismanaged, they get into water and soil where they can harm human health and the environment or create costly cleanup sites. HWTR works with responsible parties and affected communities to ensure contamination is cleaned up at 42 legacy cleanup sites, allowing these locations to be restored to productive use.

Authorizing Laws

- Federal Emergency Planning and Community Right-to-Know Act (SARA Title III)

[14] Washington law uses the term dangerous waste. Federal law uses the term hazardous waste. While these terms are often used interchangeably, Washington's definition includes some substances that are not included in the federal definition.

[15] https://fortress.wa.gov/ecy/publications/SummaryPages/1304004.html

- Federal Pollution Prevention Act
- Federal Resource Conservation and Recovery Act
- Federal Toxic Substances Control Act
- Chapter 15.54 RCW, Fertilizers, minerals, and limes
- Chapter 49.70 RCW, Worker and community right to know act
- Chapter 70A.205 RCW, Solid waste management – Reduction and recycling
- Chapter 70A.214 RCW, Waste reduction
- Chapter 70A.218 RCW, Hazardous waste fees
- Chapter 70A.222 RCW, Packages containing metals and toxic chemicals
- Chapter 70A.230 RCW, Mercury
- Chapter 70A.300 RCW, hazardous waste management
- Chapter 70A.305 RCW, Hazardous waste cleanup — Model toxics control act
- Chapter 70A.335 RCW, Bisphenol A – Restrictions on sale
- Chapter 70A.340 RCW, Brake friction material
- Chapter 70A.350 RCW, Toxic pollution
- Chapter 70A.400 RCW, Firefighting agents and equipment – Toxic chemical use
- Chapter 70A.405 RCW, Polybrominated diphenyl ethers – Flame retardants
- Chapter 70A.415 RCW, Hazardous substance information
- Chapter 70A.430 RCW, Children's safe products
- Chapter 70A.435 RCW, Replacement of lead wheel weights
- Chapter 70A.440 RCW, Stormwater pollution – Coal tar
- Chapter 70A.445 RCW, Recreational water vessels – Antifouling paints
- Chapter 70A.560 RCW, Cosmetic products – Toxic chemicals

Constituents/Interested Parties

- Business groups and associations
- Environmental advocacy groups
- Federal agencies, such as the U.S. Environmental Protection Agency
- General public
- Regulated businesses and agencies
- State and local governments and other agencies
- Tribal governments

Focus Areas

HWTR's work is divided into four focus areas: preventing pollution, managing dangerous waste and materials, outreach and information sharing, and developing and maintaining the state's Hazardous Waste Plan.

Preventing Pollution by Reducing Impacts of Materials and Products

Reducing Toxic Threats: Safer Products for Washington Program

In 2019, the Legislature passed the Pollution Prevention for Healthy People and Puget Sound Act, authorizing Ecology, in consultation with the Washington Department of Health, to regulate classes of chemicals in consumer products. The law establishes a repeating five-year process for Ecology and Health to designate priority chemicals, identify products that contain these chemicals, determine regulatory actions (notice requirements or chemical restrictions), and adopt rules to implement those regulatory actions. Adopting chemical restrictions requires that safer alternatives are both feasible and available on the market.

On May 31, 2023, Ecology adopted the first set of regulatory actions under this authority, restricting the use of six chemical classes in a variety of consumer products. The new rules also require manufacturers report to Ecology for some products where the chemical use is not restricted.

Ecology has already started its next review of additional chemical classes and consumer products, as required by the law.

Reducing Toxic Threats: Implementing Specific Safer Chemical Laws and Other Toxic Substance Activities

Public concern about toxic chemicals in everyday consumer products has increased during the last several years. Consumers are more aware of potential health issues associated with toxic chemicals, including cancer, hormone disruption, and harm to children's development. The public wants to know if these types of chemicals are in the products they use.

A growing body of research shows that commonly used household products can be a majority source of exposure to chemicals of concern for both humans and the environment. For example, polychlorinated biphenyl (PCB) contamination in the Spokane River comes from a few industrial dischargers, but also from consumer products like motor oil, hydraulic fluid, soaps, inks, and caulk. All these products contain PCBs, which (although legal) eventually find their way into our environment.

The effects of toxic chemical exposure on human health, the environment, and the economy are enormous—and largely preventable. Many of HWTR's projects support various state, national, and international efforts to transition to safer chemicals and alternatives, including:

- Assuring compliance with the state's new toxic chemicals in cosmetics law, which prohibits using chemicals like formaldehyde, mercury, and lead in personal care and beauty products.
- Providing technical assistance to cosmetics manufacturers and beauty industry workers to help them transition to safer ingredients and products.
- Assuring compliance with the Children's Safe Products Act and other laws that limit toxic chemicals in consumer products or require manufacturer reporting.

- Researching potential safer alternatives to per- and polyfluoroalkyl substances (PFAS) in food packaging and implementing restrictions when safer alternatives are identified.
- Implementing restrictions on firefighting foams that contain PFAS and working with fire departments to safely dispose of PFAS foam they still have.
- Providing Washington airports with equipment to test their firefighting capabilities without dispersing toxic PFAS firefighting foam into the environment and helping them transition to non-PFAS foam.
- Working with the Toxics in Packaging Clearinghouse, a consortium of states working to keep regulated toxic metals out of consumer products packaging.
- Developing and implementing Chemical Action Plans to reduce uses and releases of persistent, bioaccumulative, and toxic chemicals.
- Replacing dry cleaning machines that use toxic perchloroethylene (also known as "PERC") solvents with safer alternatives.
- Replacing recreational foam cubes containing toxic flame retardants in schools, gyms, and gymnastics facilities.
- Helping automotive repair shops replace toxic automotive degreasers and switching to safer alternatives.
- Certifying manufacturer compliance with the Better Brakes law and assessing availability of alternative auto brake friction materials that eliminate or reduce copper, asbestos fibers, cadmium, lead, and mercury.
- Researching safer alternatives to toxic boat paints and implementing restrictions on boat paints containing the highly toxic substance Irgarol.
- Overseeing the mercury switch "bounty" program, which pays recyclers to safely remove automotive switches containing highly toxic liquid mercury before cars are sent for crushing, disposal, and recycling.
- Working with a multistate effort to monitor EPA's implementation of the updated federal Toxic Substances Control Act.
- Working to mainstream green chemistry in Washington.
- Participating in collaborations that improve transparency about chemicals in products.
- Working with State Efficiency and Environmental Performance (commonly referred to as "SEEP") agencies to identify and implement efforts to reduce toxic chemicals in products and materials purchased through the state.

Reducing Dangerous Waste: Pollution Prevention Planning

Businesses that produce more than 2,640 pounds of dangerous waste each year are required to submit a plan to reduce hazardous substance use and dangerous waste. This requirement also applies to businesses that report toxic releases under Section 313 of the federal Emergency Planning and Community Right-to-Know Act. These plans are known as Pollution Prevention Plans, or P2 Plans. Implementing these plans can help businesses use fewer toxic chemicals and improve worker safety while reducing risks to the environment.

Reducing Risk through Technical Assistance to Businesses

Face-to-face technical assistance visits result in significantly higher voluntary compliance rates. Hundreds of businesses in Washington have saved money and increased their competitive advantage by reducing their use of hazardous substances, and this helps ensure better compliance with state dangerous waste laws.

Two strategies are key to breaking the cycle of ongoing cleanup expenses. First, use fewer toxic chemicals; and second, safely manage hazardous substances for which there is no safer alternative available. Facilities that produce more dangerous waste tend to run a higher risk of mismanaging that waste. Mismanaged waste can contaminate the environment and may eventually require cleanup.

Although the COVID pandemic continued to restrict our efforts during the 2021-23 biennium, HWTR staff conducted more than 200 business assistance visits. During those visits, we provided business-specific recommendations on how to:

- Reduce use of hazardous substances.
- Avoid generating waste.
- Manage dangerous waste safely.
- Achieve energy savings.
- Conserve water.
- Prevent stormwater contamination.

For the 2023-25 biennium, HWTR staff will continue our technical assistance efforts with a focus on reducing use of hazardous substances and safely managing those substances. Our goals include making at least 420 technical assistance visits and engaging with at least 10 Washington businesses through an in-depth toxics reduction project.

Reducing Risk from Small Businesses: Pollution Prevention Assistance Program

Smaller businesses are less likely to get the attention of regulatory agencies for waste, air, or stormwater issues. But many smaller businesses also generate dangerous waste. If stored, managed, or disposed of incorrectly, they can cause pollution to the state's land, air, and water.

The Pollution Prevention Assistance (PPA) Partnership began in 2008 (formerly known as Local Source Control) when Ecology developed interagency agreements with local government agencies in the Puget Sound and Spokane River watersheds to provide technical assistance to smaller businesses.

In 2015, additional funding for the Columbia River watershed allowed Ecology to add new partners in Clark County. Since that time, the program has maintained a total of 27 contracts with cities, counties, and local health authorities to help businesses ensure their waste doesn't contaminate soil, air, wastewater, or stormwater. Local government partners educate businesses and help them implement best management practices to ensure they comply with environmental laws and regulations.

The PPA technical assistance program helps business with spill prevention and cleanup preparedness. In the 2021-23 biennium, our contracted partners made over 5,938 technical assistance visits to small businesses, helping them resolve almost 1,640 potential threats to the environment.

In the 2019–21 biennium, the PPA Program added a Product Replacement Program to help businesses with costs associated with switching to safer products and technology. The Partnership's first effort under this program was to help dry cleaners switch from PERC to a safer cleaning technology by reimbursing some of the costs associated with purchasing new, safer equipment. This program has helped almost all the PERC dry cleaners in the state switch to safer cleaning methods.

In the 2021-23 biennium, Ecology added new product replacement programs for solvent-based automotive degreasers and recreational foams containing hazardous flame retardants in schools, gyms, and gymnastics facilities. Ecology also began researching options to replace PFAS-containing firefighting foams with safer alternatives. For the 2023-25 biennium, we will continue this work and build on the work started previously.

Managing Dangerous Waste and Materials

Compliance Inspections

While much of HWTR's work is focused on preventing tomorrow's toxic threats, we must still manage today's dangerous waste safely.

Formal dangerous waste inspections at larger, regulated businesses and facilities are critical to environmental health. These businesses handle the bulk of the state's dangerous waste. Inspections can be unannounced or scheduled within a several-month period.

Routine inspections are a critical regulatory line of defense between Washington's environment and the millions of pounds of dangerous waste produced each year. Mismanaging dangerous waste:

- Allows harmful chemicals to contaminate our water, soil, and air.
- Pollutes stormwater runoff.
- Creates expensive cleanups.
- May result in exposure to toxic chemicals or other injuries.

During the 2021-23 biennium, HWTR's environmental inspectors performed over 700 compliance inspections at facilities that generate or manage dangerous waste. Inspectors identified areas of concern and violations of the Dangerous Waste Regulations throughout the inspection process. Ecology worked with businesses to educate them and correct problems.

For the 2023-25 biennium, our inspection efforts will continue, and we expect to focus on in-person inspections.

Permitting and Corrective Action

Ecology issues permits to dangerous waste treatment, storage, and disposal (TSD) facilities. Commercial TSDs handle millions of pounds of dangerous waste, mostly generated by other businesses or facilities. Ecology also issues a permit to some facilities to store their company's dangerous waste for long periods. Facilities that recycle dangerous waste or process used oil aren't required to obtain a permit, but they are subject to many of the same rules that TSDs are required to follow.

When a facility moves locations or closes a tank or other area where dangerous waste is handled or stored, Ecology oversees the closure activities and any necessary cleanup. TSD facilities are mostly located near Puget Sound and are often contaminated. Cleanups at TSD facilities are known as corrective action.

Corrective actions are currently occurring at 42 "priority sites" in Washington. Work is progressing at all sites, and we expect to have many of these cleanups finished or in maintenance status by 2030. As sites are cleaned up, those that remain are the most complex and contaminated. The full cleanup process at an average site takes 10-30 years to complete.

Cleanups are expensive. However, owners of corrective action sites are responsible for paying for all cleanup activities. Ecology is often able to recover costs from the property owners. Once clean, these properties provide opportunities for habitat restoration, economic development, and public recreation.

Ensuring Current and Updated Rules

As EPA updates its rules, Ecology is required to amend the state's Dangerous Waste Regulations to maintain consistency and be equally stringent. This is a requirement of Washington's EPA Authorization.

"Authorization" is a federal rulemaking process where EPA delegates to the state the primary responsibility for implementing the federal hazardous waste rules. As an authorized state, Ecology leads Washington State's compliance efforts on EPA's behalf.

During the 2021-23 biennium, HWTR began the process of assessing potential changes to the Dangerous Waste Regulations for the next rulemaking process. Potential changes being considered are based on EPA rule updates, errors found during the current EPA Authorization process, and proposed state-only changes.

Ecology is in the process of obtaining updated EPA Authorization of our Dangerous Waste Regulations to incorporate the 2019 and 2020 rulemakings. These rulemakings incorporated the EPA Generator Improvements Rule and Pharmaceutical Rules, along with updates based on smaller EPA rule package adoptions.

Providing Outreach and Information

Access to Hazardous Substance and Waste Information

Ecology's data systems gather, maintain, and report a range of information about hazardous substances and dangerous waste. Data sets include hazardous substances stored, toxic chemicals present in children's products, toxic substances released to the environment, dangerous waste generated and managed, and pollution prevention measures taken by businesses. We compile and use this data to inform our program efforts. We also make the data available to emergency responders, individuals, businesses, and local government decision makers.

Ecology provides information on hazardous substances and dangerous waste to businesses and the public through our website, printed materials, telephone information line, and Shoptalk[16] newsletter. We have over 7,000 subscribers to Shoptalk. These resources help businesses and the public make informed decisions on using and safely managing hazardous substances to protect human health and the environment.

Emergency Planning and Community Right-to-Know

Ecology supports multiple sections of the federal Emergency Planning and Community Right-to-Know Act (EPCRA). This work is coordinated with EPA, other state agencies, local emergency planning committees, and Tribes. Ecology manages two basic services through this law and related state rules:

- Tracking bulk storage of hazardous chemicals to facilitate emergency planning and response.
- Tracking and reporting on the release of toxic chemicals into communities across the state.

In 1984, Congress used EPCRA to mandate that all states support the Act's basic community right-to-know needs. There is no federal funding for this work. The core state agencies involved are the Department of the Military's Emergency Management Division, the Washington State Patrol, Ecology, and member agencies of the Washington State Emergency Response Commission.

To comply with the mandate, thousands of businesses annually report chemical inventories to Ecology. Also, hundreds of manufacturers annually report their permitted and other chemical releases into the air, ground, water, sewers, and what is shipped off-site. Ecology collects, updates, manages, uses, and distributes this data.

[16] https://www.ecy.wa.gov/Regulations-Permits/Guidance-technical-assistance/Dangerous-waste-guidance/Shoptalk

The State Solid and Hazardous Waste Plan: Moving Washington Beyond Waste and Toxics

The state of Washington is required by law to have a Hazardous Waste Plan and to update it at least every five years. The plan's purpose is to guide waste and toxics reduction and safe waste management in the state. Ecology last updated a combined Solid and Hazardous Waste plan in 2021, addressing new laws and associated work, demographic and industry trends, and program planning. For more details, please see Washington's State Solid and Hazardous Waste Plan: Moving Washington Beyond Waste and Toxics[17].

Activities, Results, and Performance Measures

Increase Safe Hazardous Waste Management, Pollution Prevention, and Compliance with Dangerous Waste Regulations

This activity supports the work the agency does to:

- Conduct dangerous waste compliance inspections, escalating to formal enforcement actions when necessary.
- Amend the Dangerous Waste Regulations to keep our rules current with the federal program and maintain state authorization.
- Provide dangerous waste management and pollution prevention education and technical assistance to businesses, including via local specialists through the Pollution Prevention Assistance partnership.
- Issue permits to facilities that treat, store, or dispose of dangerous waste, and ensure that proper financial assurance requirements are in place.

Expected Results

Dangerous waste generators and facilities that treat, store, or dispose of large volumes of dangerous waste are in compliance with state and federal rules designed to protect human health and the environment.

Performance Measure

- Number of significant toxics-related environmental threats resolved.

[17] https://apps.ecology.wa.gov/publications/SummaryPages/2104050.html

Prevent the Use of Toxic Chemicals in Products and Promote Safer Alternatives

This activity supports the work the agency does to:

- Work with key organizations and interest groups, especially Department of Health, to identify chemicals of concern, review science, and develop and implement action plans to reduce presence of toxic chemicals in the environment.
- Provide information about safer alternatives and green chemistry to business, education, government, and public sectors.
- Update and enforce statutory reporting requirements and limits in specific products.

Expected Results

- Persistent, bioaccumulative toxic chemicals (PBTs) and other chemicals of concern are reduced or eliminated from Washington's environment, reducing risks to people, wildlife, and Washington's environment.
- Manufacturers, Washington residents, and other sectors use safer alternative chemicals or products.

Performance Measure

- Number of site visits to small businesses by local jurisdictions in the Pollution Prevention Assistance partnership.

Reduce the Generation of Hazardous Waste and the Use of Toxic Substances through Technical Assistance

This activity supports the work the agency does to provide pollution prevention and toxics reduction technical assistance to hazardous waste generators.

Expected Results

- Hazardous waste generation and the use of toxic chemicals is reduced, or safer alternatives are used.
- Businesses spend less on resource use or waste cleanup and disposal.
- Public health and the environment are better protected.

Performance Measures

- Number of pollution prevention or toxics reduction technical assistance site visits to waste generators.
- Dollars saved by businesses participating in technical assistance projects.
- Pounds of dangerous waste reduced because of Ecology toxics reduction projects.
- Pounds of toxic chemical use eliminated because of Ecology toxics reduction projects.

Support and Engage Our Communities and Provide Hazardous Substance and Waste Information

This activity supports the work the agency does to:

- Provide the public and local governments with information about the type, location, and source of hazardous substances in local communities.
- Provide waste generators with best practices and other helpful information.
- Collect, manage, and report hazardous waste generation data to meet EPA's data reporting and community right-to-know requirements.
- Engage with various interested parties and communities to inform environmental justice and hazardous waste and toxics reduction efforts.

Expected Results

- The public and local governments have the information they need to prepare for chemical hazards in their communities.
- Generators have access to waste management best practices and other helpful information to manage waste properly.

Performance Measure

- Number of new or updated communication products published.

Remediate Hazardous Waste Pollution and Restore Contaminated Sites to Productive Use

This activity supports the work the agency does to:

- Oversee cleanup of high-priority corrective action sites.
- Provide pollution prevention and toxics reduction technical assistance to hazardous waste generators.

Expected Results

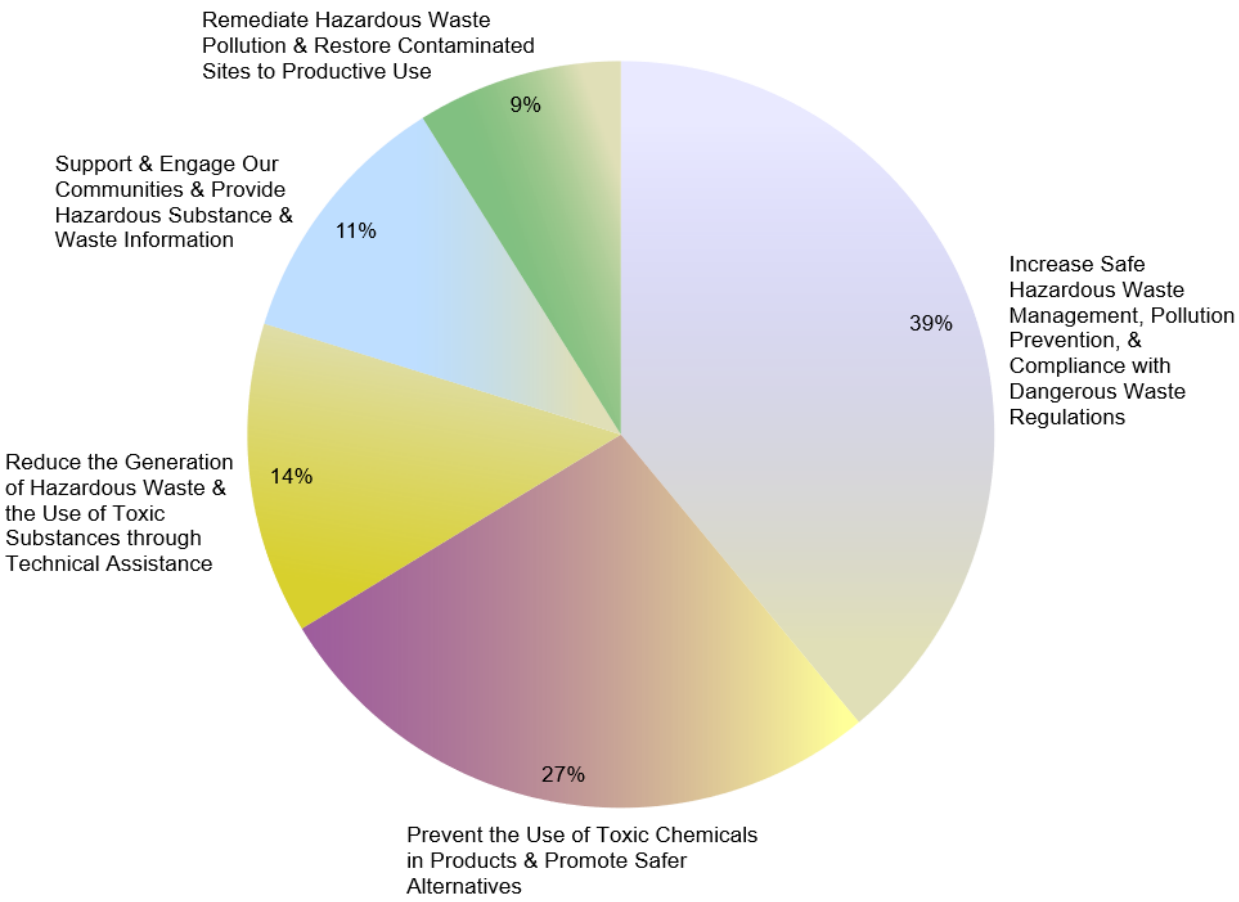
Potentially liable parties manage corrective action sites to meet federal and state cleanup requirements and control and remediate contamination.

Performance Measure

- New measure is being developed.

Hazardous Waste & Toxics Reduction Program 2023-25 Biennium Budget by Activities

Operating = $57.5 Million | Capital = $10.7 Million | Total = $68.2 Million | FTEs = 155.6



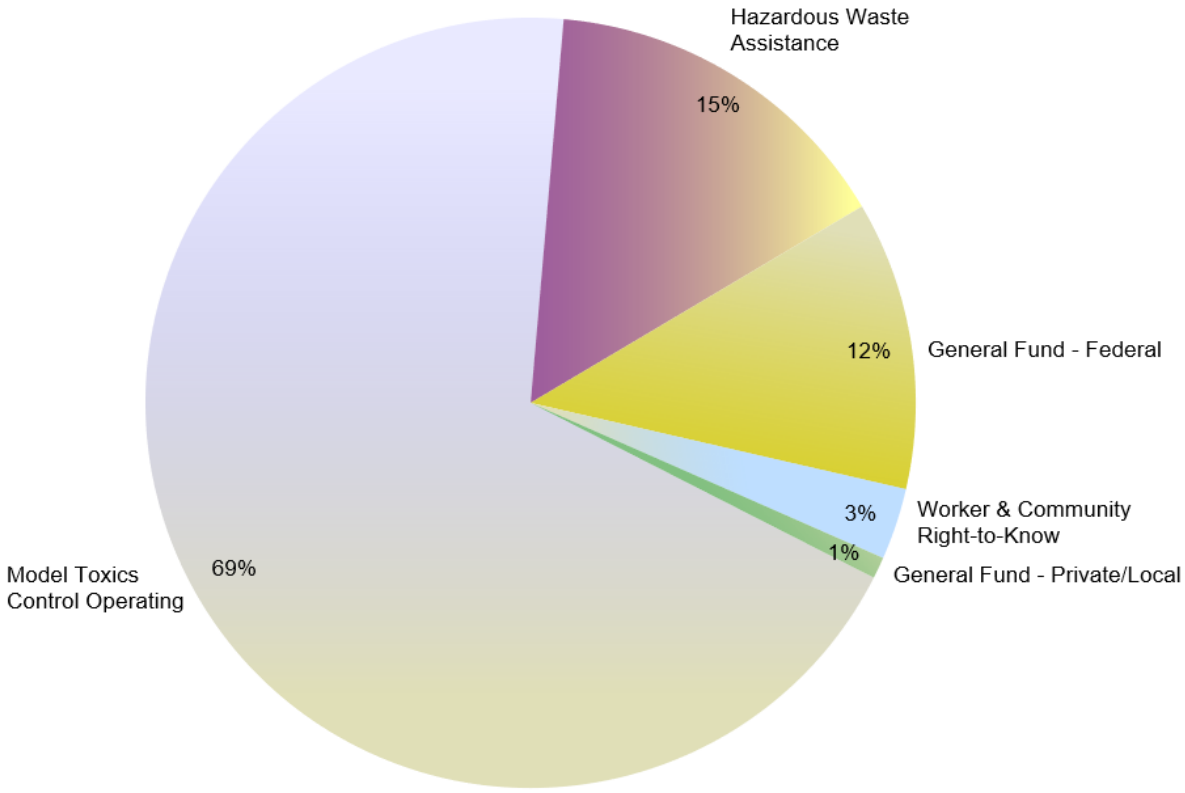
Activities	Amount	%	FTEs
Increase Safe Hazardous Waste Management, Pollution Prevention, and Compliance with Dangerous Waste Regulations (A021)	$22,401,000	39%	55.6
Prevent the Use of Toxic Chemicals in Products and Promote Safer Alternatives (A065)	15,724,000	27%	36.0
Reduce the Generation of Hazardous Waste and the Use of Toxic Substances through Technical Assistance (A052)	7,787,000	14%	24.0
Support and Engage Our Communities and Provide Hazardous Substance and Waste Information (A019)	6,483,000	11%	24.8

Hazardous Waste & Toxics Reduction Program

Activities	Amount	%	FTEs
Remediate Hazardous Waste Pollution and Restore Contaminated Sites to Productive Use (A031)	5,116,000	9%	15.2
Hazardous Waste & Toxics Reduction Operating Budget Total	**$57,511,000**	**100%**	**155.6**

Hazardous Waste & Toxics Reduction Program 2023-25 Biennium Budget by Fund Source

Operating = $57.5 Million | Capital = $10.7 Million[18] | Total = $68.2 Million | FTEs = 155.6



Operating Fund Sources	Amount	%	Uses
Model Toxics Control Operating (23P)	$39,570,000	69%	Conduct agency programs to identify priority hazardous chemicals, identify consumer products that contain those priority chemicals, and determine if regulatory actions are needed to reduce those priority chemicals. Promote reduction of toxic and other hazardous substances in consumer products to reduce production of hazardous waste. Promote safe waste management, primarily through technical assistance to

[18] Funded entirely by Model Toxics Control Capital (23N).

Operating Fund Sources	Amount	%	Uses
			businesses, inspections of large quantity generators of hazardous waste and permitted treatment, storage and disposal facilities, and hazardous waste cleanups. Conduct criminal investigations and enforcement actions. Review and analyze waste-derived fertilizers as part of the fertilizer registration process. Fund and train local government specialists to provide assistance in waste management and reduction and source control. Manage permits, closures, and cleanups at facilities that treat, store, or dispose of hazardous waste. Compile information on hazardous substance use and make this information available to residents and other public entities.
Hazardous Waste Assistance (207)	8,709,000	15%	Provide technical assistance to hazardous waste generators and hazardous substance users. Identify safer chemical alternatives for toxic or hazardous chemicals to help businesses, governments and residents make better choices on what to use and buy.
General Fund – Federal (001)	6,955,000	12%	Grant funds received from EPA to implement federal Resource Conservation and Recovery Act (RCRA) and pollution prevention innovations.
Worker & Community Right-to-Know (163)	1,745,000	3%	Provide data systems that compile/gather, maintain, report, and make available current hazardous substance and waste information to individuals, businesses, emergency responders, and local government decision makers. Address strategies to best implement environmental justice principles in state agency decision-making, to address environmental health disparities.
General Fund – Private/Local (001)	532,000	1%	Manage cleanups at facilities that treat, store, or dispose of hazardous waste.

Operating Fund Sources	Amount	%	Uses
Operating Budget Total	**$57,511,000**	**100%**	
Capital Fund Sources	**Amount**	**%**	**Uses**
Model Toxics Control Capital (23N)	$10,723,359	100%	Remove known toxic components in vehicles and appliances, including switches containing mercury, prior to crushing and shredding. Remove and replace toxic chemicals present in consumer and commercial products, before they get into the environment, through product replacement opportunities, which directly support current and past Corrective Action Plans (CAPs) recommendations.
Capital Budget Total	**$10,723,359**	**100%**	
Haz. Waste & Toxics Reduction Operating & Capital Budget Total	**$68,234,359**		

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Jay Decker (the Science and Engineering Unit Supervisor for the Nuclear Waste Program) inspects part of the Tank-Side Cesium Removal System (TSCR) at Hanford. Ecology regularly inspects dozens of Hanford site facilities. TSCR began pretreating tank waste in January 2022.

Nuclear Waste Program

Program Mission

The Nuclear Waste Program's mission is to protect the state's air, water, and land at and adjacent to the U.S. Department of Energy's (USDOE) Hanford Site by overseeing effective and efficient cleanup to ensure sound management of mixed hazardous wastes in Washington.

Environmental Threats

The Hanford Site covers 586 square miles in Southeast Washington. Hanford's half-century of nuclear materials production created one of the world's most polluted areas. The cleanup challenges include:

- Removing and vitrifying (incorporating into glass) an estimated 56 million gallons of radioactive and chemically hazardous waste from Hanford's 177 underground storage tanks.
- Inspecting radioactive mixed waste stored in over 10,000 stored containers and approximately 12,000 buried and aging containers that need to be retrieved and properly managed.
- Ensuring the safe management of 1,936 highly radioactive capsules containing concentrated cesium and strontium compounds and of spent ion exchange columns used to pretreat tank waste, which are all stored on above-ground pads.
- Monitoring about 190 square miles of contaminated groundwater that flows to and some of which eventually enters the Columbia River. About 61 square miles of contaminated groundwater currently exceed federal and state drinking water standards.
- Permitting the operation and closure of 35 hazardous waste treatment, storage, and disposal sites ranging from small demolition sites to half-mile-long nuclear chemical processing buildings.
- Cleaning up the remaining waste sites and facilities across the Hanford Site. As cleanup along the Columbia River nears completion, the focus is shifting to 1,500 waste sites in the Central Plateau.

Authorizing Laws

USDOE operates the Hanford Site. USDOE, the U.S. Environmental Protection Agency (EPA), and the Department of Ecology signed a comprehensive cleanup and compliance agreement on May 15, 1989.

The Hanford Federal Facility Agreement and Consent Order, known as the Tri-Party Agreement (TPA), contains required actions for the Hanford Site cleanup. The TPA reflects a concerted goal of achieving, in an aggressive manner, full regulatory compliance and remediation with enforceable milestones.

Until the late 1980s, USDOE did not fully comply with state hazardous waste, air, or water pollution standards. The TPA includes a consent order requiring USDOE at the Hanford Site to come into compliance with the same hazardous waste rules that regulate private industry.

The laws applied at Hanford include:

- Federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund)
- Federal Hazardous and Solid Waste Amendments of 1984
- Federal Resource Conservation and Recovery Act (RCRA)
- Federal Toxic Substances Control Act
- Chapter 70A.15 RCW, Washington clean air act
- Chapter 70A.300 RCW, Hazardous waste management
- Chapter 70A.305 RCW, Hazardous waste cleanup—Model toxics control act
- Chapter 90.48 RCW, Water pollution control

Constituents and Interested Parties

- Congress, USDOE, EPA, the Defense Nuclear Facilities Safety Board, and the U.S. Fish and Wildlife Service.
- Environmental Council of the States, National Governors Association, Western Governors' Association, State and Tribal Government Working Group funded by USDOE, and the Oregon Department of Energy.
- Tribal Nations: As the state's lead for natural resource damage assessments at the Hanford Site, Ecology works with the Yakama, Umatilla, and Nez Perce Tribes.
- Franklin, Benton, and Grant counties and the cities of Pasco, Richland, Kennewick, Benton City, and West Richland.
- Hanford Advisory Board, Heart of America Northwest, Hanford Challenge, Physicians for Social Responsibility, Washington League of Women Voters, and Columbia Riverkeeper.
- Tri-Cities area businesses (TRIDEC), labor groups, and residents.
- Washington State Departments of Health and Fish and Wildlife, and the Northwest Interstate Compact on Low-Level Radioactive Waste.

Focus Areas

Slowed Progress in Site Cleanup

USDOE's Environmental Management Program is the largest environmental cleanup program in the nation. The Hanford Site cleanup is the largest and most costly effort in this program.

The federal budget continues to be a major concern. It has increased recently, but not enough to keep up with increasing cleanup costs. If that trend continues, it will become impossible for USDOE to meet the cleanup schedule set in the TPA and Tank Waste Consent Decree milestones. Ecology has contracted with an outside firm to help us advocate for a compliant federal budget.

USDOE has missed several major cleanup milestones over the years and in 2019 notified Ecology that current tank retrieval and Waste Treatment Plant (WTP) construction milestones are in jeopardy. USDOE put the pretreatment and high-level waste vitrification facilities on hold based on funding and project technical issues.

In 2020, the Tri-Party agencies entered into "Holistic Negotiations" to identify a holistic and realistic path forward for Hanford's tank waste.

The agencies announced a conceptual agreement from these negotiations in May 2023, and they have begun draft proposed modifications to the TPA and Consent Decree that will go out for public comment.

Funding has also been allocated for the high-level waste facility again, allowing for design work to continue.

Also, the partial collapse of the roof over PUREX Tunnel 1 in spring 2017 and active leaks in two single-shell underground tanks illustrate rising risks due to aging infrastructure throughout the Hanford Site. Addressing those risks competes with sitewide cleanup priorities within the insufficient federal cleanup budget.

Tank Waste Cleanup

Cleaning up underground tanks at the Hanford Site will be one of the longest, most costly public works projects ever performed by the U.S. government.

A key element of the cleanup work is retrieving radioactive waste from aging, failing, single-shell tanks and placing the waste in newer (although still past their design life) double-shell tanks for eventual treatment and disposal.

Tank waste retrieval has slowed. USDOE will delay retrievals because there is very little double-shell tank space available and will shift resources to focus on meeting Tank Waste Consent Decree milestones.

In April 2021, USDOE announced that Tank B-109, a single-shell tank that is at least 75 years old, was leaking. This announcement followed a tank leak assessment that began in 2020.

B-109 joined Tank T-111 as known active leakers on the Hanford Site, meaning toxic, radioactive waste is draining into the soil beneath the tanks. Any waste leaked into the soil could eventually make its way into groundwater, and from there into the Columbia River. However, in August 2022, Ecology and USDOE announced an Agreed Order, addressing both actively leaking tanks and future single-shell tank leaks.

USDOE has stopped construction on some parts of the Waste Treatment Plant due to funding and project technical issues. Instead, they are focusing on completing facilities related to direct-feed, low-activity waste (DFLAW).

The low-activity waste vitrification facility is all but complete, with the first melter heatup finished and undergoing testing and commissioning work.

Ecology also supported permitting of two new facilities to support DFLAW: the effluent management facility and the tank-side cesium removal facility (TSCR). TSCR began pre-treating tank waste in January 2022

We are working to ensure that USDOE meets its Consent Decree obligation to complete hot commissioning of the DFLAW process by 2025.

Continuing Hanford Cleanup Progress

Progress has continued on some highly contaminated sites at Hanford. Ecology continues to oversee USDOE's efforts to maintain progress on stabilizing and decommissioning these sites to reduce hazards to workers and the environment.

- Plutonium Finishing Plant (PFP) – A clean soil cover was placed in November 2021, and the facility is now in surveillance and maintenance status.
- Contaminated groundwater – Roughly 30.5 billion gallons of contaminated groundwater has been treated in the central Hanford "200 Area," removing 3,401,340 kg of nitrate, 32,670 kg of carbon tetrachloride, 510 kg of chromium, and 1,450 kg of uranium.

Protecting the Columbia River

Work under both interim and final Superfund remedial decisions must continue to clean up existing groundwater contamination before it enters the Columbia River. Highly contaminated soil can add more radioactivity and toxic chemicals to the groundwater contamination that threatens the Columbia River.

Soil excavation at the last of nine nuclear reactor areas will continue for several more years.

With the exception of the 324 Building and 300-296 remediation site, the focus is now shifting to investigate and formulate cleanup plans for more than 1,000 sites in central Hanford where waste leaked, spilled, or was intentionally disposed.

Early in 2023, USDOE discovered highly radioactive soil in unanticipated areas under the 324 Building, which is near the town of Richland and only several hundred yards from the Columbia River. This is leading to reassessment of the cleanup decision that has been underway since 2013. Ecology and EPA will work together to review the path forward and implement any needed changes to address this concern.

Completing the final Superfund investigations in central Hanford has taken more than a decade longer than expected and is planned to continue for several years. The physical cleanup is planned to continue through 2042.

Potential grouting of Hanford tank waste

USDOE has been pursuing the Test Bed Initiative (TBI) for several years to demonstrate the feasibility of a non-vitrification option for a portion of Hanford's low-activity tank waste.

This method of alternative treatment entails pretreating and filtering tank waste as it is retrieved from a tank to produce low-activity tank waste. This waste is then shipped to a treatment facility to be mixed with grout and is ultimately disposed out of state. This pilot project is now entering its second phase.

In June 2022, USDOE submitted its research, development, and demonstration permit application to Ecology for Phase 2 of TBI. Ecology is currently processing the permit and expecting to send it out for comment in spring 2024.

We remain supportive of the implementation and completion of Phase 2 and look forward to achieving what we hope will be the demonstration of a valid path to final appropriate disposal of grouted Hanford tank waste at a facility without the contamination to groundwater concerns we have at Hanford and within Washington State.

Activities, Results, and Performance Measures

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

Ecology protects public health and natural resources by providing regulatory oversight for the treatment and removal of highly radioactive tank waste at the Hanford Site. 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 the Immobilized High-level Waste Storage Facility.

Expected Results

- Fifty-three million gallons of high-level radioactive mixed waste from Hanford's interim storage tanks are retrieved and treated.
- Construction of the Hanford Tank Waste Treatment Plant continues at a rate that supports approved milestones.
- Conceptual planning and design of an interim storage facility for immobilized high-level waste starts.

Performance Measure

- Percentage completion of tasks required to construct and operate Hanford's low-activity tank waste treatment plant.

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

Ecology protects public health and natural resources by working to restore the public use of air, soil, and water at the Hanford Site through cleanup of contaminated sites from past activities. Radioactive and hazardous contaminants are removed, residual contaminants are contained and monitored, and mitigation of natural resource damage occurs.

Expected Results

- Public use of the air, soil, and water at Hanford is restored.
- Human and environmental risks associated with past Hanford activities is removed or reduced.
- Cleanup of contaminated waste sites adjacent to the Columbia River continues.
- Cleanup on the Hanford Central Plateau starts.

Performance Measures

- Gallons of groundwater contaminated by hexavalent chromium that is remediated at Hanford (in millions of gallons).
- Pounds of chromium removed from contaminated groundwater at Hanford.

Ensure the Safe Management of Radioactive Mixed Waste at Hanford

Ecology provides regulatory oversight for the safe storage, treatment, and disposal of liquid and solid dangerous and radioactive mixed waste at the Hanford Site, as well as at radioactive mixed waste sites throughout the state.

This activity regulates management of this historic and ongoing waste stream and ensures the retrieval, treatment, and safe disposal of high-risk transuranic and high-activity waste currently buried in shallow, unlined trenches.

Expected Results

- Transuranic and mixed low-level waste is managed and retrieved, treated and processed, and stored and disposed of in compliance with existing regulations to reduce risks posed to Hanford workers and the environment.
- 15,058 cubic meters (cumulative) of retrievably stored waste retrieved from the burial grounds at Hanford, certified for shipment to the Waste Isolation Pilot Plant in New Mexico, or treated for disposal at Hanford by September 30, 2030.
- The US Ecology commercial low-level radioactive waste site Model Toxics Control Act (MTCA) remediation is completed in coordination with closure activities being directed by the Washington Department of Health.

Performance Measure

- Cubic meters of radioactive, dangerous waste certified by USDOE for shipment to the Waste Isolation Pilot Project in New Mexico or treated for disposal at Hanford.

Ensure Safe Tank Operations, Storage of Tank Wastes, and Closure of the Waste Storage Tanks at Hanford

Ecology protects public health and the environment by enforcing regulatory compliance at the Hanford site to ensure the safe storage, treatment, and disposal of the high-level radioactive tank waste according to the Hanford Tank Waste Project.

Expected Results

- Reduce the risk to public health and the environment by safely removing and treating 53 million gallons of waste on the Hanford site and closing all 177 tanks by 2028.

Performance Measure

- Number of single-shell tanks containing radioactive hazardous waste emptied.

Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford

Ecology oversees the decommissioning of the large, complex, and high-risk facilities throughout the Hanford site and provides regulatory oversight of mixed waste management activities at facilities not under the management of the U.S. Department of Energy (Columbia Generating Station, Perma-Fix Northwest, and the U.S. Navy's Puget Sound Naval Shipyard).

Expected Results

All major facilities on the Hanford Site will be decontaminated and decommissioned, and either demolished or placed into a long-term safe storage configuration. This includes:

- Removal and remediation actions for the 324 Building.

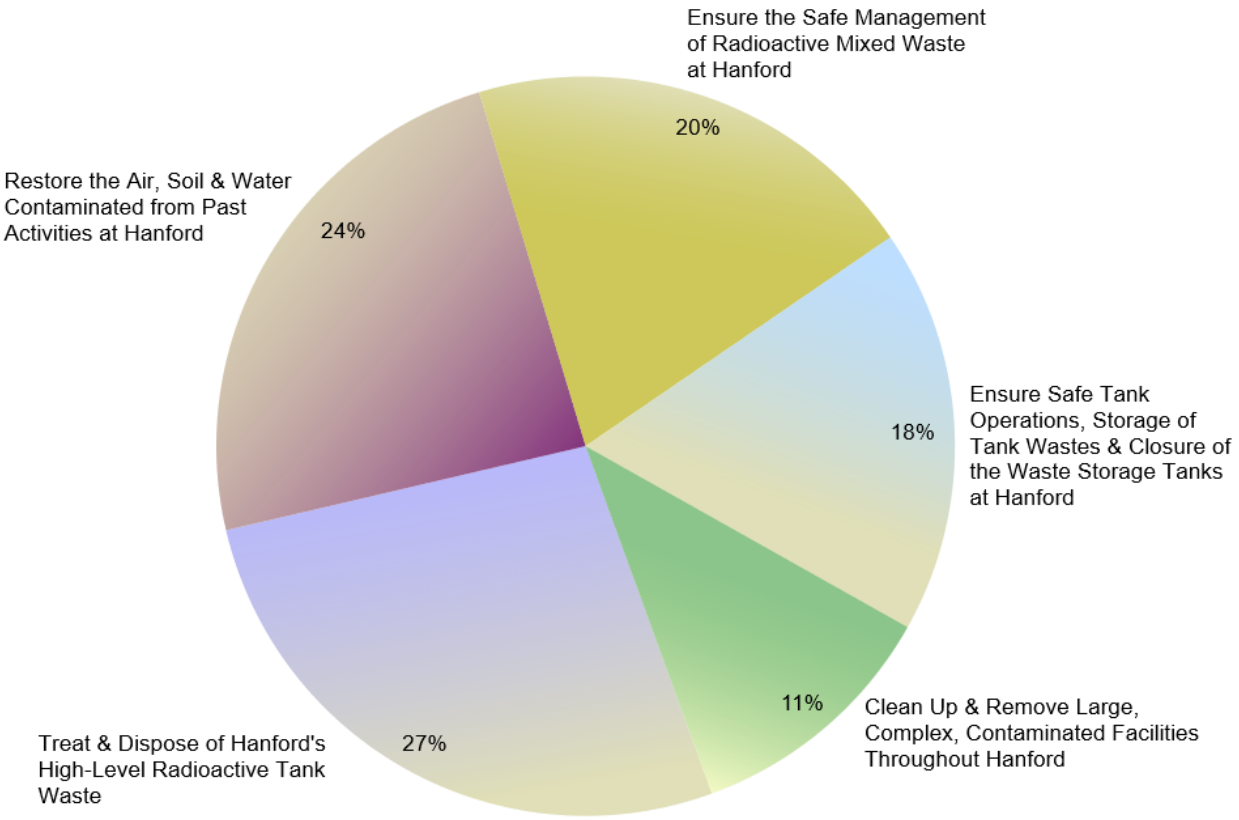
- Transfer of cesium and strontium waste from the Waste Encapsulation Storage Facility to dry storage at the new permitted Capsule Interim Storage facility.
- Removal actions for the Plutonium Uranium Extraction Plant (PUREX) and B Plant facilities. Removal action for the Plutonium Uranium Extraction Plant and B plant facilities.
- Continued oversight of permitting and compliance for facilities that manage mixed waste in Washington.

Performance Measure

- Percentage of decontamination or decommission complete at the Hanford plutonium finishing plant.

Nuclear Waste Program 2023-25 Biennium Budget by Activities

Operating = $32.4 Million | Capital = $1.7 Million[19] | Total = $34.1 Million | FTEs = 103.5



Activities	Amount	%	FTEs
Treat & Dispose of Hanford's High-Level Radioactive Tank Waste (A016)	$8,732,000	27%	33.6
Restore the Air, Soil & Water Contaminated from Past Activities at Hanford (A014)	7,779,000	24%	16.8
Ensure the Safe Management of Radioactive Mixed Waste at Hanford (A018)	6,528,000	20%	20.4
Ensure Safe Tank Operations, Storage of Tank Wastes & Closure of the Waste Storage Tanks at Hanford (A017)	5,749,000	18%	18.6

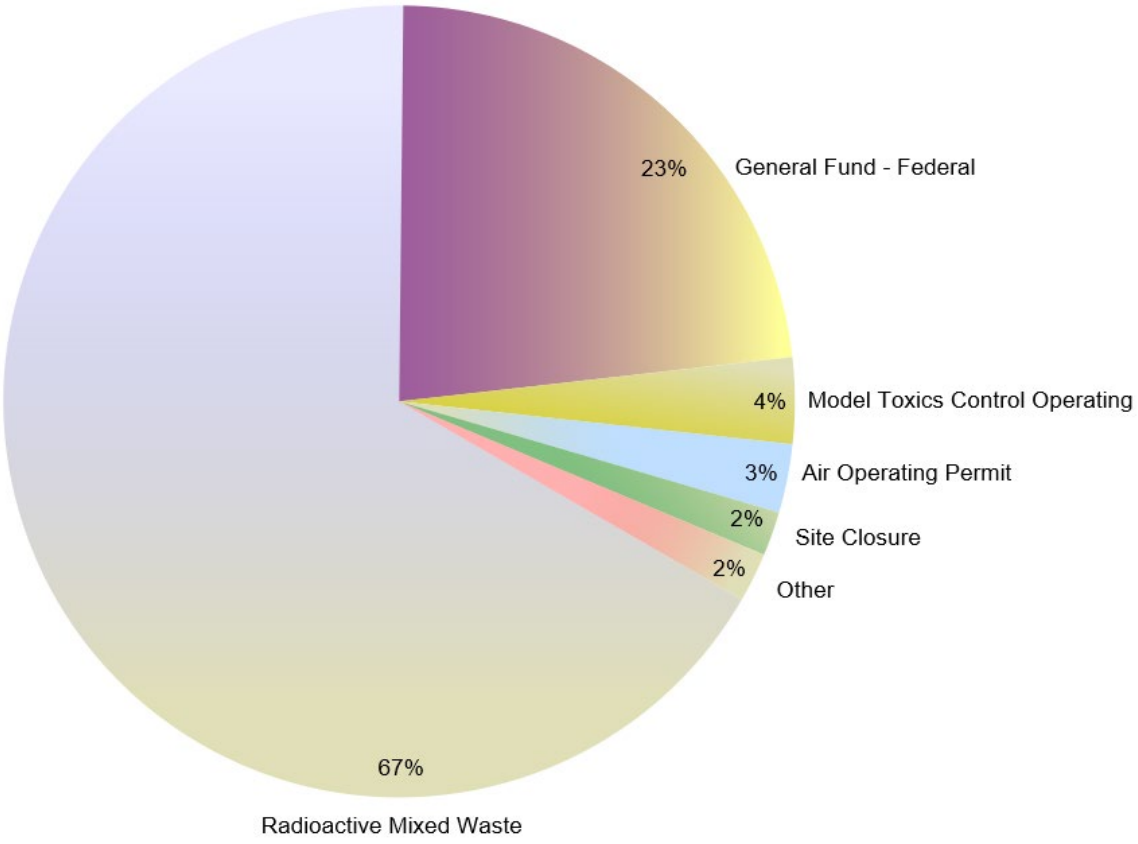
[19] Funded entirely by Site Closure Account (125).

Nuclear Waste Program

Activities	Amount	%	FTEs
Clean Up & Remove Large, Complex, Contaminated Facilities Throughout Hanford (A015)	3,653,000	11%	14.1
Nuclear Waste Operating Budget Total	**$32,441,000**	**100%**	**103.5**

Nuclear Waste Program 2023-25 Biennium Budget by Fund Source

Operating = $32.4 Million | Capital = $1.7 Million[20] | Total = $34.1 Million | FTEs = 103.5



Operating Fund Sources	Amount	%	Uses
Radioactive Mixed Waste (20R)	$21,635,000	67%	Fund implementation of the Hazardous Waste Management Act at facilities that manage radioactive mixed waste. The HWMA provides a comprehensive statewide framework for the planning, regulation, control, and management of hazardous waste, which will prevent land, air, and water pollution and conserve the natural, economic, and energy resources of the state.

[20] Funded entirely by Site Closure (125).

Operating Fund Sources	Amount	%	Uses
General Fund – Federal (001)	7,471,000	23%	Oversee removal of radiological and chemical contaminants at Hanford, provide regulatory assistance to USDOE and EPA and implement the provisions of the Hanford Federal Facility Agreement and Consent Order.
Model Toxics Control Operating (23P)	1,144,000	4%	Oversee remediation of historic hazardous substance releases at the commercial low-level radioactive waste disposal facility (commercially operated disposal site on Hanford).
Air Operating Permit (219)	901,000	3%	Conduct permitting and compliance assurance activities for air emissions sources on the Hanford Site.
Site Closure (125)	582,000	2%	Northwest Interstate Compact low-level radioactive waste management policy oversight for commercial low-level radioactive waste disposal within the state (commercially operated disposal site on Hanford).
Other:			
Air Pollution Control (216)	230,000	<1%	Regulation of air pollutants at new or modified Hanford facilities subject to the Clean Air Act.
Water Quality Permit (176)	206,000	<1%	Activities needed to maintain safe facilities for treating wastewater discharges at the Hanford Site.
General Fund – Private/Local (001)	194,000	<1%	All moneys except the $600 required for Ecology's annual prime lease payment to USDOE are passed through to Benton County.
General Fund – State (001)	78,000	<1%	Initial regulation air pollutant sources not billable under Air Pollution Control (216) and Congressional Liaison activities not funded with GF-Fed or RMWA funds.

Operating Fund Sources	Amount	%	Uses
Operating Budget Total	**$32,441,000**	**100%**	
Capital Fund Sources	**Amount**	**%**	**Uses**
Site Closure (125)	$1,653,755	100%	Investigation, closure, and decommissioning of the Hanford low-level radioactive waste disposal facility.
Capital Budget Total	**$1,653,755**	**100%**	
Nuclear Waste Operating & Capital Budget Total	**$34,094,755**		

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Left to right: Carly Perez (a Washington Conservation Corps crew supervisor) and Bri Farley (a crew member) remove invasive holly and improve habitat around Walsh Lake in the Cedar River Watershed, near North Bend, WA.

Shorelands & Environmental Assistance Program

Program Mission

The Shorelands and Environmental Assistance Program's mission is to create community conservation partnerships to protect and restore our shorelands, wetlands, and floodplains.

Environmental Threats

Washington's natural environment defines the quality of life for its residents. Our state has an abundance of shorelines, rivers, streams, lakes, wetlands, floodplains, and marine waters. These natural treasures attract people to the state and contribute to our thriving economy and public health. At the same time, poorly managed population growth and development can threaten the very resources that Washingtonians value.

The challenge facing our communities is to manage development for the 21st century while protecting and restoring these important assets. As population growth continues to pressure remaining natural habitats, we must find effective means to preserve them and protect their connections to other functioning habitats.

Authorizing Laws

- Federal Clean Water Act
- Federal Coastal Zone Management Act
- Chapter 36.70A RCW, Growth Management—Planning by selected counties and cities
- RCW 43.21A.690, Cost-reimbursement agreements
- RCW 43.21A.730, Office of Chehalis basin
- Chapter 43.21C RCW, State environmental policy
- Chapter 43.143 RCW, Ocean resource management act
- Chapter 43.220 RCW, Washington conservation corps
- Chapter 43.372 RCW, Marine waters planning and management
- Chapter 78.56 RCW, Metals mining and milling operations
- RCW 86.12.200, Comprehensive flood control management plan—Elements
- Chapter 86.16 RCW, Floodplain management
- Chapter 86.26 RCW, State participation in flood control maintenance

- RCW 90.03.265, Appropriation procedure—Cost-reimbursement agreement for expedited review of application—Adoption of rules
- Chapter 90.48 RCW, Water pollution control
- Chapter 90.58 RCW, Shoreline management act of 1971
- Chapter 90.71 RCW, Puget Sound water quality Protection
- Chapter 90.74 RCW, Aquatic resources mitigation
- Chapter 90.84 RCW, Wetlands mitigation banking

Constituents/Interested Parties

- Residents
- Property owners
- Local governments
- State and federal resource agencies
- Tribal governments
- Businesses
- Environmental organizations

Focus Areas

Managing and Protecting Shorelines

Shoreline Master Programs (SMPs) are important tools in protecting and restoring shorelines. Local governments and Ecology collaborate to develop SMPs that include goals, policies, and regulations for managing shorelines. SMPs help us protect and restore important habitats, keep water clean, protect homes and property from shoreline hazards, and provide opportunities for public access.

Ecology provides grants and technical guidance to help 259 counties and cities throughout the state update and implement their SMPs.

In the 2023-25 biennium, Ecology will update SMP rules to add new requirements to plan for the impact of sea level rise and increased storm severity on people, property, and shoreline natural resources and the environment. Ecology will continue to direct resources toward evaluating permit compliance and providing technical assistance on implementing SMPs to ensure they are efficient and effective.

Sustaining Our Remaining Wetlands

Wetlands provide many benefits to people, fish, and wildlife. They filter pollutants, provide habitat, store floodwaters, recharge aquifers, and maintain water flows during dry periods. Washington State has lost more than one-third of our wetlands.

To stop further loss, laws require mitigation to replace lost wetlands and their functions. Our priorities are:

- Ensuring wetlands are protected and replaced by conditioning projects through water quality certifications.
- Implementing a compliance program to ensure approved mitigation is successful.
- Supporting alternative mitigation approaches (e.g., wetland banking and advance mitigation) and providing templates, guidance, and training on these approaches.
- Assisting local governments in managing wetlands through technical assistance on updated critical areas ordinances, training on wetland tools and topics, and voluntary stewardship programs in agricultural areas.
- Protecting important coastal wetlands through acquisition grant programs.

Building Resilient Coastal Communities

Coastal communities in Washington State are experiencing the impacts of hazards such as erosion, landslides, and flooding. Experts predict climate change will exacerbate these stressors and increase risk to vital human and natural systems.

Ecology works to improve resilience by helping communities prepare for impacts from current and future hazards. Priorities include:

- Collaborating with key partners to provide communities with better data and information about hazards.
- Providing shoreline planning assistance to help shape where and how development occurs.
- Coordinating across programs and levels of government to provide practical support for communities.

In the 2023-25 biennium, Ecology will partner with coastal communities and state agencies (including Washington Sea Grant, Emergency Management Division, and Washington State University Extension) to create a new Coastal Hazard Organizational Resilience Team (COHORT) to deliver coordinated technical assistance to help coastal communities design resilience projects and apply for grants.

Ocean and Coastal Health

Washington's spectacular Pacific Coast and ocean waters face their own set of challenges and opportunities. Aquatic invasive species, toxic algal blooms, hypoxic events, warming ocean temperatures, and ocean acidification threaten the health of our ecosystems and our coastal economies. Shoreline erosion is already a threat to infrastructure and property and will be even more problematic as sea levels rise. The potential for new renewable ocean energy facilities and other new use proposals, in an already busy ocean, heightens the need for more thoughtful planning.

Ecology works in partnership with the interagency State Ocean Caucus, Washington Coastal Marine Advisory Council, Olympic Coast Intergovernmental Policy Council, and other local,

regional, Tribal, federal, and international partnerships to improve coastal and ocean resource management by:

- Helping to implement the marine spatial plan for Washington's Pacific Coast to reduce potential impacts of ocean uses and establish appropriate strategies to manage these activities.
- Improving research, monitoring, and understanding of our ocean resources and uses.
- Addressing erosion and sediment management issues.
- Supporting development of sustainable coastal communities by supporting local and regional planning processes.
- Advancing ocean policy and management priorities and needs.

Protecting Floodplain Resources

Ecology is the lead state agency for floodplain management in Washington. We support approaches that:

- Improve public safety.
- Prevent damage to property and public infrastructure.
- Protect flood storage, groundwater recharge, and habitat for aquatic and terrestrial species.

Ecology assists local governments and residents with awareness, planning, and project funding for flood hazard reduction and floodplain management. In addition to our ongoing assistance to local governments to meet the state-adopted National Flood Insurance Program (NFIP), Ecology is collaborating on a relatively new approach, Floodplains by Design (FbD).

FbD is a public-private partnership working for better coordination of investments in flood risk management and ecosystem recovery in Washington. This framework approaches floodplain management holistically—moving beyond disjointed, single-focus approaches—to projects that both reduce flood risk to people and improve ecological functions of our floodplains. In the 2023-25 biennium, Ecology will administer the FbD grant program, funded at approximately $70 million. We will continue to work with Bonneville Environmental Foundation, The Nature Conservancy, and other partners to engage with Tribes, local governments, and the agricultural community in leading and sustaining the FbD partnership.

Developing the Next Generation of Leaders While Providing Environmental and Disaster Assistance

A year of service in the Washington Conservation Corps (WCC) provides a living allowance for 300 young adults and military veterans and offers opportunities for career exploration, professional development, and job placement assistance. The WCC consists of three sub-programs; our original Corps Program, Veteran Conservation Corps, and Puget Sound Corps.

During their year of service, WCC members complete environmental and disaster service projects while serving on crews stationed throughout Washington State. These crews provide assistance to local, state, and federal natural resource agencies through the following activities:

- Installing native trees and shrubs to restore or enhance habitat for fish and wildlife.
- Monitoring restoration sites and controlling invasive species.
- Increasing public access and safety through constructing or improving trails and boardwalks.
- Reducing the risk of floods and wildfires through environmental restoration and forest health management.

Efforts to reduce fires and floods cannot eliminate these risks entirely, so Ecology prepares WCC members and staff to respond to natural disasters when they occur. In recent years, Ecology's WCC provided logistical support and direct service in response to wildfires, floods, drought, landslides, spills, and debris removal.

State Environmental Policy Act (SEPA)

SEPA helps state and local government agencies identify environmental impacts likely to result from projects and decisions—like issuing permits for private projects such as an office building; constructing public facilities like a new highway; or adopting regulations, policies, or plans such as a county or city comprehensive plan. The SEPA review process helps agency decision-makers, project applicants, and the public understand how development proposals may affect the environment. The environmental review process in SEPA is designed to work with other regulations to provide a comprehensive review of a proposal. Ecology oversees SEPA rules and guidance and provides technical assistance to government agencies, applicants, and citizens as they participate in the review process. We also serve as the SEPA lead or co-lead agency for some proposals.

Clean Energy Siting

The Legislature adopted a new law in 2022 aimed at providing timely and effective siting and permitting for new clean energy projects while protecting the environment, overburdened communities, Tribal rights, and cultural resources. In the 2023-25 biennium, Ecology will partner with the Washington Department of Commerce to establish an Interagency Clean Energy Siting Coordinating Council to improve permitting of clean energy projects. Ecology will also develop three programmatic Environmental Impact Statements for solar, onshore wind, and green hydrogen facilities by 2025. To support the clean energy transition, Ecology will develop and implement a new coordinated permit process for eligible clean energy projects with state and local agencies.

Protecting Puget Sound Habitat

Habitat protection is a priority for Puget Sound restoration. Bulkheads, rip rap, and concrete walls have altered one-third of Puget Sound's shoreline. Many wetlands and floodplains have been lost to cutting, grading, and filling for homes, businesses, and transportation.

In the 2023-25 biennium, Ecology will be expanding the Coastal Monitoring and Analysis Program with new funding to gather and share high quality aerial and on-water photos of marine shorelines.

Ecology will continue efforts to improve the effectiveness of wetland mitigation and floodplain management, provide training and technical assistance, complete habitat restoration projects through the WCC/Puget Sound Corps, and create partnerships to promote appropriate development.

Reducing Flood Damage and Restoring Aquatic Habitat in the Chehalis River Basin

In 2016, the Legislature established the Office of Chehalis Basin in Ecology. The office is created to aggressively pursue implementation of an integrated strategy for long-term flood damage reduction and aquatic species restoration in the basin and to administer funding to implement the strategy. The Chehalis Basin Strategy is an ambitious collection of potential actions to address these challenges. The Strategy includes near-term and long-term actions, as well as small- and large-scale projects.

The Chehalis Basin fishery is in decline, and major floods have been getting bigger. Not acting could cost $3.5 billion in damage to families and communities over the next 100 years—more with climate change. Today, the Chehalis Basin has no salmon species listed under the Endangered Species Act, but declines have led to a petition to list spring-run Chinook and could lead to further petitions in the future.

The Office of Chehalis Basin will collaborate with federal and other state agencies and Tribal and local leaders to use ongoing capital appropriations to:

- Conduct environmental review for raising the Chehalis/Centralia Airport levee and the flood retention dam being considered on the main stem Chehalis River.
- Developing and implementing flood-proofing programs, such as the Community Flood Assistance and Reduction (CFAR) program.
- Design and implement local-scale flood damage reduction projects to protect infrastructure (Chehalis River Basin Flood Authority projects).
- Conduct a comparative analysis of Local Action Non-Dam (LAND) alternatives.
- Support construction of the Aberdeen-Hoquiam Flood Protection Project.
- Implement a comprehensive, basin-wide Aquatic Species Restoration Plan (ASRP).
- Identify other aquatic species protection actions that are not characterized under the ASRP.
- Implement the erosion management program to maintain and improve stream and riparian habitats and slow artificially accelerated streambank loss.
- Support the Chehalis Basin Board.

- Complete a long-term strategy assessment for public review, which will articulate the Chehalis Basin Board's preferred long-term strategy (including an implementation schedule and quantified measures for evaluating the success of implementation).
- Continue the public involvement and outreach strategy for all the actions and activities associated with the Chehalis Basin Strategy.

Activities, Results, and Performance Measures

Restore Watersheds by Supporting Community-Based Projects with the Washington Conservation Corps

The Washington Conservation Corps (WCC) was established in 1983. WCC's mission is 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.

Expected Results

- Local communities get help from Washington Conservation Corps crews to carry out conservation and emergency response projects.

Performance Measures

- Number of native trees and shrubs planted by WCC crew members.
- Acres of habitat created or improved for fish and wildlife by WCC crew members.
- Miles of trails improved or created on public lands by WCC crew members.

Protect and Manage Shorelines in Partnership with Local Governments

The Shoreline Management Act establishes a cooperative program between local and state governments, where local governments develop and administer local Shoreline Master Programs, and Ecology provides support and oversight. We are 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.
- Reviewing permits to ensure resource protection and implementation of the law.

We work 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.

Expected Results

- Shorelines of the state are protected, restored, and managed consistent with state and local laws.
- Local governments get technical and financial assistance to update their Shoreline Master Programs.

Performance Measure

- Number of communities (cities and counties) that have submitted updated Shoreline Master Programs.

Protect, Restore, and Manage Wetlands

Ecology is the lead agency responsible for implementing the state Water Pollution Control Act, which requires protection of wetlands. We provide:

- Leadership on wetlands issues, coordinate statewide policy issues, and develop new approaches for managing and restoring wetlands.
- Technical assistance to local governments to help them implement requirements in the Shoreline Management and Growth Management acts.
- Technical assistance to nongovernment entities on wetlands conservation and stewardship programs.

Expected Results

- Wetlands are protected, restored, and managed consistent with state and local permits and laws.
- Wetlands function properly to protect water quality, reduce flooding, recharge aquifers for drinking water and other uses, and provide critical habitat for fish and wildlife.
- Local governments and other parties get technical assistance to carry out local wetland protection efforts.
- Approved mitigation achieves compliance through monitoring project performance and meeting performance standards.

Performance Measures

- Percentage of wetland mitigation sites inspected within 12 months after receiving as-built mid-monitoring, and close-out reports.
- Percentage of mitigation bank documents reviewed within 45 days of receipt.

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 resident involvement in the environmental review process and provides developers an opportunity to identify mitigation opportunities that facilitate overall project approval and minimize development costs. Ecology provides training and assistance to local governments and the public and manages the SEPA register.

Expected Results

- The public has input into projects that may have environmental impact.
- Local governments and state agencies get technical assistance on how to apply SEPA in their communities.
- Local and state decision makers use the SEPA process to analyze and mitigate environmental impacts of proposals.

Performance Measures

- Number of SEPA workshops provided.
- Percentage of SEPA workshop participants who said they intend to apply what they learned in their work.

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. Our staff review and approve local Comprehensive Flood Hazard Management Plans and inspect construction of flood damage reduction projects.

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.

Expected Results

- Local flood hazard management plans and flood control projects reduce flood damage to property and the environment.
- Local governments get technical and financial help to maintain flood management programs and respond to flooding.

- Flood-prone communities are better prepared for responding to flooding emergencies.

Performance Measure

- Number of flood-prone communities that receive support on flood hazard reduction and regulations.

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

The Padilla Bay National Estuarine Research Reserve in Skagit County is part of a national network of reserves established to protect estuaries for research and education. The Padilla Bay Reserve conducts a broad array of public education programs, technical and professional training, coastal restoration, and scientific research and monitoring. Managed in partnership with the National Oceanic and Atmospheric Administration, the reserve includes over 11,000 acres of tidelands and uplands, the Breazeale Interpretive Center with aquaria and touch pool, a research laboratory, residential quarters, trails, and support facilities. The reserve also provides funds and technical support to local Marine Resource Committees as part of the Northwest Straits Initiative and administers the Northwest Straits Marine Commission.

Expected Results

- Efficiently manage and maintain Padilla Bay Reserve to provide training and education for current and future coastal decision makers by increasing their technical expertise and level of knowledge.
- Coastal and land use managers and planners are trained to implement environmental policies and rules and gain a better understanding of issues, science, and innovative methods for managing Washington's coasts.
- Teachers and students of all ages increase their knowledge of the health and restoration of Puget Sound, climate change, ocean acidification, and sea level rise.
- Ecosystem research is carried out and results shared with government and academic organizations.
- Volunteers and professionals carry out restoration activities to improve Puget Sound.

Performance Measures

- Number of teachers, students, adults, and professionals participating in Puget Sound education and training programs at the Padilla Bay Reserve.
- Percentage of Puget Sound and coastal training workshop participants who said they intend to apply what they learned in their work.

Protect Water Quality by Reviewing and Conditioning Construction Projects

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.

Expected Results

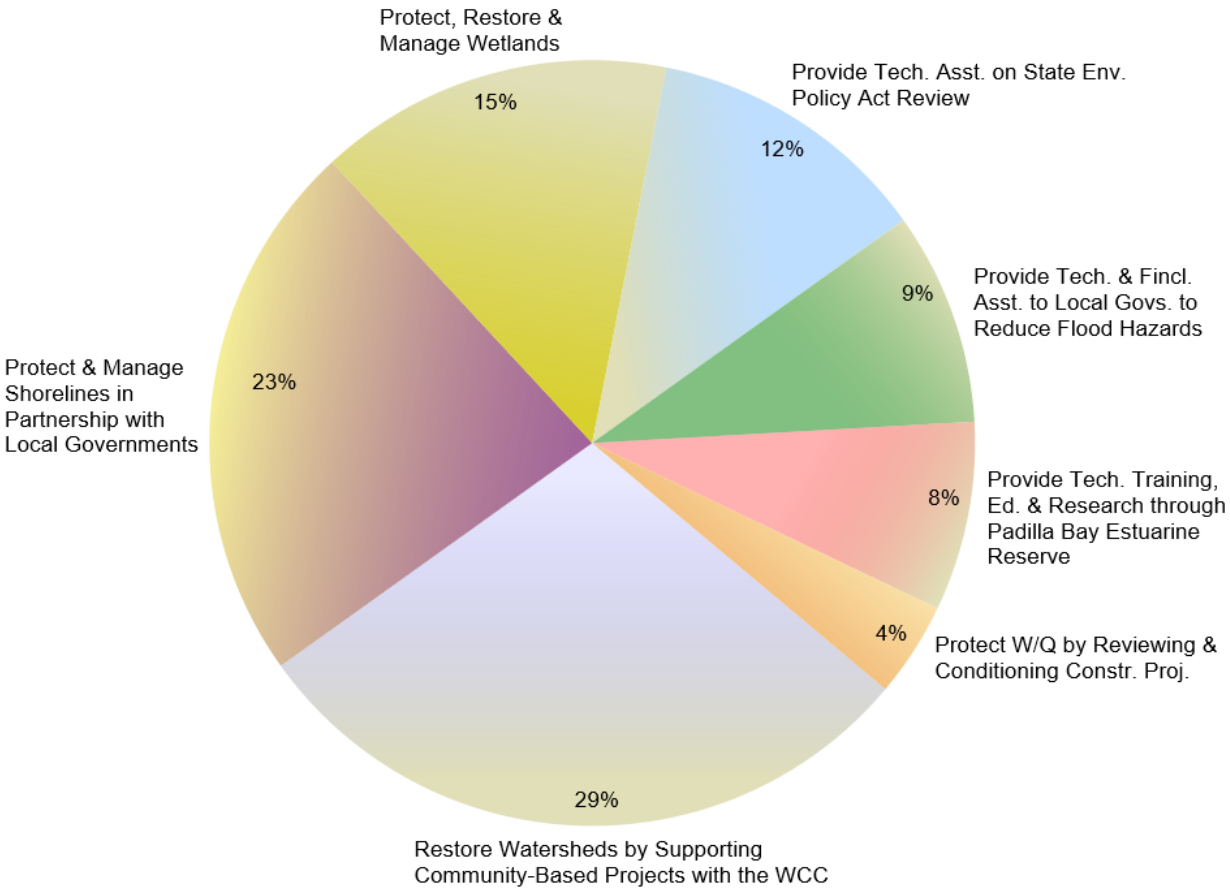
- Water quality, habitat, and aquatic life are protected and managed consistent with federal, state, and local laws.
- Applicants get technical help on reducing impacts and permit issues.
- Decisions are timely, thorough, and consistent.
- The average number of days it takes to make a 401-permit certification decision is reduced.
- Projects comply with permit conditions.

Performance Measure

- The number of days it takes to make a final decision on 401 water quality certifications.
- Percentage of reviews and decisions made within agreed-upon timeframes for Washington State Department of Transportation permit documents.

Shorelands & Environmental Assistance Program 2023-25 Biennium Budget by Activities

Operating = $105.7 Million | Capital = $186.5 Million | Total = $292.2 Million | FTEs = 234.0

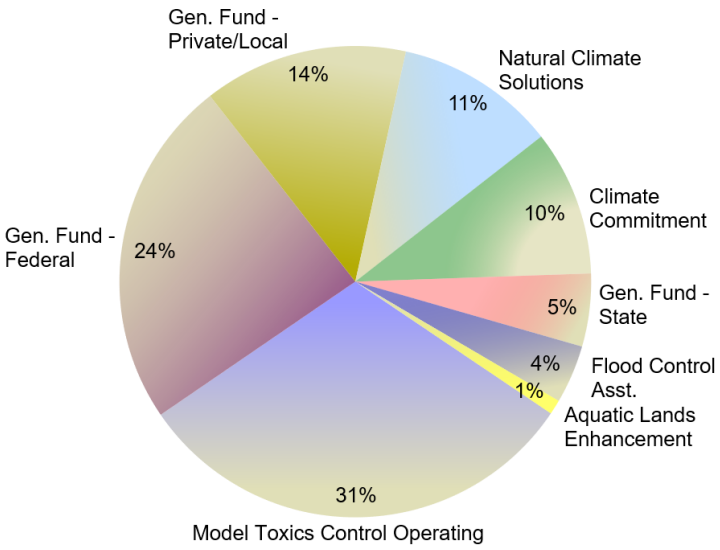


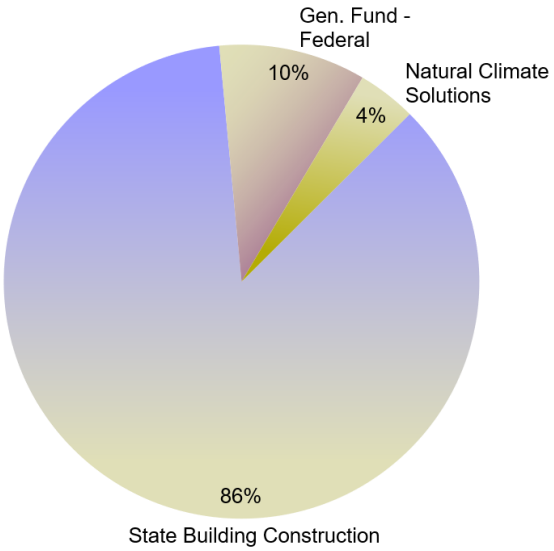
Activities	Amount	%	FTEs
Restore Watersheds by Supporting Community-Based Projects with the Washington Conservation Corps (A056)	$30,947,000	29%	64.8
Protect & Manage Shorelines in Partnership with Local Governments (A036)	24,683,000	23%	63.0
Protect, Restore & Manage Wetlands (A038)	15,992,000	15%	33.0
Provide Technical Assistance on State Environmental Policy Act (SEPA) Review (A041)	12,150,000	12%	22.6
Provide Technical & Financial Assistance to Local Governments to Reduce Flood Hazards (A040)	9,526,000	9%	10.3

Activities	Amount	%	FTEs
Provide Technical Training, Education & Research through Padilla Bay Estuarine Reserve (A042)	8,111,000	8%	21.0
Protect Water Quality by Reviewing & Conditioning Construction Projects (A037)	4,333,000	4%	19.3
Shorelands & Environmental Assistance Operating Budget Total	**$105,742,000**	**100%**	**234.0**

Shorelands & Environmental Assistance Program 2023-25 Biennium Budget by Fund Source

Operating = $105.7 Million | Capital = $186.5 Million | Total = $292.2 Million | FTEs = 234.0

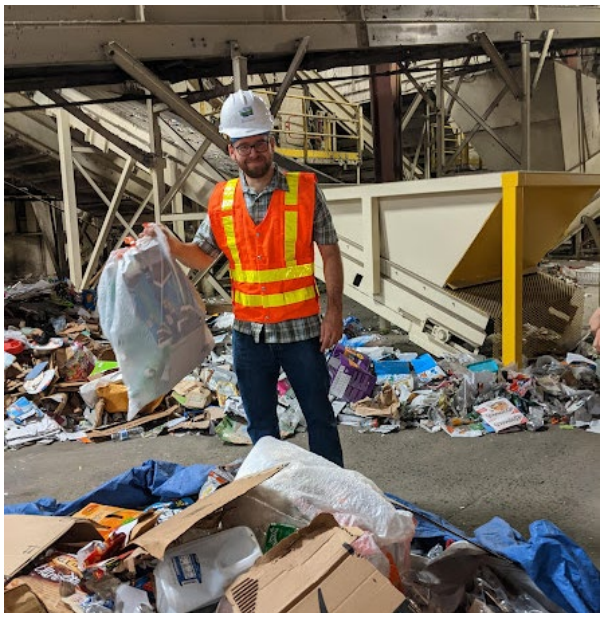




Operating Fund Sources	Amount	%	Uses
Model Toxics Control Operating (23P)	$32,297,000	31%	Partial match for Washington Conservation Corps crews performing natural resource restoration projects with federal, state, and local agency sponsors. Match for federal Coastal Zone Management. Washington State Department of Transportation permitting. Water quality 401/Clean Water Act certifications for water-related construction projects, including dredging and aquaculture. Ocean policy review. Wetlands banking and environmental mitigation. Wetlands technical assistance. Local government financial assistance to update their Shoreline Master Programs. Staff to provide technical assistance to local governments updating local master shoreline programs and updating wetland protection standards in local critical area ordinances. Shoreline management planning, implementation, enforcement. Wetlands

Operating Fund Sources	Amount	%	Uses
			protection and Puget Sound Agenda implementation requirements. Northwest Straits commission grants to marine resource committees. Salmon Recovery.
General Fund – Federal (001)	25,253,000	24%	Primary grant: National Oceanic and Atmospheric Administration Coastal Zone Management (Padilla Bay operations, Shoreline planning, implementation, enforcement, water quality certifications, and technical/financial assistance to local governments). U.S. EPA grants for wetlands and Puget Sound. Federal grant for coastal erosion. Washington Conservation Corps activities. FEMA flood management federal grant. EPA Performance Partnership Grant for water quality certifications. FEMA Floodplain Map Modernization Grant.
General Fund – Private/Local (001)	15,221,000	14%	Coastal erosion. Permit and project reviews. Padilla Bay. Washington Conservation Corps.
Natural Climate Solutions (26D)	11,314,000	11%	Kelp Conservation and Recovery at Padilla Bay. Nooksack. Coastal Climate Hazards. Marine Shoreline Habitat.
Climate Commitment (26C)	11,063,000	10%	Clean Energy. Climate Change and Planning.
General Fund – State (001)	5,647,000	5%	Minimum wage increases for WCC members. Transportation Fuel/Carbon Siting Study. Northwest Straits commission grants to marine resource committees. Shoreline Management Act Compliance. Ocean Acidification. Channel Migration.
Flood Control Assistance (02P)	4,797,000	4%	Administer Flood Control Assistance Program including state review of local flood hazard management plans, flood management and control grants, and emergency flood response assistance through grants to local governments and through Washington Conservation Corps.

Operating Fund Sources	Amount	%	Uses
Aquatic Lands Enhancement (02R)	150,000	1%	Washington coastal marine advisory council facilitator.
Operating Budget Total	**$105,742,000**	**100%**	
Capital Fund Sources	**Amount**	**%**	**Uses**
State Building Construction (057)	$160,422,444	86%	Floodplain by Design. Office of Chehalis Basin.
General Fund – Federal (001)	18,458,986	10%	Padilla Bay federal capital improvement projects. Federal grant awards for coastal wetland acquisitions (funds passed through to local entities).
Natural Climate Solutions (26D)	7,592,000	4%	Floodplains by Design.
Capital Budget Total	**$186,473,430**	**100%**	
Shorelands & Env. Assistance Operating & Capital Budget Total	**$292,215,430**		



Dan Weston (Statewide Recycling Coordinator) holds a bag of recycled materials to be sorted at a facility in Tacoma, WA. Ecology contracted for a recycling characterization study to determine the typical composition of inbound and outbound recyclables, including the level of contamination.

Solid Waste Management Program

Program Mission

The mission of the Solid Waste Management (SWM) Program is to reduce waste through prevention and reuse, keep toxics out of the environment, and safely manage what remains.

Environmental Threats

Solid waste management in Washington State is based on partnerships. State government provides regulations, permit review, and technical assistance for safe waste handling to ensure contaminants do not reach the environment through groundwater, surface water, or discharges to the air. The state also provides planning guidance and approval, financial assistance, and oversees statewide recycling and waste reduction laws. Local governments have primary responsibility for assuring services and facilities are available to safely manage waste within their jurisdictions. The private sector provides waste and recycling services and owns and operates the majority of the waste handling, recycling, and disposal facilities.

Chapter 70A.205 RCW, Solid Waste Management—Reduction and Recycling, is the primary state law for solid waste management. It establishes waste reduction as the highest priority, followed by recycling, and then safe disposal. Preventing waste in the first place is the smartest, cheapest, and healthiest approach to waste management.

Our data shows overall per capita waste generation is not declining. The structure of the waste stream changes, and products containing toxic materials or valuable resources continue to enter the waste stream. These products burden state and local governments and the solid waste industry's ability to manage them.

Recycling is a popular and long-promoted method of reducing the impacts of waste. Recycling reduces the need for raw materials, which conserves energy, reduces greenhouse gas emissions, and creates jobs. However, challenges with recycling are widespread, from export market shutdowns and non-recyclable materials contaminating the recycling stream, to customer confusion and lack of trust in the system.

Concerns about plastics continue to grow. Most plastics are not readily recycled, and plastic pollution is increasingly prevalent in our environment. This has led to a growing number of legislative bills and laws banning products and requiring the use of recycled content.

Organic materials compose 22.8 percent of the waste generated in Washington, according to our 2021 waste characterization study. Of this, 13.8 percent is food waste, with more than half of that estimated to be edible when thrown away. This not only wastes food but also wastes the water, fertilizers, labor, and fossil fuels used to produce that food, which has large, serious greenhouse gas impacts. There is increased focus on composting to divert food waste and other organics from landfills, where they create potent methane gas. But composting, an important waste management strategy, is not enough—we must not waste so much food to begin with.

Landfills are a critical part of our waste management system and currently provide the most reasonable option for many materials. However, materials continue to have an environmental impact after being disposed of through leachate and methane release. Reducing these impacts and ensuring safe and legal disposal remains a priority.

In Washington, more than 26 million pounds of litter is tossed or blown onto roadways and on-off ramps every year. Another 11 million pounds end up in parks and recreation areas. Litter negatively affects the environment, waterways, wildlife, home values, tourism, businesses, quality of life, and public health and safety. We cannot address the litter problem through pick-up programs alone. We need to stop litter at the source.

Biosolids, one of the end results of the wastewater treatment process, contain important nutrients for plant growth. As such, biosolids are not handled as a waste in Washington State; instead, they are seen as a valuable resource. They also increase the soil water holding capacity, reduce soil compaction, increase crop yield and quality, and aid in mitigating climate change through carbon sequestration. State law directs Ecology to maximize the beneficial use of biosolids (application to the land as a soil amendment) in a manner consistent with protecting public health and the environment. We develop regulations and permit wastewater treatment plants, beneficial use facilities, septage management facilities, and compost facilities that use biosolids as feedstocks. Ecology enforces requirements for proper handling, quality standards, and rates at which biosolids are applied to the land.

The Industrial Section within the Solid Waste Management Program oversees the environmental regulation of major industries in the state, such as pulp and paper, aluminum smelting, and oil refineries. These industries discharge wastewater and stormwater, emit air pollution, and generate dangerous waste. These discharges have the potential to significantly affect the environment if not done according to established environmental laws, rules, and regulations. To help protect human health and the environment, the Industrial Section ensures environmental compliance at these facilities via permitting, inspections, technical assistance, enforcement actions, agreed orders, and consent decrees.

Authorizing Laws

- Chapter 49.70 RCW, Worker and community right to know act
- Chapter 70A.02 RCW, Environmental justice
- Chapter 70A.15 RCW, Washington clean air act
- Chapter 70A.200 RCW, Waste reduction, recycling, and model litter control act
- Chapter 70A.205 RCW, Solid waste management—Reduction and recycling
- Chapter 70A.214 RCW, Waste reduction
- Chapter 70A.216 RCW, Solid waste incinerator and landfill operators
- Chapter 70A.220 RCW, Labeling of plastics
- Chapter 70A.224 RCW, Used oil recycling
- Chapter 70A.226 RCW, Municipal sewage sludge – Biosolids
- Chapter 70A.230 RCW, Mercury
- Chapter 70A.235 RCW, Beverage containers
- Chapter 70A.240 RCW, Recycling development center
- Chapter 70A.245 RCW, Recycling, waste, and litter reduction
- Chapter 70A.300 RCW, Hazardous waste management
- Chapter 70A.305 RCW, Hazardous waste cleanup—Model toxics control act
- Chapter 70A.315 RCW, Incinerator ash residue
- Chapter 70A.455 RCW, Plastic product degradability
- Chapter 70A.500 RCW, Electronic product recycling
- Chapter 70A.505 RCW, Mercury-containing lights—Proper disposal
- Chapter 70A.510 RCW, Photovoltaic module stewardship and takeback program
- Chapter 70A.515 RCW, Architectural paint stewardship program
- Chapter 70A.520 RCW, Plastic packaging—Evaluation and assessment
- Chapter 70A.530 RCW, Carryout bags
- Chapter 70A.540 RCW, Landfills—Methane emissions
- Chapter 70A.555 RCW, Batteries—Environmental stewardship
- Chapter 90.48 RCW, Water pollution control
- Chapter 90.52 RCW, Pollution disclosure act of 1971

Constituents/Interested Parties

- Businesses, including consumer goods companies and packagers
- Environmental organizations
- Federal, state, and local governments
- General public
- Solid waste and recycling companies
- Tribal governments

Focus Areas

Responding to Growing Legislative Activity

The amount of legislative activity affecting the SWM Program continues to grow. Bills focus on recycling, plastics, food and other organic waste, alternative energy waste products, and more. Ecology actively tracks bills and provides technical assistance on their development. We are tasked with implementing multiple new laws and contracting for numerous required studies.

There is also growing activity at the federal level, including bills and plans addressing recycling, plastics, and labeling. The SWM Program has received grant funding through the federal Bipartisan Infrastructure Law.

Preventing and Cleaning Up Litter

We have a bilingual (English and Spanish), multifaceted litter prevention campaign, "We Keep Washington Litter Free" (Por Un Washington Impecable). It uses a social marketing framework and is the first prevention campaign since 2008. It includes a litter prevention toolkit for others to use, and two sub-campaigns; "Secure Your Load and Safer Roads" and "Not littering – Simple As That." These campaigns were recognized with two international Telly awards and national and state awards from the Public Relations Society of America. We will continue to work with partners to build on these campaigns, increasing awareness and behavior change to reduce intentional and unintentional littering.

Litter pickup continues to expand through a variety of programs and partnerships. We run youth and adult litter crews to clean state highways and now have contracted litter crews to assist us with the more dangerous, highly littered areas. This successful partnership began in the 2021-23 biennium and will continue through the 2023-25 biennium. We provide funding to state agency partners, including the state departments of Natural Resources, Fish and Wildlife, and Parks and Recreation, for litter and illegal dump pickup. We partner with the Washington State Department of Transportation and Washington State Patrol to coordinate litter pickup, litter prevention messaging, and litter emphasis patrols. We also provide funding to 38 local government partners for litter and illegal dump pickup and prevention through the Community Litter Cleanup Program. Our new Ramp Litter Cleanup Program will provide grant funding to 13 local governments in the 2023-25 biennium to clean state highway ramps in their jurisdictions.

In 2022, we completed the first litter study since 2004. The 2022 Washington Statewide Litter Study[21] provides baseline information about the distribution, types, and amount of litter on Washington roadways, freeway ramps, and public areas. This data allows us to plan effective reduction programs and measure success. The study found that 38-58 percent of litter (by

[21] https://apps.ecology.wa.gov/publications/SummaryPages/2307038.html

weight) is not covered by the litter tax, notably construction and demolition debris, vehicle debris, and auto rubber products, such as tire shards.

Reduce, Reuse, Recycle

The well-known saying to "Reduce, Reuse, Recycle" drives a growing amount of work in the SWM Program. We are supporting market development for recycling and reuse efforts through NextCycle Washington, a project of the Recycling Development Center that provides start-up grants and technical assistance. The "Recycle Right" campaign continues to advertise important ways to reduce contamination in the recycling stream. Contamination in materials sent to recycling and compost facilities was studied, with results to be published at the end of 2023. This information will inform future campaigns, best management practices for recycling and composting acceptance lists, and more. A waste reduction campaign encouraging durable food service ware is planned this biennium.

There has been significant legislative attention in the past three years to pass an extended producer responsibility law in Washington for packaging and printed paper (referred to as EPR for PPP), including the items collected in curbside and drop-off recycling programs. Similar laws have recently passed in four other states, bills have been introduced in almost a dozen states and federally, and future bills are expected—including in Washington. If passed, this would provide systemic change and progress to Washington's residential recycling program. In the past two sessions, the Legislature has required Ecology to contract for studies to inform this effort.

Plastics

Reducing and recycling plastic is a growing issue of concern, as illustrated by the many bills introduced in recent legislative sessions. Chapter 70A.520 RCW, passed in 2019, required a plastic packaging evaluation and recommendations to reduce plastic packaging. Every year since, new laws have banned or otherwise regulated certain plastic products.

Plastic items now banned—or with bans pending—include plastic carryout bags, multiple extended polystyrene products, and small personal care product containers at lodging establishments. Single-use food service ware items, such as cutlery, are available only on request. Multiple plastic products now have requirements to use post-consumer recycled-content, and annually register, report, and pay administration costs to Ecology. Implementation of these new laws is underway, and a rule governing the post-consumer recycled content requirements was completed in October 2023. Additional bills addressing plastics are expected in coming legislative sessions.

Organic Materials Management

Organic materials, such as yard debris, wood waste, and food waste, create methane when placed in a landfill. When composted or otherwise 'recycled' into products like soil amendments or energy, they become a valuable resource. For these reasons, organic materials management is getting significant attention. House Bill 1799, now called the "Organics

Management Law," passed in 2022. This complex law requires state and local governments, businesses, and other organizations to reduce the amount of organic materials disposed in landfills, with a goal to reduce landfill-disposed organic material by 75 percent by 2030. The law also calls for compost procurement ordinances to increase demand for processed organic materials, like compost, and adds requirements for degradable product labeling, among other elements. Ecology is currently working on interpreting and implementing this law, and stakeholder meetings are underway for "Part Two of the Organics Management Law."

Organics management was also a topic of House Bill 1033, which passed in the 2023 session. This law requires Ecology to hire a facilitator to convene an advisory committee to make recommendations to the Legislature regarding compostable products' sales, use, and end-of-life uses, including food service ware products. The recommendations are due to the Legislature by September 15, 2024.

Additional organics work includes a compost emissions study under contract with Washington State University. We also continue to provide technical assistance to jurisdictional health districts (JHDs) and compost facility owners and operators on other challenges, including contamination in compost and concerns about spreading the apple maggot into pest-free areas when transporting raw organic materials.

Reducing Wasted Food

One of the most important waste reduction efforts to focus on is reducing wasted food. Estimates are that 30 to 40 percent of all food grown is wasted, which has significant greenhouse gas implications. Working with the state departments of Health, Agriculture, Commerce, and the Office of Superintendent of Public Instruction, Ecology created and is implementing the "Use Food Well Washington Plan." One of the 30 recommendations in the plan is to create the Center for Sustainable Food Management. This center, the first in the nation, was officially created in the 2022 Organics Management Law, codified in Chapter 70A.207 RCW.

To address organics and food management, the SWM Program added staff to focus on organics and the new sustainable food center. We have dedicated funding, planned campaigns for food waste reduction and compost contamination, and an ongoing partnership with the Pacific Coast Collaborative. This will help us meet the 50 percent food waste reduction goal set in 2019 and the 75 percent organic disposal goal set in the 2022 law.

Product Stewardship Programs

Product stewardship or extended producer responsibility (EPR) programs require manufacturers who make the products to share responsibility for managing them at end-of-life, either by recycling or safe disposal. EPR programs help reduce the financial burdens on local governments to manage hard-to-handle products and provide more convenient collection options for the public.

Ecology is now responsible for overseeing five product stewardship laws for electronics (computers and TVs), mercury-containing lights, photovoltaic modules, paint, and batteries.

Electronic Product Recycling

E-Cycle Washington for computers, monitors, and TVs was the first product stewardship law in the state. The law passed in 2006, began operations in 2009, and has collected more than 460 million pounds of covered products.

Mercury-containing Lights – Proper Disposal

LightRecycle Washington, for mercury-containing lights, helps keep toxic mercury out of the environment. The program began operating in January 2015 from a law passed in 2010 and has collected more than 8.3 million lights for recycling. The program is funded by an environmental handling charge (EHC) of 95 cents for each mercury-containing light sold. Sales of compact fluorescent lights (CFLs) are declining, and LED lights, which have become the preferred alternative, do not carry the surcharge. The program is set to sunset in July 2025. Stakeholder work is underway to determine if the sunset date is appropriate.

Photovoltaic Module Stewardship and Takeback Program

The Legislature created the producer responsibility program for photovoltaic modules (solar panels) in 2017. The initial timeline to start producer-funded collection and recycling program operations was January 2021. However, two laws in the 2020 and 2021 legislative sessions delayed this start date—first to July 2023 and most recently to July 2025.

Architectural Paint Stewardship Program

The PaintCare product stewardship program collects and recycles architectural paint. The law passed in 2019, and the program started in April 2021. In the first year of operations, they collected 864,000 gallons of paint for recycling or safe disposal. Paint is one of the most common materials brought to local government household hazardous waste facilities. Many stopped taking latex paint due to the expense of disposal and recycling and the fact that it is not toxic. Under the PaintCare program, paint retailers accept unwanted paint, so the public has more convenient options for recycling.

Batteries – Environmental Stewardship

In 2023, the Legislature created the battery stewardship program. Start dates are January 2027 for portable batteries and 2029 for medium-sized batteries. A future study must assess management of large-format batteries and products with embedded batteries. Rulemaking is underway, as is a current required study for recommendations on electric vehicle (EV) batteries, which are not included in the 2023 law. Bills for EV batteries are expected in 2024.

Technical Assistance at Solid Waste Facilities

Ecology engineers, hydrogeologists, and facility specialists provide technical assistance to jurisdictional health departments, solid waste facility owners, and operators. Many local

governments do not have staff expertise and rely on Ecology for technical review of facility designs, operations, environmental monitoring, and regulatory interpretation.

Ecology also manages Model Toxics Control Act (MTCA) cleanup at solid waste landfills in several counties throughout the state. Ongoing fires at two landfills in central Washington require significant attention and assistance from SWM facility staff. One facility is now under an Agreed Order; the other is in progress.

The SWM Program recently hired an exempt-facility specialist to inspect facilities with solid waste permit exemptions, assess if they are meeting the conditions of the exemptions, and provide technical assistance as needed.

SWM was tasked with contracting for a life cycle assessment comparing emissions from waste managed at the Spokane waste-to-energy facility to estimated emissions if that waste was instead managed at any of three area landfills. We also engaged in rulemaking for Chapter 70A.540 RCW Landfills—Methane emissions, which should be completed in 2024. SWM staff may provide some ongoing technical assistance with implementation.

The State Solid and Hazardous Waste Plan: Moving Washington Beyond Waste and Toxics

The state of Washington is required by law to have a solid and hazardous waste plan and to update it regularly. The plan's purpose is to guide waste and toxics reduction and safe waste management in Washington. The 2021 update is being implemented, and considerations for the next five-year update will begin in 2024.

The plan focuses on sustainable materials management and looks at the full lifecycle of materials from the design and manufacturing phase through the use phase to the end-of-life phase when the material is disposed of or recycled. Looking at the production and use phases can help identify more sustainable ways to design products that use less energy, water, and toxics, and create less waste and pollution. This is important because the adverse environmental impacts of extraction, production, and use can be far greater than those associated with disposal when a material becomes a waste.

Financial Assistance: Grants and Awards

SWM provides financial assistance to local governments, non-profit organizations, and schools through grants and award programs. Expenditures of grant funds are high, upwards of 95 percent.

Local Solid Waste and Financial Assistance Program

The Local Solid Waste and Financial Assistance (LSWFA) program provides pass-through grants to local governments to support local solid and hazardous waste plan implementation and regulatory programs. Financial assistance is used for planning, regulating solid waste facilities, reducing human exposure to toxics by providing safe collection of household hazardous waste,

and supporting resource conservation through recycling and reuse programs. The amount of funding for LSWFA was reduced in the past. Since the 2021-23 biennium, funding has been restored to $24 million ongoing each biennium, providing a key and consistent funding source to our local government partners. The restored funding enables local governments to provide more consistent programs to safely manage solid and hazardous waste.

Waste Reduction and Recycling Education Grant Program

Ecology's Waste Reduction and Recycling Education (WRRED) grant program was created in 2015 to fund local governments and non-profit organizations for public education programs about litter control, waste reduction, recycling (including contamination reduction), or composting. This competitive grant program provides up to $60,000 in state dollars plus 25 percent matching funds from the recipient. For the 2023-25 biennium, $700,000 will be available for the WRRED grant program, an increase from past years.

Public Participation Grant Program

The Public Participation Grant (PPG) program funds public participation regarding hazardous substance release sites and implementation of the state's solid and hazardous waste management priorities. This competitive grant program provides up to $60,000 per year per project to eligible individuals and non-profit organizations, with no matching funds required. PPG projects have a strong correlation with environmental justice both for release sites and for waste reduction activities. One percent of revenues collected from the Hazardous Substance Tax is allocated to fund the PPG program. For the 2023-25 biennium, approximately $4.9 million is available for this grant program.

Other Grants

We also provide grants to local governments for litter pickup and prevention and to clean state highway ramps through the Community Litter and the Ramp Litter Cleanup Programs.

Demand for grants has been high, so growth in funding is timely. The SWM Program will hire additional staff to assist with grant management for the increased number of both Public Participation and WRRED grants.

After a decade of absence, the Waste Not Washington School Awards returned in 2019-21 and will continue in the 2023-25 biennium. The awards give $5,000 per project to K-12 staff of public, private, or Tribal schools or school districts to help build and improve waste reduction, reuse, and recycling programs and curricula in Washington schools. The amount of funding available is $100,000 per year, which provides awards to 20 deserving schools each year.

Biosolids and Septage

Wastewater treatment facilities in Washington have beneficially used biosolids for more than 40 years. Ecology implements Washington's biosolids rules (Chapter 173-308 WAC) through a five-year statewide general permit for wastewater treatment plants and other facilities that

manage biosolids. This general permit establishes a baseline for all facilities and allows Ecology to impose additional requirements on an individual site-specific basis.

The most current statewide general permit for biosolids management will be in effect from June 2022 through July 2027. For this permit cycle, Ecology made significant changes to the structure of the general permit, adding new technical requirements for some facilities and emphasizing improved communication between Ecology and permitted facilities.

Ecology's biosolids coordinators review permit applications, communicating with the facilities to ensure operations are accurately documented. When necessary, coordinators will include additional or more stringent requirements for facilities as a condition of final coverage. In addition, Ecology continues to address any environmental concerns related to biosolids operations, ensure permitted facilities comply with all state and federal regulations, and offer them technical assistance.

PFAS (Per- and Poly-Fluoroalkyl Substances)

PFAS are synthetic chemicals used in many products—like food wrappers, clothing, carpets, and cosmetics—to make these products resistant to water, oil, grease, stains, and heat. They are also used in industrial applications. PFAS are of concern because they are water-soluble, highly mobile, do not break down in the environment, and can bio-accumulate. Some are linked to health impacts in animals and people.

Ecology's PFAS Chemical Action Plan includes recommendations to evaluate PFAS in biosolids and landfill gas, leachate, and groundwater to better understand and manage these materials. Ecology completed a round of landfill leachate sampling at 19 landfills across the state in 2022 and published testing results in the PFAS in Landfill Leachate report[22]. The Industrial Section includes PFAS monitoring in some water discharge permits.

Since PFAS are present in a broad range of products used daily, they make their way into the sewage collection systems from manufacturers and homes. It's believed that biosolids contain low levels of PFAS, but significant information gaps exist, including PFAS concentration data in Washington biosolids. Ecology plans to conduct sampling of wastewater treatment plant biosolids in 2024.

The SWM Program has designated a few staff to lead our PFAS work. This includes working on the Legislature's request to provide a prioritized list of work that is needed regarding PFAS and estimates for the cost to complete the work.

[22] https://apps.ecology.wa.gov/publications/SummaryPages/2207011.html

Industrial Redevelopment

Ecology works with Washington's largest refineries, pulp and paper mills, and aluminum smelters. When industries close after decades of operation, residual chemical contamination issues must be addressed. Since these facilities are usually in prime locations with access to water, transportation, rail, and power transmission infrastructure, they are in demand for redevelopment.

One example is the former Reynolds Metals aluminum smelter in Longview. This facility produced high-purity aluminum for almost 60 years, leaving residual soil and groundwater contamination behind. Ecology is working with the landowner, Northwest Alloys (Alcoa), to clean up contamination from the former smelter. Northwest Alloys completed a sediment cleanup in 2016 and signed the Consent Decree in December 2018 to implement the final cleanup action plan. Industrial waste on the site is currently being consolidated and capped to optimize the area available for redevelopment, and groundwater contamination will be addressed. The first phase of this cleanup occurred in summer 2023. Comprehensive monitoring and a robust financial assurance program will ensure the cleanup actions remain effective over the long term. Construction will take two years to complete. When complete, this site will again be positioned to play a key role in the local economy and protect human health and the environment.

Another example of a former industrial site redevelopment is a proposed hydropower project on the Columbia River near Goldendale. The Free Flow Power Project 101, LLC proposes building a "pumped storage" system to store energy produced by renewable sources during periods of low demand and provide that energy during high-demand times. The project would be a closed-loop system consisting of two reservoirs and a connecting tunnel fitted with a reversible turbine. It would store energy by pumping water uphill and generate energy by letting it flow back down to the lower reservoir through a turbine. This proposal is located at the former Columbia Gorge Aluminum smelter site. The final environmental impact statement was released in December 2022. A remedial investigation and feasibility study (RI/FS) is being prepared to determine how the site should be cleaned up to protect human health and the environment.

Activities, Results, and Performance Measures

Provide Planning and Financial Assistance to Manage and Reduce Waste

The Department of Ecology provides planning assistance to local governments and financial assistance to local governments, non-governmental organizations, and community groups through three grant programs:

- Local Solid Waste Financial Assistance (LSWFA) grants to local governments for solid waste planning, implementation, and enforcement.
- Public Participation Grants (PPGs) to interest groups for public outreach and education.

- Waste Reduction and Recycling Education (WRRED) grants to local governments and non-profit organizations for public outreach and education.

Expected Results

- The public is informed about cleanups in their local area and educated about waste reduction efforts.
- Appropriate recycling and composting increases.
- Toxic products use and waste generation declines.
- Household and small business waste is collected and handled safely.
- Solid waste facilities in Washington State comply with regulatory standards.

Performance Measures

- Millions of tons of solid waste generated annually.
- Percentage of materials recycled and recovered for energy annually.
- Pounds of household and small quantity generator hazardous wastes that are recycled or properly disposed (in millions).
- Tons of organic material recovered for composting and other uses.
- Tons of organic materials disposed.

Eliminate Waste and Promote Material Reuse

The Department of Ecology:

- Provides technical assistance and outreach to promote waste reduction and recycling, including how to reduce contamination in the recycling stream.
- Implements plastic and single-use packaging laws.
- Supports recycling and reuse market development through the Recycling Development Center.
- Reduces wasted food through a state food waste reduction and diversion plan and the Center for Sustainable Food Management.
- Provides technical assistance to promote reuse of organic materials.
- Ensures an environmentally compliant biosolids program in the state.
- Promotes environmentally preferred purchasing.
- Oversees producer managed recycling programs.

Expected Results

- The amount of solid waste generated and disposed of by businesses and residents decreases so air, water, and greenhouse gas pollution is reduced and resources are conserved.
- Washington's Center for Sustainable Food Management and Recycling Development Center implement successful initiatives that advance their missions.

- The amount of materials recovered for recycling, composting, and other uses increases so fewer valuable materials enter the waste stream, there is less waste for disposal, and greenhouse gas emissions are reduced.
- Materials include recyclables, organic matter, compost, biosolids, electronics, and mercury containing lights.

Performance Measures

- Pounds of solid waste disposed annually per person by residents and businesses.
- Tons of electronics collected for recycling through E-Cycle Washington.
- Pounds of solid waste generated per dollar (State GDP).
- Tons of organic material recovered for composting and other uses.
- Tons of mercury-containing lights collected for recycling through LightRecycle Washington.
- Percentage of biosolids beneficially used annually.
- Percentage of materials recycled and recovered for energy annually.
- Tons of organic materials disposed.

Prevent and Pick Up Litter

Ecology is the state's lead agency managing litter programs. We operate youth and adult litter pickup crews and provide funding for litter pickup and prevention to state and local governments. We work with partners across the state to promote litter prevention and secure vehicle loads for safer, cleaner highways and public areas.

Expected Results

- Roadways are cleared of litter using Ecology funded crews.
- Prevention efforts help change littering behaviors and prevent litter in the first place.
- Litter and its environmental impacts are reduced.

Performance Measures

- Pounds of litter picked up annually by Ecology-funded activities.
- Miles of roadway cleared of litter annually by Ecology-funded activities.

Improve Environmental Compliance at the State's Largest Industrial Facilities

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.

Expected Results

- Pulp and paper mills, oil refineries, and aluminum smelters improve compliance rates through one stop environmental permitting, compliance review, technical assistance, and timely issuance of environmental permits.
- Updated permits ensure that industries are meeting new state and federal requirements in a timely way.

Performance Measure

- Percentage of industrial section permits that meet timeliness goals.

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.

Expected Results

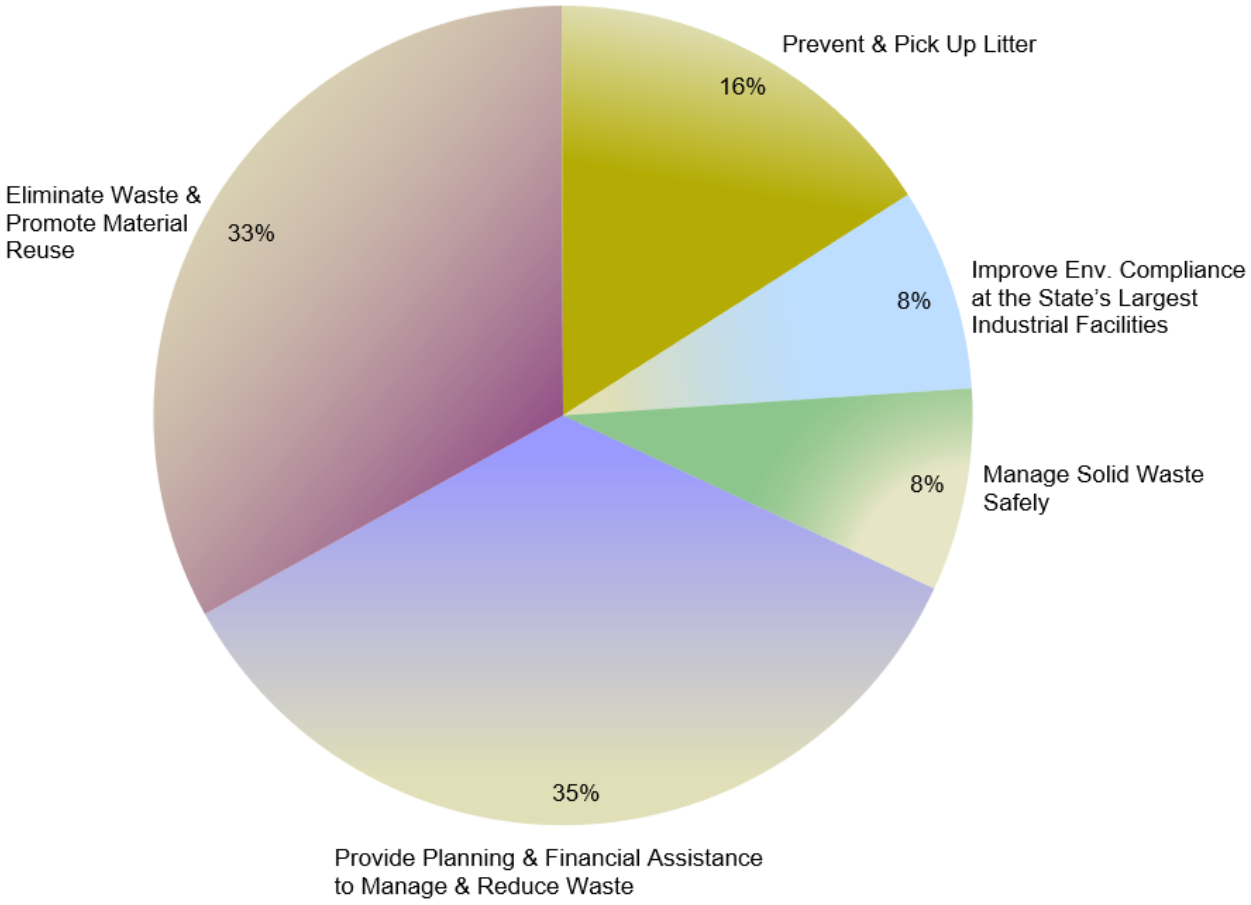
- Solid waste is managed and disposed of in facilities that comply with federal, state, and local requirements.
- Solid waste handling and disposal practices minimize contamination to the state's groundwater, surface water, and air.
- Technical assistance is provided to health departments responsible for ensuring facilities comply with environmental rules.

Performance Measures

- Percentage of landfills in compliance with applicable state regulations.
- Millions of tons of solid waste generated annually.
- Pounds of household and small quantity generator hazardous waste that are recycled or properly disposed (in millions).
- Percentage of regulated solid waste facilities completing annual reports.

Solid Waste Management Program 2023-25 Biennium Budget by Activities

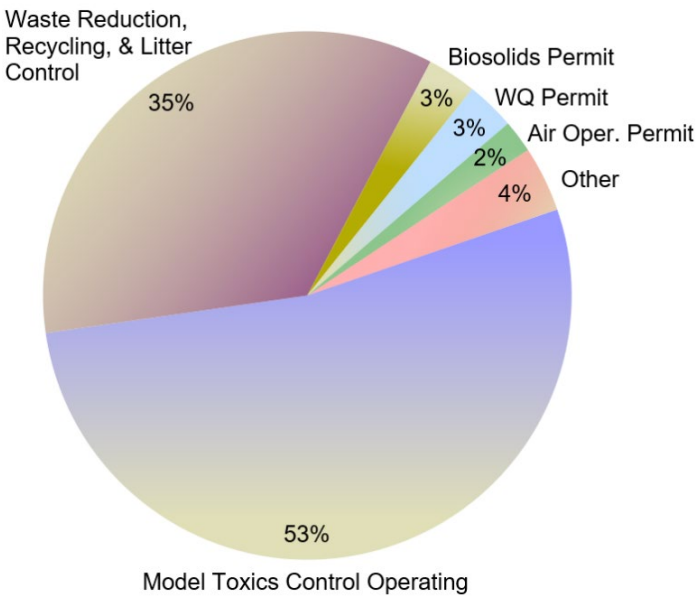
Operating = $93.3 Million | Capital = $3.7 Million | Total = $97.0 Million | FTEs = 141.3



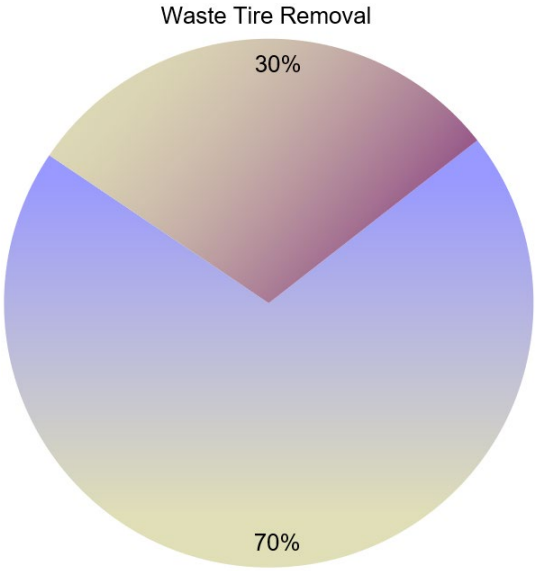
Activities	Amount	%	FTEs
Provide Planning and Financial Assistance to Manage and Reduce Waste (A013)	$32,714,000	35%	11.0
Eliminate Waste & Promote Material Reuse (A009)	30,863,000	33%	56.5
Prevent & Pick Up Litter (A010)	15,371,000	16%	24.8
Improve Environmental Compliance at the State's Largest Industrial Facilities (A028)	7,188,000	8%	23.8
Manage Solid Waste Safely (A064)	7,121,000	8%	25.2
Solid Waste Management Operating Budget Total	**$93,257,000**	**100%**	**141.3**

Solid Waste Management Program 2023-25 Biennium Budget by Fund Source

Operating = $93.3 Million | Capital = $3.7 Million | Total = $97.0 Million | FTEs = 141.3



Model Toxics Control Operating



Model Toxics Control Capital

Operating Fund Sources	Amount	%	Uses
Model Toxics Control Operating (23P)	$49,682,000	53%	Provide engineering and hydrogeological support to local health departments; regulatory compliance assistance; industrial dangerous waste and cleanup activities. Provide planning and technical assistance to local governments related to solid waste implementation and enforcement. Provide technical assistance to local government to implement and regulate local hazardous waste facilities and to implement the state's solid and hazardous waste management priorities. Support the implementation of RCW 70A.205.007, Chapter 70A.555 RCW, RCW 70A.205.720, RCW 70A.245.130, RCW 70A.245.140, compost emissions, Spokane solid waste, and recycling studies, expanded

Operating Fund Sources	Amount	%	Uses
			polystyrene ban, and opt-in serviceware restriction. Provide solid waste financial assistance grants to local governments to implement local solid and hazardous waste plans and regulatory programs. Provide public participation grants to resident groups and non-profit public interest organizations to facilitate public participation in the investigation and remediation of contaminated sites.
Waste Reduction, Recycling, & Litter Control (044)	32,341,000	35%	Support the Ecology Youth Corps, litter prevention, and other state agencies for litter pickup activities (40%); technical assistance in waste reduction and recycling, and recycling development center (40%); pass-through grants for litter pickup and waste reduction and recycling education to local governments and nonprofit organizations, including funding to support the Welcome to Washington Act (20%).
Biosolids Permit (199)	2,794,000	3%	Administer permit applications, review related plans and documents, monitor, evaluate, conduct inspections, oversee performance of delegated program elements, provide technical assistance, and support overhead expenses that are directly related to these activities.
Water Quality Permit (176)	2,751,000	3%	Industrial water quality permitting, inspections, and sediment source control. Data management and public involvement related to water quality at regulated industries.
Air Operating Permit (219)	1,889,000	2%	Industrial air quality permitting, inspections, and enforcement of Title 5 permits.
Other:			

Operating Fund Sources	Amount	%	Uses
Recycled Content (25R)	1,053,000	1%	Implement post-consumer recycled content requirements for plastic beverage containers, trash bags, and household cleaning and personal care products plastic containers, including but not limited to rulemaking, technical assistance, enforcement, workload analysis, petition requests and annual reports (Chapter 70A.245 RCW)
Climate Commitment (26C)	1,014,000	1%	Permitting of Industrial clean energy projects and providing support to other clean energy coordination activities. Also, incorporates CCA reporting into Industrial facility AOPs, and coordinates compliance related to CCA reporting at these facilities.
Electronic Products Recycling (11J)	846,000	1%	Administer manufacturer registration fee collections, as well as monitor, evaluate, and implement the regulations adopted for the EPR program.
General Fund – State (001)	323,000	<1%	Water quality and biosolids enforcement actions and disaster debris management.
Product Stewardship Programs (16T)	247,000	<1%	Administer mercury-containing lights collection and recovery program; review and approve plans and plan revisions; monitor and evaluate program operations and implement the regulations.
Paint Product Stewardship (23W)	141,000	<1%	Administer paint collection and recycling program; review and approve plans.
Photovoltaic Module Recycling (22G)	76,000	<1%	Administer manufacturer-funded photovoltaic module recycling program; review and approve plans.
Air Pollution Control (216)	50,000	<1%	Minor New Source Review permitting, inspection, and public notice of Notice of Construction air permits for Pulp & Paper and Aluminum Smelters.

Operating Fund Sources	Amount	%	Uses
General Fund – Private/Local (001)	50,000	<1%	Appropriation authority for potential projects with local communities.
Operating Budget Total	**$93,257,000**	**100%**	
Capital Fund Sources	**Amount**	**%**	**Uses**
Model Toxics Control Capital (23N)	$2,600,909	70%	Appropriation authority for the Lilyblad site cleanup project.
Waste Tire Removal (08R)	1,101,960	30%	Appropriation authority for statewide waste tire pile cleanup and prevention activities.
Capital Budget Total	**$3,702,869**	**100%**	
Solid Waste Management Operating & Capital Budget Total	**$96,959,869**		

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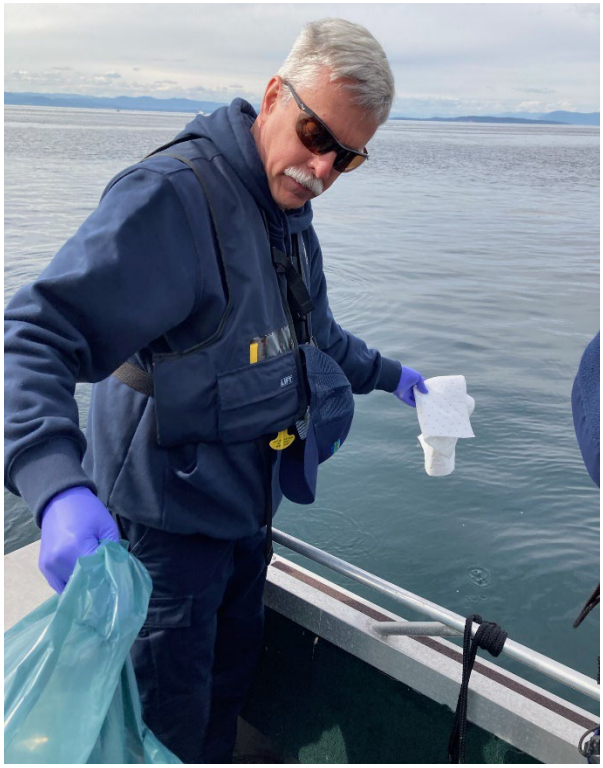


Dave Byers (a Spill Responder) collects absorbent pads from the water during the *Aleutian Isle* vessel sinking. The incident occurred at Sunset Point on San Juan Island, in August 2023.

Spill Prevention, Preparedness & Response Program

Program Mission

The mission of the Spill Prevention, Preparedness, and Response Program (Spills Program) is to protect, preserve, and restore Washington's environment. The program focuses on preventing oil spills to Washington's waters and land, and planning for and delivering a rapid, aggressive, and well-coordinated response to oil and hazardous substance spills wherever they occur.

Environmental Threats

More than 20 billion gallons of oil and hazardous materials are transported through Washington State each year by vessel, pipeline, and rail. Human error, equipment failure, and natural disasters can lead to releases of these materials with potentially disastrous consequences. Oil and chemical spills threaten Washington's valuable natural resources.

Over the years, the nature of these threats has changed due to changes in oil markets and technological innovations. These threats—whether on land or water—endanger public health, safety, and the environment and can damage the state's economy and quality of life.

Authorizing Laws

The harm caused by major oil spills and other toxic releases in the 1980s and early 1990s sparked public concern and resulted in passage of state and federal legislation, including:

- Northwest Area Contingency Plan (NWACP), Pursuant to the federal Oil Pollution Act of 1990
- Ports and Tanker Safety Act of 1978 and amendments to the Ports and Waterways Safety Act of 1972
- Chapter 70A.305 RCW, Hazardous waste cleanup—Model toxics control act
- Chapter 82.23B RCW, Oil spill response tax
- Chapter 88.40 RCW, Transport of petroleum products—Financial responsibility

- Chapter 88.46 RCW, Vessel oil spill prevention and response
- Chapter 90.48 RCW, Water pollution control
- Chapter 90.56 RCW, Oil and hazardous substance spill prevention and response

Constituents/Interested Parties

Ecology works closely with organizations and people interested in environmental protection and emergency response, including:

- Advisory councils, environmental organizations, and the general public
- City, county, and regional fire, police, health, and planning departments
- Commercial vessel owners and operators worldwide, marine transportation trade associations, public ports, and maritime trade unions
- Federal, state, local, and Tribal governments, including the U.S. Coast Guard, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, and local emergency management agencies
- Governments of British Columbia, Oregon, Idaho, and other West Coast states
- Oil refineries, marine oil terminals, oil pipelines, rail companies, and oil trucking companies
- Spill response cooperatives and contractors

Focus Areas

The Spills Program takes pride in adapting to shifting economic trends, legislative direction, and public demands. Our core services include vessel and facility inspections, oil transfer monitoring, risk modeling, prevention and contingency plan review and approvals, contingency plan drills, environmental restoration, and 24/7 response to oil and hazardous materials spills. Through these services, the Spills Program minimizes the long-term release of toxics into the environment and protects the water, soil, air, and public health of the state.

In addition to our core services, the Spills Program has identified tasks we plan to accomplish during the 2023-25 biennium to address the challenges associated with changing spill risks in Washington State. A comprehensive list of tasks is described in the Spills Program's 2023-25 Program Plan.[23] Some of these are noted below.

Robust Financial Responsibility Rules

Under Washington State law, anyone who spills oil is responsible for the costs of cleanup efforts. However, there are no requirements to ensure the major facilities and large vessels that could spill significant quantities are able to afford those costs. This creates a risk that those high

[23] https://apps.ecology.wa.gov/publications/SummaryPages/2308013.html

costs could fall on Ecology and our federal, state, local, and Tribal partners rather than the responsible party.

To reduce this risk, Ecology will develop rules to certify that companies can afford those potential costs, even in a worst-case spill. These rules will apply to refineries, terminals, pipelines, oil tank ships and barges, and large cargo and passenger vessels.

Expanded Tug Escort Requirements

Within the constricted and busy waterways of Puget Sound, longstanding rules have required large oil carrying vessels to have tug escorts to reduce the risk of major spills.

Ecology will support the Washington Board of Pilotage Commissioners in writing rules that expand these requirements to cover both smaller tankers and a larger area, including Rosario Strait. The rules will be based on recent work to thoroughly model the risk and analyze potential benefits of such prevention tools.

Dangerous Waste Coordination

Ecology collects ever-increasing volumes of dangerous waste from hazardous materials spills, illegal drug manufacturing facilities, laboratory testing, and other operations. To safely handle this waste and comply with our own regulations, we are investing in improved staffing, facilities, procedures, and training. This work ensures we can set the best example of safe and effective dangerous waste handling for our customers across the state.

Alternative Marine Fuels

The maritime industry is taking on major decarbonization efforts, including upgrading their fleets and shifting to alternative fuel sources, such as liquefied natural gas. Although Ecology has limited authority to regulate these changes, they represent a significant change in our operating environment. We are collaborating closely with federal, Tribal, local, and industry partners to ensure we understand these trends and can properly react to the potential risks and opportunities they present.

Improving Training and Tools

The Spills Program is committed to continually improving our training and methodology to protect both the people and environment of Washington State. This biennium's actions include:

- Conducting internal drills and exercises to test our procedures and readiness.
- Incorporating no-notice drills into our drill program.
- Expanding our capacity for quantitative modeling to support future projects.

Activities, Results, and Performance Measures

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.
- Implementing protection strategies to minimize impacts to Washington's environmental, cultural, and economic resources.
- Issuing enforcement actions based on results of incident investigations.

Expected Results

- Oil spills, hazardous material spills, and clandestine labs are responded to and cleaned up rapidly to protect public health, natural resources, and property.
- All oil spills are responded to within 24 hours from the time they are reported.
- Approximately 4,000 annual spill reports are managed.
- Environmental, cultural, and economic damages resulting from spills are minimized.

Performance Measure

- Percentage of reported incidents that receive field responses.

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.

Expected Results

- Oil spills from regulated vessels and oil handling facilities are reduced or prevented.
- Oil spills impacting surface waters are reduced or prevented.
- Enrollment in the Exceptional Compliance Program is increased.
- Washington's environment, public health, and safety are protected.

Performance Measures

- Number of oil spills to surface water from all sources, including unregulated sources.

- Total volume of oil spilled to surface waters from all sources, including unregulated sources.
- Percentage of potential unique, high-risk vessels inspected.
- Gallons of oil spilled to surface water during an oil transfer for every 100 million of gallons transferred.
- Percentage of unique, regulated, over-water oil operations inspected.
- Total volume of oil spilled to water from regulated facilities and vessels.

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.

Expected Results

- Ecology and the regulated community are fully prepared to promptly respond to oil spills, and damage from spills are minimized.
- Contingency plans are in compliance with regulations and are tested through drills.
- Geographic Response Plans (GRPs) are developed for areas that do not have plans, and existing GRPs are updated and kept current.
- Maintenance of response equipment is documented by industry and records verified by Ecology.
- Washington's environment, public health, and safety are protected.

Performance Measures

- Number of Geographic Response Plans completed.
- Percentage of vessel emergencies reported to Ecology.

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.

Expected Results

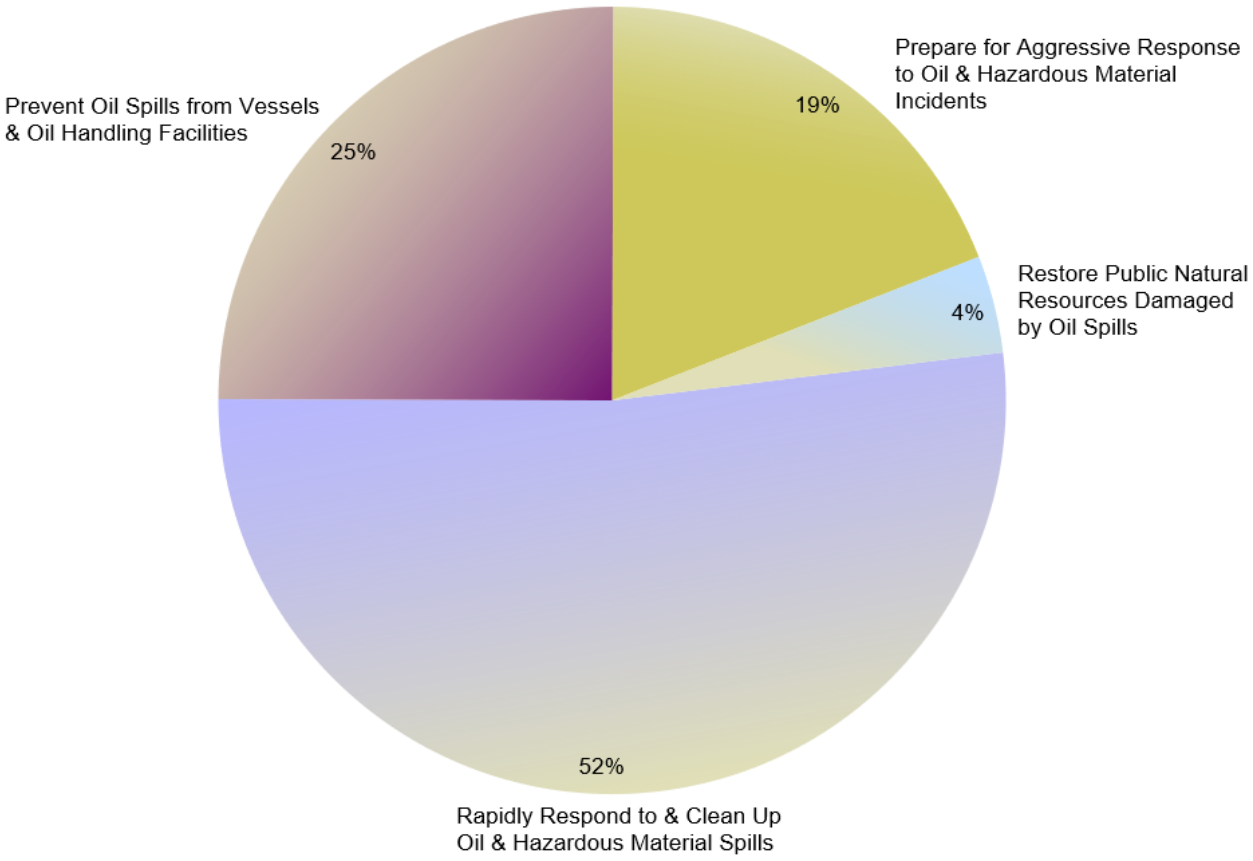
- Environmental impacts to publicly owned natural resources from oil spills are partially mitigated (compensated for) using damage assessment funding.
- Natural resource damage assessment is done on 100 percent of oil spills where 25 or more gallons reach surface waters.
- Priority wildlife habitat is restored and protected.

Performance Measure

- Percentage of completed restoration projects that meet plan specifications.

Spill Prevention, Preparedness & Response Program 2023-25 Biennium Budget by Activities

Operating[24] = $48.0 Million | No Capital | Total = $48.0 Million | FTEs = 106.6



Activities	Amount	%	FTEs
Rapidly Respond to & Clean Up Oil & Hazardous Material Spills (A054)	$24,904,000	52%	47.9
Prevent Oil Spills from Vessels & Oil Handling Facilities (A033)	12,061,000	25%	29.1
Prepare for Aggressive Response to Oil & Hazardous Material Incidents (A030)	9,364,000	19%	26.8
Restore Public Natural Resources Damaged by Oil Spills (A055)	1,694,000	4%	2.8

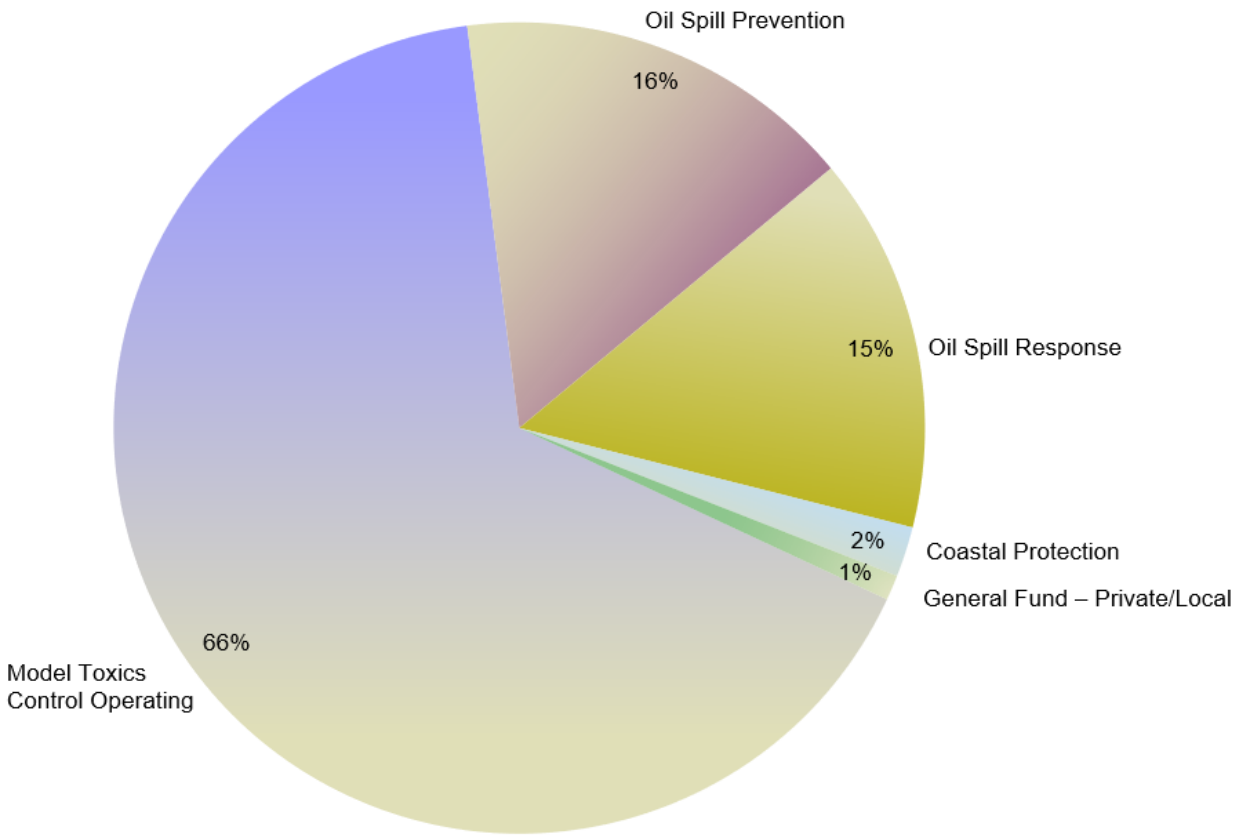
[24] The Spill Prevention, Preparedness & Response Program is funded entirely by operating dollars.

Spill Prevention, Preparedness, and Response Program

Activities	Amount	%	FTEs
Spill Prevention, Preparedness & Response Operating Budget Total	**$48,023,000**	**100%**	**106.6**

Spill Prevention, Preparedness & Response Program 2023-25 Biennium Budget by Fund Source

Operating[25] = $48.0 Million | No Capital | Total = $48.0 Million | FTEs = 106.6



Operating Fund Sources	Amount	%	Uses
Model Toxics Control Operating (23P)	$31,709,000	66%	Oil spill prevention, preparedness, and hazardous material and oil spill response work, including drug lab cleanup.
Oil Spill Prevention (217)	7,836,000	16%	Oil spill prevention and preparedness work.

[25] The Spill Prevention, Preparedness & Response Program is funded entirely by operating dollars.

Operating Fund Sources	Amount	%	Uses
Oil Spill Response (223)	7,076,000	15%	Oil spill cleanup where state response costs are expected to exceed $1,000. Amount is based on appropriation. Actual spending varies depending on qualifying expenditures for oil spill response.
Coastal Protection (408)	1,064,000	2%	Restoration of natural resources damaged by oil spills and nonpersonnel-related oil projects, research, and studies.
General Fund – Private/Local (001)	338,000	1%	British Columbia and Pacific States oil spill task force.
Operating Budget Total	**$48,023,000**	**100%**	
Spill Prev., Prep. & Resp. Operating & Capital Budget Total	**$48,023,000**		

Hector Casique (Project Manager of the Former Orchard Lands Unit in the Central Regional Office) prepares to perform soil sampling with an X-ray fluorescence spectrometer at a site in Yakima, WA.

Toxics Cleanup Program

Program Mission

The mission of the Toxics Cleanup Program is to protect Washington's human health and environment by preventing and cleaning up pollution, supporting sustainable communities, and protecting natural resources for the benefit of current and future generations. We do this by preventing, reducing, or eliminating exposure to contamination, which supports the development of environmentally and economically sustainable communities.

Environmental Threats

Ecology has identified over 14,100 toxics contaminated sites since the mid-1980s. We regulate over 8,600 underground storage tanks at more than 3,300 facilities across the state, and over half of the 14,100 identified sites were the result of underground storage tanks leaking into the environment and contaminating the soil and/or groundwater. Around 55 percent of the sites require no further cleanup action, and 30 percent are in the process of being cleaned up.

Contamination at each site is unique and can pose a different type and level of risk to public health and the environment. For example:

- Soils contaminated by arsenic and covering several miles have been discovered in school playgrounds, parks, backyards, and at industrial facilities.
- Fish and shellfish living near chemically contaminated sediments can retain toxins in their systems and expose people to toxins when eaten. Contaminated sediments can also contribute to declining fish populations.
- Contamination can expose people to chemicals in the water they drink and use at home.

We clean up contaminated sites to protect human health and the environment. It's also important to note that restoring contaminated property and putting it back into productive use preserves undeveloped lands, enhances redevelopment, and reduces further declines in state resources, such as fish and shellfish habitat.

Authorizing Laws

- Chapter 70A.305 RCW, Hazardous waste cleanup—Model toxics control act
- Chapter 70A.355 RCW, Underground storage tanks
- Chapter 90.48 RCW, Water pollution control
- Chapter 90.71 RCW, Puget Sound water quality protection

Constituents/Interested Parties

An important element of the Model Toxics Control Act (MTCA) is including the public and other interested parties throughout the process of cleaning up contaminated sites and developing new initiatives. We continue to build partnerships among government, industry, and residents. Constituents interested in cleaning up contaminated sites include:

- Businesses and individuals engaged in contaminated site cleanup
- Conservation and environmental groups
- Contaminated site owners
- Homeowners and businesses affected by leaking underground storage tanks
- Insurance and petroleum companies
- Lenders, developers, and realtors
- Ports
- Residents interested in, living near, or affected by contaminated sites
- State, federal, and local governments
- Tank owners and operators
- Tribal governments
- Underground storage tank service providers
- Washington Legislature
- Water purveyors

Focus Areas

Voluntary Cleanup

The Voluntary Cleanup Program (VCP) is designed for sites with routine cleanups. Under the program, customers can perform a cleanup independently and request technical assistance and written opinions from Ecology on the sufficiency of their cleanup.

Customers drive the VCP demand as they request advice and technical assistance. With today's strong real estate market, demand is greater than ever before. TCP has had over 6,000 VCP applications, and about 40 of those sites are on waiting list for staff capacity to work on the project. Of the 6,000 potential VCP projects, roughly 3,000 entered the VCP program. TCP is working on almost 600 VCP projects right now and has issued over 3,000 No Further Action letters through the VCP since 1999.

Over the past several years, Ecology has shifted some VCP work on petroleum-contaminated sites to the Pollution Liability Insurance Agency (PLIA) and implemented changes to make the VCP review process more efficient. This includes developing cleanup guidelines, model remedies, submittal checklists, and templates. These changes have helped reduce, but not eliminate, the backlog of VCP projects.

The 2019 Legislature passed SHB 1290, which authorized Ecology to:

- Establish a self-funding, expedited process for reviewing independent cleanups.
- Waive the costs of reviewing independent cleanups when affordable housing is built on the cleaned-up properties.

Ecology developed the new expedited review process implemented on July 1, 2020. This process allows us to be more responsive to the needs of customers working under tight timelines and reduce VCP dependence on tax revenue. The expedited review process is separate from the VCP. Since the new process was implemented, expedited VCP has received 96 requests, issued 14 No Further Actions, 29 No Further Action Likely, and six other opinions.

Per- and Polyfluoroalkyl Substances (PFAS) at Cleanup Sites

PFAS are a class of synthetic compounds that were originally manufactured in the 1940s and contain thousands of individual chemicals. They are extremely persistent in the environment and have been linked to immune system toxicity, high cholesterol, reproductive and developmental issues, certain cancers, and other health related problems.

Ecology has worked closely with the Washington Department of Health (DOH) to address concerns about PFAS. DOH set State Action Levels (SALs) for five PFAS compounds in drinking water. Ecology developed recommended soil and groundwater cleanup levels protective of human health for the same five compounds and some additional PFAS.

In October 2021, Ecology concluded that PFAS compounds are hazardous substances under the Model Toxics Control Act (MTCA) law and rule. In June 2023, we published our final guidance for investigating and cleaning up PFAS contamination in Washington State. This guidance helps potentially liable parties, engineering consultants, and Ecology staff better address sites with PFAS contamination.

MTCA Cleanup Regulations Updated

The MTCA Cleanup Regulations (Chapter 173-340 WAC) establish standards and procedures for cleaning up contaminated sites under Washington's environmental cleanup law, the Model Toxics Control Act (MTCA). Both the regulations and law help people remove contamination that can pose risks to human health and the environment.

The cleanup regulations had not been fully updated since 2001, and we began the process to update them in 2018. The amended rule for the first phase of updates was adopted on

August 23, 2023, and goes into effect on January 1, 2024. The revisions achieve several outcomes because they:

- Strengthen environmental justice when prioritizing and cleaning up sites.
- Advance public participation and Tribal engagement.
- Improve the site hazard assessment and ranking process.
- Update and clarify remedial investigation and remedy selection requirements.
- More clearly distinguish the requirements that apply to independent remedial actions.
- Improve response to underground storage tank (UST) releases and maintain federal approval of the state's UST program, as required by Chapter 70A.355 RCW.
- Make the rule easier to use and understand.

This was the first of several planned rulemakings where we focused on improving the way we prioritize, investigate, and clean up contaminated sites. The next rulemaking is slated for 2024, when we'll turn our attention to updating the technical cleanup standards portion of the regulations.

Ecology's Grant Programs Jumpstart Affordable Housing Development

Nearly every community in Washington State could say the same thing: "We urgently need affordable housing." Affordable housing is rental housing where rent (including utilities) is no more than 30 percent of the renting household's income. Cities, towns, and Tribes across the state are experiencing a critical shortage of this type of housing that would let more people live where they work. But contamination, or even the suspicion of contamination, can drive up costs of housing development and leave little incentive for developers to build it.

It is a complex problem that will require many solutions, and Ecology's Affordable Housing Cleanup Grant Program offers one solution to help. The new program makes it easier to redevelop once-contaminated properties by providing technical assistance and competitive grants for projects developing affordable housing in Washington. The two types of grants include planning grants for investigation and planning activities and cleanup grants to support projects through cleanup construction.

The program invests in communities with several benefits:

- It reduces costs for developers up front, so residents are less likely to be displaced by more expensive redevelopment.
- It requires the cleanup meet Washington's rigorous environmental cleanup law standards, which removes the threat of contamination, so people know the site is safe for living.
- Cleanup grants require the property remain affordable housing for 30 years, which helps preserve a community's character and lessens the chance for gentrification.

The grant programs' roots began in 2018, when the Legislature directed Ecology and the Department of Commerce to develop a competitive process for funding recipients who will use their cleaned-up property to build affordable housing. We launched the program in 2022 and will continue making improvements in response to stakeholders and community feedback.

In 2022, we solicited applications for the 2023-25 cleanup grants and awarded three to projects in Seattle and Tacoma. In 2023, we solicited applications for the planning grants and received seven for projects across the state, with four awarded in October 2023. In 2024, we will open solicitation for the 2025-27 cleanup grants.

Integrating Cleanup and Water Quality Authorities

Using regulatory tools effectively to address long-term environmental objectives is a significant challenge facing Ecology at two sites that bookend the state: the Lower Duwamish Waterway in Seattle and the Spokane River in Spokane. Both have polychlorinated biphenyl (PCB) contamination, and both have widespread contamination that involves multiple government and private partnerships.

Resolving regulatory differences and integrating their respective requirements is critical. Success in this arena will ensure the longevity of cleanup actions as well as achieve water quality objectives in the Lower Duwamish and Spokane rivers.

Water quality in the Lower Duwamish Waterway and the Spokane River causes concern for human and environmental health due to their active use. Both of the rivers:

- Are used for recreation.
- Are used for fishing, including Tribal use.
- Have contaminants in the sediments that can be carried through the food chain to fish and people.
- Receive discharges from industrial and municipal sources that contain PCBs.
- Flow through varied land uses, including industrial, residential, and recreational areas.
- Are adjacent to active industrial areas that are continued pollution sources.

Collaboration between the Toxics Cleanup and Water Quality programs at Ecology are critical and ongoing. When challenges arise due to competing regulations, these programs work together as One Ecology to ensure contaminated site cleanup is in agreement with water quality permits and vice versa.

Lower Duwamish Waterway

The Lower Duwamish Waterway (LDW) is one of two projects in the nation where Ecology and the U.S. Environmental Protection Agency (EPA) are bringing their cleanup and water quality staff together to solve very complex cleanup issues in an active industrialized area.

The LDW is a Superfund site located in Seattle. The site is approximately five miles long, and there are nearly 275 confirmed or suspected contaminated sites within the Superfund site.

With 32 square miles of stormwater and combined sewer overflow (CSO) drainage, contaminants can be picked up by runoff in the drainage area or deposited in the river and settle into the sediments. These contaminants include PCBs, polycyclic aromatic hydrocarbons, dioxins and furans, phthalates, arsenic, mercury, and other contaminants. These pose a threat to people, fish, and wildlife.

Managing this combination of site-specific and diffused sources of pollutants is called source control. Source control efforts are a critical part of reducing contaminants to the waterway so the in-water sediment cleanup led by EPA is effective and long lasting. Without an effective source control strategy in place, the in-water cleanup will be impacted by this continuing pollutant input and become recontaminated.

In the summer of 2023, we submitted a report to the EPA about source control efforts in the upper reach of the LDW. Together with our source control and cleanup partners, we've made solid progress on controlling sources of pollution. We're recommending that the EPA begin cleanup at 28 out of 29 active sediment cleanup locations in the upper reach.

Sediment cleanup in the Upper Reach is slated to begin in 2024 and it's time for us to make these recommendations for this part of the LDW. With our partners, we've made solid progress on controlling sources of pollution. We've determined that sources have been sufficiently controlled and we recommend that EPA proceed with cleanup at all but one sediment area. That area is located next to a contaminated upland cleanup site, Boeing Isaacson Thompson, where source control is still in progress.

Spokane River

The Spokane River begins in Idaho and flows for 112 miles through the cities of Post Falls and Spokane, eventually discharging into the Lake Roosevelt stretch of the Columbia River. Its drainage area encompasses over 6,500 square miles in Washington and Idaho.

Testing has shown high PCB levels in the river. PCBs get into the Spokane River through industrial discharges, wastewater treatment plants, and stormwater. These PCBs, along with PCBs found in sediments from historical discharges, are found in the river's fish.

Ecology, Tribes, other agencies, stakeholders, and the general public continue to work together to find effective solutions to improve and preserve the Spokane River. In the past, the Toxics Cleanup Program has participated in the Spokane River Regional Toxics Task Force, comprised of regulatory entities, state and local governments, environmental groups, and dischargers. The group developed a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs. However, with the initiation of a water quality cleanup plan (also called Total Maximum Daily Load, or TMDL) for PCBs, the group has disbanded and will be replaced with a new Ecology-led entity. We will continue to work closely with Ecology's Water Quality Program to ensure that work on PCBs in the Spokane River aligns with cleanup work occurring at sites along the river.

Brownfields Program Invests in Communities So People and Local Economies Can Thrive

There are more than 14,000 identified contaminated sites in Washington. Roughly 55 percent of these sites are already cleaned up and require no further action, but the remainder are awaiting further investigation and cleanup or are in the cleanup process. Many can be considered 'brownfields'—formerly developed properties now abandoned or underused, with contamination (or the perception of contamination) that inhibits their redevelopment. One example of a brownfield is an abandoned former gas station.

The Washington Brownfields Program helps people transform these properties. TCP's Brownfields Program leads the team that includes staff from the Washington Department of Commerce and the Environmental Protection Agency (EPA). We work with people in local governments, Tribes, and other community organizations who are interested in cleaning up their sites for redevelopment. We connect them with state and federal resources and provide technical assistance about the environmental cleanup laws so they can navigate the cleanup process more easily. Throughout the process, we provide education and outreach to help them reach their community's vision for the property. Examples of successful brownfield transformations include Spokane's Riverfront Park, Wenatchee's Riverfront Park, and Palouse Producers—a now-cleaned up property that houses a brewery and veterinary office.

Roadblocks Can Prevent People from Redeveloping Their Brownfield

Brownfields can originate in several ways. Private property owners may be reluctant to conduct an environmental investigation, or they may have potential liability concerns. Prospective purchasers and developers are often wary of buying a property if they suspect environmental contamination. Some people might own property that was contaminated by historical uses and later transferred to family trusts; others might be out of state with few ties to the community and little incentive to clean it up.

Roadblocks like these can cause properties to become (and remain) vacant or underused, which can lead to:

- Less local tax revenue.
- Fewer redevelopment and reinvestment opportunities.
- Lower community morale.
- Greater threat to public health and the environment.
- Greater chance of redeveloping pristine land, leaving blight in place and consuming greenspace.
- Greater chance that disproportionate impacts on overburdened and underserved communities will continue.

Vacant Properties Can Affect Small or Underserved Communities the Most

Thousands of contaminated sites are located throughout Washington, but it's often the small and rural communities and the overburdened or underserved communities in urban areas that

are affected the most. These communities may have a smaller local tax base. This, coupled with the loss of revenue from vacant or underutilized properties, can limit the amount of local public funding available to clean them up. Ecology is increasingly hearing concerns from smaller local governments that they are strapped for funding and strapped for staff capacity to do the work. The COVID-19 pandemic exacerbated the problem, leaving communities challenged to fund even small assessment and cleanup projects.

Communities are seeing the benefits of assessing, cleaning up, and redeveloping their brownfields—and Ecology is seeing an increased demand for resources to help them do so. In 2022, the Washington Brownfields Program received 50 new requests for assistance and is on track for a similar tally in 2023. That means we average four to five new inquiries each month about projects needing funding, many of which are from local governments with projects that are ready to move forward as soon as possible.

The reason for this high demand for brownfield resources is simple—people know it works. 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 they don't lose the interest of potential developers. We've found that early funding for assessment and cleanup helps stimulate a brownfield's redevelopment. But consistent funding has been cyclical at best, and often with gaps that create uncertainty for local governments and community stakeholders who need stable assistance.

Funding Provides a Critical Bridge

Ecology's 2023–25 budget included $1.6 million for Integrated Planning Grants (IPG). These grants provide $200,000 to $300,000 to support planning, investigation, and community engagement for a potential cleanup, and they are popular because they help communities make critical "go/no-go" decisions on whether to redevelop their brownfield. The demand for this type of funding is high. In September 2023, we received 16 applications requesting a total of $3.2 million—twice the funding available. Communities are realizing that early funding can yield a much bigger return on investment later. IPGs are an excellent way to give projects a strong foundation for future success.

In addition to IPGs, the Brownfields Program continues to facilitate a limited number of site assessments each year using funding from the EPA State Response Program grants. Local governments, Tribes, and nonprofits can request assessments for properties they own or plan to purchase.

Starting with the 2023–25 biennium, the Legislature has allocated $1 million of Flexible Brownfields Funding in Ecology's operating budget. This is a critical resource we will use to support local governments, nonprofits, and Tribes. It will bridge funding gaps so people can meet project milestones and complete cleanups faster.

Communities redeveloping their brownfields are reaping economic, environmental, and social benefits because they are:

- Retaining and creating jobs.
- Growing local economies.
- Revitalizing tax base/tax revenue.
- Increasing property values.
- Leveraging private investment.
- Re-using existing infrastructure and previously developed properties.
- Creating affordable housing.
- Revitalizing neighborhoods.
- Reducing threats to public health.
- Improving air and water quality.
- Reducing urban sprawl.

Washington's Brownfields Program invests in communities because it makes a difference for all of us. When we help assess and remove the stigma of blighted, abandoned brownfield properties, communities can spark changes that benefit their neighborhoods, local economies, and Washington State.

Activities, Results, and Performance Measures

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.

Expected Results

- The number of highly contaminated sites cleaned up increases by three percent each year.
- Public and environmental health is protected.
- Toxic contamination in food fish is reduced, and the aquatic environment is protected.
- Cleaned sites are ready for redevelopment and job creation.
- The number of sites with cleanup actions in progress increases.

Performance Measure

- Number of known toxics-contaminated sites with cleanup actions completed statewide.

Services to Site Owners that Volunteer to Clean Up Their Contaminated Sites

Ecology provides services to site owners or operators who initiate cleanup of their contaminated sites. Voluntary cleanups can be done in a variety of ways; completely independent of Ecology, independently with some Ecology assistance or review, or with Ecology 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 cleanup and promotes local economic development through new industries and other beneficial uses of cleaned properties.

Expected Results

- Three percent increase in the number of contaminated sites that are voluntarily cleaned up by site owners and prospective buyers using private funding.
- Public and environmental health is protected.
- Cleaned sites are ready for redevelopment and job creation.
- Increased number of sites with cleanup actions in progress.
- Decreased response time from Ecology to site owners and prospective buyers.
- Increased number of determinations made on final cleanup reports submitted by parties that voluntarily cleaned up sites.

Performance Measures

- Percentage of the Voluntary Cleanup Program applicants who receive an assessment of their plan or report within 90 days.
- Average number of days to provide an assessment of a plan or report received from a Voluntary Cleanup Program applicant.

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 tanks saves millions of dollars in cleanup costs and prevents contamination of limited drinking water and other groundwater resources.

Expected Results

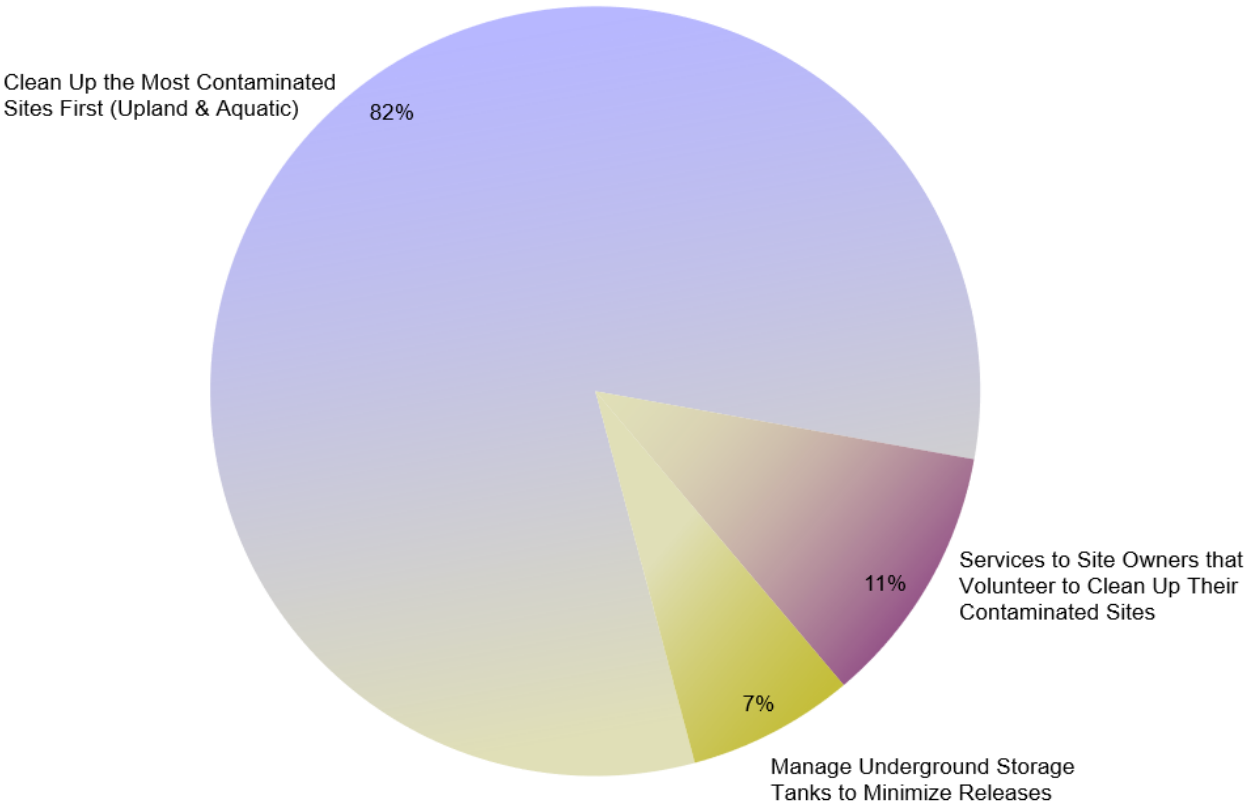
- Underground storage tanks are properly installed, monitored, or decommissioned to minimize the release of oil, gas, and other toxic materials into drinking water and other underground water sources.
- Decreased number of reported releases from underground storage tanks over time.
- Increased number of leaking underground storage sites where cleanup actions are completed.
- Increased percentage of underground storage tanks inspected that pass compliance for leak detection.

Performance Measure

- Percentage of underground storage tank sites inspected within three years.

Toxics Cleanup Program 2023-25 Biennium Budget by Activities

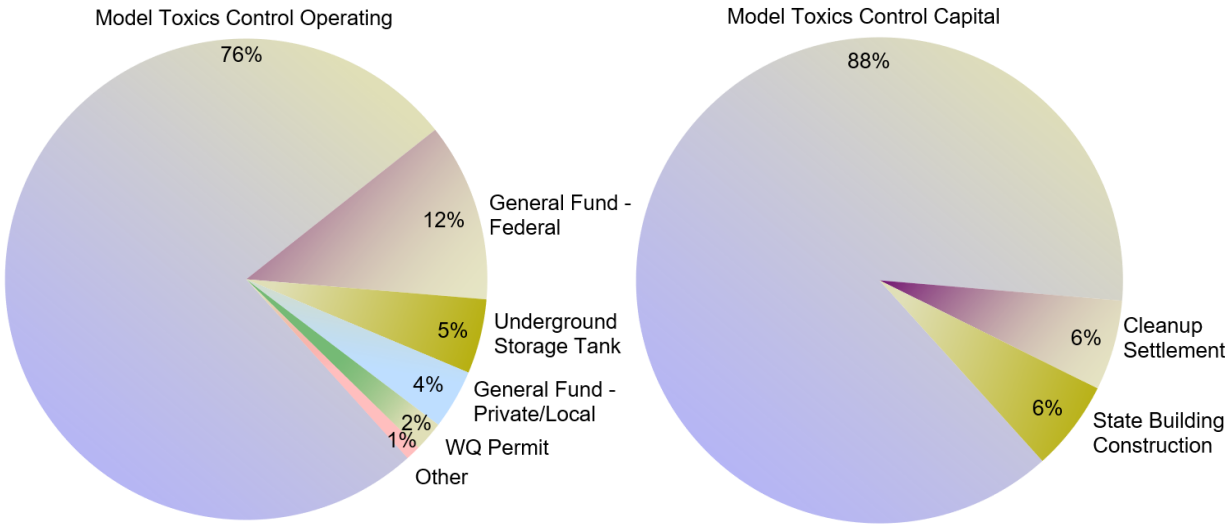
Operating = $84.4 Million | Capital = $330.3 Million | Total = $414.7 Million | FTEs = 252.4



Activities	Amount	%	FTEs
Clean Up the Most Contaminated Sites First (Upland & Aquatic) (A005)	$69,283,000	82%	200.5
Services to Site Owners that Volunteer to Clean Up Their Contaminated Sites (A057)	9,375,000	11%	26.9
Manage Underground Storage Tanks to Minimize Releases (A023)	5,744,000	7%	25.0
Toxics Cleanup Operating Budget Total	**$84,402,000**	**100%**	**252.4**

Toxics Cleanup Program 2023-25 Biennium Budget by Fund Source

Operating = $84.4 Million | Capital = $330.3 Million | Total = $414.7 Million | FTEs = 252.4



Operating Fund Sources	Amount	%	Uses
Model Toxics Control Operating (23P)	$64,057,000	76%	Cleanup activities include overseeing cleanups conducted under an order or decree, providing advice and assistance to persons independently conducting cleanups, leading emergency actions and cleanups where sites are abandoned or have non-compliant owners, and supporting contaminated site cleanup with public information, policy, and rule development, and other Toxic Cleanup Program support tasks. Includes cleanup project manager oversight of local government Remedial Action Grants.

Operating Fund Sources	Amount	%	Uses
General Fund – Federal (001)	10,259,000	12%	Federal cooperative agreements support the following: program activities and funding assistance for cleanup at Brownfield sites, national priorities list sites, federal superfund sites at military facilities, technical assistance, and cleanup related to leaking underground storage tanks, and pollution prevention, inspection, and permitting activities related to underground storage tanks.
Underground Storage Tank (182)	4,500,000	5%	Pollution prevention, inspection, and permitting activities related to underground storage tanks.
General Fund – Private/Local (001)	2,974,000	4%	Ongoing appropriations allow cleanup work at sites where there are multiple potentially liable parties. Funds allow Ecology to act as contracting agent and pass payment money to a cleanup contractor.
Water Quality Permit (176)	1,805,000	2%	Review NPDES permits to ensure discharges are not contaminating sediments above sediment management standards.
Other:			
Model Toxics Control Operating – Private/Local (23P)	499,000	<1%	Activities related to the cleanup of leaking underground storage tanks.
Voluntary Cleanup (23V)	308,000	<1%	Providing advice and technical assistance to persons independently conducting cleanups through the Voluntary Cleanup Program's expedited process.
Operating Budget Total	**$84,402,000**	**100%**	

Capital Fund Sources	Amount	%	Uses
Model Toxics Control Capital (23N)	$290,977,738	88%	Remedial Action Grant Program funding local government grants. Administration of the Remedial Action Grants, which provides fiscal oversight of the program. Investigate and clean up toxic sites. Includes appropriations for Cleanup Toxic Sites – Puget Sound and the Eastern Washington Clean Sites Initiative to clean up orphaned or abandoned sites, clean up sites with non-compliant owners, fund emergency removals, and invest where state funding can advance cleanups and build partnerships. Development, implementation and evaluation of model remedies. Clean up contaminated properties to support redevelopment for affordable housing.
Cleanup Settlement (15H)	21,081,772	6%	Continued remediation activities and habitat restoration as required by settlements resulting in settling liability with the state and depositing funds in the account.
State Building Construction (057)	18,215,522	6%	Remedial Action Grant Program funding local government grants. Investigate and clean up toxic sites. Includes appropriations for Cleanup Toxic Sites – Puget Sound and the Eastern Washington Clean Sites Initiative to clean up orphaned or abandoned sites, clean up sites with non-compliant owners, fund emergency removals, and invest where state funding can advance cleanups and build partnerships.
Capital Budget Total	**$330,275,032**	**100%**	
Toxics Cleanup Operating & Capital Budget Total	**$414,677,032**		

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Jay Fennell (an Inspector in the Water Quality Program) visits a mining and construction aggregate operation in Arlington, WA. Inspectors review business operations and site records to ensure the permittee is protecting water quality.

Water Quality Program

Program Mission

The mission of the Water Quality Program is to ensure that all aquatic life and communities in the watershed experience cool, clean water to refresh and sustain us in a changing climate.

Environmental Threats

Water pollution threatens lakes, estuaries, streams, and groundwater across Washington State. Fish, shellfish, and other aquatic animals require cool, clean water to survive. Water quality impacts to rivers and streams include high water temperature, low dissolved oxygen, low pH, toxics, and bacteria. Washington has a significant number of waterbodies, marine sediments, and groundwater polluted by an array of contaminants.

Several sources contribute to poor water quality, and stormwater and nonpoint runoff are foremost among them. Stormwater is rain and snowmelt that runs off surfaces such as rooftops, paved streets, highways, and parking lots. As water runs off these surfaces, it can pick up pollution like oil, fertilizers, pesticides, soil, trash, and animal waste. From here, the water may flow into a local waterway through a pipe or just over the stream bank. The large, paved surfaces in urban areas increase the quantity of peak flow runoff, leading to urban flooding. Untreated stormwater can make water and shellfish unsafe for humans and animals and can harm fish and wildlife habitat.

Federal law requires states to identify sources of pollution in waters that fail to meet state water quality standards and to develop water quality cleanup plans, or Total Maximum Daily Loads (TMDLs), to address those pollutants. The TMDL establishes limits on pollutants that can be discharged to the waterbody and still meet state water quality standards.

Toxic pollution from new and unknown chemicals is a growing concern threatening water quality. Ecology is studying sources of toxic pollution and developing action strategies to clean up and protect water quality. As Washington's population continues to increase, so will these potential sources of water pollution.

Authorizing Laws

- Federal Clean Water Act
- Federal Safe Drinking Water Act

- RCW 43.21A.650, Freshwater aquatic weeds account
- Chapter 70A.135 RCW, Water pollution control facilities financing
- Chapter 70A.305, Hazardous waste cleanup—Model toxics control act
- Chapter 76.09 RCW, Forest practices
- Chapter 90.42 RCW, Water resource management
- Chapter 90.46 RCW, Reclaimed water use
- Chapter 90.48 RCW, Water pollution control
- Chapter 90.50A RCW, Water pollution control facilities—Federal capitalization grants
- Chapter 90.54 RCW, Water resources act of 1971
- Chapter 90.64 RCW, Dairy nutrient management
- Chapter 90.71 RCW, Puget Sound water quality protection

Constituents/Interested Parties

- Businesses and industries
- Conservation districts
- Environmental organizations
- Local governments, cities, and counties
- Residents and special interest groups
- State and federal governments and agencies
- Tribes and Tribal governments

Focus Areas

Toxic Tire Wear in Stormwater

A chemical in tires, 6PPD-quinone (6PPD-q), is lethal to salmon in very small doses. We are researching its persistence in the environment and finding out which stormwater treatment approaches are effective in removing 6PPD-q's toxic effects to coho salmon and other aquatic organisms impacted by stormwater runoff.

Ecology is also developing new procedures for approving use of Best Management Practices (BMPs) under our Technology Assessment Protocol to address 6PPD-q toxicity. We are also expanding coordination with multiple state and federal agencies and Tribal governments to find and make use of opportunities to leverage existing research and get BMPs on the ground where we need them.

Ecology is also expanding stormwater studies to identify the appropriate BMPs and their design and construction specifications. BMP studies will fill science gaps in understanding the effectiveness of current and future stormwater treatment facilities and devices to remove 6PPD-q from stormwater runoff, evaluate the logistics and site conditions that are required for the BMP to be effective (e.g., soil type and depth to groundwater), and prepare regulations and guidance for stormwater managers to reduce tire toxicity to salmon.

Addressing Nonpoint Pollution

Nonpoint pollution is Washington's most serious pollution problem, and often the most difficult one to solve. This pollution comes from diffused sources, is generated by every kind of land use, and has no specific regulatory tool (like a permit) to deal with it. Solving the nonpoint pollution problem will require behavior changes, as well as better land management practices.

Nonpoint sources of water pollution, such as runoff from farms, forestlands, and other sources, continue to pollute Washington's waters and now represent the largest remaining challenges to achieving clean water in our state. Key to addressing this challenge is having focused nonpoint specialists in the field to implement the state's Nonpoint Source Pollution (NSP) Program by identifying pollution sources and working with partners to get fixes on the ground.

Ecology received funding in the 2023-25 budget to support additional nonpoint water quality positions needed to work with landowners and local governments to promote voluntary compliance, implement BMPs, and support implementation of water quality cleanup plans (also called Total Maximum Daily Loads, or TMDLs).

Building a strong, enduring NSP Program requires a tremendous amount of relationship building within local communities. Working out of Ecology's Central, Eastern, and Southwest regional offices, these nonpoint specialists will use a watershed evaluation process to identify pollution problems, contact landowners and producers, work with them and other watershed stakeholders to implement recommended BMPs that prevent discharges of pollutants, and provide a regulatory backstop when voluntary efforts do not address pollutions sources. These additional staff will increase capacity to implement cleanup plans in areas of the state critical to salmon, shellfish, and orca recovery, as well as protecting people recreating in those waters.

Contaminated Sites Redevelopment

Stormwater runoff at construction sites is typically controlled through a construction stormwater general discharge permit. However, when a construction site is contaminated from past uses, the stormwater runoff may become contaminated and release toxic materials or hazardous substances to the environment.

As contaminated properties are cleaned up and redeveloped, Ecology has a responsibility (Chapter 90.48 RCW) to ensure stormwater runoff during construction meets water quality standards. In these circumstances, when general permit requirements are not specific enough to address water quality concerns, Ecology issues individual administrative orders under RCW 90.48.120 as companions to general permit coverages to ensure stormwater treatment and monitoring addresses site-specific contaminants. These orders and permits combine to allow site remediation and construction without contaminating neighboring waters. The combination also helps properly cover most projects under the general permit.

In the 2023-25 biennium, we will increase our team of stormwater specialists who will work with developers and other project proponents to more effectively issue administrative orders in

conjunction with general permits. The team will develop and issue site-specific administrative orders to require stormwater treatment and BMPs, additional sampling and analysis, and corrective action triggers to ensure pollutants in contaminated stormwater are measured, controlled, and removed prior to discharge.

More specialists to do this work will reduce delays for customers and better protect water quality and fish and wildlife resources. It will also reduce human health risks for residents who could consume contaminated fish and shellfish.

Reducing the Permit Backlog

Ecology regulates pollutant discharges to surface and ground waters by writing and managing wastewater discharge permits for sewage treatment plants, industrial facilities, and other general categories of wastewater dischargers.

Restoring water quality is an obligation for Washington under the federal Clean Water Act and ensures our waters support recreation and businesses that rely on clean water; clean drinking water; and protection of fish, shellfish, wildlife, and public health.

In 2022, the Legislature passed Substitute Senate Bill 5585, which requires Ecology to make progress on its wastewater discharge permit backlog and report progress in its biennial Wastewater and Stormwater Discharge Permit Fee Program Report to the Legislature. The law requires reducing the current backlog of 66 percent to 40 percent by July 1, 2025, and 20 percent by July 1, 2027. With increased revenue from permit fees and additional appropriation in the 2023-25 budget, Ecology will add permit staff positions that will be strategically located in the regions where the backlog issue is the greatest.

Ecology also administers approximately 4,150 general permits for construction and industrial stormwater, which represents 65 percent of all water quality permits. With funding provided in the 2023-25 budget, we increased staffing to issue permit coverages and associated actions in a timely manner; ensure electronic reporting is up-to-date; review and approve site-specific corrective actions; provide technical assistance; evaluate discharge monitoring reports and other submittals for compliance; and be responsive to regional inspectors, permittees, and the public.

Puget Sound Nutrient Reductions

Humans are causing nutrient pollution in Puget Sound, which results in more acidic waters with less oxygen for fish and other aquatic life. This disrupts the food chain and exacerbates risks of fish kills, threatening salmon and the orca that depend on them. Ecology issued the Puget Sound Nutrient General Permit in early 2022, starting what will be a critical long-term effort to upgrade municipal wastewater facilities that discharge into Puget Sound with nutrient control technology. These facilities contribute nearly 70 percent of the excess nutrients going into the sound. In the 2023-35 biennium, Ecology is supporting permit implementation, defending the permit from legal challenges, and distributing $9 million provided by the Legislature to support local municipalities that are implementing the new requirements.

Ecology also submitted a report to the Legislature in June 2023[26] on the potential for water quality trading of nutrients in Puget Sound to support both the pace and size of reductions in excess nutrients discharged to the sound. We will continue to explore this effort with stakeholders, permittees, and Tribal governments as we prepare for the significant investments that will be needed to restore Puget Sound oxygen to health levels.

WQ Fee and Loan Tracking Systems

The Water Quality Program manages two fee databases and a loan tracking system that all require ongoing maintenance and integration with our agencywide invoicing system, eHub. The Operator Certification Database tracks fees for Wastewater Treatment Plant Operator Certifications, the Aquarius Database tracks fees for water quality permits, and the eHub loan module calculates invoices for loans.

With funding provided in the 2023-25 budget, we increased our Water Quality Information Technology (IT) staffing and resources to maintain the three systems properly and reduce the risk that invoicing is inaccurate or delayed. This work will improve customer service and significantly reduce the manual workload for Ecology staff. Ecology plans to allow operators to apply and pay for certifications online instead of through our manual paper process.

Financial Assistance

Ecology's Water Quality Combined Funding Program provides funding for projects that improve and protect water quality throughout Washington. The program combines grants and loans from both state and federal funding sources to support water quality infrastructure and nonpoint pollution projects in communities throughout the state. Applicants submit just one application to seek funding from all of the funding sources within the combined program, and Ecology staff provide technical assistance and financial and project management throughout the process.

Since 2014, the number of projects funded through this program has increased by 197 percent, while staffing has only increased by 62 percent over that same time.

Ecology received funding in the 2023-25 biennium for additional staff to ensure these critical funding opportunities reach the communities that need them, and the projects are effectively managed to completion.

Ecology will award new water quality grants and loans and continue to manage existing grants and loans to protect public health and the environment through water quality protection and improvement. Specifically, Ecology will:

[26] https://apps.ecology.wa.gov/publications/SummaryPages/2310007.html

- Provide effective and efficient financial and technical assistance to manage water quality projects with the highest benefit to human health and the environment.
- Capture environmental data and demonstrate the environmental benefits of the grant and loan program.
- Help grant and loan recipients properly manage public funds with a high level of integrity and accountability.
- Continue to develop an ongoing, comprehensive, statewide stormwater financial assistance program for local governments.
- Coordinate with other state and federal programs to provide technical assistance to communities planning water quality improvement projects.

Activities, Results, and Performance Measures

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.

Expected Results

- Public funds dedicated to improving water quality are managed responsibly to protect public health and the environment.
- Improve water quality by awarding close to $220 million in water quality grants and loans per year to local communities.
- About 60 new grants and loans are awarded each year for projects under existing and ongoing financial assistance programs that demonstrate clear benefits for the environment.
- Additional grants are awarded each year for stormwater projects, based on newly appropriated funds.
- Approximately 350 existing grants and loans are managed each year.
- Local governments get support through implementing revised grant and loan program rules that address updated water quality needs, the State Revolving Fund loan program perpetuity, balanced funding allocations, and design-build alternative contracting options.

- Environmental benefits are documented and illustrated through data generated from grants and loans.

Performance Measure

- Number of funded on-site sewage system repairs or replacements completed in Puget Sound counties.

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.

Expected Results

- Fewer wastewater discharges and lower toxicity through administering the permit program for 2,000 permit holders.
- 100 National Pollution Discharge Elimination System wastewater discharge permits are issued or renewed each year.
- Active permits are up to date.
- New permit applicants get responses within 60 days.
- General permits are developed and managed on schedule for 1,500 dischargers.
- 700 site visits are done each year.
- Approximately 2,000 wastewater plant operators get certification.
- Communities get help increasing the production and use of reclaimed wastewater.
- Ecology responds to permit violations in a timely manner (within three months for minor violations).

Performance Measure

- Percentage of active water quality discharge permits (National Pollutant Discharge Elimination System permits) that are up to date.

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. We currently provide 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.

Expected Results

- Reduced contamination of streams, rivers, estuaries, lakes, and groundwater due to stormwater runoff from roads and other impervious surfaces.
- Approximately 3,000 construction and industrial stormwater dischargers that require permits are managed.
- New permit applicants get a response within 60 days of application receipt.
- Approximately 120 municipal stormwater permits are managed.
- Permittees get web-based information and support for low-impact development, emerging treatment technologies, and permit technical assistance.

Performance Measures

- Average number of days it takes to make final decisions on construction stormwater permits.
- Percentage of city and county Phase II Municipal Stormwater permittees in substantial compliance with their permit.
- Number of industrial stormwater inspections conducted.
- Number of construction stormwater inspections conducted.
- Percentage of industrial stormwater facilities submitting discharge monitoring reports as required by permit.
- Percentage of construction stormwater facilities submitting discharge monitoring reports as required by permit.

Clean Up Polluted Waters

The Federal Clean Water Act requires Ecology to develop water quality standards and identify water bodies that fail to meet those standards. We do 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.

Expected Results

- Water quality improvement reports are in place to protect public health and the environment.
- 1,500 contaminated water body segments are managed on 650 water bodies (Washington's legal commitments specified in a Memorandum of Agreement prompted by a lawsuit).
- Fifty water improvement reports and associated technical reports are submitted each year to the Environmental Protection Agency.
- Local communities get help implementing water quality improvement reports.
- An updated list of marine water bodies failing to meet water quality standards is developed.

Performance Measure

- Number of water quality cleanup plans submitted to the Environmental Protection Agency.

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. We also coordinate with other stakeholders through the Washington State Nonpoint Workgroup, the Forest Practices Technical Assistance group, and the Agricultural Technical Assistance group.

Expected Results

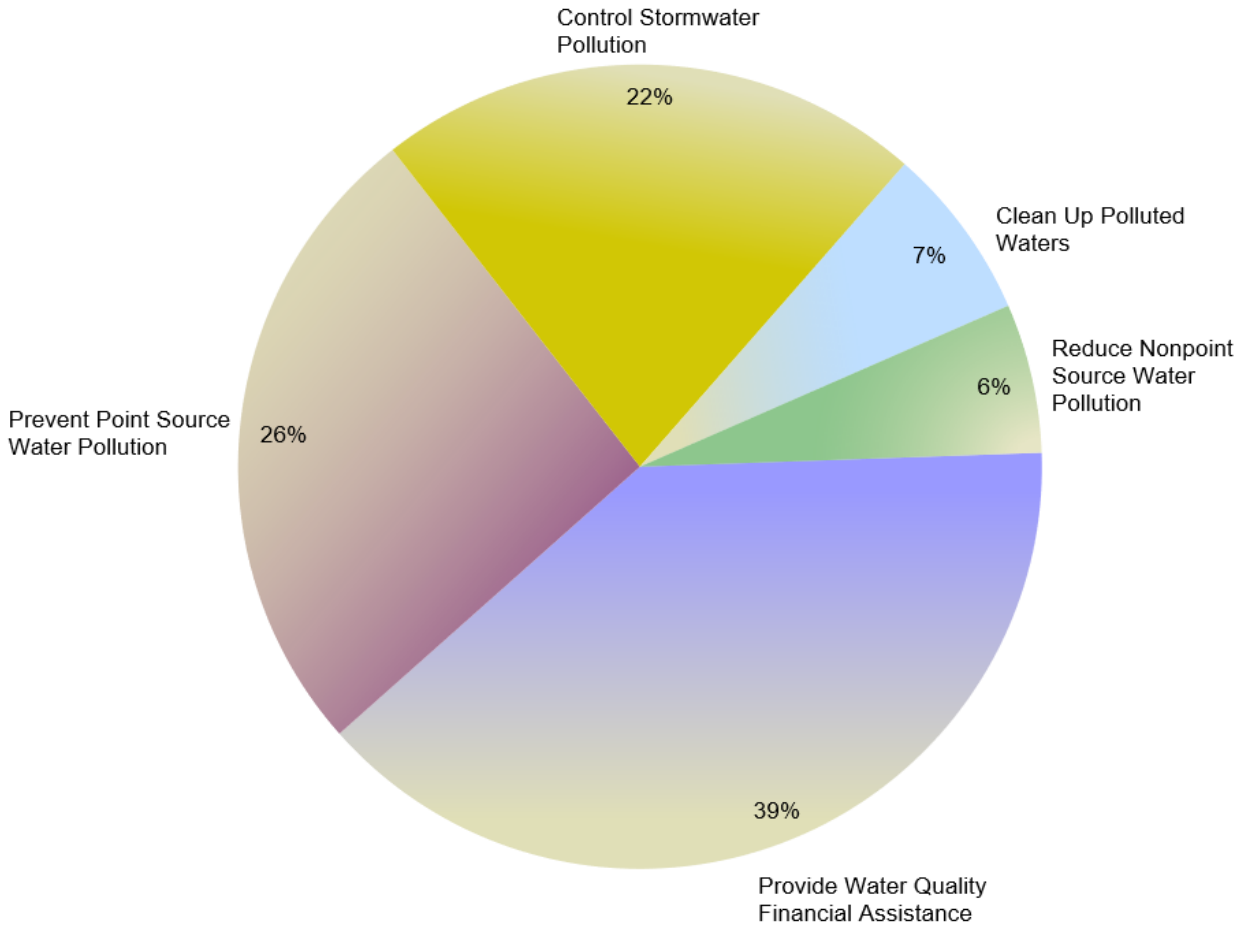
- Protection of surface and groundwater is improved through community implementation of the state's Water Quality Management Plan to Control Nonpoint Pollution and water quality improvement reports.
- Local communities and groups get help from Ecology to implement water quality improvement projects and other strategies to clean up polluted waters.
- The Department of Natural Resources and the forestry industry get help to manage 12 million acres of state-owned and privately owned forests.
- The Department of Agriculture gets help to manage water quality problems generated by agricultural uses.
- Best management practices necessary to address nonpoint pollution problems are implemented.
- State and federal grants are available to, and used efficiently by, local governments.
- The number of stream miles restored or protected is increased through work with local communities and other agencies.

Performance Measure

- Number of funded on-site sewage system repairs or replacements completed in Puget Sound counties.

Water Quality Program 2023-25 Biennium Budget by Activities

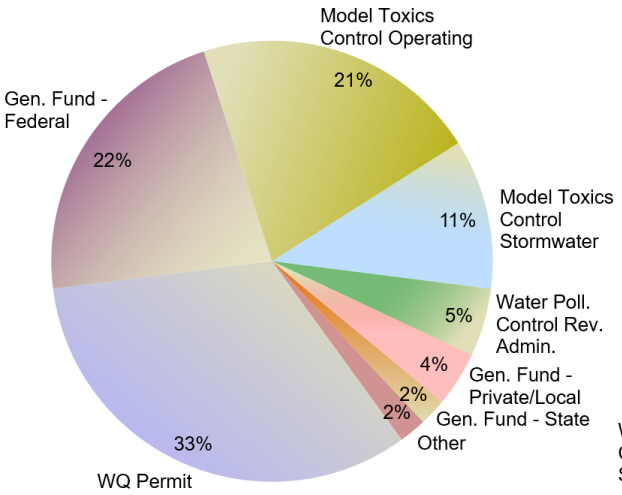
Operating = $147.2 Million | Capital = $999.8 Million | Total = $1.1 Billion | FTEs = 346.1

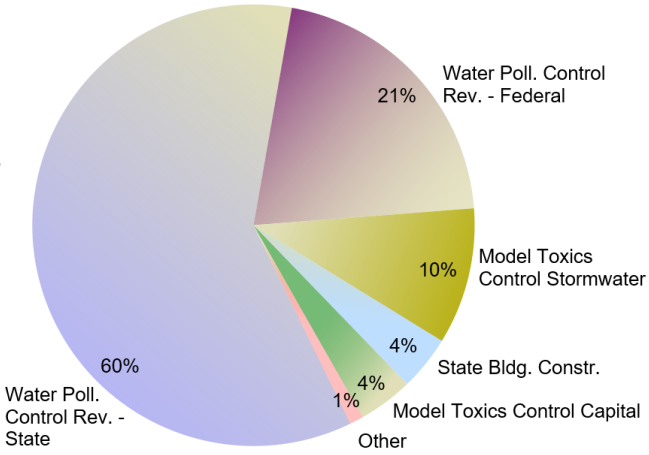


Activities	Amount	%	FTEs
Provide Water Quality Financial Assistance (A043)	$57,056,000	39%	70.8
Prevent Point Source Water Pollution (A032)	38,198,000	26%	138.8
Control Stormwater Pollution (A008)	31,660,000	22%	60.3
Clean Up Polluted Waters (A006)	10,784,000	7%	31.4
Reduce Nonpoint Source Water Pollution (A049)	9,497,000	6%	44.8
Water Quality Operating Budget Total	**$147,195,000**	**100%**	**346.1**

Water Quality Program 2023-25 Biennium Budget by Fund Source

Operating = $147.2 Million | Capital = $999.8 Million | Total = $1.1 Billion | FTEs = 346.1





Operating Fund Sources	Amount	%	Uses
Water Quality Permit (176)	$48,245,000	33%	Issue and manage federal and state wastewater/stormwater discharge permits.
General Fund – Federal (001)	31,819,000	22%	Numerous U.S. Environmental Protection Agency grants for point and nonpoint source control; water cleanup plans; management of water quality grants and loans to local governments; and groundwater protection.
Model Toxics Control Operating (23P)	30,855,000	21%	Water quality standards; aquatic pesticides management; water quality financial assistance; enforcement of permit requirements; Puget Sound Plan activities, such as nonpoint source watershed management; forest practices compliance; water cleanup plans; data and aquatic plant management. This funding also provides state match needed to secure federal funding.
Model Toxics Control Stormwater (23R)	16,965,000	11%	Stormwater management and local government stormwater capacity grants.

Operating Fund Sources	Amount	%	Uses
Water Pollution Control Revolving Administration (564)	7,763,000	5%	Funding will provide the Water Quality Program with stable financial resource to provide engineering oversight, financial management, and administration for the SRF loan program based on Clean Water Act requirements.
General Fund – Private/ Local (001)	6,142,000	4%	Administer the Stormwater Action Monitoring (SAM) Program.
General Fund – State (001)	2,738,000	2%	Funding is passed through to the Spokane River Toxics Advisory Committee in order to identify and remove sources of PCBs and other toxins in the Spokane River. Supports water quality certifications for hydroelectric projects and other nonpoint source control activities.
Other:			
Reclamation (027)	1,340,000	<1%	Funding provided to Ecology and the Department of Fish and Wildlife to license, relicense, and monitor the effects of hydroelectric projects on water, fish and wildlife.
Wastewater Treatment Plant Operator Certification (21H)	722,000	<1%	This account funds our work to administer and oversee the certification process for plant operators.
Climate Commitment (26C)	606,000	<1%	Supports issuing water quality permits for new clean energy facilities.
Operating Budget Total	**$147,195,000**	**100%**	

Capital Fund Sources	Amount	%	Uses
Water Pollution Control Revolving – State (727)	$598,940,766	60%	State funds for loans for constructing or replacing water pollution control facilities, nonpoint source control activities, and estuary management.
Water Pollution Control Revolving – Federal (727)	207,864,520	21%	Federal funds for loans for constructing or replacing water pollution control facilities, nonpoint source control activities, and estuary management.
Model Toxics Control Stormwater (23R)	99,675,373	10%	Grants for statewide stormwater projects to local governments for plan, design, and construct stormwater retrofit or low-impact development projects.
State Building Construction (057)	45,078,977	4%	New appropriations and reappropriations for the Centennial Clean Water Program provide grants for water pollution control facilities and nonpoint source control. New appropriations for Nutrient Reduction Grant Program provide grants for wastewater nutrient reduction planning and optimization to Puget Sound municipalities. Reappropriations provide grants for the Stormwater Financial Assistance Program.
Model Toxics Control Capital (23N)	39,450,000	4%	Reappropriations for the Centennial Clean Water Program provide grants for water pollution control facilities and nonpoint source control.
Other:			
General Fund – Federal (001)	6,000,000	<1%	Grants to local governments to fund essential municipal infrastructure work to address the water quality and public health impacts caused by urban stormwater and combined sewer overflows.
Freshwater Aquatic Weeds (222)	1,832,948	<1%	Grants to local governments to prevent, remove, or manage invasive freshwater aquatic weeds.

Capital Fund Sources	Amount	%	Uses
Aquatic Algae Control (10A)	1,003,402	<1%	Grants to local governments to prevent, remove, or manage freshwater and saltwater aquatic blue-green algae.
Capital Budget Total	**$999,845,986**	**100%**	
Water Quality Operating & Capital Budget Total	**$1,147,040,986**		

Eric Hartwig (the Walla Walla Watermaster) measures streamflow on a Walla Walla River tributary.

Water Resources Program

Program Mission

The mission of the Water Resources Program is to manage water resources to meet the needs of people and the natural environment, in partnership with Washington communities.

Environmental Threats

Historically, Washington residents have enjoyed an abundance of clean and inexpensive water. Now, water managers are facing increasing challenges in ensuring adequate water supplies are available to meet current and future needs.

Washington increasingly lacks water where and when it is needed for fish, farms, and communities. Decreasing snowpack, earlier spring thaws, and hotter summers are exacerbating problems with threatened and endangered fish and wildlife species already stressed by the state's growing population. Climate change is likely to further increase the frequency and severity of droughts, resulting in dry or over-heated streams, withered crops, rampant wildfires, and reduced hydropower production.

Lack of water for further allocation puts senior water rights and instream flows at risk of impairment in water-short basins. Legal uncertainty related to the validity and extent of water rights and claims, including federal and Indian rights and claims, are putting more water allocation decisions in the hands of judges and attorneys.

Authorizing Laws

- Chapter 18.104 RCW, Water well construction
- RCW 19.27.097, Building permit application—Evidence of adequate water supply—Authority of a county or city to impose additional requirements—Applicability—Exemption—Groundwater withdrawal authorized under RCW 90.44.050
- Chapter 43.21A RCW, Department of ecology
- Chapter 43.27A RCW, Water resources
- Chapter 43.83B RCW, Drought conditions
- Chapter 77.57 RCW, Fishways, flow, and screening
- RCW 86.16.035, Department of ecology—Control of dams and obstructions
- Chapter 90.03 RCW, Water code
- Chapter 90.08 RCW, Stream patrollers
- Chapter 90.14 RCW, Water rights—Registration—Waiver and relinquishment, etc.
- Chapter 90.16 RCW, Appropriation of water for public and industrial purposes

- Chapter 90.22 RCW, Minimum water flows and levels
- Chapter 90.24 RCW, Regulation of outflow of lakes
- Chapter 90.28 RCW, Miscellaneous rights and duties
- Chapter 90.36 RCW, Artesian wells
- Chapter 90.38 RCW, Yakima river basin water rights
- Chapter 90.40 RCW, Water rights of United States
- Chapter 90.42 RCW, Water resource management
- Chapter 90.44 RCW, Regulation of public groundwaters
- Chapter 90.46 RCW, Reclaimed water use
- Chapter 90.54 RCW, Water resources act of 1971
- Chapter 90.66 RCW, Family farm water act
- Chapter 90.80 RCW, Water conservancy boards
- Chapter 90.82 RCW, Watershed planning
- Chapter 90.86 RCW, Joint legislative committee on water supply during drought
- Chapter 90.90 RCW, Columbia river basin water supply
- Chapter 90.94 RCW, Streamflow restoration

Constituents/Interested Parties

- Agricultural groups
- Business and industry
- Environmental organizations and local watershed planning and management groups
- Local governments—cities, counties, utilities, irrigation districts, and conservation districts
- People living near dams and dam owners
- State and federal agencies
- Tribal governments
- Real estate developers, realtors, and builders
- Recreational water users and sport and commercial fishers
- Water and power utilities
- Water-right holders and well drillers

Focus Areas

Water Management Challenges and Successes

Washington has seen increased demand for water supplies to accommodate population growth and economic development. Demand has also been coupled with concern for how climate change will impact water supplies and the environment.

These issues highlight the need for improving water management in water-short basins. More than ever before, Ecology recognizes the importance of working with our water management partners and the Legislature to update water management policies and provide additional funding to address increased demand and competition for water.

Ecology is focusing on more efficient decision-making on new water rights applications. We have revised our application forms and guidance to ensure we have the information we need to efficiently process new incoming applications and to help facilitate sales, transfers, and changes in water use to better manage water supply. The current pending application backlog is 4,484 applications (as of June 2023), which is down from 7,018 applications in 2011. In the two-year period from July 1, 2021, to June 30, 2023, Ecology made 593 water right decisions.

Legislative support has brought funding to several water management initiatives. These initiatives are discussed in more detail on the following pages.

Streamflow Restoration Act Implementation

In 2018, the Legislature passed ESSB 6091 (Chapter 90.94 RCW), which substantially altered the state's historic approach to managing permit-exempt groundwater withdrawals for domestic purposes. This law imposes reduced limits on daily water withdrawals, requires fees for the right to withdraw water for domestic purposes, and mandates plans and actions to offset the impacts of those withdrawals on instream flows. Ecology is working with Tribes, local governments, and other state agencies to implement this chapter in water resources law and management. The law requires:

- Updating watershed plans in 15 Water Resource Inventory Areas (WRIAs).
- Creating a statewide grant funding program to support the watershed plan updates.
- Establishing two metering pilots.
- A joint legislative task force to look at mitigation for up to five pilot projects.

To date, Ecology has adopted 10 of the 15 watershed plans by the statutory deadline and has submitted the following draft plans to the Salmon Recovery Funding Board for technical review and recommendations prior to adoption:

- WRIA 7 – Snohomish
- WRIA 8 – Cedar-Sammamish
- WRIA 13 – Deschutes
- WRIA 14 – Kennedy-Goldsborough
- WRIA 15 – Kitsap

In passing the Streamflow Restoration Act, the Legislature stated the intent to appropriate $300 million for projects to achieve the goals of the act until June 30, 2033. They also directed Ecology to implement a program to restore and enhance streamflows and develop and implement plans to restore streamflows to levels necessary to support robust, healthy, and sustainable salmon populations. Ecology has supported implementation of 63 projects in 27

watersheds in the first three streamflow restoration competitive grant[27] rounds, and the fourth round will be initiated in early 2024, with up to $40 million available.

The two metering pilots are providing Ecology with data on permit-exempt domestic withdrawals in Kittitas County and the Dungeness rule area. The purpose of these pilots is to examine the overall feasibility of measuring water use for all new groundwater withdrawals. The pilots will continue for a total of 10 years.

Of the five mitigation projects identified in the law, the City of Yelm's pilot project was approved by Ecology in 2022. Ecology will continue to coordinate with local entities, jurisdictions, and planning units to complete the permitting process for the other four pilot projects:

- WRIA 1 – Whatcom County Irrigation District
- WRIA 10 – City of Sumner
- WRIA 12 – Spanaway Water System
- WRIA 15 – City of Port Orchard

Water Banking and Trust

The Legislature provided $15 million for the 2021-23 biennium, and reappropriated funding for the 2023-2025 biennium for Ecology to establish a grant program for funding local water banks and continue with stakeholder engagement to evaluate concerns around water banking and trust and water right transfers during this biennium. Ecology initiated the grant funding solicitation in the fall of 2021. The grant funding opportunity remains open until funds are fully expended.

Adjudication

A water rights adjudication is the process of determining whether each water right on a water source is legal, how much water can be used, and the priority of rights from oldest to newest. The process occurs in the county Superior Court where the water source is located.

The Legislature provided funding in the 2023-25 biennium for Ecology to initiate adjudications in the Nooksack and Lake Roosevelt and Middle Tributaries. We anticipate filing the Nooksack adjudication in spring 2024.

Drought Funding

Drought can cause agricultural losses, drinking water shortages, and severe environmental harm. In 2023, the Legislature updated Chapter 43.83B RCW to provide funding to Ecology for immediate drought response because drought is difficult to forecast, and it is critical to be

[27] https://ecology.wa.gov/About-us/Payments-contracts-grants/Grants-loans/Find-a-grant-or-loan/Streamflow-restoration-implementation-grants

prepared when it occurs. Ecology issued a drought emergency on July 23, 2023 and developed a grant funding opportunity for emergency drought response, as detailed on our public web page, Drought Response Grants – Washington State Department of Ecology.[28] The Legislature also provided $2 million to Ecology for drought preparation, planning, and resiliency. We will develop a grant funding opportunity for drought planning projects in early 2024.

Yakima Basin Integrated Plan

Since the 2013-15 biennium, the Legislature has invested over $334 million to implement the Yakima River Basin Integrated Water Resource Management Plan (YBIP). This includes $49 million for the 2023-25 biennium to continue implementing the YBIP. The plan is a 30-year effort to address current water availability problems and meet impending climate change challenges by increasing water supply for both instream and out-of-stream uses. YBIP projects fall into seven categories:

- Fish passage
- Structural and operational changes
- Surface water storage
- Groundwater storage
- Market reallocation
- Enhanced water conservation
- Habitat protection and enhancement

Initial projects include:

- The Teanaway acquisition
- The Manastash Creek Conservation and Tributary Enhancement Project
- The design and environmental review work needed to bring the Cle Elum Pool Raise and Kachess Drought Relief Pumping Plant projects to a decision point on beginning construction

In addition to the seven YBIP elements listed above, the plan also includes implementing the Yakima River Basin Water Enhancement Project (YRBWEP), which is a water conservation program in the Yakima Basin.

Office of Columbia River

In 2006, with great foresight, the Legislature created the Office of Columbia River in state law (Chapter 90.90 RCW). The mission for the Office of Columbia River (OCR) was succinct—to aggressively pursue the development of water supplies in the Columbia River Basin by

[28] https://ecology.wa.gov/about-us/payments-contracts-grants/grants-loans/find-a-grant-or-loan/drought-emergency-grants-2023

recognizing the fundamental need for a program focused on development of water supplies for families, farms, and fish.

The ability to use additional funding from general obligation bonds appropriated by the Legislature has driven the success of OCR's water supply development projects and programs. By the end of the 2017-2019 Biennium, the initial $200 million budget to implement the program in 2006 was fully allocated.

The initial budget to implement the program has been supplemented on a biennial basis with regular capital budget appropriations and, since 2019, OCR has relied on the Legislature to provide this funding each biennium to implement projects. Having a pre-authorized, long-term budget authority, like the initial $200 million provided in 2006, would provide long-term reliability for future projects, rather than relying on a reoccurring approval of funds every two years. Some projects can be completed within a biennium, and those would not be affected by this. But larger projects that span across multiple biennia face the risk of losing funding before the project can be completed.

Columbia River Basin Water Supply Development funding for the 2023-25 biennium includes $60.5 million in total funds, including $32.8 million for Odessa, $27.8 million for general projects, and $3.2 million for continued implementation of Yakima River Basin Water Enhancement Project.

The Office of Columbia River's aggressive pursuit in the development of water supplies has yielded 476,007 acre-feet of sustainable and reliable water supplies to date. This water benefits both instream flows and out-of-stream demands throughout Eastern Washington. Columbia River projects create infrastructure to mitigate drought and climate change conditions by securing a water supply for families, farms, and fish.

Significant projects being developed include:

- The Lake Roosevelt incremental storage releases
- Sullivan Lake water supply
- Odessa sub-area groundwater replacement projects

To maintain a high standard of performance in implementing the growing number of water supply development projects and programs, OCR restructured into three complementary teams: a permitting team, a project team, and a financial team. With the $60.5 million provided for 2023-25, OCR has been able to bring on additional full time staff members, bringing the total number of OCR staff to 23 FTEs. These FTEs include management, support staff, project management, and permitting staff. As the state emerges from the pandemic, the funding provided by the Legislature to support these additional FTEs is testament to OCR's highly successful management of multiple water supply projects.

Many of OCR's water supply development projects parallel other local and regional water supply goals. This allows OCR to tap into smaller funding sources, grants managed by Ecology,

and other competitive funding opportunities. This same adaptive management collaboration is working in other watersheds around the state.

Activities, Results, and Performance Measures

Implementing Integrated Solutions to Protect Instream Resources

Ecology staff seek to support water supply solutions that address 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 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.

Expected Results

- Water will be available to meet the needs, today and into the future, for communities, agriculture, industry, and fish.
- Permanent instream flow protections are in place, agricultural irrigation is efficient, and Washington communities manage their water resources sustainably.
- Impacts from new water uses are offset by streamflow restoration projects.

Performance Measures

- Number of water right decisions completed.
- Percentage of monitored stream flows below critical flow levels.
- Number of funded local water supply projects completed in Washington State counties.
- Percentage of watersheds in the implementation of Chapter 90.94 RCW, Streamflow Restoration.

Manage Water Rights

The agency allocates surface and groundwater to meet the state's many water supply needs. Ecology staff make decisions on applications for new water rights, changes to existing water rights, and participates in water rights adjudications in areas where additional certainty is needed.

Expected Results

- Improved allocation of new water rights and changes to existing rights through sound and timely permit decision-making.
- Water needs are met and existing water users and the environment are protected.
- Timely and sound decisions are made on applications for new water rights and changes to existing rights.

Performance Measure

- Number of water right decisions completed.

Promote Compliance with Water Laws

Ecology is responsible for compliance and enforcement of Washington's water laws. Compliance staff (including program compliance officers, water masters, and metering coordinators) provide technical assistance to the public, government officials, and Tribes. In addition to ensuring compliance with well drilling regulations and dam safety requirements, compliance staff also respond to and investigate complaints related to water rights and claims. Compliance efforts are prioritized in the 16 fish-critical basins.

Expected Results

- Increased awareness of, and compliance with, the state's water laws so that legal water users and applicants for water rights are not impaired, water use remains sustainable, and the environment is protected.
- Water right holders receive compliance information, assistance, and strategic enforcement action.
- Water use on streams with flows set is regulated during periods of low flows.

Performance Measures

- Percentage of water use that is metered in 16 salmon critical basins.
- Number of formal enforcement actions (penalties, orders, and notices) taken to achieve compliance for water management.

Provide Water Resources Data and Information

Ecology collects, manages, and shares water availability and water use data with local watershed groups, conservancy boards, businesses, local governments, nonprofit groups, the

Legislature, other agencies, and the media to communicate information about water allocation, dam safety, well construction, metering, and instream flows.

This data 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 using Geographic Information System (GIS) tools.
- Supporting compliance actions.
- Collecting water usage and groundwater data.
- Supporting well construction and licensing activities and the Dam Safety Program.

Expected Results

- Sound water management is supported.
- Improved agreement and more informed water resources decisions are based on increasingly timely and accurate data and improved public access to information.
- Data and information systems are developed and maintained by increasing the numbers of external users (watershed groups, conservancy boards, businesses, etc.).
- Improved collection, preservation, and availability of data and information for water allocation, dam safety, well construction, instream flows, and communication.

Performance Measure

- Percentage of water rights mapping completed statewide.

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.

Expected Results

- Public and environmental health and safety is protected.
- Reduced risk of potentially catastrophic dam failures for the safety of people and property located below dams.

Performance Measures

- Number of high-hazard dams inspected.
- Number of significant-hazard dams inspected.

Regulate Well Construction

Ecology issues licenses and provides continuing education to well drillers; investigates complaints; approves variances from construction standards; and provides technical assistance to homeowners, well drillers, Tribes, and local governments. The work is accomplished in partnership with delegated counties.

Expected Results

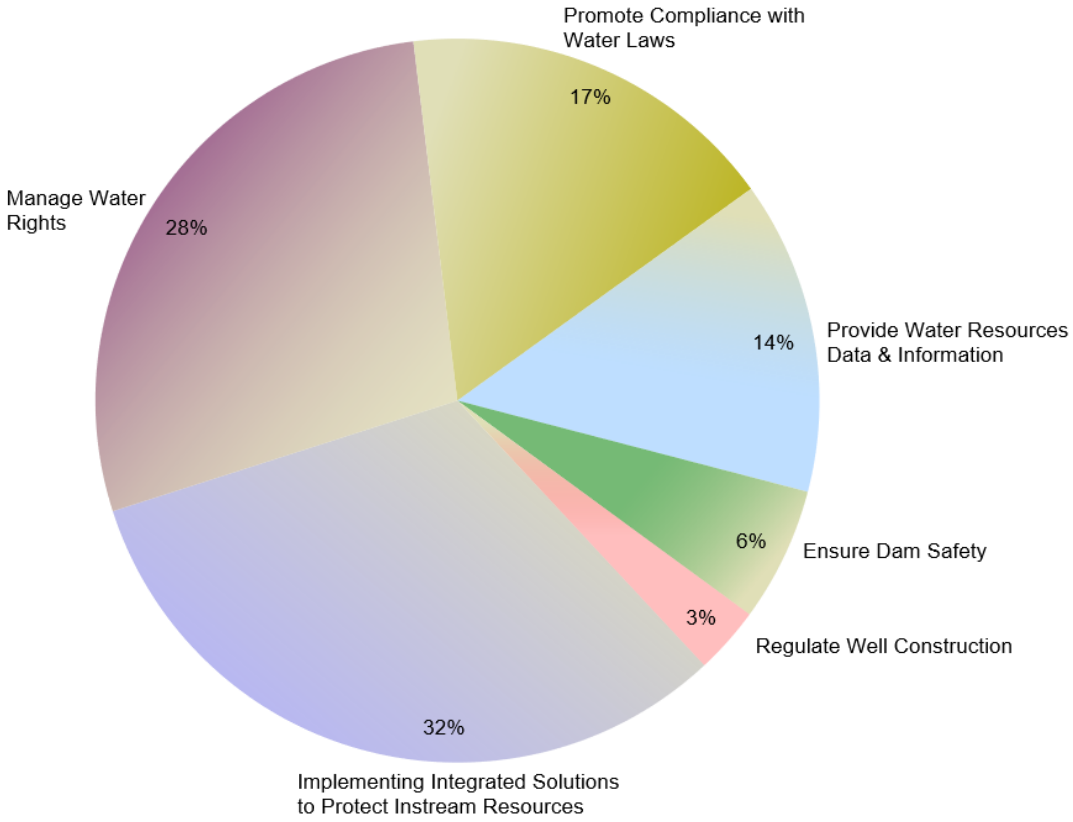
- Public and environmental health and safety is protected.
- Improved protection of consumers, well drillers, and the environment.
- Well drillers get licensing and training services.
- Well drilling is regulated.

Performance Measure

- Percentage of water supply wells inspected in delegated counties.

Water Resources Program 2023-25 Biennium Budget by Activities

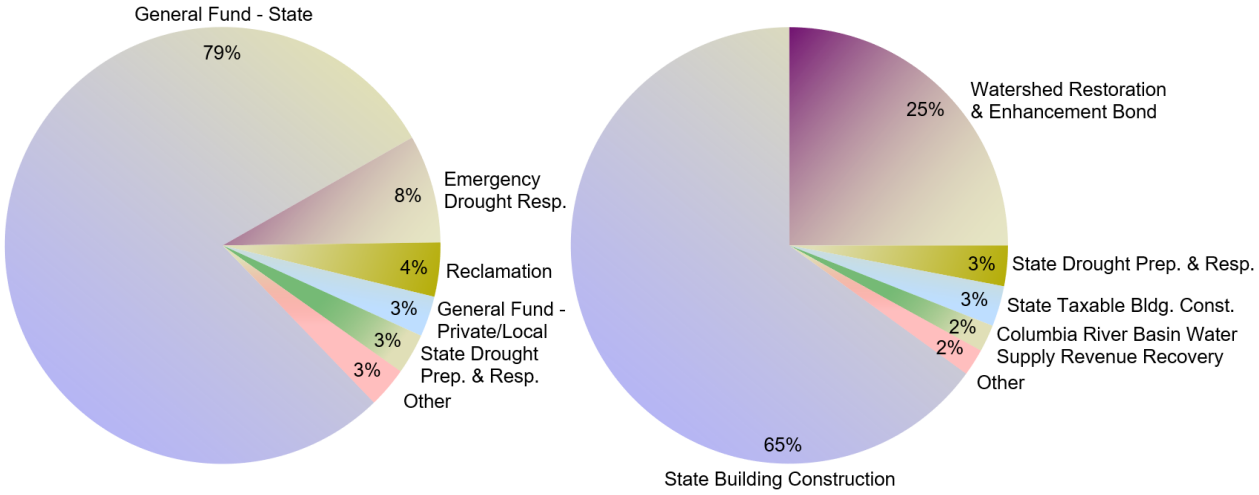
Operating = $72.7 Million | Capital = $338.2 Million | Total = $410.9 Million | FTEs = 180.2



Activities	Amount	%	FTEs
Implementing Integrated Solutions to Protect Instream Resources (A003)	$23,381,000	32%	41.1
Manage Water Rights (A024)	20,285,000	28%	60.6
Promote Compliance with Water Laws (A035)	11,928,000	17%	25.5
Provide Water Resources Data & Information (A044)	10,019,000	14%	32.7
Ensure Dam Safety (A011)	4,576,000	6%	13.5
Regulate Well Construction (A053)	2,478,000	3%	6.8
Water Resources Operating Budget Total	**$72,667,000**	**100%**	**180.2**

Water Resources Program 2023-25 Biennium Budget by Fund Source

Operating = $72.7 Million | Capital = $338.2 Million | Total = $410.9 Million | FTEs = 180.2



Operating Fund Sources	Amount	%	Uses
General Fund – State (001)	$57,479,000	79%	Water rights decision-making, county water conservancy board assistance, illegal dam compliance, dam safety, data management, public information, water use efficiency, watershed support, instream flows, Yakima River adjudication, Columbia River activities, Spokane area water rights, Kittitas County groundwater support. Funding support for Chamokane Basin ground/surface water technical study by the U.S. Geological Survey.
Emergency Drought Response (28E)	6,000,000	8%	Grants and/or agreements to fund activities that alleviate drought conditions during a drought emergency order.
Reclamation (027)	3,083,000	4%	Administration of the well construction oversight program, including revenue transfers to delegated counties with well construction management authority, compliance, well information systems. Hydropower dam licensing and contract with

Operating Fund Sources	Amount	%	Uses
			the U.S. Geological Survey for stream gauging data collection and studies.
General Fund – Private/Local (001)	2,408,000	3%	Instream flow projects, water acquisition, and cost reimbursement contracts for water rights processing.
State Drought Preparedness and Response (05W)	2,136,000	3%	Grants/loans for drought-related agricultural and municipal water supply facilities projects. Purchase and lease of water rights to improve stream flows in fish critical streams.
Other:			
Climate Commitment (26C)	562,000	<1%	Clean energy permitting related to water rights processing.
General Fund – Federal (001)	516,000	<1%	Dam safety scanning project and guidelines, Yakima River Enhancement liaison, Spokane Valley Rathdrum Prairie Aquifer Study.
State & Local Improvements Revolving – Water Supply Facilities, Referendum 38 (072)	186,000	<1%	Staff support for grants and loans for the improvement and/or construction of agricultural water supply facilities. Technical assistance to irrigation districts. Operation and maintenance of Zosel Dam (Lake Osoyoos in Okanogan County).
Basic Data (116)	170,000	<1%	Pass-through to the U.S. Geological Survey for stream gauging data collection and studies.
Water Rights Tracking System (10G)	48,000	<1%	Continued development, implementation, and management of a water rights tracking system, including a mapping system and database. Enhancements increase public access to water right data.

Operating Fund Sources	Amount	%	Uses
State Emergency Water Projects Revolving (032)	40,000	<1%	Grants/loans to alleviate emergency water supply conditions for municipal, industrial, and agricultural water users. Funds supply and distribution system improvements.
Water Rights Processing (16V)	39,000	<1%	Funds (via contract with applicant) the processing of water right applications for a new appropriation, change, transfer, or amendment of a water right, or for the examination, certification, and renewal of certification of water right examiners.
Operating Budget Total	**$72,667,000**	**100%**	
Capital Fund Sources	**Amount**	**%**	**Uses**
State Building Construction (057)	$221,059,142	65%	New appropriations and reappropriations for installation of water measuring devices, on-farm irrigation efficiencies, water conveyance improvements or equipment replacement, water storage investigations, water acquisition, watershed councils, agriculture water supply, Comprehensive Irrigation District Management Plans, Columbia River feasibility studies and implementation, Sunnyside Valley Irrigation District conservation projects, and the Yakima River Basin Water Storage Feasibility Study.
Watershed Restoration & Enhancement Bond (366)	84,708,293	25%	Capital new appropriations and reappropriations to support grants that assess, plan, and develop projects that include acquiring senior water rights, water conservation, water reuse, stream gaging, groundwater monitoring, and developing natural and constructed infrastructure designed to provide access to new water supplies.

Capital Fund Sources	Amount	%	Uses
State Drought Preparedness and Response (05W)	10,858,241	3%	Capital new appropriations and reappropriations to provide grants and the purchase or lease of water rights to mitigate impacts to statewide agricultural, municipal, and environmental (fishery) sectors suffering from drought conditions.
State Taxable Building Construction Account (355)	10,653,910	3%	Capital new appropriations and reappropriations support grants for feasibility studies and construction of storage and water conservation projects, along with purchase or leases of water rights.
Columbia River Basin Water Supply Revenue Recovery (296)	6,230,057	2%	Capital new appropriations and reappropriations support grants for feasibility studies and construction of storage and water conservation projects, along with purchase or leases of water rights.
Other:			
Columbia River Basin Water Supply Development (10P)	4,408,158	1%	Capital new appropriations and reappropriations support grants for feasibility studies and construction of storage and water conservation projects, along with purchase or leases of water rights.
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	295,000	<1%	Capital new appropriations and reappropriations support grants for feasibility studies and construction of storage and water conservation projects, along with purchase or leases of water rights.
Capital Budget Total	**$338,212,801**	**100%**	
Water Resources Operating & Capital Budget Total	**$410,879,801**		

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Chris Madunich (Ecology's Building Administrator at the Eastern Region Office) raises the pride flag in June.

Agency Administration Program

Program Mission

The mission of Ecology's Administration Program is to direct and sustain Ecology's effort to accomplish its mission—to protect, preserve, and enhance Washington's environment for current and future generations.

Environmental Threats

Agency Administration helps Ecology's environmental programs meet the mission of Ecology to protect Washington's environment by:

- Providing information to residents about environmental threats.
- Promoting good working relationships with members of the Legislature and Tribes.
- Managing financial systems and issues.
- Providing human resource, employment, and labor relations services.
- Providing high-quality information technology services.
- Providing safe and secure workplaces.
- Managing Ecology records and ensuring appropriate public access to those records.
- Developing policies and programs that help the state achieve its greenhouse gas limits and prepare for and respond to climate impacts.
- Assuring no community in Washington is overburdened by environmental pollution.

Authorizing Laws

- Chapter 41.06 RCW, State civil service law
- Chapter 41.80 RCW, State collective bargaining
- Chapter 43.21A RCW, Department of ecology
- Chapter 70A.02, Environmental justice

Constituents/Interested Parties

- Internal management and staff

- Issues that affect other government agencies or private interests often require Agency Administration to work closely with a full range of groups interested in environmental issues.

Focus Areas

Modern Work Environment

Ecology will continue our Modern Work Environment (MWE) transition during this biennium. Our MWE strategy uses technology and workspaces to maximize productivity, assure consistent service delivery, promote employee well-being, and support teamwork and collaboration. In the near term, hybrid conference rooms, media, and public hearing room spaces are being created to support our new work environment.

Staff Services and Facilities

Ecology's Staff Services, Risk and Budget, and Facility Management sections provide expertise and services related to risk and emergency management, environmental performance, fleet, and facilities. Significant activities for the 2023-25 biennium include:

- Continuing updates to Ecology's Continuity of Operations Plan (COOP) and establishing an Emergency Operations Plan. This will help Ecology respond quickly to emergencies that impact our business and Washington residents.
- Repairing and resurfacing the Lacey building parking garage with a more durable road surface. This will extend the parking garage road deck life span by 25 years and is due for completion in 2023.
- Upgrading our existing electric vehicle (EV) charging stations. This project is due for completion by the middle of 2024.
- Working with Ecology's dam safety team to replace the Zosel Dam sluice gates and upgrades to the main pump, controls, and lighting. This project is due for completion in summer 2025.
- Upgrading the elevator control systems in the Lacey building, ERO, and Padilla Bay.
- Upgrading the fire alarm system in Lacey and ERO.
- Installing a standby generator at our ERO to enhance its capability as an emergency backup site for Ecology in the event of a major disaster.

Information Governance

Ecology is implementing a holistic information governance (IG) program to better align records management, public records disclosure, litigation discovery, and information technology (IT) services. This will improve transparency, compliance with laws and rules, and organizational efficiency. IG has obtained new resources for Enterprise Content Management (ECM) and for improved staff training. ECM will enhance records management and public disclosure compliance and improve agency workflows and efficiencies. Better compliance benefits future generations of employees and provides transparency and equal access to the deserving public.

Environmental Justice

In 2021, the Legislature passed the Healthy Environment for All (HEAL) Act, and Ecology established the Office of Equity and Environmental Justice (OEEJ) that same year. OEEJ leads Ecology's strategies to reduce pollution and address health disparities in overburdened communities and vulnerable populations. OEEJ provides critical guidance and direction on external civil rights compliance, meaningful community engagement, and equitable access to Ecology information and services.

Building on Ecology's 30-year leadership in environmental justice, and in line with state and federal equity and environmental justice obligations, priority actions for the 2023-25 biennium are to:

- Develop and implement an agency community engagement plan and Tribal consultation framework.
- Develop environmental justice metrics through cross-program strategic planning.
- Create environmental justice and equity goals and protocols in budget development processes and funding and grant decisions.
- Conduct environmental justice assessments on significant agency actions.
- Ensure nondiscrimination through updated policies and plans for language access, document and digital accessibility, and Americans with Disabilities Act (ADA) compliance.
- Work with Ecology's Human Resources team to increase accountability to diversity and belonging goals through an organizational assessment that will inform agency strategy for positive organizational change.

Human Resource Management

The Human Resources (HR) team will continue to carry out its strategic business plan with the vision of powering the nation's leading environmental workforce by:

- Increasing our resources and capacity to support recruiting, selecting, and hiring highly qualified candidates and onboarding new employees. This includes a special emphasis on the goal for Ecology's diversity to reflect the people we serve. We will use our workforce and applicant data to identify jobs for increased and enhanced outreach and consultation. We will update required qualifications to recognize multiple pathways to gain knowledge, skills, and abilities necessary to perform our work.
- Promoting a culture of belonging and respect by working with Ecology's Office of Equity and Environmental Justice implementing recommendations from Ecology's diversity, equity, inclusion, and respect agency organizational assessment and developing and implementing new and revised anti-discrimination, anti-harassment, workplace accommodation, diversity, equity, and respectful workplace policies.
- Increasing our resources and capacity to promote a safe and healthy work environment by engaging supervisors and employees in identifying and reducing hazards in the workplace and strengthening our employees' connection to wellness.

- Modernizing HR business processes to support digitizing personnel records and implementing automated workflows.

Information Technology Services

Information technology (IT) is critical to protecting, preserving, enhancing, and transforming Ecology's data-driven decision-making, digital business processes, and technical service delivery. Increasing security, privacy, accessibility, and public records management requirements create both opportunities and challenges. Ecology's digital transformation and preservation strategy focuses on:

- Preserving and protecting Ecology's data and information assets by enhancing our security practices and technologies.
- Transforming from paper-based to digital-based processes and records management.
- Developing improved data management business analytics and reporting capabilities to increase the public's access to information.
- Providing technical solutions that support an increasingly collaborative and mobile workforce.

Ecology's Cloud Journey

Ecology established a collection of cloud initiatives to plan, coordinate, and transition our virtual environment from on-premises servers into the Microsoft Azure cloud. This modernizing of our computing ecosystem supports Ecology's business needs by providing the agility to scale computer power up for large data models and map creation, duplicating critical applications and databases to secondary servers in the event of a disaster event, and providing access to educational training for the staff who maintain and support the cloud environments.

Using Customer Feedback and Performance Measures for Process Improvements

Ecology uses results from our semi-annual survey of permitted and inspected customers, along with other customer feedback, to identify opportunities for improvement. We combine the feedback provided with data from our performance measures to strategically focus where we work on improvements.

Strategic Coordination

Strategic alignment between our agency and program priorities and Results WA goals helps guide Ecology's work. Strategic coordination provides opportunities to collaborate across Ecology programs and partner with state agencies and other organizations to share knowledge, data, and align processes. We will continue to look for opportunities to collaborate and identify more possibilities for partnerships to support environmental and public health.

Communications

Communications' mission is to provide clear, accurate, and timely communications to explain the work Ecology does, why it matters, and the science behind it.

Communications supports Ecology leadership, programs, and regions to help address some of the toughest environmental challenges of our time. We also lead proactive, strategic communications to explain, educate, and engage diverse audiences through the web, social media, news media, and public events.

Our website is our greatest communications and business channel. It's how we conduct business, provide services, and share news, information, and stories online. People rely on our website to get information about state environmental laws and permits, public meetings, comment periods, scientific findings, interactive modeling, databases and maps, and more.

We seek to reach underserved communities that have been disproportionately impacted by pollution and help foster equitable opportunities to participate and provide input. We want our work to reflect and respect communities across Washington, to be inclusive, and to speak to diverse audiences.

We strive to stay current with emerging technologies and trends and lean into digital and visual communications. We share environmental stories and news on our Twitter, Facebook, Instagram, TikTok, YouTube, and blog channels. These tools allow us to provide timely, accurate, compelling, and visual information about the hard work our employees do to protect Washington's land, air, and water.

We pride ourselves in being timely and responsive to reporters' needs and being accountable and transparent to our partners, policy leaders, and the public. We provide round-the-clock communications and outreach support for oil and hazardous chemical spills and staff multi-jurisdiction incident response teams.

Financial Oversight and Management

Around 73 percent of Ecology's total budget is passed through to local partners for work in communities throughout the state. Ecology uses over 75 different accounts, and we are the administrator of 65 of those accounts. It is an imperative and high priority at Ecology to properly manage and provide oversight of these environmental, economic, and public health investments.

Financial Management System Updates

Ecology's Administration of Grants and Loans

The money passed through to local governments, Tribes, and communities is done so in the form of grants, loans, or contracts. Most of these funds—and all Ecology grants and loans—are managed in Ecology's Administration of Grants and Loans (EAGL) system. Ecology received

funding in the 2023-25 biennium to modernize EAGL. Some key improvements to the system will:

- Provide new language access options by enabling users to change the language; this will increase the ability of some non-profits to access grants and loans, make the system more approachable, and help these users to be more comfortable reading the application forms.
- Improve ADA compliance through tools to assist users who use screen readers.
- Provide mobility, giving users the ability to do work from their phone.
- Improved user navigation so our customers will be able to find what matters to them more quickly and efficiently.

One Washington

The Financial Services Office works closely with the Office of Financial Management (OFM) on the One Washington project. One Washington is an enterprise-wide transformation program focused on replacing 1960s-era technology with a cloud-based solution for finance, procurement, budget, HR, and payroll processes.

The first phase, focusing on core accounting functionality, is set to go live July 1, 2025, and will replace the current Agency Financial Reporting System (or AFRS) with Workday, a modern enterprise resource planning (ERP) system. The Ecology project team is working with our environmental programs to assemble updated financial coding for the 2025-27 biennium in the new Workday format. These codes will be used for end-to-end testing currently scheduled for June 2024.

Activities, Results, and Performance Measures

Consolidated Activities

These activities share results with Ecology's environmental programs across the agency.

The administration activity supports Ecology functions by providing leadership, across-program support, and staff presence throughout the state. Administration manages Ecology'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 resident 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 Ecology's centralized records and library resources; responds to public records requests; and provides mail services.

Expected Results

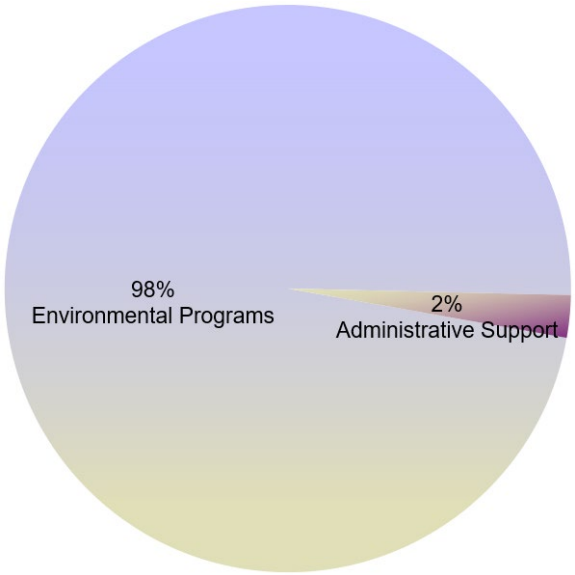
- Ecology managers, the governor, the State Auditor, the Office of Financial Management (OFM), and the legislature have confidence in our financial information and can use it to make decisions affecting the environment.
- The public is educated about Ecology's work and role in environmental protection and understands the policies we are developing and the opportunities available to influence decisions.
- Washington's environmental laws and rules are improved through Ecology's relationships with legislators, local governments, businesses, Indian tribes, and environmental and resident groups.
- Ecology managers and supervisors possess the highest-quality communication, performance management, hiring, and leadership skills.
- The Ecology work environment reflects the diversity of the community it serves.
- Agency staff receive reliable, secure, and high-quality desktop support and network services.
- Customers have easy access to information.
- Facilities and vehicles are well-maintained, safe, and efficient.

Performance Measures

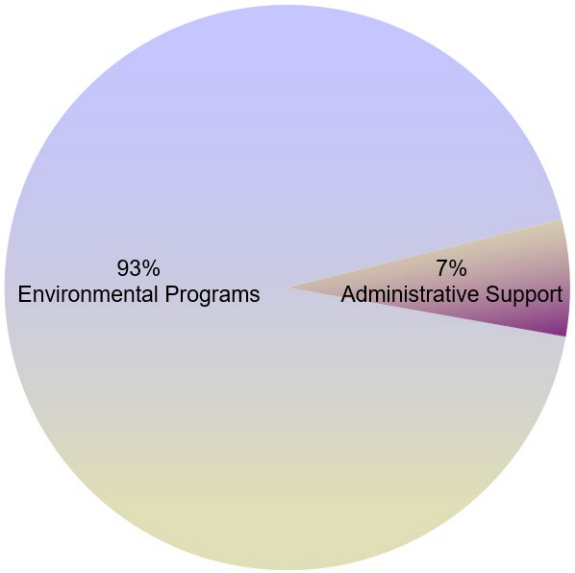
- Percentage of Ecology-administered dedicated accounts with a positive cash balance at the end of each quarter, excluding accounts that receive bond proceeds.
- Percentage of employees who are accident-free.
- Percentage of Ecology's workforce who self-identify as a person living with a disability.
- Percentage of Ecology’s workforce who self-identify as a veteran.
- Percentage of current employees who have completed performance development plans.
- Percentage of employees indicating they are usually or always satisfied with their jobs.
- Percentage of Ecology employees taking the annual employee survey

Administration Program as a Percentage of Ecology's 2023-25 Biennium Budget

Operating & Capital Budget



Operating Budget Only



Environmental Programs
Operating & Capital Budget = 98%
Operating Budget Only = 93%

- Water Quality
- Toxics Cleanup
- Water Resources
- Shorelands & Environmental Assistance
- Air Quality
- Solid Waste Management
- Hazardous Waste & Toxics Reduction
- Environmental Assessment
- Climate Pollution Reduction Program
- Spill Prevention, Preparedness, and Response
- Nuclear Waste

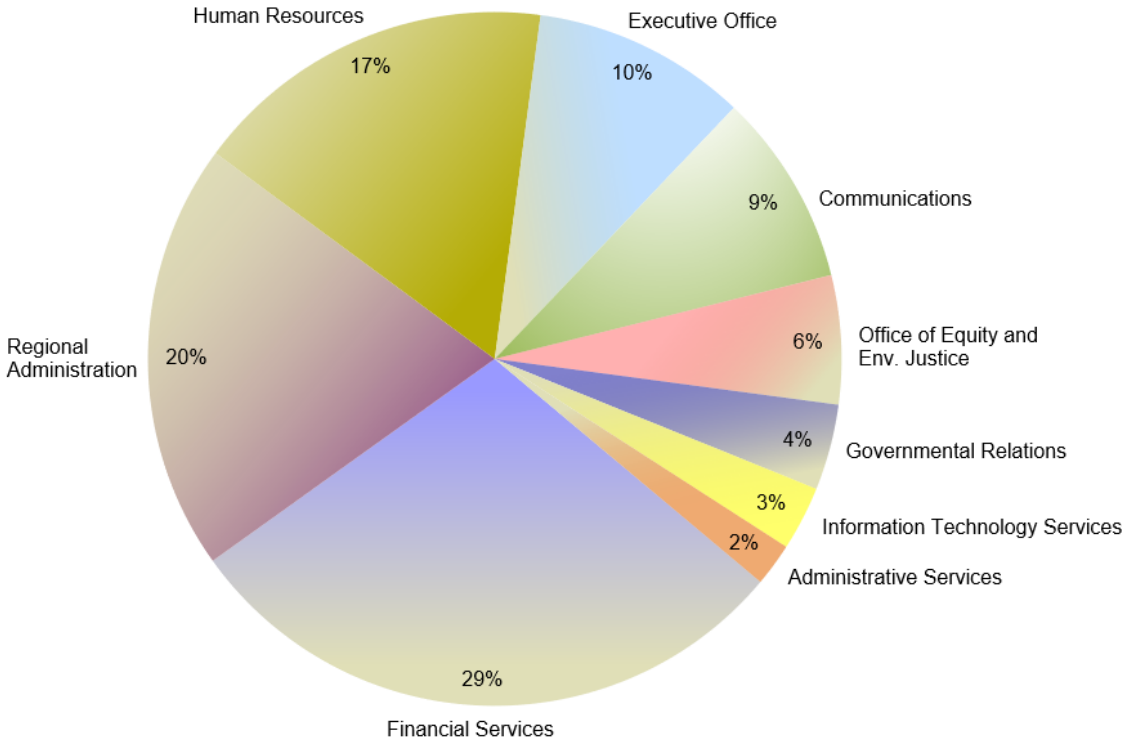
Program A
Operating & Capital Budget = 2%
Operating Budget Only = 7%

- Financial Services (Budget, Fiscal, Contracts, Payroll, Accounting, and Purchasing)
- Regional Directors & Support
- Human Resources
- Executive (Director, Special Assistants, Tribal Relations)
- Communications
- Office of Equity & Env. Justice
- Governmental Relations
- Information Technology Services
- Administrative Services

Note: Includes Central Business Services

Administration Program 2023-25 Biennium Operating Budget by Activities

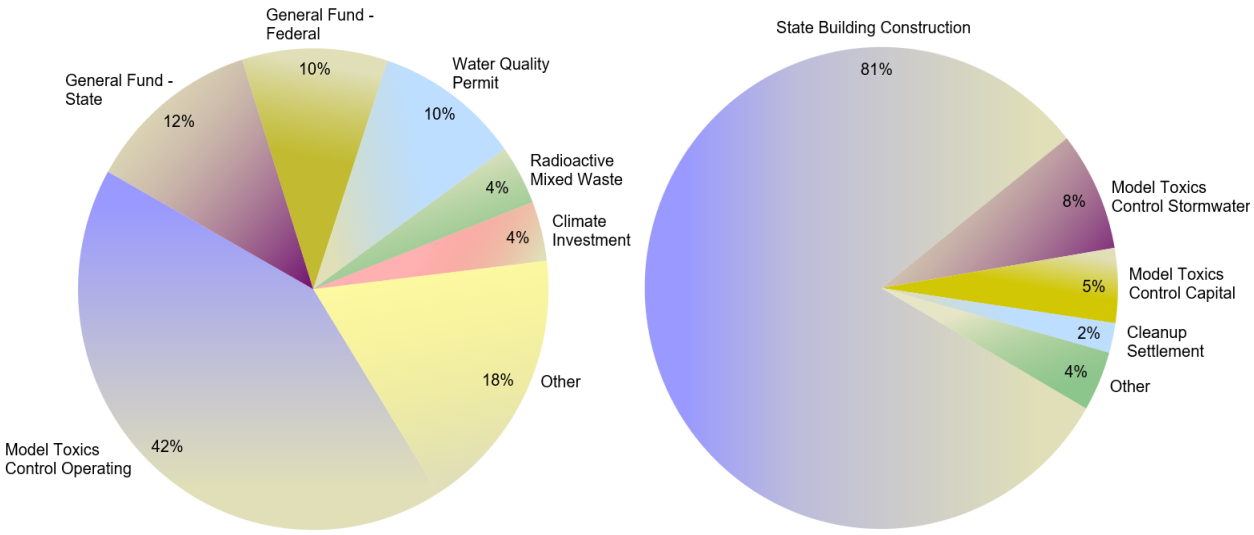
Operating = $57.9 Million | Capital = $10.5 Million | Total = $68.5 Million | FTEs = 209.8



Activities	Amount	%	FTEs
Financial Services	$16,967,874	29%	67.0
Regional Administration	11,536,005	20%	48.5
Human Resources	9,972,935	17%	37.0
Executive Office	5,851,809	10%	12.1
Communications	5,152,418	9%	16.3
Office of Equity and Environmental Justice	3,193,311	6%	10.9
Governmental Relations	2,586,383	4%	8.7
Information Technology Services	1,562,999	3%	4.9
Administrative Services	1,104,266	2%	4.4
Agency Administration Operating Budget Total	**$57,928,000**	**100%**	**209.8**

Administration[29] Program 2023-25 Biennium Budget by Fund Source

Operating = $57.9 Million | Capital = $10.5 Million | Total = $68.5 Million | FTEs = 209.8



Operating Fund Sources	Amount	%
Model Toxics Control Operating (23P)	$24,204,000	42%
General Fund – State (001)	6,749,000	12%
General Fund – Federal (001)	5,956,000	10%
Water Quality Permit (176)	5,859,000	10%
Radioactive Mixed Waste (20R)	2,320,000	4%
Climate Investment (26B)	2,292,000	4%
Waste Reduction, Recycling & Litter Control (044)	1,525,000	3%
Natural Climate Solutions (26D)	1,481,000	3%
General Fund – Private/Local (001)	1,023,000	2%
Climate Commitment (26C)	861,000	1%
Water Pollution Control Revolving Administration (564)	743,000	1%
Hazardous Waste Assistance (207)	684,000	1%

[29] The agency Administration Program is supported by each fund source available to the Department of Ecology. Each fund contributes to the agency Administration Program in the same percentage that each fund contributes to the total of the environmental programs' salaries and benefits.

Operating Fund Sources	Amount	%
Oil Spill Prevention (217)	649,000	1%
Underground Storage Tank (182)	487,000	<1%
Worker & Community Right-to-Know (163)	467,000	<1%
Air Operating Permit (219)	462,000	<1%
Air Pollution Control (216)	396,000	<1%
Reclamation (027)	330,000	<1%
Clean Fuels Program (25Q)	291,000	<1%
Refrigerant Emission Management (25T)	264,000	<1%
Biosolids Permit (199)	260,000	<1%
Flood Control Assistance (02P)	244,000	<1%
Wastewater Treatment Plant Operator Certification (21H)	79,000	<1%
Recycled Content (25R)	72,000	<1%
State Drought Preparedness (05W)	68,000	<1%
Electronic Products Recycling (11J)	53,000	<1%
Voluntary Cleanup (23V)	36,000	<1%
Wood Stove Education & Enforcement (160)	32,000	<1%
Model Toxics Control Stormwater (23R)	26,000	<1%
Paint Product Stewardship (23W)	10,000	<1%
Product Stewardship Programs (16T)	5,000	<1%
Operating Budget Total	**$57,928,000**	**100%**
Capital Fund Sources	**Amount**	**%**
State Building Construction (057)	$8,545,387	81%
Model Toxics Control Stormwater (23R)	802,190	8%
Model Toxics Control Capital (23N)	514,986	5%
Cleanup Settlement (15H)	237,807	2%
General Fund – Private/Local (001)	141,931	1%
Air Quality & Health Disparities Improvement (26E)	138,906	1%
Freshwater Aquatic Weeds (222)	45,144	<1%
Climate Commitment (26C)	33,858	<1%

Agency Administration Program

Capital Fund Sources	Amount	%
General Fund – Federal (001)	32,775	<1%
Waste Tire Removal (08R)	26,458	<1%
Aquatic Algae Control (10A)	9,100	<1%
Columbia River Basin Water Supply Revenue Recovery (296)	8,563	<1%
Capital Budget Total	**$10,537,105**	**100%**
Administration Program Operating & Capital Budget Total	**$68,465,105**	

Ecology's Data – Where It Comes From

This publication relies on financial data for tables and graphs. Operating data is based on initial appropriations from the enacted 2023-25 biennial operating budget. Capital data is based on agency allotments from the initial enacted 2023-25 biennial capital budget. Following are the specific data sources.

Agency Level – Operating

Operating funds by account and program are based on the enacted biennial operating budget appropriations, which match Ecology's initial approved allotments (spending plans) and unallotted funds from the Office of Financial Management (OFM).

Operating funds pass-through are based on allotments for grants and other pass-through functions from initial approved allotments.

Agency Level – Capital

Capital funds by account and program are based on OFM-approved allotments for the initial enacted 2023-25 biennial capital budget. They include new appropriations and reappropriations. They do not include unallotted or reserve funds. Unallotted funds are primarily appropriations for future project expenditures that will not be expended in the current biennium.

Capital funds pass-through are based on allotments for grants, loans, and contracts as approved by OFM. They include new appropriations and reappropriations. They do not include unallotted funds.

Program Level – Operating

Operating funds by activity are based on activity inventory funding amounts for the enacted biennial budget as approved by OFM.

Operating funds by account are based on initial 2023-25 biennial OFM-approved allotments.

Program Level – Capital

Capital funds by account are based upon OFM-approved allotments for the enacted 2023-25 biennial capital budget. It includes new appropriations and reappropriations. It does not include unallotted or reserve funds.

2023-25 Operating Pass-through Detail by Program

The operating pass-through amount was determined based on total operating initial allotments that were identified as pass-through grants or Washington Conservation Corps and Ecology Youth Corps staff costs that are placed in local communities throughout the state via contractual agreements. This total was divided by the operating total appropriation to determine the pass-through percentage.

Purpose/Grants	Program	Amount
Local Solid Waste Financial Assistance (MTCA-Op)	Solid Waste Management	$24,000,000
CCA Tribal Participation Grants (Climate Investment)	Climate Pollution Reduction	16,000,000
Stormwater Grants (MTCA-Op)	Water Quality	15,871,432
NEP Stormwater Strategic Initiative EPA (GF-Federal)	Water Quality	13,347,843
WCC Crews Salaries	Shorelands & Environmental Assistance	12,442,143
Local Partner Core Operations Grants (GF-Federal & MTCA-Op)	Air Quality	6,402,274
Local Source Control (LSC) (MTCA-Op)	Hazardous Waste & Toxics Reduction	5,144,000
CCA Tribal Carbon Offset Assistance Grants (Climate Investment)	Climate Pollution Reduction	5,000,000
Public Participation Grants (MTCA-Op)	Solid Waste Management	4,896,863
Community Litter Cleanup Program (WRRLCA)	Solid Waste Management	4,355,000
Nonpoint Source Grants EPA 319 (GF-Federal)	Water Quality	3,556,300
Oil Spill Response Equipment Caches (MTCA-Op)	Spill Prevention, Preparedness & Response	3,476,000
Shoreline Master Program Grants (MTCA-Op)	Shorelands & Environmental Assistance	3,200,000
DERA Clean Diesel Grant Program Grants (GF-Federal)	Air Quality	2,926,327
Flood Control Assistance Emergency Grants (FCAA)	Shorelands & Environmental Assistance	2,450,000
Prevent Nonattainment Grants (MTCA-Op)	Air Quality	2,000,000
EYC Crews Salaries (WRRLCA)	Solid Waste Management	1,898,598

Operating Pass-through Detail by Program

Purpose/Grants	Program	Amount
Pollution Prevention (P2) Grant Program (GF-Federal)	Hazardous Waste & Toxics Reduction	1,858,909
Padilla Bay NWS Kelp Grants (Natural Climate Solutions)	Shorelands & Environmental Assistance	1,260,000
Environmental Restoration Projects (Coastal Protection)	Spill Prevention, Preparedness & Response	1,064,000
NWS Grants to MRC (Interagency)	Shorelands & Environmental Assistance	948,500
Padilla Bay NWS MRC Grants (GF-State)	Shorelands & Environmental Assistance	903,600
Flexible Brownfields Grants (MTCA-Op)	Toxics Cleanup	700,000
Waste Reduction & Recycling Edu. Grants (WRRLCA)	Solid Waste Management	700,000
State Highway Ramp Litter Cleanup Program (WRRLCA)	Solid Waste Management	700,000
GHG Emissions Reduction Grant Application Assistance for Puget Sound Clean Air (Climate Commitment)	Climate Pollution Reduction	370,000
Vancouver Lake (MTCA-Op)	Water Quality	330,000
Woodstove Education & Enforcement Grants to Local Air Authorities (Wood Stove Ed. & Enforce.)	Air Quality	310,332
Nooksack Whatcom County Grant (GF-State)	Water Resources	300,000
Lower Columbia Estuary Partnership (MTCA-Op)	Water Quality	264,000
Waste Not WA School Awards (WRRLCA)	Solid Waste Management	200,000
Local Partner PM 2.5 Grants to Local Air Authorities (GF-Federal – IRA)	Air Quality	176,000
Local Partner PM 2.5 Grants to Local Air Authorities (GF-Federal)	Air Quality	108,075
Enhanced Air Quality Monitoring for Spokane Clean Air (Climate Investment)	Air Quality	25,000
Total		**$137,185,196**

Ecology-Administered Accounts

The Department of Ecology uses up to 73 accounts and is the administering agency for 65 of these accounts. Each account description includes the RCW authority, fund manager, account purpose, authorized uses, and revenue source. Following is a numeric listing of the accounts Ecology administers. For a more detailed description of each account, see the *Administered Accounts – Detail* section of this document.

In the 2021-23 biennium, the Legislature created three new accounts administered by Ecology effective July 1, 2023, and one account was eliminated. In 2023, E2SSB 5144 created the Responsible Battery Management Account (28C); SHB 1138 created the Emergency Drought Response Account (28E) and changed the title of account 05W to the State Drought Preparedness Account; and ESHB 1853 created the Clean Fuels Transportation Investment Account (28F). In addition, SB 5295 eliminated the Water Quality Capital Account (11W).

027 – Reclamation

02P – Flood Control Assistance

032 – State Emergency Water Projects Revolving

044 – Waste Reduction, Recycling, & Litter Control

051 – State and Local Improvements Revolving – Waste Disposal Facilities (Ref. 26)

055 – State and Local Improvements Revolving – Waste Disposal Facilities (Ref. 39)

05W – State Drought Preparedness

072 – State and Local Improvements Revolving – Water Supply Facilities (Ref. 38)

08R – Waste Tire Removal

10A – Aquatic Algae Control

10G – Water Rights Tracking System

10P – Columbia River Basin Water Supply Development

116 – Basic Data

11J – Electronic Products Recycling

125 – Site Closure

15H – Cleanup Settlement

15K – Columbia River Water Delivery

160 – Wood Stove Education and Enforcement

16T – Product Stewardship Programs

16V – Water Rights Processing

176 – Water Quality Permit

182 – Underground Storage Tank

18B – Columbia River Basin Taxable Bond Water Supply Development

199 – Biosolids Permit

19K – Yakima Integrated Plan Implementation

19N – Diesel Idle Reduction

207 – Hazardous Waste Assistance

20B – Brownfield Redevelopment Trust Fund

20C – Yakima Integrated Plan Implementation Taxable Bond

20R – Radioactive Mixed Waste

216 – Air Pollution Control

217 – Oil Spill Prevention

219 – Air Operating Permit

21B – Chehalis Basin

21H – Water Treatment Plant Operator Certification

222 – Freshwater Aquatic Weeds

223 – Oil Spill Response

22G – Photovoltaic Module Recycling

22K – Watershed Restoration and Enhancement

23N – Model Toxics Control Capital Account

23P – Model Toxics Control Operating Account

23R – Model Toxics Control Stormwater Account

23V – Voluntary Cleanup Account

23W – Paint Product Stewardship Account

25Q – Clean Fuels Program Account

25R – Recycled Content Account

25S – Recycling Enhancement Account

25T – Refrigerant Emission Management Account

26B – Climate Investment Account

26C – Climate Commitment Account

26D – Natural Climate Solutions Account

26E – Air Quality and Health Disparities Improvement Account

27P – Price Ceiling Unit Emission Reduction Investment

28C – Responsible Battery Management

28E – Emergency Drought Response

28F – Clean Fuels Transportation Investment

296 – Columbia River Basin Water Supply Revenue Recovery

366 – Watershed Restoration and Enhancement Bond

367 – Chehalis Basin Taxable

377 – Watershed Restoration and Enhancement Taxable Bond

408 – Coastal Protection

500 – Perpetual Surveillance and Maintenance

564 – Water Pollution Control Revolving Administration

565 – Yakima Integrated Plan Implementation Revenue Recovery

727 – Water Pollution Control Revolving

Ecology uses the following accounts, but is not the administering agency:

001 – General Fund

02R – Aquatic Lands Enhancement

057 – State Building Construction

163 – Worker and Community Right-to-Know

277 – State Agency Parking

355 – State Taxable Building Construction

466 – Statewide Information Technology System Development Revolving

746 – Hanford Area Economic Investment

Administered Accounts – Detail

Air Operating Permit Account ..... Fund #219 .....RCW 70A.15.1010

Fund Manager: Air Quality Program. Contact Andrew Contreras, 360-485-7648

Purpose: To reduce air pollution from large industrial sources.

Authorized Use: To issue permits to major air pollution sources and for small business technical assistance as it relates to the air operating permit program.

Revenue Source: Permit fees are collected from large industrial air pollution sources. These annual fees are set based on source emissions and complexity.

Air Pollution Control Account ..... Fund #216 .....RCW 70A.15.1010

Fund Manager: Air Quality Program. Contact Andrew Contreras, 360-485-7648

Purpose: To reduce air pollution from agricultural burning, small industrial sources (for example, dry cleaners, rock crushers, coffee roasters), and greenhouse gas emitters.

Authorized Use: To issue permits for agricultural burning and small industrial air pollution sources, to fund agricultural burning alternatives research, and to fund a greenhouse gas reporting program.

Revenue Source: Permit fees are collected for burning (charged on a per-acre basis) and initial or modified industrial air pollution sources (charged on a per-hour basis). In addition, annual fees are charged for small industrial air pollution sources and greenhouse gas emission sources.

Air Quality and Health Disparities Improvement Account ..... Fund #26E .....RCW 70A.65.280

Fund Manager: Climate Pollution Reduction Program. Contact Cristina Steward, 564-669-1723

Purpose: To reduce criteria pollutants and health disparities in overburdened communities.

Authorized Use: To fund expansion of the air monitoring network and to reduce health disparities in overburdened communities. All funding is subject to Legislative appropriation.

Revenue Source: Auction receipts collected under the Climate Commitment Act.

Aquatic Algae Control Account ..... Fund #10A .....RCW 43.21A.667

Fund Manager: Water Quality Program. Contact Kim Wagar, 360-878-4915

Purpose: To prevent, remove, or manage freshwater and saltwater aquatic blue-green algae.

Authorized Use: To provide grants, grant management, and technical assistance to local governments for the prevention, removal, and management of freshwater and saltwater aquatic blue-green algae.

Revenue Source: This fee is charged in conjunction with annual boat license fees collected by the Department of Licensing. The charge is $1 per license. Fee set by statute.

Basic Data Account ..... Fund #116 .....RCW 43.21A.067

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To gather stream flow, groundwater, and water quality data or other hydrographic information.

Authorized Use: The fund shall be expended on a matching basis with the U.S. Geological Survey for the purpose of obtaining additional basic information needed for an intelligent inventory of water resources in the state.

Revenue Source: Special purpose account for private individuals to receive stream flow, groundwater, and water quality data, or other hydrographic information. Ecology is required to contract for the information with the U.S. Geological Survey.

Biosolids Permit Account ..... Fund #199 .....RCW 70A.226.030

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To maximize the beneficial use of biosolids while at the same time protecting human health and the environment from pollutants and microorganisms that can be found in the material.

Authorized Use: Administer permit applications, review related plans and documents, monitor, evaluate, conduct inspections, oversee performance of delegated program elements, and provide technical assistance.

Revenue Source: Facilities that handle and manage biosolids in the state of Washington, including, but not limited to, wastewater treatment facilities, receiving-only facilities, and septage management facilities are required to pay an annual biosolids permit fee plus a fee for each residential equivalent. New biosolids facilities also pay a one-time review fee.

Brownfield Redevelopment Trust Fund Account ..... Fund #20B .....RCW 70A.305.140

Fund Manager: Toxics Cleanup Program. Contact Lyndsay Gordon, 360-810-1636

Purpose: For remediation and cleanup activities at the specific redevelopment opportunity zones or specific brownfield renewal authority for which moneys were deposited in the account.

Authorized Use: The moneys may be used only by local governments for remedial actions approved by Ecology under the Model Toxics Control Act, Chapter 70A.305 RCW. To receive moneys from the account, local governments must meet the eligibility and other requirements governing the Remedial Action Grant Program, which are codified in Chapter 173-322A WAC.

Revenue Source: Money deposited voluntarily or appropriated by the Legislature for redevelopment opportunity zones or brownfield renewal authorities, and receipts from settlements or court orders directing payment to the account for a specific redevelopment opportunity zone to resolve liability under the Model Toxics Control Act. (This account retains interest.)

Chehalis Basin Account ..... Fund #21B .....RCW 43.21A.733

Fund Manager: Shorelands and Environmental Assistance Program. Contact Jessica S. Moore, 360-407-6994

Purpose: For the operation of the office of Chehalis Basin and Chehalis River basin-related flood hazard reduction and habitat recovery activities per RCW 43.21A.731.

Authorized Use: Ecology administers the Office of Chehalis Basin, in order to aggressively pursue the implementation of an integrated strategy including funding for long-term flood damage reduction and aquatic species restoration in the Chehalis River basin.

Revenue Source: Receipts from direct appropriations from the Legislature, including the proceeds of tax-exempt bonds, or moneys directed to the account as required by RCW 43.21A.733. No revenue is estimated at this time. (This account retains interest.)

Chehalis Basin Taxable Account ..... Fund #367 .....RCW 43.21A.734

Fund Manager: Shorelands and Environmental Assistance Program. Contact Jessica S. Moore, 360-407-6994

Purpose: For the operation of the Office of Chehalis Basin and Chehalis River basin-related flood hazard reduction and habitat recovery activities.

Authorized Use: Ecology administers the Office of Chehalis Basin, in order to aggressively pursue the implementation of an integrated strategy including funding for long-term flood damage reduction and aquatic species restoration in the Chehalis River basin.

Revenue Source: Receipts from the proceeds of taxable bonds for the Office of Chehalis Basin. No bonds have been authorized for this account. (This account retains interest.)

Clean Fuels Program Account ..... Fund #25Q.....RCW 70A.535.130

Fund Manager: Climate Pollution Reduction Program. Contact Cristina Steward, 564-669-1723

Purpose: To fund the Clean Fuels Program.

Authorized Use: To fund the Clean Fuels Program and reduce the carbon intensity in transportation fuels used in Washington.

Revenue Source: Fees and penalties received by the Clean Fuels Program, authorized in RCW and established in rule, are deposited in this account based on a biennial workload analysis prepared by Ecology and the Department of Commerce.

Clean Fuels Transportation Investment Account ..... Fund #28F.....RCW 70A.535.160

Fund Manager: Climate Pollution Reduction Program. Contact Cristina Steward, 564-669-1723

Purpose: To support the reduction of greenhouse gas emissions associated with transportation.

Authorized Use: To be used for activities and projects that reduce greenhouse gas emissions and decarbonize the transportation sector.

Revenue Source: Clean fuel credits generated under chapter 70A.535 RCW from transportation investments.

Cleanup Settlement Account ..... Fund #15H .....RCW 70A.305.130

Fund Manager: Toxics Cleanup Program. Contact Lyndsay Gordon, 360-810-1636

Purpose: To conduct remedial actions at a specific facility or to assess or address the injury to natural resources caused by the release of hazardous substances from a specific facility.

Authorized Use: Expenditures may only be used to conduct remedial actions at the specific facility or to assess or address the injury to natural resources caused by the release of hazardous substances from that facility for which the moneys were deposited in the account.

Revenue Source: Receipts from settlements or court orders that resolve a person's liability or potential liability. (This account retains interest.)

Climate Commitment Account ..... Fund #26C .....RCW 70A.65.260

Fund Manager: Climate Pollution Reduction Program. Contact Cristina Steward, 564-669-1723

Purpose: To support the transition to a clean energy economy.

Authorized Use: To reduce greenhouse gas emissions in overburdened communities, strengthen the air quality monitoring network, support projects that: promote renewable energy technology and infrastructure; invest in energy efficiency in industry and agriculture; invest in energy efficiency and decarbonization for buildings; and assist affected workers during the transition to a clean energy economy.

Revenue Source: After funding administration of the Climate Commitment Act, 75% of the funds remaining from the Climate Investment Account will be redistributed by the Washington State Treasurer to the Climate Commitment Account.

Climate Investment Account ..... Fund #26B ..... RCW 70A.65.250

Fund Manager: Climate Pollution Reduction Program. Contact Cristina Steward, 564-669-1723

Purpose: To fund projects that support the transition to clean energy, build ecosystem resilience, and support carbon sequestration. Funds in this account may also be used for cap and invest program.

administrative costs for agencies, up to 5% of auction revenue.

Authorized Use: Subject to appropriation by the Legislature, this account funds administration of the carbon cap and invest program and provides funds to be transferred to the Climate Commitment Account and Natural Climate Solutions Account per RCW.

Revenue Source: Auction receipts collected under the Climate Commitment Act

Coastal Protection Account..... Fund #408 .....RCW 90.48.390

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Ryan Olson, 360-584-4086

Purpose: To provide funds for the restoration of natural resources and the enhancement of prevention, preparedness, and response activities related to oil and hazardous material spills.

Authorized Use: These funds are used for environmental restoration and enhancement projects, investigations of the long-term effects of oil spills, and the development and implementation of aquatic land geographic information systems.

Revenue Source: Penalty payments and payments from oil spill damage assessments received from parties responsible for oil spills and water pollution.

Columbia River Basin Taxable Bond Water Supply Development Account..... Fund #18B .....RCW 90.90.090

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To fund projects or activities that resolve water conflicts in the Columbia River Basin through taxable bond sales and investment in storage, conservation, or access to water supplies.

Authorized Use: Authorized through 2SHB 1803 in the 2011 Legislative Session. Intended to fund projects owned or used by the federal government, nonprofit corporations, or private entities. Two-thirds of the authorized funds are for the development of new storage opportunities; one-third of the authorized funds are for projects that conserve water.

Revenue Source: Direct appropriations from the Legislature and up to $200 million of state bonds (in combination with the Columbia River Basin Water Supply Development Account) have been authorized for grants to local jurisdictions for new storage and conservation projects. The initial $200 million authorized in 2006 has been fully obligated to existing projects. (This account retains interest.)

Columbia River Basin Water Supply Development Account ..... Fund #10P ..... RCW 90.90.010

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To fund projects or activities that resolve water conflicts in the Columbia River Basin through non-taxable bond sales and investment in storage, conservation, or access to water supplies.

Authorized Use: Authorized in 2006. Intended to fund projects owned or used by state or local governments. Two-thirds of the authorized funds are for the development of new storage opportunities; one-third of the authorized funds are for projects that conserve water.

Revenue Source: Direct appropriations from the Legislature and up to $200 million of state bonds (in combination with the Columbia River Basin Taxable Bond Water Supply Development Account) have been authorized for grants to local jurisdictions for new storage and conservation projects. The initial $200 million authorized in 2006 has been fully obligated to existing projects. (This account retains interest.)

Columbia River Basin Water Supply Revenue Recovery Account ..... Fund #296 ..... RCW 90.90.100

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To resolve water conflicts in the Columbia River Basin through recovery of certain costs for water service contracts or other water supply projects, which may be reinvested in storage, conservation, or access to water supplies.

Authorized Use: Authorized through 2SHB 1803 in the 2011 Legislative Session. May be used to assess, plan, and develop new storage, improve or alter operations of existing storage facilities, implement conservation projects, develop pump exchanges, or any other actions designed to provide access to new water supplies within the Columbia River Basin for both instream and out-of-stream uses.

Revenue Source: Water service contracts, permitting new water supply and/or loans related to the cost to develop new water supplies. Specific repayment terms depend on each individual agreement. (This account retains interest.)

Columbia River Water Delivery Account ..... Fund #15K ..... RCW 90.90.070

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To resolve water conflicts in the Columbia River Basin through new releases of Lake Roosevelt water of approximately 82,500 acre feet of water, increasing to no more than 132,500 acre feet of water in drought years, will bolster the state economy. Intended purposes include new surface water supplies for farmers to replace the use of diminishing groundwater in the Odessa aquifer; new water supplies for municipalities with pending water right applications; enhanced certainty for agricultural water users with water rights

that are interruptible during times of drought; and water to increase flows in the river when salmon need it most.

Authorized Use: Authorized through E2SSB 6874 in the 2008 Legislative Session. May be used to implement the agreement between the governor, the Legislature, the Confederated Tribes of the Colville Reservation and the Spokane Tribe of Indians to support additional releases of water from Lake Roosevelt. Because the sovereign and proprietary interests of these Tribal governments are directly affected by water levels in Lake Roosevelt, the state intends to share a portion of the benefits derived from Lake Roosevelt water releases and to mitigate for any impacts such releases may have upon the Tribes.

Revenue Source: The account consists of all moneys transferred or appropriated to the account by law.

Diesel Idle Reduction Account ..... Fund #19N .....RCW 70A.55.040

Fund Manager: Air Quality Program. Contact Andrew Contreras, 360-485-7648

Purpose: To provide loans with low or no interest to loan recipients for the purpose of reducing exposure to diesel emissions and improving public health by investing in diesel idle emission reduction technologies and infrastructure.

Authorized Use: Low or no interest loans to local and state governments to fund projects that reduce exposure to diesel emissions and the associated administration costs of that loan program.

Revenue Source: To date there has been no revenue or appropriation to this account. After an initial appropriation, the remittances from loan recipients (principal and interest) would be deposited into the account to fund future loans.

Electronic Products Recycling Account..... Fund #11J .....RCW 70A.500.130

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To provide the public with free collection, transportation, and recycling of covered electronic products, including televisions, computers, monitors, and e-readers.

Authorized Use: Oversight of the electronic products recycling program (E-Cycle WA), review and approve plans and plan revisions, monitor, evaluate, and implement the regulations set for the E-Cycle WA program in rule.

Revenue Source: Manufacturers of televisions, computers, monitors, and e-readers who sell their products within or into (as with internet sales) the state of Washington pay a tier-structured fee based on their percentage of the total weight market share in the state of Washington. Depending on the market for the time period, manufacturers may move from one tier to another. Ecology is required to adjust the fee rates annually to provide equity to manufacturers based on their market shares.

Emergency Drought Response Account ..... Fund #28E ..... RCW 43.83B.435

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To provide relief for the immediate hardship caused by water unavailability during a drought emergency order.

Authorized Use: Expenditures from this account may be used to for activities that alleviate drought conditions including grants and loans to public entities (does not include State agencies) and/or interagency agreements to State agencies to respond to a drought declaration.

Revenue Source: Funds are transferred to this account from the State General Fund when there is a state-declared drought, in such amounts as necessary to bring the account balance to $3 million.

Flood Control Assistance Account ..... Fund #02P ..... RCW 86.26.007

Fund Manager: Shorelands and Environmental Assistance Program. Contact Jessica S. Moore, 360-407-6994

Purpose: To provide grants and technical assistance to local governments for flood damage reduction projects and comprehensive flood hazard management planning.

Authorized Use: Ecology administers the Flood Control Assistance Account Program (FCAAP), providing grants and technical assistance to local governments for flood damage reduction projects and comprehensive flood hazard management planning. Ecology staff assists in the development and approval of local Comprehensive Flood Hazard Management Plans, feasibility studies, public awareness programs, and flood hazard warning programs. Ecology also inspects construction of flood damage reduction projects. Ecology is the state's coordinating agency for the National Flood Insurance Program (NFIP) and provides assistance and support to the 289 communities enrolled in the NFIP. Many of the projects funded through FCAAP grants require detailed hydrologic and engineering studies. Ecology staff must verify that these studies are properly done and meet standard practices.

Revenue Source: $4 million per biennium transfer from State General Fund as required by RCW 86.26.007.

Freshwater Aquatic Weeds Account ..... Fund #222 ..... RCW 43.21A.650

Fund Manager: Water Quality Program. Contact Kim Wagar, 360-878-4915

Purpose: To prevent and control or manage invasive freshwater aquatic weeds.

Authorized Use: Funds are used for grants, grant management, and technical assistance to local governments for the prevention, removal, and management of invasive freshwater aquatic weeds.

Revenue Source: This fee is charged in conjunction with annual boat trailer license fees collected by the Department of Licensing. The charge is $3 per license. Fee set by statute.

Hazardous Waste Assistance Account.... Fund #207 .....RCW 70A.218.060

Fund Manager: Hazardous Waste and Toxics Reduction Program. Contact Vince Chavez, 360-338-5034

Purpose: To provide technical assistance and compliance education assistance to hazardous substance users and waste generators.

Authorized Use: Assist businesses with the development and implementation of plans for reducing the use of toxic substances and generation of hazardous waste. Develop and distribute educational information on waste reduction to all businesses that use toxic substances or generate hazardous waste.

Revenue Source: Annual fees charged to businesses that generate hazardous waste (RCW 70A.218.020) and businesses required to prepare waste reduction plans under RCW 70A.214.110 and 70A.214.040 (RCW 70A.218.030).

Model Toxics Control Capital Account ... Fund #23N .....RCW 70A.305.190

Fund Manager: Toxics Cleanup Program. Contact Lyndsay Gordon, 360-810-1636

Purpose: Cleanup toxic sites and address other toxic pollution and contamination issues qualifying for funding under the Model Toxics Control Act (MTCA).

Authorized Use: Funding is used for capital expenditures to carry out MTCA, including remedial actions, solid waste plans and programs, toxic air pollutant reduction programs, hazardous waste plans and programs, and plastic or polystyrene foam debris cleanup activities.

Revenue Source: Revenue comes from the hazardous substance tax (HST). A volume-based HST is applied to all petroleum products that can be measured on a per-barrel basis on the first possession in the state of Washington. After first depositing $50 million per biennium into the Motor Vehicle Fund, revenue collected by the Department of Revenue from this tax is deposited 60 percent to the MTCA Operating Account, 25% to the MTCA Capital Account, and 15% to the MTCA Stormwater Account. The tax rate increases annually by the implicit price deflator for nonresidential structures beginning July 1, 2020. A value-based HST of seven-tenths of one percent of the wholesale value is applied to other petroleum products that cannot be measured by volume on the first possession in the state of Washington. The revenue from this tax is collected by the Department of Revenue and deposited to the MTCA Capital Account. This account also earns revenue through Cost Recovery and the Voluntary Cleanup Program (VCP). Cost Recovery is when Ecology recovers its expenditures from potentially liable parties for the cost of providing cleanup oversight at properties under an order or decree. The VCP offers a service to customers who request review of a planned or completed cleanup to determine whether there should be any further action taken. Other revenues include certain fines and

penalties issued against persons or businesses, which have not complied with environmental contamination and cleanup laws.

Model Toxics Control Operating Account ..... Fund #23P .....RCW 70A.305.180

Fund Manager: Central Budget Office. Contact Lars Andreassen, 360-742-7903

Purpose: Address toxic pollution and contamination issues qualifying for funding under the Model Toxics Control Act (MTCA).

Authorized Use: Funding is used for operating expenditures to carry out MTCA, including toxic cleanup, toxic pollution prevention, hazardous and solid waste management, public participation grants, oil spill prevention and response, air quality programs, and other water and environmental health protection programs.

Revenue Source: Revenue comes from the volume-based hazardous substance tax (HST). This tax is applied to all petroleum products that can be measured on a per-barrel basis on the first possession in the state of Washington. After first depositing $50 million per biennium into the Motor Vehicle Fund, revenue collected by the Department of Revenue from this tax is deposited 60 percent to the MTCA Operating Account, 25% to the MTCA Capital Account, and 15% to the MTCA Stormwater Account. The tax rate increases annually by the implicit price deflator for nonresidential structures beginning July 1, 2020. Other revenues include penalties issued against persons or businesses that have not complied with environmental contamination laws.

Model Toxics Control Stormwater Account ..... Fund #23R .....RCW 70A.305.200

Fund Manager: Water Quality Program. Contact Kim Wagar, 360-878-4915

Purpose: Stormwater pollution control under the Model Toxics Control Act (MTCA).

Authorized Use: Funding is used to carry out programs directly relating to stormwater pollution control.

Revenue Source: Revenue comes from the volume-based hazardous substance tax (HST). This tax is applied to all petroleum products that can be measured on a per-barrel basis on the first possession in the state of Washington. After first depositing $50 million per biennium into the Motor Vehicle Fund, revenue collected by the Department of Revenue from this tax is deposited 60 percent to the MTCA Operating Account, 25% to the MTCA Capital Account, and 15% to the MTCA Stormwater Account. The tax rate increases annually by the implicit price deflator for nonresidential structures beginning July 1, 2020.

Natural Climate Solutions Account ..... Fund #26D .....RCW 70A.65.270

Fund Manager: Climate Pollution Reduction Program. Contact Cristina Steward, 564-669-1723

Purpose: To support climate resilience.

Authorized Use: To support projects including but not limited to restoring and protecting estuaries, fisheries, and marine shoreline habitats; increasing carbon sequestration; and supporting remediation and adaptation to the impacts of ocean acidification.

Revenue Source: After funding administration of the Climate Commitment Act, 25% of the funds remaining from the Climate Investment Account will be redistributed by the Washington State Treasurer to the Natural Climate Solutions Account.

Oil Spill Prevention Account ..... Fund #217 ..... RCW 90.56.510

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Ryan Olson, 360-584-4086

Purpose: To provide funding for oil spill prevention, preparedness, and response activities.

Authorized Use: These funds are used for: routine responses to spills (currently funded from MTCA); development of rules and policies; facility and vessel plan review and approval; contingency plan review and approval, oil spill drills; oil transfer inspections; vessel and rail traffic risk assessment, investigations; enforcement; interagency coordination; and public outreach and education.

Revenue Source: A four-cent tax on the first possession of each barrel of crude oil or petroleum products imported into and consumed in Washington State from vessel or rail and subject to an export tax credit.

Oil Spill Response Account..... Fund #223 ..... RCW 90.56.500

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Ryan Olson, 360-584-4086

Purpose: To provide funds for responding to and cleaning up oil spills when state response costs are expected to exceed $1,000.

Authorized Use: These funds are used for: oil spill response, containment, wildlife rescue, oil cleanup and disposal, and associated costs; natural resource damage assessments and related activities; interagency coordination and public information related to a response; appropriate travel, goods and services, contracts, and equipment related to a response.

Revenue Source: A one-cent tax on the first possession of each barrel of crude oil or petroleum products imported into and consumed in Washington State from vessel or rail and subject to an export tax credit.

Paint Product Stewardship Account..... Fund #23W ..... RCW 70A.515.100

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To provide a convenient and environmentally sound collection and recycling program for architectural paint in Washington state.

Authorized Use: Administration, oversight, and enforcement of the paint stewardship program.

Revenue Source: A paint stewardship organization representing producers of architectural paint sold in Washington state is required to pay an annual fee for the purposes of funding Ecology's costs to implement and enforce the paint stewardship program.

Perpetual Surveillance and Maintenance Account ..... Fund #500 .....RCW 70A.384.050

Fund Manager: Nuclear Waste Program. Contact Aaron Hubler, 509-537-6749

Purpose: To fund surveillance and maintenance of the Commercial Low-Level Radioactive Waste Disposal site at Hanford after closure.

Authorized Use: Funds will be transferred to the Federal Government unless the state purchases the land at lease termination.

Revenue Source: Disposal fee of $1.75 per cubic foot of disposed commercial low-level radioactive waste. (This account retains interest.)

Photovoltaic Module Recycling Account..... Fund #22G .....RCW 70A.510.010

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To provide a convenient, safe, and environmentally sound system for recycling photovoltaic modules, minimizing hazardous waste, and recovering commercially valuable materials.

Authorized Use: Oversight of the photovoltaic module recycling program including guidance development, plan review and approval, enforcement, and rulemaking.

Revenue Source: A one-time flat fee is required from participating manufacturers to recover costs associated with the plan guidance, review, and approval process. In addition to the flat fee, an annual fee may be charged based on the manufacturer's pro rata share of sales in Washington to cover Ecology's annual program implementation costs.

Price Ceiling Unit Emission Reduction Investment Account ..... Fund #27P .....RCW 70A.65.160

Fund Manager: Climate Pollution Reduction Program. Contact Cristina Steward, 564-669-1723

Purpose: To support the transition to a clean energy economy.

Authorized Use: To achieve greenhouse gas emissions reductions.

Revenue Source: Sales of price ceiling units.

Product Stewardship Programs Account ..... Fund #16T ..... RCW 70A.505.120

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To provide a convenient and environmentally sound collection and recycling program for mercury-containing lights. The law that created the mercury-containing light program, LightRecycle, will be repealed on July 1, 2026, RCW 43.131.422.

Authorized Use: Oversight of the mercury containing lights collection and recovery program, including review and approve plans and plan revisions, monitor and evaluate program operations, and implement the regulations.

Revenue Source: Producers of mercury-containing lights are required to pay an annual fee of $3,000 per manufacturer.

Radioactive Mixed Waste Account ..... Fund #20R ..... RCW 70A.300.480

Fund Manager: Nuclear Waste Program. Contact Aaron Hubler, 509-537-6749

Purpose: To fund implementation of the Hazardous Waste Management Act at facilities that manage radioactive mixed wastes. The HWMA provides a comprehensive statewide framework for the planning, regulation, control, and management of hazardous waste which will prevent land, air, and water pollution and conserve the natural, economic, and energy resources of the state.

Authorized Use: State costs to carry out the duties of the HWMA at radioactive mixed waste facilities, including permitting, compliance, and necessary office, staff and support functions.

Revenue Source: Annual billing to Radioactive Mixed Waste Facility operators. Hanford (USDOE), and two non-Hanford facilities.

Reclamation Account ..... Fund #027 ..... RCW 89.16.020

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To provide for the reclamation and development of such lands in the state of Washington as shall be determined to be suitable and economically available for reclamation and development as agricultural lands.

Authorized Use: To conduct a regulatory program for well construction as provided in Chapter 18.104 RCW. Also, to independently (or in cooperation with the federal government) initiate stream gauging activities, adjudications and conduct investigations and natural resource hydrographic, topographic, river, underground water, mineral and geological surveys for potential hydro power projects as provided in RCW 90.16.060. In addition, funds are used to support staff work at the Departments of Ecology and Fish and Wildlife on Federal Energy Regulatory Commission hydro facility relicensing.

Revenue Source: Fees for well drilling and well driller's license (RCW 18.104.055) and for power licensing (RCWs 90.16.050 and RCW 90.16.060).

Recycled Content Account ..... Fund #25R .....RCW 70A.245.110

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To implement post-consumer recycled contents requirements for plastic beverage containers, trash bags, and household cleaning and personal care products plastic containers.

Authorized Use: Implementation, administration, and enforcement of recycled content requirements, including but not limited to rulemaking, registration of producers, technical assistance, prepare workload analysis, review of annual reports and petition requests, assess penalties and enforcement of non-compliance as needed.

Revenue Source: Producers of covered products or their third-party representatives are required to pay an annual fee for the purposes of funding Ecology's costs to implement, administer, and enforce the recycled content requirements.

Recycling Enhancement Account ..... Fund #25S.....RCW 70A.245.100

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To implement post-consumer recycled contents requirements for plastic beverage containers, trash bags, and household cleaning and personal care products plastic containers.

Authorized Use: For providing grants to local governments for the purpose of supporting local solid waste and financial assistance programs.

Revenue Source: Producers of covered products not meeting the minimum postconsumer recycled content requirements or out of compliance with the registration, reporting, or labeling requirements are subject to an annual penalty as prescribed in the law.

Refrigerant Emission Management Account ..... Fund #25T .....RCW 70A.60.050

Fund Manager: Climate Pollution Reduction Program. Contact Cristina Steward, 564-669-1723

Purpose: To fund the Refrigerant Management Program.

Authorized Use: Subject to appropriation by the Legislature, funds may only be used to develop and implement the provisions of RCW 70A.60.030.

Revenue Source: All receipts received by the state from the fees imposed under RCW 70A.60.030.

Responsible Battery Management Account..... Fund #28C .....RCW 70A.555.120

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To ensure the proper handling, recycling, and end-of-life management of used batteries to prevent the release of toxic materials into the environment and other safety concerns.

Authorized Use: Ecology's costs to implement, administer, and enforce the battery stewardship program.

Revenue Source: Producers selling or distributing covered batteries or battery-containing products in or into Washington must pay an annual fee to cover Ecology's costs to implement the program. The fee collection is expected to begin in FY 2027 after rulemaking is complete.

Site Closure Account ..... Fund #125 ..... RCW 70A.384.050

Fund Manager: Nuclear Waste Program. Contact Aaron Hubler, 509-537-6749

Purpose: To fund final closure and decommissioning the Commercial Low-Level Radioactive Waste Disposal site at Hanford.

Authorized Use: Funds have been used for an environmental impact study, a site investigation, design of a cover for filled trenches, and will be used for final closure activities.

Revenue Source: Users of the facility and site pay permit fees based on disposal volumes. Revenue also comes from repayment of a $13.8 million fund transfer from the Site Closure Account to the State General Fund, which started in July 2008. Payment amounts are increased annually by the Implicit Price Deflator. (This account retains interest.)

State & Local Improvements Revolving Account – Waste Disposal Facilities, 1980 (Ref. 39) ..... Fund #055 ..... RCW 43.83.350

Fund Manager: Water Quality Program. Contact Kim Wagar, 360-878-4915

Purpose: Authorizes the Department of Ecology to provide grants and loans for state and local improvements to wastewater treatment facilities, agricultural pollution abatement facilities, and lake restoration projects.

Authorized Use: Grants and loans to local governments.

Revenue Source: Revenue from the State and Local Improvements Revolving Account comes from the sale of bonds and principal and interest payments from loans awarded to local governments for construction of water pollution control facilities and projects that reduce pollution in Washington's waterways.

State & Local Improvements Revolving Account – Waste Disposal Facilities (Ref. 26) ..... Fund #051 ..... RCW 43.83.330

Fund Manager: Water Quality Program. Contact Kim Wagar, 360-878-4915

Purpose: Authorizes the Department of Ecology to provide grants and loans for state and local facilities and systems for the collection, treatment, control, or disposal of solid or liquid waste materials.

Authorized Use: Grants and loans to local governments.

Revenue Source: Revenue from the State and Local Improvements Revolving Account comes from the sale of bonds and principal and interest payments from loans awarded to local governments for construction of water pollution control facilities and projects that reduce pollution in Washington's waterways.

State & Local Improvements Revolving Account – Water Supply Facilities (Ref. 38) ..... Fund #072 ..... RCW 43.83.340

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To provide grants and loans to agricultural users for water supply facilities.

Authorized Use: Provides grants and loans to applicants for water supply facilities for agricultural use alone or in combination with fishery, recreational, or other beneficial uses of water to assist those entities in improving their efficiency of water use beyond current levels.

Revenue Source: The Legislature authorized $75 million of general obligation bonds for loans for water supply facilities. The entire $75 million authorized has been expended. The revenue deposited to this account includes proceeds from the sale of bonds plus payment of principal and interest on loans made to agricultural users.

State Drought Preparedness Account .... Fund #05W ..... RCW 43.83B.430

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To provide assistance for drought planning and preparedness activities and projects.

Authorized Use: Expenditures from the account may be used for drought planning and preparedness activities, including grants to public entities and/or interagency agreements to State agencies to reduce current or future hardship caused by water unavailability stemming from drought conditions.

Revenue Source: Funds are transferred to this account as directed by the Legislature.

State Emergency Water Projects Revolving Account ..... Fund #032 ..... RCW 43.83B.360

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To provide for emergency action during a drought declaration.

Authorized Use: To provide emergency powers to the Department of Ecology to enable it to take actions in a timely and expeditious manner to alleviate hardships and reduce burdens on various water users and uses arising from drought conditions. As used in this chapter, "drought condition" means that the water supply for a geographical area or for a significant portion of a geographical area is 75 percent below normal and the water shortage is likely to create undue hardships for various water uses and users.

Revenue Source: The initial $18 million general obligation bonds established for projects funded from this account have been expended. In 2001 and 2005, there were transfers from the State General Fund to this account for drought projects. Interest and principal paid on loans to local jurisdictions for drought relief are also deposited into this account.

Underground Storage Tank Account ..... Fund #182 ..... RCW 70A.355.090

Fund Manager: Toxics Cleanup Program. Contact Lyndsay Gordon, 360-810-1636

Purpose: To conduct inspections and provide technical assistance aimed to prevent leaks that cause underground storage tank contamination into soil and groundwater.

Authorized Use: To adopt and enforce rules establishing requirements for all underground storage tanks regulated under the federal Resource Conservation and Recovery Act.

Revenue Source: Tank fees and fines for tank violations.

Voluntary Cleanup Account ..... Fund #23V ..... RCW 70A.305.170

Fund Manager: Toxics Cleanup Program. Contact Lyndsay Gordon, 360-810-1636

Purpose: Through cost recovery, a fee structure, or both collect all costs associated with Ecology's expedited process for providing advice and assistance related to cleanup of hazardous waste sites under the Voluntary Cleanup Program.

Authorized Use: To support Ecology's expedited process for providing advice and assistance related to cleanup of hazardous waste sites under the Voluntary Cleanup Program.

Revenue Source: Cost recovery or fees collected from customers in the Voluntary Cleanup Program requesting reviews the expedited process.

Waste Reduction, Recycling, and Litter Control Account ..... Fund #044 ..... RCW 70A.200.140

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To control, remove and prevent litter and develop public education programs concerning the litter problem, and to reduce and recycle waste materials, including those related to litter.

Authorized Use: Litter prevention and pickup (through Ecology Youth Corps, contracts and grants with local governments, other state agencies, and a commercial contractor), litter prevention campaign, litter survey, administration of litter program. Implementation of waste reduction, recycling, and composting efforts, including: providing technical assistance to local governments and commercial businesses to increase markets, and recycling and composting programs; educating residents about waste and litter reduction, and recycling and composting; increasing access to recycling and composting programs, especially for food packaging and plastic bags; and for programs to reduce wasted food and food waste.

Revenue Source: Wholesalers and retailers in Washington State pay a litter tax of $0.15 per $1,000 of gross proceeds as set in statute for all sales of food for humans or pets, cigarettes and tobacco products, soft drinks, carbonated water, beer, wine, newspapers, magazines, household paper and paper products, glass containers, metal containers, plastic or fiber containers made of synthetic materials, cleaning agents, and toiletries.

Waste Tire Removal Account ..... Fund #08R .....RCW 70A.205.415

Fund Manager: Solid Waste Management Program. Contact My-Hanh Mai, 360-742-6931

Purpose: To cleanup unauthorized waste tire piles and prevent future accumulation of unauthorized waste tire piles.

Authorized Use: Administer and manage a contract to clean up and prevent unauthorized tire piles; establish and maintain a website to disseminate information about preventing tire piles; and provide enforcement of waste tire disposal regulations.

Revenue Source: RCW 70A.205.405 authorizes a one dollar per tire fee on the retail sale of new replacement vehicle tires. This fee is collected from consumers making new tire purchases. Only one million dollars of the revenue collection is dedicated towards cleanup and prevention of unauthorized waste tire piles. RCW 70A.205.425 requires that on September 1st of odd-numbered years, any balance in excess of one million dollars from the Waste Tire Removal Account must be transferred to the Motor Vehicle Account for the purposes of road wear-related maintenance on state and local public highways.

Wastewater Treatment Plant Operator Certification Acct. ..... Fund #21H .....RCW 70A.212.170

Fund Manager: Water Quality Program. Contact Ligeia Heagy, 564-233-8279

Purpose: To fund the certification of wastewater treatment plant operators.

Authorized Use: Fees shall be sufficient to fully recover the costs of the wastewater operator certification program, to include: evaluating applications necessary to verify compliance with certification requirements; maintaining and administering credible examinations; ensuring operators receive necessary training, outreach, and technical assistance; enforcing certification program requirements; providing necessary education and training

to program staff; and supporting the overhead expenses related to administering the program.

Revenue Source: Wastewater treatment plant operator certification application and renewal fees.

Water Pollution Control Revolving Account ..... Fund #727 ..... RCW 90.50A.020

Fund Manager: Water Quality Program. Contact Kim Wagar, 360-878-4915

Purpose: To provide low interest loans to local governments for construction of water pollution control facilities and related activities that contribute to improved statewide water quality.

Authorized Use: Loans to local governments.

Revenue Source: Revenue for the Water Pollution Control Revolving Account comes primarily from two sources. The first is a yearly federal EPA grant that averages $25-28 million. The second source of revenue is principal and interest payments from loans awarded to local governments for construction of water pollution control facilities and other projects that reduce pollution in Washington's waterways. (This account retains interest.)

Water Pollution Control Revolving Administration Account ..... Fund #564 ..... RCW 90.50A.090

Fund Manager: Water Quality Program. Contact Kim Wagar, 360-878-4915

Purpose: Ecology is authorized to assess administration charges as a portion of the debt service for loans issued under the water pollution control revolving fund created in RCW 90.50A.020. The sole purpose of assessing administration charges is to predictably and adequately fund Ecology's costs of administering the water pollution control revolving fund loan program.

Authorized Use: Administration costs associated with conducting application processes, managing contracts, collecting loan repayments, managing the revolving fund, providing technical assistance, and meeting state and federal reporting requirements. Information and data system costs associated with loan tracking and fund management.

Revenue Source: Any administration charges levied by the department in conjunction with administration of the water pollution control revolving fund and any other revenues derived from gifts, grants, or bequests pledged to the state for the purpose of administering the water pollution control revolving fund. (This account retains interest.)

Water Quality Permit Account ..... Fund #176 ..... RCW 90.48.465

Fund Manager: Water Quality Program. Contact Ligeia Heagy, 564-233-8279

Purpose: To fund regulation of the disposal of solid or liquid waste material into waters of the state, including commercial or industrial operators discharging solid or liquid waste material into sewage systems operated by municipalities or public entities.

Authorized Use: Fees are established in amounts to fully recover and not to exceed expenses in: processing permit applications and modifications; monitoring and evaluating compliance with permits; conducting inspections; securing laboratory analysis of samples; reviewing plans and documents directly related to operations of permittees; overseeing performance of delegated pretreatment programs; and supporting the overhead expenses directly related to these activities.

Revenue Source: Annual fees are based on a variety of factors including the complexity of permit issuance and compliance. Fee interval ranges from $130-176,697 for industries; $2.07-$2.16 (per residential equivalent) for municipalities; and $103-$41,232 for general permits. Stakeholders review fees each biennium. Ecology must go through formal rulemaking to amend the fees (Chapter 173-224 WAC). This can only occur every two years.

Water Rights Processing Account ..... Fund #16V ..... RCW 90.03.650

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To provide funds for processing water right applications.

Authorized Use: To support the processing of water right applications for a new water appropriation, as well as a request to change, transfer, or amend an existing water right.

Revenue Source: Fees from applicants seeking to process a water right through expedited processing RCW 90.44.540 or 90.03.655 and Certified Water Rights Examiners per RCW 90.03.665 are deposited to this account.

Water Rights Tracking System Account ..... Fund #10G ..... RCW 90.14.240

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To provide funds for management of a water rights tracking system.

Authorized Use: For the development, implementation, and management of a water rights tracking system, including a water rights mapping system and a water rights database.

Revenue Source: Twenty percent of the water right application or transfer/change/amendment fees collected by the Department of Ecology under RCW 90.03.470 are deposited to this account.

Watershed Restoration and Enhancement Account ..... Fund #22K ..... RCW 90.94.060

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To provide funds for administering the water availability act (Streamflow Restoration Program).

Authorized Use: To cover costs of administering the water availability act, including implementing watershed planning projects and watershed restoration and enhancement projects; and collecting data and completing studies necessary to develop, implement, and evaluate watershed restoration and enhancement projects.

Revenue Source: Fees and direct appropriations. Individuals seeking a permit that includes construction of a permit exempt well pays a $500 fee to the local permitting authority for the purpose of implementing a watershed restoration and enhancement program, and the local governments remit $350 of each fee to Ecology by August 1st of each year. Fees must be collected and used in the water resource inventory area in which the fee originated.

Watershed Restoration and Enhancement Bond Account ..... Fund #366 ..... RCW 90.94.080

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To fund projects using tax exempt bonds for administering the water availability act (Streamflow Restoration Program).

Authorized Use: To fund projects using tax exempt bonds. Projects include acquiring senior water rights, water conservation, water reuse, stream gaging, groundwater monitoring, and developing natural and constructed infrastructure designed to provide access to new water supplies, with priority given to projects in watersheds developing specified plans and watersheds participating in the defined pilot project.

Revenue Source: Up to $300 million of state bonds (in combination with the Watershed Restoration and Enhancement Taxable Bond Account) have been authorized for projects to achieve the goals of the water availability act until June 30, 2033. (This account retains interest.)

Watershed Restoration and Enhancement Taxable Bond Account ..... Fund #377 ..... RCW 90.94.070

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: To fund projects using taxable bonds for administering the water availability act (Streamflow Restoration Program).

Authorized Use: To fund projects using taxable bonds. Projects include acquiring senior water rights, water conservation, water reuse, stream gaging, groundwater monitoring, and developing natural and constructed infrastructure designed to provide access to new

water supplies, with priority given to projects in watersheds developing specified plans and watersheds participating in the defined pilot project.

Revenue Source: Up to $300 million of state bonds (in combination with the Watershed Restoration and Enhancement Bond Account) have been authorized for projects to achieve the goals of the water availability act until June 30, 2033. (This account retains interest.)

Wood Stove Education & Enforcement Account ..... Fund #160 ..... RCW 70A.15.3620

Fund Manager: Air Quality Program. Contact Andrew Contreras, 360-485-7648

Purpose: To reduce air pollution from indoor wood stove use.

Authorized Use: To support educational programs on proper wood stove use and enforcement of opacity (density of smoke coming out of chimney) regulations as they relate to indoor wood stove burning.

Revenue Source: A $30 fee is charged to buyers of new wood stoves and fireplaces. Ecology receives $10 of this fee; the other $20 is passed through to local air authorities based on population.

Yakima Integrated Plan Implementation Account ..... Fund #19K ..... RCW 90.38.070

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: In cooperation with the United States and local water users, to fund projects or activities that resolve water conflicts in the Yakima River Basin through non-taxable bond sales and investment in storage, conservation, or access to water supplies pursuant to the Yakima Integrated Plan. The program is intended to satisfy both existing rights, and others presently unmet as well as future needs of the basin.

Authorized Use: Authorized in 2013. Intended to fund Yakima Integrated Plan projects owned or used by state or local governments.

Revenue Source: Direct appropriations from the Legislature, moneys directed to the account pursuant to Chapter 90.38 RCW, and any other sources deposited to the account. (This account retains interest.)

Yakima Integrated Plan Implementation Revenue Recovery Account ..... Fund #565 ..... RCW 90.38.090

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: In cooperation with the United States and local water users, to fund projects or activities that resolve water conflicts in the Yakima River Basin through bond sales (taxable and non-taxable) and investment in storage, conservation, or access to water

supplies pursuant to the Yakima Integrated Plan. The program is intended to satisfy both existing rights, and others presently unmet as well as future needs of the basin.

Authorized Use: Authorized in 2013. Intended to fund assessment, planning and/or development of water supply projects under the Yakima River Basin Integrated Resource Management Plan or for any other actions that provide access to new water supplies within the Yakima River Basin for both instream and out-of-stream uses.

Revenue Source: Water service contracts, permitting new water supply and/or loans related to the cost to develop new water supplies. Specific repayment terms depend on each individual agreement. (This account retains interest.)

Yakima Integrated Plan Implementation Taxable Bond Account..... Fund #20C .....RCW 90.38.080

Fund Manager: Water Resources Program. Contact Jim Skalski, 360-584-3805

Purpose: In cooperation with the United States and local water users, to fund projects or activities that resolve water conflicts in the Yakima River Basin through taxable bond sales and investment in storage, conservation, or access to water supplies pursuant to the Yakima Integrated Plan. The program is intended to satisfy both existing rights, and others presently unmet as well as future needs of the basin.

Authorized Use: Authorized in 2013. Intended to fund Yakima Integrated Plan projects owned or used the federal government, non-profit corporations, or private entities.

Revenue Source: Direct appropriations from the Legislature, moneys directed to the account pursuant to Chapter 90.38 RCW, and any other sources deposited to the account. (This account retains interest.)