Washington Department of Ecology

Budget & Program Overview

2015-2017

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DEPARTMENT OF
ECOLOGY
State of Washington

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Refer to publication number 15-01-007.

Cover photo: Spill Prevention, Preparedness and Response Program staff participate in a deployment drill on the lower Columbia River to test the effectiveness of an industry oil spill contingency plan. Deployment drills ensure that the appropriate spill response equipment can be deployed and industry personnel are properly trained and familiar with their plan.

Washington Department of Ecology

Budget & Program Overview

2015-2017

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A Message from the Director

Welcome to the tenth edition of the Washington State Department of Ecology Budget and Program Overview publication, where we highlight our work and provide details about our budget for the 2015-17 Biennium.

As Washington's lead environmental agency, we are dedicated to addressing today's most complex natural resources challenges. Our mission is to protect and preserve the environment for current and future generations, while valuing and supporting economic success.

Many of the challenges facing our natural resources in the 21st century are unique to our time and require a new way of thinking. In 2015, Washington experienced the worst drought in its modern history. The warmer and drier conditions contributed to the worst wildfire season we have ever seen in this state. Moreover, climate change modeling indicates these conditions are likely to become the norm for future generations.

By the same token, many of Washington's environmental challenges stem from decades-old contamination left behind from past practices that have not been mediated. We continue to oversee the cleanup of waste at the Hanford Nuclear Reservation and are tackling many other sediment and upland cleanup sites across the state.

Whether the challenges are old or new, they motivate us to seek innovative partnerships with businesses, tribes, ranchers, conservation groups, dairy farmers and other agricultural producers, and all levels of government. We are finding creative ways to work together because we have a shared vision: passing on the natural beauty and abundance of healthy resources that ensure future generations the quality of life they deserve. Together we can work toward sustaining a clean environment in harmony with a robust economy.

I hope this publication helps you become familiar with the important environmental work we do, the laws we implement and uphold, and the money that has been appropriated to us for the next two years. We are thoughtfully establishing priorities and goals—and measuring our results.

Sincerely,

Maia D. Bellon
Director

2015-17 Introduction – Agency Budget

Ecology's 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.

Our Commitment
- Perform our work in a professional and respectful manner.
- Listen carefully and communicate in a responsive and timely manner.
- Solve problems through innovative ways.
- Build and maintain cooperative relationships.
- Practice continuous improvement.

Goals
- Protect and restore land, air and water.
- Prevent pollution.
- Promote healthy communities and natural resources.
- Deliver efficient and effective services.

Strategic Priorities
- Reduce and prepare for climate impacts.
- Prevent and reduce toxic threats.
- Deliver integrated water solutions.
- Protect and restore Puget Sound.

This book provides an overview of Ecology's 2015-17 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.

Ecology employees work across the state to protect the environment, the health of our citizens, and create a sustainable economy. We do this in a variety of ways, including:

- Contracts, loans, and grants.
- Environmental permitting.
- Compliance assistance.
- Inspections and enforcement.
- Environmental monitoring and analysis.
- Policy, rule, and technical guidance.
- Education and outreach.

The Legislature and the Governor faced a tremendous challenge in passing a 2015-17 biennial budget, with significant General Fund-State (GF-S) shortfalls projected. Even so, the final budget includes major new investments in K-12 activities related to the McCleary Supreme Court Decision; state employee bargaining agreements; I-732 teacher COLA's; higher education tuition reductions; and a transportation revenue package.

Ecology's 2015-17 operating budget is $475.2 million, and our capital budget is $903 million. When you combine the two, almost 70 percent of the total is money passed through to local governments and communities to do environmental work. The remainder supports Ecology activities.

Over the last several biennia, legislative fund shifts and appropriations have increased our reliance on Model Toxics Control Act (MTCA) funding for base environmental program work. Most of this work was supported by GF-S prior to the large downturn in the economy. Over the last few years, the Legislature has made broad funding shifts that reduced GF-S and replaced it with MTCA to preserve core environmental activities.

A continued theme for Ecology in this biennium will be managing the MTCA accounts and the fund balance challenges related to Hazardous Substance Tax revenue decline.

Each program's profile includes the context for its work and descriptions of the activities funded in the 2015-17 budget, 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.

Department of Ecology – Executive Management

DEPARTMENT OF ECOLOGY
State of Washington

Director
Maia Bellon
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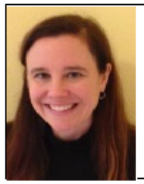

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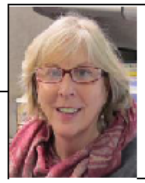

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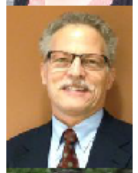

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Northwest Region
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Southwest Region
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Air Quality
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Water Resources
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Waste 2 Resources
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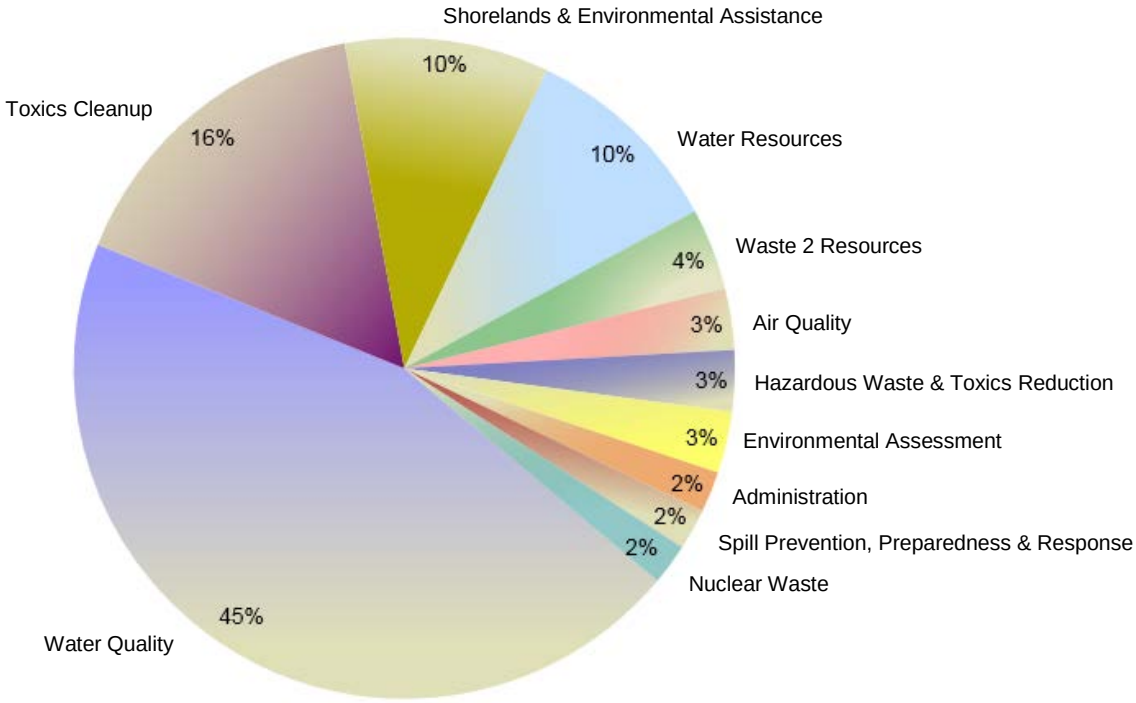
Ecology 2015-17 Biennium Budget
By Program

Ecology carries out its mission through 10 environmental programs, plus agency administration. The agency's combined Operating and Capital Budget is divided among these programs and includes funds Ecology will pass through to other entities.



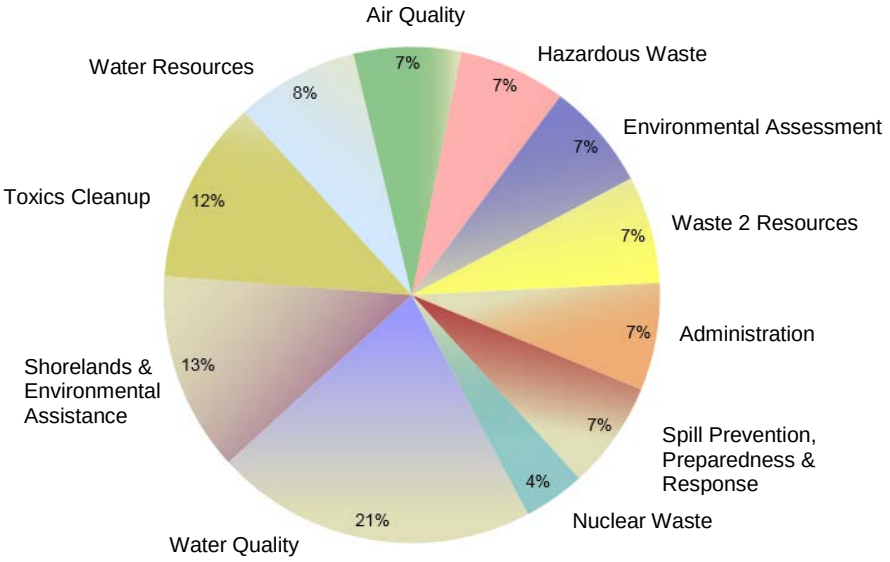
Programs	FTEs	Operating	Capital	Operating + Capital
Water Quality	260.1	$97,793,348	$524,043,156	$621,836,504
Toxics Cleanup	196.6	55,212,519	171,807,957	227,020,476
Shorelands & Environmental Assistance	165.5	62,165,656	78,692,767	140,858,423
Water Resources	141.0	39,073,448	100,885,431	139,958,879
Waste 2 Resources	113.1	32,620,375	19,671,920	52,292,295
Air Quality	114.8	34,672,076	5,063,399	39,735,475
Hazardous Waste & Toxics Reduction	130.5	34,656,345	309,430	34,965,775
Environmental Assessment	155.0	34,329,562	0	34,329,562
Administration Program	155.6	32,191,787	1,134,880	33,326,667
Spill Prevention, Preparedness & Response	89.2	31,500,508	0	31,500,508
Nuclear Waste	89.2	20,984,376	1,409,230	22,393,606
Total	**1,610.6**	**$475,200,000**	**$903,018,170**	**$1,378,218,170**

Ecology 2015-17 Biennium Operating Budget

Operating Budget = $475.2 Million

By Program

Programs	Operating
Water Quality	$97,793,348
Shorelands & Environmental Assistance	62,165,656
Toxics Cleanup	55,212,519
Water Resources	39,073,448
Air Quality	34,672,076
Hazardous Waste & Toxics Reduction	34,656,345
Environmental Assessment	34,329,562
Waste 2 Resources	32,620,375
Administration*	32,191,787
Spill Prevention, Preparedness & Response	31,500,508
Nuclear Waste	20,984,376
Total	**$475,200,000**



**Note: The Administration Program is funded by operating and capital budgets and is 2% of the total budget. See page 114 for more detail.*
Source: Operating Allotment Control Totals, Adjusted for RTT in W2R/HWTR. Sort high to low.

By Fund Source

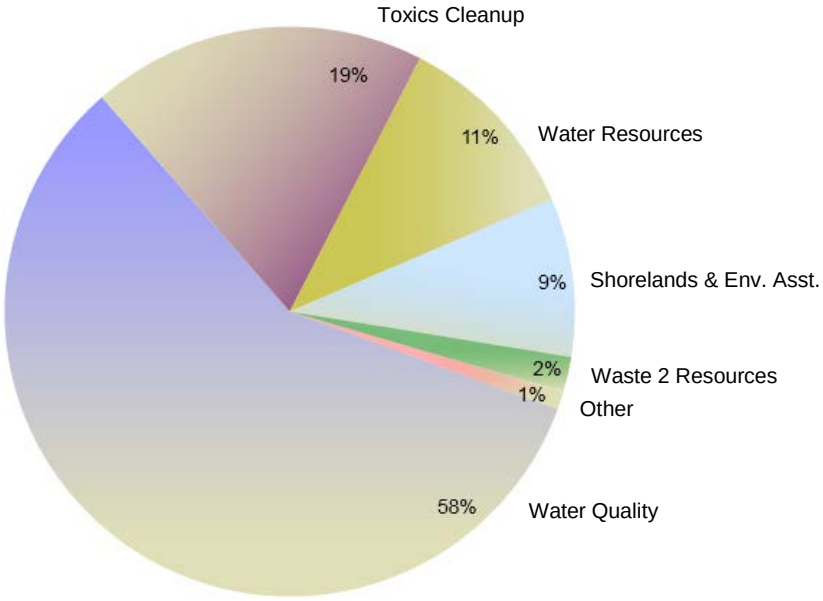
General Funds	Amount	%
General Fund – Federal (001)	$103,800,000	21.8
General Fund – State (001)	49,489,000	10.4
General Fund – Private/Local (001)	22,398,000	4.7
Dedicated Accounts	**Amount**	**%**
State Toxics Control (173)	$128,760,000	27.1%
Environmental Legacy Stewardship (19G)	44,295,000	9.3%
Water Quality Permit (176)	41,644,000	8.8%
Radioactive Mixed Waste (20R)	14,900,000	3.1%
Waste Reduction, Recycling & Litter Control (044)	13,163,000	2.8%
Oil Spill Prevention (217)	8,594,000	1.8%
Oil Spill Response (223)	7,076,000	1.5%
Hazardous Waste Assistance (207)	6,029,000	1.3%
Local Toxics Control (174)	4,628,000	1.0%
Reclamation (027)	3,926,000	0.8%
Underground Storage Tank (182)	3,544,000	0.7%
Air Pollution Control (216)	3,284,000	0.7%
Air Operating Permit (219)	3,231,000	0.7%
Water Pollution Control Revolving - Federal (727)	2,337,000	0.5%
Biosolids Permit (199)	2,108,000	0.4%
Flood Control Assistance (02P)	2,068,000	0.4%
Worker & Community Right-to-Know (163)	1,790,000	0.4%
Coastal Protection (408)	1,556,000	0.3%
Freshwater Aquatic Weeds (222)	1,439,000	0.3%
Electronic Products Recycling (11J)	759,000	0.2%
Water Pollution Control Revolving Administration (564)	579,000	0.1%
Site Closure (125)	578,000	0.1%
Wood Stove Education & Enforcement (160)	547,000	0.1%
Aquatic Algae Control (10A)	518,000	0.1%
State Toxics Control - Private/Local (173)	499,000	0.1%
Water Pollution Control Revolving - State (727)	493,000	0.1%
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	447,000	0.1%
Product Stewardship Programs (16T)	222,000	<0.1
State Drought Preparedness (05W)	204,000	<0.1
Basic Data (116)	170,000	<0.1
Water Rights Tracking System (10G)	46,000	<0.1
State Emergency Water Projects Revolving (032)	40,000	<0.1
Water Rights Processing (16V)	39,000	<0.1
Total	**$475,200,000**	**100.0**

Ecology 2015-17 Biennium Capital Budget

Capital Budget = $903.0 Million

By Program

Programs	Capital
Water Quality	$524,043,156
Toxics Cleanup	171,807,957
Water Resources	100,885,431
Shorelands & Environmental Assistance	78,692,767
Waste 2 Resources	19,671,920
Air Quality	5,063,399
Nuclear Waste	1,409,230
Administration	1,134,880
Hazardous Waste & Toxics Reduction	309,430
Environmental Assessment	0
Spill Prevention, Preparedness & Response	0
Total	**$903,018,170**



Other = Air Quality (0.56%), Nuclear Waste (0.16%), Administration (0.13%), Hazardous Waste (0.03%).

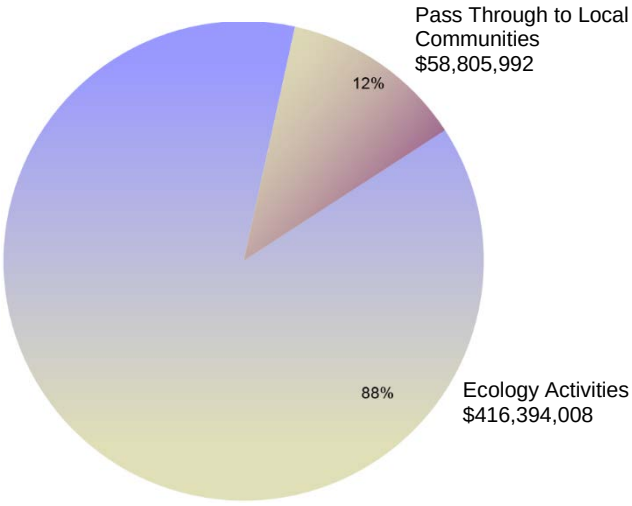
By Fund Source

Accounts	Amount	%
Water Pollution Control Revolving - State (727)	$264,515,000	29.3%
State Building Construction (057)	156,504,216	17.3%
Local Toxics Control (174)	111,227,956	12.3%
Water Pollution Control Revolving - Federal (727)	102,887,000	11.4%
Environmental Legacy Stewardship (19G)	96,715,000	10.7%
Cleanup Settlement (15H)	41,830,395	4.6%
State Toxics Control (173)	34,582,000	3.8%
Columbia River Basin Water Supply Development (10P)	30,583,211	3.4%
Columbia River Basin Taxable Bond Water Supply Development (18B)	21,101,493	2.3%
General Fund - Federal (001)	20,315,000	2.3%
State Taxable Building Construction (355)	10,012,669	1.1%
State Drought Preparedness (05W)	7,500,000	0.8%
Columbia River Basin Water Supply Revenue Recovery (296)	2,200,000	0.2%
Site Closure (125)	1,409,230	0.2%
Waste Tire Removal (08R)	1,179,000	0.1%
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	456,000	0.1%
Total	**$903,018,170**	**100.0%**

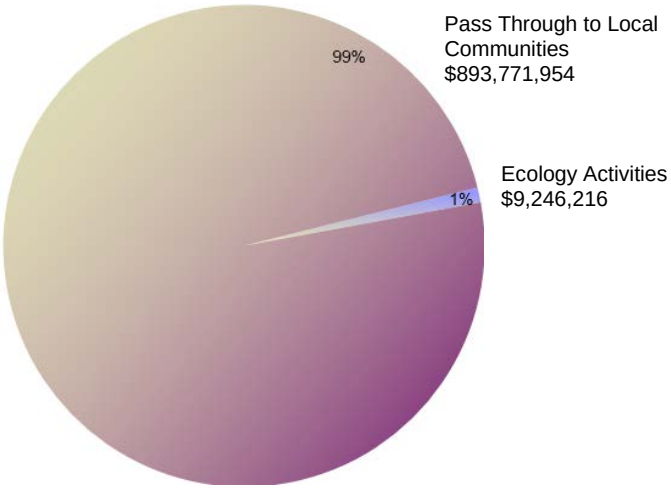
Ecology 2015-17 Biennium Budget
Pass Through Funding

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 watershed plan implementation, building water pollution control facilities, cleaning up publicly-owned and orphaned or abandoned contaminated sites, local Washington Conservation Corp placements, and supporting community awareness and involvement in hazardous waste management and pollution prevention. See pages 120 and 121 for information on data sources.

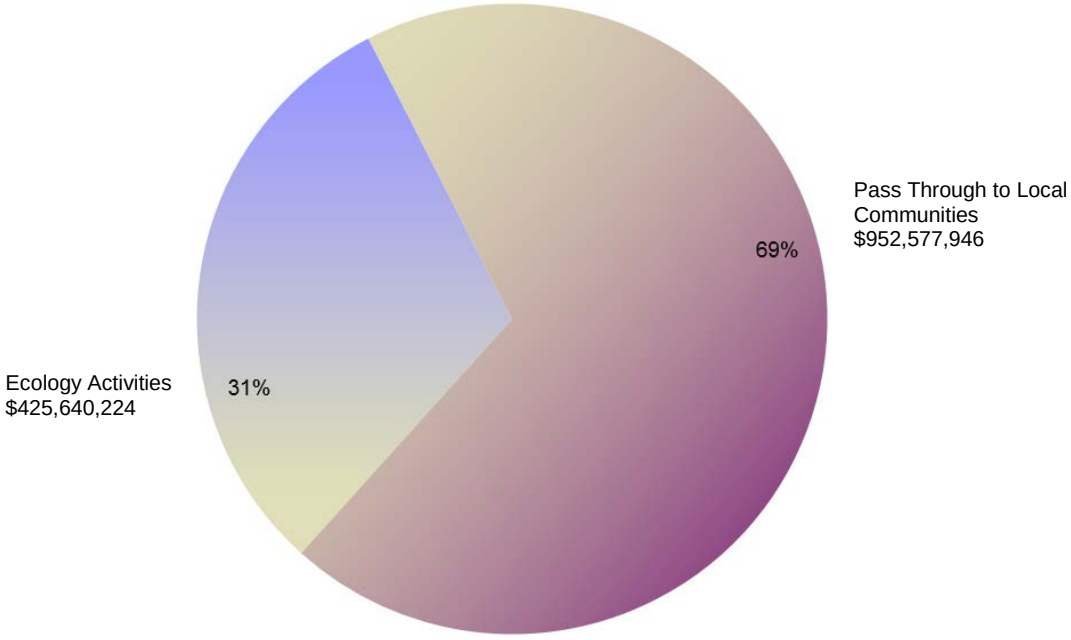
Operating Budget = $475,200,000



Capital Budget = $903,018,170



Combined Operating + Capital Budget = $1,378,218,170



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Air Quality's Jay Carmony inspects an illegal burn.

Program Mission

The mission of the Air Quality Program is to protect, preserve, and enhance air quality to safeguard public health and the environment for the people of Washington.

Environmental Threats

Air pollution is a public health concern. Air pollution causes lung disease, worsens existing heart and lung diseases, increases chronic breathing problems, elevates cancer risks, and decreases lung function in children—making them more vulnerable to chronic lung disease as adults. Air pollution can hasten death for people with these health problems. Ecology estimates hundreds of premature deaths and hundreds of millions of dollars in societal costs are attributable to air pollution each year in Washington.

The U.S. Environmental Protection Agency (EPA) sets national air quality standards for six air pollutants. EPA strengthens these standards over time, based on strong scientific evidence about the effects on public health and the environment. In 2006, EPA significantly strengthened the federal standard for fine particle pollution. Fifteen communities around the state are at risk of violating that standard. In late 2015, EPA tightened its ground-level ozone standard. Two large areas in the state surrounding Seattle and Tri-cities could violate the new health-based limit.

Meeting federal standards is very important. It reduces the health effects and health care costs of air pollution and prevents the risk of substantial financial and economic impacts on the state, local communities, businesses, and citizens. The latest scientific studies show air pollution harms health, even at levels that don't violate federal standards. Many communities that meet standards may exceed "healthy" pollution levels multiple times a year, exposing citizens to significant health risks.

Extremely fine particles in smoke and engine exhaust are the primary air pollution health concern in Washington. But hundreds of other chemicals, known as toxic air pollutants, enter the atmosphere from a wide variety of sources. Regulations require emission controls for most of these toxics, but there are currently no health-based outdoor air standards for these chemicals. Studies are increasingly showing they pose significant risks to human health and the environment.

Air pollutants also damage soil, water, crops, vegetation, man-made materials, property, animals, and wildlife; they impair visibility and affect the climate. Toxic air pollutants are not only emitted to the air and breathed by people, but are deposited to the land and waters of the state. Preliminary studies show a significant pollution source to water quality and marine and river sediments is coming from pollution in the air that lands directly in water or on land where rain water carries the pollutants to surface water.

Increases in levels of carbon dioxide and other greenhouse gases pose a major threat to public health and the environment in Washington. Studies show that climate change will result in more extreme and frequent wildfires, posing a threat to public safety and also resulting in hazardous levels of particle pollution. Climate change is linked to higher levels of ozone, which could make it increasingly difficult to meet the more stringent federal standards.

Authorizing Laws

- *Federal Clean Air Act*
- *Chapter 70.120 RCW, Motor Vehicle Emission Control*

- *Chapter 70.120A RCW, Motor Vehicle Emission Standards*
- *Chapter 70.235 RCW, Limiting Greenhouse Gas Emissions*
- *Chapter 70.94 RCW, Clean Air Act*
- *Chapter 80.80 RCW, Greenhouse Gas Emissions*

Constituents/Interested Parties

- *Motorists, transportation agencies, and motor vehicle related businesses.*
- *Business, industry, and affiliated trade associations.*
- *Wood stove and fireplace users, manufacturers, and related businesses, such as dealers.*
- *Agricultural businesses.*
- *General public.*

Issues

Reducing Health Risks from Air Pollution

Over the past several years, hundreds of scientific studies have been conducted on the health effects of air pollution. These studies consistently show air pollution, mainly fine particle pollution and ozone pollution, are more dangerous to human health than we used to think. Exposure to levels of pollution well below EPA's existing national air quality standards can result in a range of diseases and, in some cases, premature death. Ecology conservatively estimates that fine particle pollution alone contributes to approximately 1,100 premature deaths and more than $190 million each year in health and societal costs of diseases in Washington. Understanding this health and health care cost information is an important step in Ecology's efforts to identify and implement new strategies to protect public health from air pollution.

Addressing Violations of Federal Standards

In addition to tightening the fine particle standard, EPA is using the most current health information to make other air quality standards even more protective. EPA has introduced new, tougher outdoor air quality standards for lead, nitrogen dioxide, and sulfur dioxide. GPA adopted a tougher standard for ozone in late-2015. Ecology will need new air pollution prevention and control policies, tools, and approaches to meet these cleaner air levels, limit public exposure to toxic air pollution, and remove or avoid the economic sanctions that come when areas violate federal standards.

Developing federally required clean air plans for areas that violate standards will significantly increase monitoring, technical analysis, and strategy development work for Ecology. This need for more resources comes at a time when federal grants to the state for air quality protection are expected to decline significantly.

Reducing Harmful Diesel Soot

Ecology has identified diesel exhaust as the air pollutant most harmful to public health in Washington. Seventy percent of the cancer risk from airborne pollutants is from diesel exhaust. It makes 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. More than four million people in Washington live or work close to highways and other major corridors where they are most likely to be exposed to diesel exhaust.

Ecology's diesel strategy decreases the amount of diesel pollution emitted into the air and reduces the negative health effects of diesel pollution—especially for children, the elderly, and sensitive populations whose existing health problems put them at risk. Also affected are economically disadvantaged communities that are exposed to a higher amount of air pollution.

Ecology's clean diesel initiative provides and installs better emissions controls on older vehicles and equipment; scraps and replaces old, high-polluting vehicles with new low-emission vehicles; repowers old, high polluting engines with new low-emission engines; and installs idle reduction technologies to reduce emissions created by unnecessary engine idle time. Replacing or retrofitting these older vehicles typically reduces toxic emissions by 30 to 99 percent.

The clean diesel initiative has upgraded over 14,000 diesel engines, resulting in reductions of more than 44 tons of diesel particulates each year. School bus retrofits and replacements have reduced exposure of toxics emissions for the 450,000 children that ride a school bus every school day.

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 three to eight dollars in savings in improved health, avoided health problems, or lower operating and maintenance costs for diesel fleets. The Union of Concerned Scientists estimates that, for every dollar invested in diesel retrofits, nine to sixteen dollars are returned to society.

Reducing Harmful Smoke Pollution

Ecology has determined that fine particle pollution from smoke is the second greatest toxic threat from air pollution in Washington. Burning household trash (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 what outdoor burning is allowed and where.

But the largest problem source of particulate pollution is 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.

Recently, a large area in Pierce County violated the federal standard for fine particle pollution. As a result of local and state efforts to reduce residential wood smoke, the area met the standard by 2015.

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 upwards. We also offer incentives to people in the most affected areas to trade out older, more polluting wood stoves with newer, cleaner models or switching to alternative forms of heat, such as gas or electricity.

Ecology and its local air agency partners have replaced close to 4,000 uncertified wood stoves with cleaner forms of home heat. These replacements are targeted to lower-income, high wood-using homes in communities that are at high risk of violating the standard. During the 2015-17 Biennium, Ecology's goal is to replace an additional 600 uncertified devices with cleaner alternative sources of heat.

The desire to burn can collide with the demand for clean air. Pressure to burn agricultural and horticultural debris and intentional burning in forests is likely to increase, and land clearing and backyard burning to reduce yard waste are common practices in some communities.

There is also increased interest in burning biomass for energy, including burning wood and other organic wastes, in part to offset greenhouse gas emissions associated with burning fossil fuels. At the same time, pressure to reduce burning is increasing. People understand the health consequences of breathing smoke particles and don't like to be "smoked out." We expect more changes in burning laws and regulations as state and local agencies struggle to find the balance between clean air, reasonable alternatives to burning, and accepted burning practices.

Visibility and Regional Haze

Citizens complain when air pollution affects their views of Mt. Rainier, the Olympics, or 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 its plan to EPA for approval. The plan contains industrial source controls and other strategies to achieve and maintain federally-required visibility goals. The visibility plan must be updated by 2018 to ensure the state makes further progress toward the federal goals.

Responding to Climate Change

To make meaningful reductions in greenhouse gas emissions, the public and policy makers must know what activities emit those gases, and in what quantities. Ecology has a specific role to create a high-level emissions inventory that catalogues these emissions for the state over time, by industry, and by economic sector. Law also requires Ecology to operate a greenhouse gas reporting program requiring entities that emit certain quantities of greenhouse gases to report those emissions. This information is used to better inform and guide future federal and state climate policy direction and decisions that target emissions reductions across Washington.

Ecology staff provide policy and technical expertise to the Governor and policymakers on state policy development, efforts to meet federal requirements, and to help achieve the greenhouse

gas reduction limits in state law. Governor Inslee recognizes the need to do more and take action now, and he directed Ecology to design and implement a regulatory cap on greenhouse gas emissions by the summer of 2016.

Ecology also provides expertise on greenhouse gas emissions from vehicles and motor fuels. Emissions from the transportation sector are the largest single source of greenhouse gases in Washington. We support statewide efforts to evaluate emissions from alternative fuels, such as ethanol and biodiesel, as well as emissions from different types of vehicles, such as electric vehicles, gasoline/electric hybrids, and hydrogen fuel cell vehicles. Ecology will implement changes required to meet California clean car standards for greenhouse gas emissions.

Ecology will also implement new federal regulations to reduce carbon pollution from power plants. These new requirements place an increased workload on the rule development and policy and technical resources in the Air Quality Program.

Innovative and Effective Control of Commercial and Industrial Emissions

Commercial and industrial air pollution is well-controlled in Washington. Ecology issues timely permits for new construction and modifications of air pollution sources, and provides ongoing permit management, technical assistance, and inspection. These activities assure that 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 inspection processes. Because businesses rarely operate in the same way or use the same materials, Ecology usually tailors permits for each air pollution source. Where businesses are relatively similar (e.g., dry cleaners, autobody shops), Ecology has implemented and continues to develop General Orders (categorical permits) for specific source types. This makes permitting easier, quicker, cheaper, and more certain for small businesses. We are also using Lean tools to streamline our Notice of Construction permit application process to make applyng for permits easier and to speed permit issuance.

Ecology regularly surveys its permitting and inspection clients. We also seek feedback on our webpages to promote continuous improvement and dialogue with our clients.

Activities, Results & Performance Measures

Measure Air Pollution Levels and Emissions

To make sound air quality management decisions, Ecology needs reliable information on the amount and sources of pollution and how it moves in the air. Ecology uses three primary activities to collect this data:

- Air quality monitoring (assessing trends; focused compliance; and assessing control strategies, health effects, and environmental damage).
- Emission inventory development (quantifying pollution released by sources of air pollution).
- Meteorological and dispersion modeling fore-casts (movement and concentration of air pollutants, carrying capacity of airsheds, interactions of pollutants, and point of maximum impact of pollution).

Expected Results

- Comprehensive, high-quality air quality data are gathered, maintained, and evaluated over time to ensure informed policy decisions.
- The federally required monitoring network review and monitoring site modifications are conducted to meet state and federal air quality needs.
- Adequate data are available to policy makers.
- Improved emissions data and modeling tools are used to predict air quality levels, impacts, and trends.

Performance Measure

- Percentage of monitoring data that is valid.

Prevent Unhealthy Air and Violations of Air Quality Standards

Federal law establishes minimum air standards for six air pollutants known as criteria pollutants. Violations of those health-based standards trigger costly regulatory actions for state and local governments, businesses, and consumers. This results in economic constraints and creates potential

for severe financial sanctions against the state if problem areas are not cleaned up in a timely way.

To ensure federal standards are met and people have healthier air to breathe, Ecology continuously measures air pollution levels and trends, develops and implements area specific cleanup plans, and designs and implements strategies to prevent violations. Recent compelling research shows the current National Ambient Air Quality Standards for some criteria pollutants do not protect human health, and these standards are under federal review.

In light of this new research, Ecology is adjusting its focus to assure the air in Washington is both safe to breathe and meets federal standards. We will work to reduce ambient air pollutant concentrations to levels that ensure air in Washington communities is healthy to breathe, clean up areas that violate standards as quickly as possible, and prevent future violations of National Ambient Air Quality Standards.

Expected Results

- Air quality standards in Washington are met throughout the state to minimize public health problems linked to unsafe air.
- Clean air, as classified and officially recognized by the Environmental Protection Agency, is attained and maintained, and federal sanctions are avoided.
- Ambient air quality standards violations are prevented.
- State Implementation Plan strategies are implemented for areas out of compliance with federal air quality standards. Strategies are evaluated to help prevent areas from violating federal air quality standards in vulnerable and at-risk communities.
- A focused program to reduce fine particle pollution in central Washington communities is implemented.

Performance Measure

- Number of areas in Washington measuring air quality levels that are not in compliance with federal air quality standards.

Reduce Air Pollution from Industrial and Commercial Sources

Ecology issues permits and inspects new and existing industrial and commercial facilities that emit significant levels of air pollution. Permit and inspection programs are mandated either by federal or state clean air laws and are designed to be self-supporting through fees to the degree allowed by law.

Ecology provides technical assistance, permit application and processing guidance, rule interpretation, pre-application assistance, and permit review. Permits are conditioned and approved to ensure compliance with all federal and state laws, and that public health, air quality, and the environment are protected.

Sources are inspected to ensure permit conditions are met and that ongoing operations do not jeopardize public health. Ecology develops and modifies industrial source regulations to incorporate federal and state law changes, simplify and streamline permit requirements, and ensure public health protection.

Ecology conducts compliance inspections, resolves complaints, and develops technical and policy direction on emerging industrial permit issues.

Expected Results

- Air pollution from industrial and commercial sources is controlled to protect public health and minimize costs and regulatory burdens.
- One hundred percent of permits meet timeliness targets.
- The regulated community is certain about the need, content, and time frames for permits.
- Ecology and local air pollution control agencies retain delegation and local control of federal permit programs.

Performance Measure

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

Reduce Health and Environmental Threats from Motor Vehicle Emissions

Cars, trucks, construction equipment, locomotives, and marine vessels are responsible for over 60 percent of Washington's air pollution. These emissions adversely affect public health,

substantially increase health care costs, and increase cancer and mortality rates.

Without continued emissions reductions, Ecology cannot ensure healthy air to breathe and future attainment of federal air quality standards, avoid multimillion-dollar control costs to businesses and citizens, or reduce or prevent harmful health effects. To protect public health and the environment from motor vehicle pollution, Ecology:

- Administers Washington's Clean Car standards.
- Oversees the vehicle emission check program of nearly two million cars and trucks.
- Promotes transportation alternatives and cleaner motor vehicles and fuels through voluntary, regulatory, and incentive programs.
- Retrofits school buses and other diesel engines with better emission controls and idle reduction technologies.

Expected Results

- Air pollution emissions from motor vehicles are reduced.
- Pollution from on-road motor vehicles is reduced approximately 10 percent per year.
- Pollution from approximately two million cars is reduced by operating an Emission Check Program in three maintenance areas in the state.
- Diesel school buses, public fleet engines, and appropriate private sector engines are equipped with appropriate exhaust controls and idle reduction devices.
- Additional strategies to reduce engine idling in high exposure areas (near schools, health centers, and around truck stops) are developed and implemented.

Performance Measures

- Tons of motor vehicle emissions produced statewide.
- Tons of diesel soot emissions produced statewide.

Reduce Health and Environmental Threats from Smoke

Regional smoke pollution plagues many areas in Washington and affects public health and quality of life. The two leading sources of smoke in Washington communities are outdoor burning and wood burning for residential heat.

To address smoke from outdoor burning, Ecology issues conditioned permits for agricultural, land clearing, fire training, and other outdoor burning, where required by law. We also produce daily burn forecasts; respond to and resolve complaints related to smoke; and provide technical assistance to manage and prevent outdoor burning impacts And, through technical assistance, research, and demonstration projects, we promote developing and using practical alternatives to burning.

To address smoke from residential wood heating, Ecology:

- Coordinates burn curtailments.
- Conducts wood stove change out programs.
- Sets strict emission limits for new stoves and promotes developing clean burning technologies.
- Coordinates with the Environmental Protection Agency on standards for residential home heating appliances.

Ecology will assist communities, local health organizations, and fire suppression agencies with health impact messaging and recommendations during large-scale wildfire events.

Expected Results

- Air quality levels that experts agree are sufficient to protect human health are achieved and maintained in all Washington communities.
- Public health threats from smoke are managed and minimized.
- Smoke impacts on communities from agricultural and other outdoor burning are reduced.
- Outdoor burning permit and smoke management systems are improved and streamlined.
- Local burning permit programs are audited to ensure effective and efficient operation.
- Practical alternatives and best management practices for burning are developed and used.
- Wood stove emissions are reduced through creating and implementing a proper burning outreach campaign, effective burning curtailments, change out of uncertified wood stoves, and working with EPA to develop more stringent certifications for wood.

Performance Measures

- Number of citizens exposed to air quality that does not meet healthy levels for fine particles.

- Number of woodstoves replaced with cleaner burning technologies.
- Number of times fine particle pollution is measured above a "healthy" level.

Reduce Risk from Toxic Air Pollutants

Ecology has identified 16 high-risk toxic air pollutants that are prevalent in Washington. To significantly reduce potential risk to the public, Ecology:

- Conducts annual air toxics emission inventories.
- Operates air toxics monitoring sites.
- Limits toxic emissions through permit conditions for commercial facilities, combustion processes and outdoor burning.
- Implements programs to reduce emissions from diesel engines and indoor wood heating devices.

Expected Results

- The public health threat from toxic air pollutants is minimized.
- Improved emission inventories increase agency and policy maker understanding of ambient concentrations and sources of priority toxics.
- Diesel soot emissions are reduced 50 percent by 2017 compared to a 2005 baseline.
- State funds are used to reduce diesel emissions near ports and other high exposure areas (near schools, hospitals, freight distribution centers, truck stops, etc.).
- Woodstove replacements target high use stoves in high-risk communities.
- Gasoline Vapor Recovery Program and the Asbestos Labeling Program are implemented.

Performance Measures

- Number of diesel engines retrofitted with pollution control equipment.
- Number of woodstoves replaced with cleaner burning technologies.
- Tons of diesel soot emissions produced statewide.

Climate Change Mitigation and Adaptation

State law sets limits on greenhouse gas emissions and establishes a portfolio of policies to reduce energy use and build a clean energy economy. It also lays out requirements to prepare for and respond to climate changes that are already underway and unavoidable.

- To better understand the volume and sources of greenhouse gas emissions in the state, Ecology conducts a biennial emission inventory and implements a program for mandatory greenhouse gas reporting.
- To help the state achieve its greenhouse gas targets, Ecology will continue to provide technical and analytical support to state decision makers, and will continue its efforts to monitor and influence federal initiatives that reduce greenhouse gas emissions.
- Ecology will continue to assist local governments and state agencies identify and report their greenhouse gas emissions and develop strategies to reduce those emissions.
- To help citizens, business, and local governments cope with existing and projected climate changes, Ecology has worked in concert with other designated agencies to develop an integrated climate change response strategy.
- Ecology will continue its efforts to make information about climate change impacts readily accessible to decision makers in the public and private sectors, as well as the public.

Expected Results

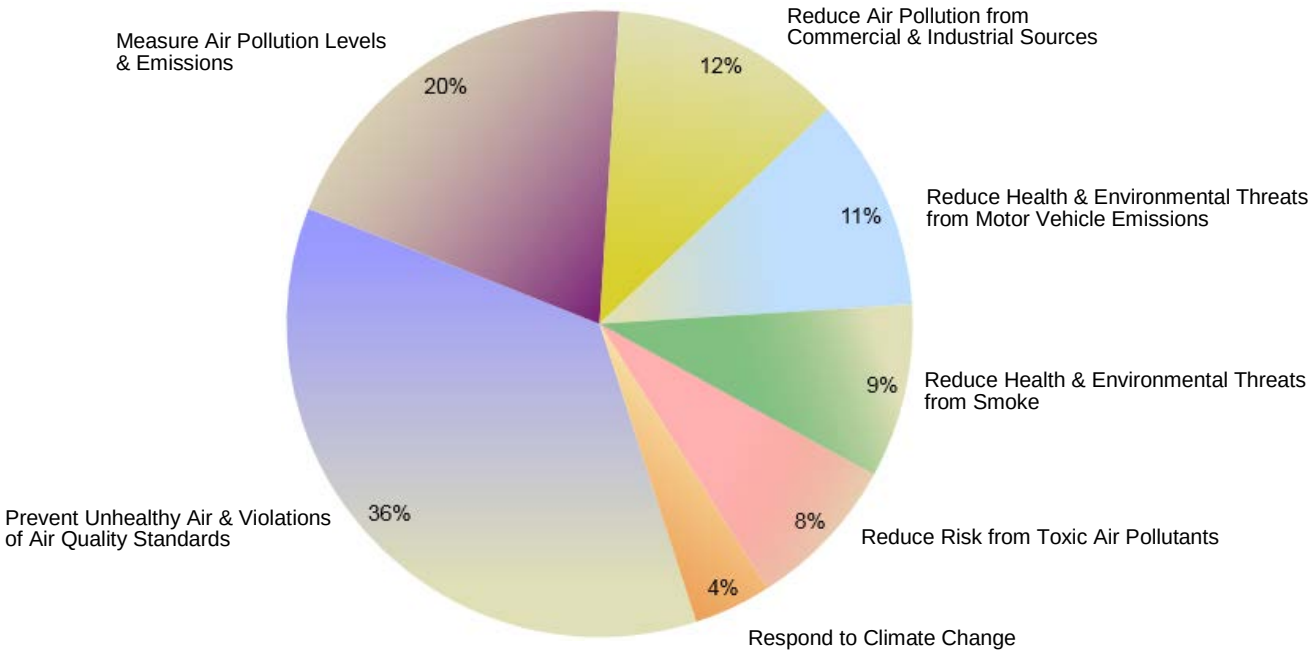
- Greenhouse gas emissions are reduced.
- Detailed sector-by-sector greenhouse gas emission inventories are updated regularly for policy makers and the public.
- Information from the greenhouse gas reporting program better informs policy makers and the public about sources of greenhouse gas emissions.
- State agency and local government emissions are known, and reduction strategies are in place.
- The Governor's Executive Order 12-07 on ocean acidification is implemented. New strategies to reduce emissions are undertaken as a result of the Climate Legislative and Executive Workgroup recommendations.

Performance Measure

- Tons of greenhouse gas emissions produced statewide.

Air Quality Program 2015-17 Biennium Budget
By Activities

Operating Budget = $34.7 Million; FTEs = 114.8



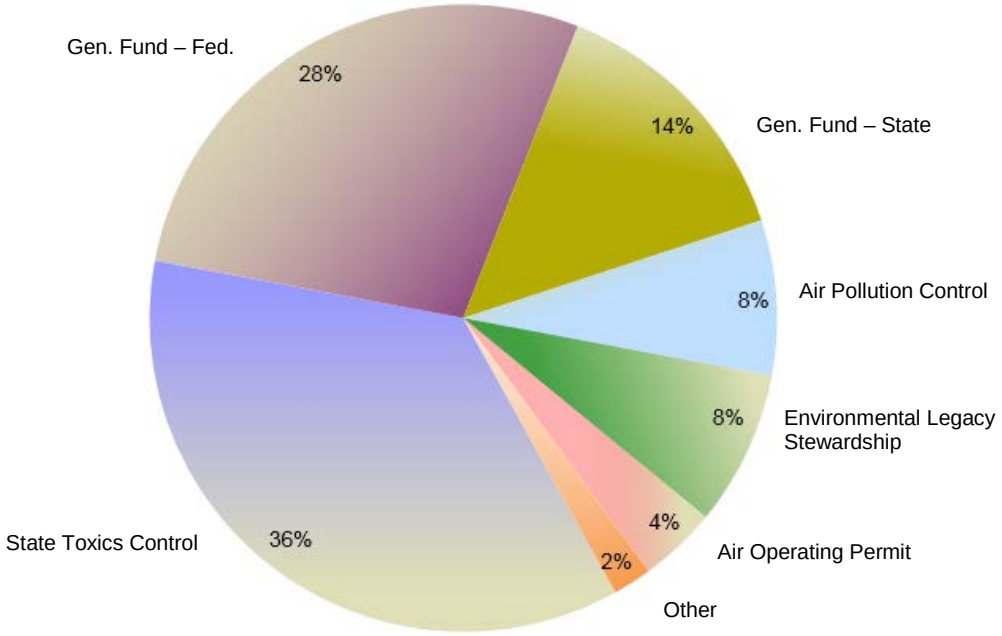
Activities	Dollars	FTEs
Prevent Unhealthy Air & Violations of Air Quality Standards (A034)	$12,433,425	25.5
Measure Air Pollution Levels & Emissions (A025)	6,880,424	22.9
Reduce Air Pollution from Commercial & Industrial Sources (A045)	4,114,646	17.8
Reduce Health & Environmental Threats from Motor Vehicle Emissions (A047)	3,992,561	17.8
Reduce Health & Environmental Threats from Smoke (A048)	3,002,576	14.2
Reduce Risk from Toxic Air Pollutants (A051)	2,713,943	9.5
Responding to Climate Change (A063)	1,534,501	7.1
Air Quality Operating Budget Total	**$34,672,076**	**114.8**

Air Quality Program 2015-17 Biennium Budget
By Fund Source

Operating Budget = $34.7 Million
Pie shown below is operating budget ONLY.

Capital Budget = $5.1 Million
Funded entirely by State Toxics Control (173).

FTEs = 114.8



Other = Wood Stove Education & Enforcement (1.47%) and General Fund – Private/Local (0.93%).

Operating Fund Sources	Amount	Uses
State Toxics Control (173)	$12,494,853	Developing strategies to respond to and prevent violations of national ambient air quality standards 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)	9,526,714	State and local air authority grants for ambient air monitoring, emission inventory, modeling, meteorology, and other air quality activities.
General Fund – State (001)	4,895,639	Vehicle emission testing and vehicle emission reduction efforts, climate change and greenhouse gas emission inventory.
Air Pollution Control (216)	2,925,601	Minor source and new source permitting, agricultural burning permitting, agricultural burning alternatives research, greenhouse gas reporting.
Environmental Legacy Stewardship (19G)	2,611,493	Returning areas to attainment with federal standards and preventing at risk areas from going into nonattainment.
Air Operating Permit (219)	1,384,427	Permitting of major air pollution sources, small business technical assistance.
Wood Stove Education & Enforcement (160)	509,503	Enforcement of and education regarding proper woodstove use, grants to local air authorities.
General Fund – Private/Local (001)	323,846	Private / local agreements associated with ambient air monitoring and telemetry systems.

Operating Budget Total	**$34,672,076**	

Capital Fund Sources	**Amount**	**Uses**
State Toxics Control (173)	$5,063,399	Reducing harmful emissions from heavy duty diesel engines and woodstove burning.
Capital Budget Total	**$5,063,399**	

Air Quality Operating & Capital Budget Total	**$39,735,475**

Dan Dugger, with Ecology's Environmental Assessment Program in Yakima, fills a sample bottle with water from Wide Hollow Creek. The water was sent to the Manchester Environmental Laboratory for water quality analysis as part of a study to understand why the creek does not meet criteria to support salmonid spawning, rearing, and migration.

Program Mission

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

Environmental Threats

Ecology conducts monitoring programs and designs scientific studies to measure marine, ground, and freshwater quality, stream flow, aquatic habitat, contaminants in sediments, marine benthic communities, and fish tissue across the state. We address both point and nonpoint pollution sources. We use this data to evaluate threats ranging from conventional pollutants, such as fecal coliform bacteria, nutrients, and temperature, to toxic contaminants and invasive aquatic weeds.

Based on our monitoring data, Ecology identifies violations of water and sediment quality criteria and assesses the condition of aquatic habitat and biological communities. In doing so, we may focus on impacts from individual sources or evaluate the combined impacts from multiple sources. Many of our monitoring programs and scientific studies are done to support clients in other Ecology programs. Some of our work partners with other agencies and entities.

Authorizing Laws

- *Federal Clean Water Act*
- *Chapter 70.105D RCW, Model Toxics Control Act*
- *RCW 70.119A.080, Public Water Systems – Penalties and Compliance*
- *Chapter 90.48 RCW, Water Pollution Control*
- *Chapter RCW 90.71 RCW, Puget Sound Water Quality Protection*

Constituents/Interested Parties

- *Federal and local governments and state agencies.*
- *Tribes.*
- *Businesses.*
- *Environmental organizations.*
- *General public.*
- *Internal clients.*

Issues

Monitoring for Action

Ecology investigates and monitors rivers, streams, lakes, and marine waters threatened by pollution so we can take appropriate action to clean up, restore, and protect those resources. We design monitoring programs and studies to support pollution cleanup efforts, guide regulatory actions (including permitting decisions and instream flow rule setting), and provide data to support critical management decisions.

Water Quality Improvement Studies (Total Maximum Daily Load Studies)

Section 303(d) of the federal Clean Water Act requires the state to develop water quality improvement plans, also known as Total Maximum Daily Loads, for water bodies that don't meet water quality standards. As part of a lawsuit agreement, a memorandum of agreement with the

Environmental Protection Agency (EPA) required Ecology to develop nearly 1,500 water quality cleanup plans by 2013. We did not meet this goal, and Ecology continues to work with EPA and the lawsuit plaintiffs to renegotiate the settlement agreement and extend the time frame for compliance.

Stream Gaging

Watersheds across the state are requesting Ecology's help to initiate and maintain stream flow gaging. Watershed managers need stream flow data to support instream flow rule setting and compliance monitoring in response to watershed planning requirements and efforts to restore salmon.

Rain Gages for Flash Flood Warning

Following the Carlton Complex Fire in 2014, the Governor's Office contacted Ecology relaying a request from the Okanogan County Conservation District for an early warning rain gaging network in the area impacted by the fire. Ecology deployed 17 gages in burn areas to help the National Weather Service provide early warnings of flash flooding due to rain events. Ecology was able to use funds from an environmental penalty for initial gage installation and maintenance. But that funding is no longer available during the 2015-17 Biennium, so we plan to submit a 2016 Supplemental Budget request for state funding to support continued operation and maintenance of the gages. This will be until vegetation grows back in the area, and the National Weather Service determines the area is no longer at risk of flash flooding.

Beach Monitoring

Using BEACH Act grant funds from EPA, Ecology is working with the Department of Health and local health agencies to monitor bacterial contamination at many marine swimming beaches in Washington. Local health agencies use these data to determine when public beaches must be closed to protect swimmers from unsafe contamination. Federal funding for this long-standing program has been threatened in the past, but was recently extended through 2016. If EPA does end the grant, Ecology plans to submit a budget request for state funding to continue the program after federal funding ends.

Innovative Tools for Data Collection and Science Communication

To better understand water quality in Puget Sound, Ecology developed an innovative approach to collecting data by "hitchhiking" sensors on public and private ferries that cross the Sound's waters on a daily basis. Ferries for Science is a cost-effective program to extend Ecology's monitoring capabilities and improve our ability to characterize, understand, and predict Puget Sound water quality. This program was developed in collaboration with federal, state, academic, and business partners. It was largely established using grant funding, and we intend to seek state funding to continue this program, which was recently recognized with an award by the Environmental Council of the States (ECOS).

Long-term monitoring data are indispensable for establishing baselines, detecting trends, and understanding natural systems. It is important to communicate that information in a way that attracts public visibility and has greater scientific impact. Eyes Over Puget Sound (EOPS) is an image-rich, story-driven surface condition report that informs the interested community about current conditions in Puget Sound and Washington's coastal estuaries. EOPS serves as an access point for a wide range of long-term marine monitoring information, including ferry data. Half a million downloads per year speak to the appeal of the program.

Emerging Toxic Threats

Toxic chemicals are widespread in the environment, but analyses are costly, and Ecology can only afford to sample for a small number of chemical compounds. We sample toxic chemicals in several current monitoring locations, but we need more capacity to keep up with requests to screen for new toxic chemicals, such as flame retardants, phthalates, new pesticides, and pharmaceuticals.

Monitoring for Success

In addition to targeting known sites and specific problem areas, Ecology is frequently asked, "What is the overall health of the environment?" "Is the water getting cleaner or dirtier?" Site-specific sampling tells us only about the conditions at a specific location. We also need to know whether the combined benefits of all our management actions and investments are making a difference against the cumulative impacts of pollution sources and

environmental degradation across broad regions of the state.

To do this, Ecology needs to expand its statistically-reliable monitoring programs to help us measure progress toward our broad environmental goals, such as restoring Puget Sound or improving watershed health to support salmon recovery. Without such programs, Ecology won't be able to answer the basic questions about whether the water quality and environmental condition of the state (or any region of interest) is getting better or worse.

Status and Trends In Freshwater

Beginning in the 2009-11 Biennium, the Legislature provided ongoing funding for a statewide watershed health monitoring program. This program provides statistically reliable estimates of the overall status, condition, and trends in freshwater quality and aquatic habitat.

Ecology completed a data management system to house the status and trends data during the 2009-11 Biennium and completed a web interface in 2013 to allow enhanced access to the data. During the 2013-15 Biennium, Ecology finished developing electronic forms for our staff and partners (EPA, King County, tribes) to enter watershed health data using rugged mobile tablets in the field. We will expand this form use to the Regional Stormwater Monitoring Program during the 2015-17 Biennium.

Groundwater Monitoring

Ecology provides groundwater monitoring and assessment to support water quality cleanup plans (TMDLs) and other specialized projects. We have a depth of hydrogeologic expertise in modeling, groundwater-surface water interaction, toxics, and agricultural nutrient impacts.

We currently do not have a systematic, statewide groundwater monitoring program, but are working toward that strategic objective. Accomplishments to date include modernizing Ecology's groundwater data management, developing database tools specific to groundwater analysis and report capture, and publishing standardized groundwater data collection procedures for quality assurance.

As we move toward systematic groundwater assessment, we will be better able to understand pollution sources and transport, and predict how groundwater levels and storage may change as a result of water withdrawals, surface flows, climate, and precipitation trends, etc. We continue to look for funding opportunities to fill this gap.

Urban Waters Initiative

This program provides baseline status and trends for toxics reduction efforts in a rotating series of urban bays. It is the best way to measure the net effect of targeted cleanup activities and compare local conditions to overall Puget Sound-wide sediment quality. Ecology will cycle back to sample Bellingham Bay in 2016 (last sampled in 2010) and Budd Inlet in 2017 (last sampled in 2011).

Biological Assessment

Most of Ecology's management actions are ultimately intended to benefit the living resources of our rivers, streams, lakes, and marine waters. So it makes sense to more directly assess the biological health of our waters. Monitoring benthic invertebrate communities, or phytoplankton abundance and distribution, can provide a more direct measure of environmental health than our usual chemical and physical parameters. Ecology uses two different monitoring strategies that identify 1) site-specific impacts; and 2) cumulative impacts at larger watershed or ecoregion scales.

Monitoring Coordination and Data Sharing

There are multiple organizations mandated or chartered to coordinate monitoring and data sharing. These include the Puget Sound Partnership and the Pacific Northwest Aquatic Monitoring Partnership. Each group is developing pathways to improve monitoring coordination; standardize field methods and protocols; standardize data sharing formats; and integrate monitoring at watershed, regional, and statewide levels.

Coordination among these groups is critical. For federal Fiscal Year 2016, EPA modified its method of providing funding through its National Estuary Program (NEP) grants to incorporate use of Strategic Implementation Teams. This should encourage Ecology to work more collaboratively with local entities regarding the use of NEP funds.

Activities, Results & Performance Measures

Conduct Environmental Studies for Pollution Source Identification and Control

Ecology conducts pollution studies to address known or suspected problems at specific sites and across regional areas. These studies support our efforts under the federal Clean Water Act, as well as the state Water Pollution Control and Model Toxics Control Acts. Studies range from simple water quality sampling for bacteria or dissolved oxygen, to very complex projects measuring toxic contaminants in fish tissues or pesticides in groundwater.

Many projects are studies that calculate the Total Maximum Daily Load (TMDL) of a pollutant a waterbody can absorb without causing violations of water quality standards. Under a memorandum of agreement with EPA, Ecology must develop nearly 1,500 TMDLs by 2013. Study results are published in scientific reports used for regulatory decision-making, policy development, and environmental health protection.

Expected Results

- Scientific studies are conducted to assess pollution sources and environmental health.
- Resource managers have credible scientific information to inform decisions on pollution controls needed to protect environmental and public health.
- All study reports are peer reviewed, completed on schedule, and posted to the internet.

Performance Measure

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

Ensure Environmental Laboratories Provide Quality Data

Ecology accredits environmental laboratories that submit data to the agency. The accreditation program covers analyses in all typical environmental matrices (water, sediment, tissue), including drinking water. Accreditation helps ensure environmental laboratories have the demonstrated capability to provide accurate and defensible data. Ecology's laboratory accreditation program is the primary source of performance monitoring for the 480 labs in the accreditation program.

Expected Results

- Environmental laboratories submitting data to Ecology and the Department of Health have the demonstrated ability to provide accurate and defensible data.
- Approximately 460 environmental laboratories in 26 states and two provinces, including 106 drinking water laboratories, are evaluated and accredited.
- Performance testing analyses for major permitted wastewater discharge laboratories are evaluated.
- Regulated laboratories maintain successful, quality programs.
- Environmental and public health decisions are based on accurate and defensible scientific data.

Performance Measure

- Percentage of acceptable performance testing analyses completed by Washington State laboratories.

Improve Quality of Data Used for Environmental Decision Making

Sound environmental policy and regulatory decisions require accurate and timely data. To ensure the reliability and integrity of data, Ecology:

- Provides guidance and training on developing quality assurance project plans.
- Reviews project proposals.
- Consults on sampling design requirements and interpretation of results.

These quality assurance functions are required by EPA 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, and supply information for policy decisions, to support agency mandates.

Expected Results

- Environmental policy and Ecology decisions are based on accurate, reliable, and timely data.
- Quality assurance project plans are completed for all scientific studies before sampling begins.

- Environmental sampling and laboratory methods are described in formal standard operating procedures.

Performance Measure

- Percentage of environmental monitoring field procedures covered by formal standard operating procedures.

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. It supports work conducted under the federal Clean Water Act, as well as the state Water Pollution Control, Puget Sound Water Quality Protection, and Model Toxics Control Acts.

Expected Results

- Ecology's full-service environmental testing laboratory provides defensible and accurate analytical and laboratory support to decision makers.
- Scientifically sound laboratory results are provided to clients for making environmental decisions.

Performance Measures

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

Monitor the Quality of State Waters and Measure Stream Flows Statewide

Ecology operates a statewide environmental monitoring network to assess the status of major water bodies, identify threatened or impaired waters, and evaluate changes and trends in water quality over time. This network includes sampling stations in rivers, streams, and in-shore marine waters (Puget Sound and the major coastal estuaries). Ecology also measures stream flows in salmon-critical basins and key watersheds statewide, and posts the results in near real-time on our website.

Expected Results

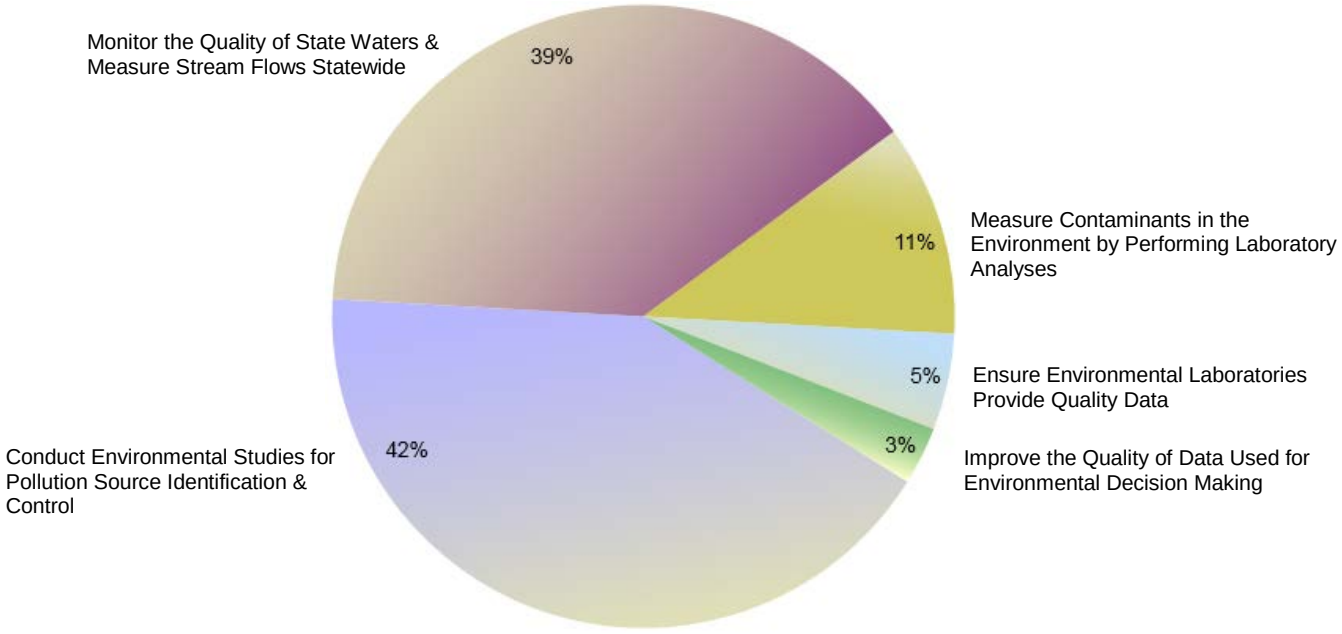
- Trends, conditions, and changes in water quality of major freshwater rivers, Puget Sound, and the largest coastal estuaries are tracked.
- Monthly samples from approximately 82 freshwater and 35 marine water sites are collected.
- Stream flows at approximately 62 near real-time stations are measured and reported.
- Real-time stream flow data is provided via the web.
- Ecology staff and the public are alerted to emerging water quality problems.
- The effectiveness of water cleanup activities is tracked and assessed.

Performance Measures

- Percentage of monitored stream flows below critical flow levels.
- Statewide river and stream water quality index.

Environmental Assessment Program 2015-17 Biennium Budget By Activities

Operating Budget = $34.3 Million; FTEs = 155.0

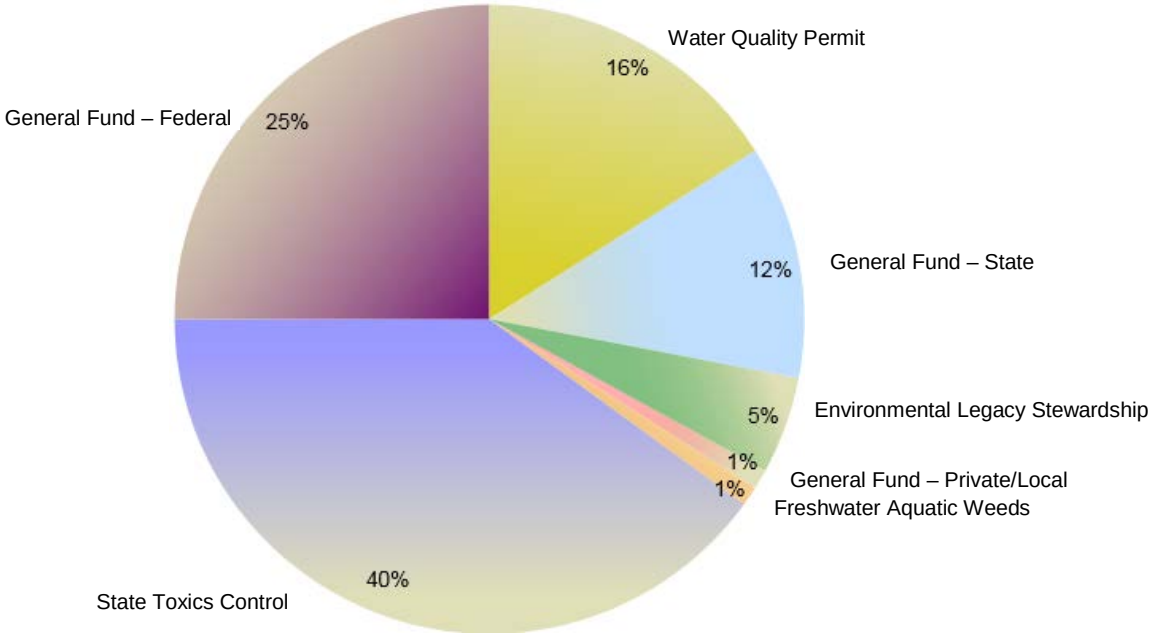


Activities	Dollars	FTEs
Conduct Environmental Studies for Pollution Source Identification & Control (A007)	$14,490,044	60.2
Monitor the Quality of State Waters & Measure Stream Flows Statewide (A027)	13,330,613	53.4
Measure Contaminants in the Environment by Performing Laboratory Analyses (A026)	3,907,500	30.6
Ensure Environmental Laboratories Provide Quality Data (A012)	1,518,403	6.2
Improve the Quality of Data Used for Environmental Decision Making (A020)	1,083,002	4.6
Environmental Assessment Operating Budget Total	**$34,329,562**	**155.0**

Environmental Assessment Program 2015-17 Biennium Budget By Fund Source

Operating Budget = $34.3 Million **No Capital Budget**

FTEs = 155.0



Operating Fund Sources	Amount	Uses
State Toxics Control (173)	$13,686,099	Water quality monitoring, toxics monitoring, marine sediment monitoring, groundwater investigations, water cleanup studies.
General Fund – Federal (001)	8,573,755	Water quality monitoring, marine sediment monitoring, groundwater investigations, water cleanup studies, effectiveness monitoring.
Water Quality Permit (176)	5,479,221	Water cleanup studies, groundwater investigations, technical assistance, compliance monitoring.
General Fund – State (001)	4,132,357	Water quality monitoring, marine sediment monitoring, stream flow monitoring, groundwater investigations, technical assistance, water cleanup studies, laboratory accreditation, quality assurance.
Environmental Legacy Stewardship (19G)	1,891,402	Water quality monitoring, biological monitoring.
General Fund – Private/Local (001)	327,827	Water quality monitoring, marine sediment monitoring, laboratory analytical work.
Freshwater Aquatic Weeds (222)	238,901	Technical assistance, monitoring.
Operating Budget Total	**$34,329,562**	
Environmental Assessment Operating & Capital Budget Total	**$34,329,562**	

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Leatta Dahlhoff, a Toxics Reduction Specialist in the Hazardous Waste & Toxics Reduction Program's Southwest Regional Office, searches for waste management improvements in a pharmaceutical waste accumulation area at a hospital in Longview during a technical assistance visit.

Program Mission

The mission of the Hazardous Waste and Toxics Reduction (HWTR) Program is to foster sustainability, prevent pollution, and ensure safe waste management of the millions of pounds of hazardous substances used and disposed of each year by businesses and households in Washington State.

Over the longer term, we work with businesses and governments to achieve a system where waste is viewed as inefficient, and most wastes and unnecessary use of toxic substances have been eliminated.

Environmental Threats

Reducing toxic threats is one of Ecology's priority initiatives. There are risks in using and storing—not just disposing of—hazardous chemicals. Some chemicals (such as cleaning products or yard chemicals) can pose an immediate health threat during use. Others pose a risk as products break down or when they are disposed. Some chemicals build up in our bodies and the environment gradually—for example, persistent, bio-accumulative toxics (PBTs), and heavy metals.

When hazardous substances are no longer usable, they become hazardous wastes—or "dangerous wastes," as they are known in Washington[1]. Washington's regulation of dangerous waste provides environmental protection not included in the federal hazardous waste rules. Our more protective standards help reduce spills, protect workers, and safeguard businesses that rely on a clean environment for their livelihood. They also create recycling opportunities for Washington businesses. For more details, see *State Dangerous Waste Regulations Protect Human Health and the Environment* at https://fortress.wa.gov/ecy/publications/publications/1304004.pdf.

When dangerous wastes are mismanaged, they get into water and soil where they can harm human health and the environment or cause costly cleanup sites. While Washington has had 6,344 toxic sites cleaned up or reported cleaned up in the state, approximately 250 new sites are reported each year. Every year there are more new sites being reported than sites that have completed cleanups. The costs of cleaning up toxic sites range from tens of thousands to millions of dollars per site. When responsible parties aren't able to pay for cleanups, the burden often falls on taxpayers.

Around 1,000 businesses and facilities statewide produce most of the dangerous waste—over 100 million pounds of recurrent dangerous waste each year. Recurrent wastes are planned, predictable by-products of industrial processes.

To ensure safe dangerous waste management at these sites, Ecology conducts inspections and provides compliance and pollution prevention technical assistance. We also work with local governments to ensure safe handling of dangerous waste produced in Washington by thousands of smaller businesses—known as Small Quantity Generators. Safely managing dangerous waste is essential to protect human health and the environment. But, avoiding the use of hazardous

[1] 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.

chemicals in the first place is the smartest, cheapest, and healthiest approach.

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. We find hazardous chemicals in our air, water, soil, and in our bodies—in part because they are ingredients found in the products we use in our homes, yards, and offices. Whether the risk is from toxics in products or dangerous waste from industry, our focus is on helping the public and businesses make informed choices about the use of hazardous substances and their ultimate safe disposal.

Authorizing Laws

- *Federal Emergency Planning and Community Right-to-Know Act (SARA Title III)*
- *Federal Pollution Prevention Act*
- *Federal Resource Conservation and Recovery Act*
- *Federal Toxic Substances Control Act*
- *Chapter 15.54 RCW, Fertilizer Regulation Act (Ecology's oversight authority over waste-derived fertilizers)*
- *Chapter 49.70 RCW, State Worker and Community Right-to-Know Act*
- *Chapter 70.102 RCW, Hazardous Substance Information Act*
- *Chapter 70.105 RCW, Hazardous Waste Management Act*
- *Chapter 70.105D RCW, State Hazardous Waste Clean Up-Model Toxics Control Act*
- *Chapter 70.240 RCW, Children's Safe Products Act*
- *Chapter 70.270 RCW, Replacement of Lead Wheel Weights*
- *Chapter 70.280 RCW, Bisphenol A—Restrictions on Sale*
- *Chapter 70.285 RCW, Brake Friction Material*
- *Chapter 70.295 RCW, Storm Water Pollution-Coal Tar*
- *Chapter 70.76 RCW, PBDE Flame Retardants*
- *Chapter 70.95 RCW, Hazardous Waste Reduction Act*
- *Chapter 70.95 RCW, Solid Waste Management-Reduction and Recycling Act*
- *Chapter 70.95C RCW, Waste Reduction*
- *Chapter 70.95E RCW, Hazardous Waste Fees*
- *Chapter 70.95G RCW, Packages Containing Metals*
- *Chapter 70.95M RCW, Mercury*

Constituents/Interested Parties

- *General public.*
- *State and local governments and other agencies.*
- *Business groups and associations.*
- *Regulated businesses and agencies.*
- *Tribes.*
- *Environmental groups.*
- *Federal agencies, such as the U.S. Environmental Protection Agency (EPA).*

Issues

Focus on Compliance

While Ecology works to prevent tomorrow's toxic threats, we strive to manage today's dangerous waste safely.

Routine inspections are a critical regulatory line of defense between the millions of pounds of dangerous waste produced in Washington and environmental contamination. Mismanaging dangerous waste:

- Allows harmful chemicals to contaminate our water, soil, and air.
- Pollutes stormwater runoff.
- Creates expensive cleanups.

Formal state 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 time period.

During the 2013-15 Biennium, Ecology staff performed nearly 750 compliance inspections at facilities that generate or manage dangerous waste. These inspections resolved over 600 serious environmental threats. Such threats have the potential to pollute our environment through leaks or spills from unsafe storage methods or containers and improper disposal.

The inspections also revealed how well facilities complied with state and federal regulations. We found serious environmental violations at 53 percent of regulated businesses we inspected during

the 2013-15 Biennium, down from almost 60 percent in the 2009-11 Biennium. An EPA study of Washington businesses showed a 20 percent increase in environmental threats when more than three years passed between inspections. During the 2013-15 Biennium, we maintained a historically high rate of inspections. By conducting inspections on a regular basis, we hope to continue to reduce the chance of finding serious environmental threats at businesses.

Local Source Control Program

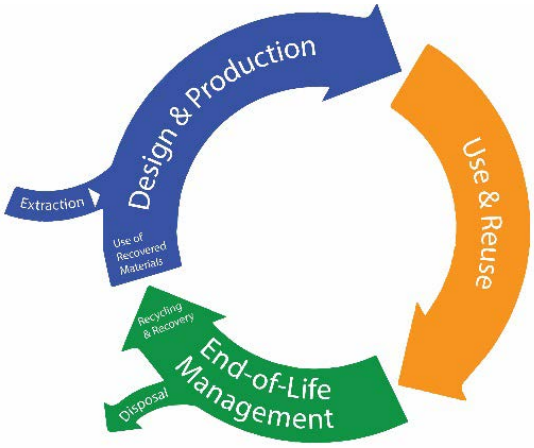
Smaller business generators of hazardous/dangerous wastes are less likely to garner the attention of regulatory agencies for waste, air, or stormwater issues. But many smaller businesses still generate wastes that can cause pollution through mismanagement or stormwater runoff.

The Local Source Control Program began in 2008 when Ecology developed performance contracts to conduct technical assistance visits with 16 local government agencies located in Puget Sound and Spokane River watersheds. The technical assistance is designed to help businesses understand and comply with dangerous waste and stormwater laws, and provide assistance with spill prevention and cleanup preparedness.

During the 2013-15 Biennium, the total number of performance contracts with local governments reached 22, with five of these funded through federal National Estuary Program grants (the balance were state-funded). The total number of technical assistance visits conducted by local government partners between July 2013 and June 2015 was 6,210, with a total of nearly 19,000 since 2008. For the 2015-17 Biennium, Local Source Control received additional funding to expand technical assistance to the Columbia River Basin and develop an environmental monitoring element with help from Ecology's Environmental Assessment Program.

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

The state of Washington is required by statute to have a Solid and Hazardous Waste Plan and update it regularly. The plan's purpose is to guide waste and toxics reduction and safe waste management in the state. With extensive stakeholder input, Ecology completed the 2015 update of the state plan, and we are now beginning implementation. Goals of the plan include reducing waste and toxics, addressing issues of concern, and continuing to improve current waste management practices.



The plan focuses on sustainable materials management. This means looking at the full life cycle of materials from the design and manufacturing phase, through the use phase, to the end-of-life phase, when the material is either disposed or recycled. 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. Looking at 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. A sustainable materials management approach is essential to conserving our natural resources to meet both today's needs and those of future generations.

Updated Rules

As EPA updates its regulations, the state is required to amend the Dangerous Waste Regulations. In the 2015-17 Biennium, Ecology will incorporate new federal hazardous waste rules into the Dangerous Waste Regulations. This rulemaking is needed to keep our rules current with federal law and maintain state authorization. Some rules we adopt to stay current with the federal program; others are optional, but help streamline or clarify existing rules.

Possible EPA rules for adoption include the definition of solid waste recycling exclusions, an

exclusion for recycling or disposal of solvent contaminated wipes, the pharmaceutical rule, and the generator improvement rule.

For Washington state only regulations, Ecology will start rulemaking on the Persistent, Bioaccumulation and Toxins rule (PBT WAC 173-333), and may start rulemaking on the Children's Safe Product Act rule (CSPA WAC 173-334). Changes to these rules involve evaluating lists of hazardous chemicals for possible deletion or inclusion. We will also evaluate the need to update and streamline the Pollution Prevention Plan rule (WAC 173-307), in conjunction with the Hazardous Waste Fee regulation (WAC 173-305).

Pollution Prevention Planning

$60.5 million saved. That's what Washington businesses said Pollution Prevention (P2) planning has done for them since 2005. The actual total is probably much higher, since businesses are not required to report cost savings. That $60.5 million saved would pay for approximately 1,200 jobs.[2]

Businesses develop P2 plans if they generate more than 2,640 pounds of dangerous waste per year or if they are required to report as part of the national Toxic Release Inventory. These plans identify opportunities to voluntarily reduce hazardous substances used and waste generated. These businesses have reduced their waste by more than 50 percent over the past 20 years.

During the 2015-17 Biennium, Ecology staff will focus on giving more assistance to these and other facilities on safer alternatives to chemicals that they use. Less toxic chemicals used by these facilities will result increased worker safety and a better environment.

Reducing Risk through Technical Assistance to Businesses

Face-to-face technical assistance visits result in voluntary compliance rates of 90 percent or higher. Hundreds of businesses in Washington have saved money and increased their competitive advantage by reducing their use of hazardous substances, ensuring better compliance with state dangerous waste laws.

Two items are key in breaking the cycle of ongoing cleanup expenses: (1) to use fewer toxic chemicals, and (2) to safely manage those hazardous substances for which no substitute is available. Facilities that produce more dangerous wastes tend to run a higher risk of mismanaging that waste. Mismanaged wastes can contaminate the environment and may eventually require cleanup.

During the 2013-15 Biennium, HWTR staff conducted over 1,000 business assistance visits. We provided business-specific advice on how to:

- Reduce the use of hazardous substances.
- Avoid generating waste.
- Manage dangerous waste safely.

We focused on improving operations and maintenance in industries with the highest rates of waste generation and non-compliance. We showed their staff how to:

- Achieve energy savings.
- Conserve water.
- Prevent stormwater contamination.
- Use fewer hazardous substances.

Safer Chemicals

The public's 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 normal development. The public wants to know if these types of chemicals are in the products they use.

More and more, studies show that commonly used household products can be a majority source of exposure to chemicals of concern, to both humans and the environment. For example, polychlorinated biphenyl (PCB) contamination in the Spokane River is not from just a few industrial dischargers, but also from the use of consumer products containing legal levels of PCBs, such as motor oil, hydraulic fluid, soaps, inks, and caulk.

The effects of toxic chemical exposure to human health, the environment, and the economy are enormous—and largely preventable—as state, national, and international efforts transition to safer chemistry. A number of Ecology projects supporting safer chemicals will continue in 2015-17, including:

[2] Based on average Washington wage $50,000, as compiled by the U.S. Bureau of Labor Statistics.

- Working with the Toxics in Packaging Clearinghouse, a consortium of states working to keep regulated toxic metals out of consumer products packaging.
- Increasing distribution and use of hazard assessments for identifying highest-risk chemicals and safer chemical alternatives.
- Working with a multi-state effort to reform the federal chemical management law (the 1976 Toxic Substances Control Act), which includes using a set of states' principles on national chemical policy reform. Last biennium, this included giving national testimony on proposed federal legislation and working with a national organization on this issue.
- Certifying manufacturer compliance with the Better Brakes Law and assessing the availability of alternative auto brake friction materials that eliminate or reduce copper, asbestiform fibers, cadmium, lead, and mercury. Right now, these toxic substances are being washed off roads into streams, rivers, and Puget Sound.
- Assuring compliance with the Children's Safe Products Act and other laws that limit toxics in consumer products.
- Developing and implementing Chemical Action Plans to reduce the uses and releases of persistent, bioaccumulative and toxic chemicals.
- Implementing a roadmap for advancing green chemistry in Washington State, including creating a Green Chemistry Center. Some of the goals of the center are to:
  - Support and facilitate designing and advancing innovative chemistries that are environmentally benign, minimize waste, and reduce energy/resource impacts in chemical processes and technologies.
  - Promote industry collaboration and industry-academia opportunities to advance adoption of green chemistry practices.
  - Convene university researchers and educators to prioritize green chemistry research needs, integrate green chemistry science curriculum, and enhance student learning opportunities.

Permitting and Corrective Action

Ecology issues permits to specially designed dangerous waste treatment, storage, and disposal (TSD) facilities. These commercial TSDs handle millions of pounds of dangerous waste generated by other businesses or facilities in Washington. Ecology also oversees closure and necessary cleanup at operating and already closed facilities. TSD facilities, mostly located near Puget Sound, are often contaminated and require some form of cleanup. This cleanup is known as corrective action.

Corrective actions are going on at 41 priority facilities, because of their significance as designated by EPA. Ecology expects to have most of these 41 cleanups finished, or in maintenance mode, by 2020. We had completed an overall average of 74 percent of the work at these facilities by the close of the 2013-15 Biennium. The full cleanup process takes 10-12 years to complete.

Human exposures are under control at 90 percent of these facilities, and contaminated groundwater is under control at 85 percent of the facilities. This meets or exceeds EPA's national goals for 2015 of 90 and 79 percent, respectively. Cleanups are expensive, but we can recover most costs from the property owners. Once clean, these properties provide opportunities for habitat restoration, economic development, and public recreation.

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, toxics in products to determine compliance with existing laws, toxics released to the environment, dangerous waste generated and managed, and pollution prevention measures taken by businesses. The information on toxics found in products includes the Children's Safe Products manufacturer reporting database and Ecology's product testing work database. We compile and make the data available to individuals, businesses, emergency responders, and local government decision makers. Our website, printed materials, telephone information line, and program newsletter, *Shoptalk* (http://www.ecy.wa.gov/programs/hwtr/shoptalkonline/index.html), provide the most current available hazardous substance and dangerous waste information. These resources help businesses and the public make informed decisions on using and safely managing hazardous substances to protect

human health and the environments. During 2013-15, HWTR websites logged more than 666,814 visits, and Shoptalk distribution more than doubled to reach over 10,000 subscribers.

Emergency Planning and Community Right-to-Know

Ecology supports multiple sections of the federal Emergency Planning and Community Right-to-Know Act (EPCRA). The 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 the 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 shall 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 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's HWTR program. 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 throughout the year.

Activities, Results & Performance Measures

Improve Community Access to Hazardous Substance and Waste Information

Ecology provides the public and local governments with information about the type, location, and source of hazardous substances in local communities. Ecology uses automated data systems to:

- Track compliance and technical assistance visits.
- Measure pollution prevention and compliance progress.
- Track amounts of dangerous waste generated each year, as well as its transport, treatment, and/or disposal.
- Identify toxic chemicals released and stored by businesses.
- Track information on facilities that prepare pollution prevention plans.
- Develop various publications, such as Shoptalk, which is a newsletter for hazardous waste generators to explain hazardous waste regulations and pollution prevention.

According to federal and state community right-to-know laws, Ecology also responds to public inquiries about toxic chemicals and provides a website for this purpose.

Expected Results

Dangerous waste and chemical data (type, location, amount, etc.) is available to emergency responders and local governments so they can plan and prepare for chemical hazards in their communities. We accomplish this through:

- Publishing and promoting the Shoptalk newsletter to 10,000 subscribers.
- Creating or updating 50 business publications each year and posting them to the web.
- Writing and distributing eight business P2 success stories during the biennium.
- Updating our compliance and toxics reduction web content.

Performance Measure

- Number of visits to toxics-related websites.

Increase Compliance and Act on Environmental Threats from Hazardous Waste

Ecology conducts annual, formal compliance enforcement inspections at large and medium quantity generators and hazardous waste management facilities to ensure compliance with state and federal regulations. A credible, formal enforcement capability is essential to preserving the effectiveness of technical assistance and informal enforcement efforts. While staff do formal enforcement infrequently, repeated refusal or inability of a facility to correct violations and comply with regulations will escalate to formal enforcement actions. When possible, a streamlined enforcement and settlement approach is used. This frees up inspectors to do more inspections instead of spending time with legal proceedings. The state

also periodically amends the Dangerous Waste Regulations to keep our rules current with the federal program and maintain state authorization.

Expected Results
Large and medium quantity generators and facilities that treat, store, or dispose of dangerous wastes are in compliance with state and federal regulations designed to protect human health and the environment. We accomplish this through:

- Conducting over 400 compliance inspections annually.
- Leaning our compliance inspection process in an effort to add capacity for additional inspections.
- Responding to 100 percent of dangerous waste related complaints (approximately 120-180 complaints per year).
- Utilizing streamlined enforcement and settlement approaches as opportunities arise.
- Issuing timely enforcement actions resulting in a deterrent to businesses and changed behavior.
- Focusing on reducing the number of significant environmental threats found during inspections.

Performance Measures

- Number of significant toxics-related environmental threats resolved.
- Percentage chance of finding a significant environmental threat during a compliance inspection.

Increase Safe Hazardous Waste Management
Ecology provides education and technical assistance to thousands of businesses on safe hazardous waste management. Safe management of hazardous waste protects the public and the environment, and enables the state to avoid significant cleanup costs. Although formal enforcement work is essential to maintaining compliance with hazardous waste regulations, training and technical assistance visits can also help bring facilities into regulatory compliance using fewer resources. Even small amounts of mismanaged toxic chemicals can create contaminated sites and pollute stormwater.

To address environmental threats from small businesses, Ecology oversees performance contracts with nine Puget Sound counties and Spokane County. These contracts provide for Local Source Control Specialists to conduct technical assistance visits to small businesses.

Expected Results
Dangerous waste is safely managed, the public is protected, and businesses comply with state dangerous waste rules. We accomplish this through:

- Conducting up to 200 compliance-related technical assistance visits to businesses each year.
- Providing six web-based dangerous waste workshop videos and training modules to help businesses properly manage dangerous waste and fill out their annual reports.
- Conducting at least four dangerous waste workshops across the state.

Performance Measures

- Number of Ecology-funded small business technical assistance visits conducted by local government.
- Number of toxics-related technical assistance visits.

Prevent Hazardous Waste Pollution through Permitting, Closure, and Corrective Action
Facilities that treat, store, or dispose large volumes of dangerous waste must obtain a permit to ensure their design, construction, maintenance, and operating procedures protect public health and the environment. Washington currently has 14 active facilities that are either in "interim status" or have a final permit.

Because these facilities handle such a large volume of dangerous waste, they are inspected annually. They are required to have closure plans to effectively deal with the end of their waste management activities. Ecology is currently working on more than 20 high-priority corrective action cleanup sites. Ecology also ensures that proper financial assurance requirements are in place at all used oil processors and recyclers, and facilities treating, storing, or disposing dangerous wastes.

Expected Results
Facilities that treat, store, or dispose dangerous wastes are constructed and operated to prevent soil, water, or air contamination. This is accomplished through:

- Striving to meet EPA's cleanup goals for protecting human health, controlling migration of contaminated groundwater, and sites reaching "remedy construction complete."
- Issuing high priority permit modifications to address health and safety issues or improve environmental outcomes.

Performance Measure

- Percentage progress toward completed corrective action at priority facilities.

Reduce Persistent Bioaccumulative Toxins (PBTs) in the Environment

Persistent, bioaccumulative toxins (PBTs) are a particular group of chemicals that can significantly affect the health of humans, fish, and wildlife. Ecology is implementing a long-term strategy designed to reduce PBTs in Washington's environment over the coming years. This strategy coordinates agencywide efforts, engages other key organizations and interest groups, and provides for public education and information on reducing PBTs in the environment.

The Legislature has enacted bans for certain products containing mercury, PBDEs (chemical flame-retardants), and lead. Ecology has implemented programs to reduce uses of mercury and lead and continues to support programs to reduce releases of polycyclic aromatic hydrocarbons (PAHs-combustion by-products). Ecology continues to support the Department of Health and local health departments in eliminating sources of lead in homes.

Expected Results

- Through developing Chemical Action Plans and implementing plan recommendations, public health and environmental impacts associated with PBTs and other toxic substances are minimized. Strategies are developed and implemented to reduce and eliminate these harmful chemicals.
- Ecology has completed chemical actions plans for mercury, PBDEs, lead, PAHs- and PCBs. Ecology has scheduled a PBT rule update during the 2015-17 Biennium.

Performance Measures

- Number of children tested for lead in blood.
- Percentage of tested children with elevated lead blood levels.
- Pounds of household and small quantity generator hazardous wastes recycled or properly disposed.

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

The state Hazardous Waste Reduction Act calls for the reduction of hazardous waste generation and the use of toxic substances and requires certain businesses to prepare plans for voluntary reduction. Staff provide on-site assistance through innovative programs designed to reduce the use of source and waste generation reduction. In addition, the agency focuses on improvements in industries that have the highest rate of waste generation and non-compliance to help them achieve energy savings, water conservation, and reduced hazardous waste production. Reducing the use of toxic chemicals in commerce reduces the generation of hazardous waste, minimizes disposal costs, reduces the need for cleanup, minimizes public exposure, and saves businesses money.

Expected Results

Hazardous waste generation is reduced by two percent each year (approximately 5 million pounds), resulting in cleanup and disposal cost savings for businesses, reduced public exposure, and fewer cleanups. This is accomplished through:

- Completing nearly 500 toxics-related technical assistance visits to businesses each year.
- Reviewing the majority of the pollution prevention ("P2") plans (approximately 450) submitted by businesses and facilities each year.
- Tracking the number of P2 opportunities and dollars saved by businesses implementing their P2 plans.
- Conducting two or four comprehensive engineering or Lean-based technical assistance projects with businesses each year.
- Promoting safer alternatives to the use of toxics by businesses in Washington State.

Performance Measure

- Annual pounds of hazardous waste generated.

Reduce Toxic Chemicals in Products and Promote Safer Alternatives

Toxic chemicals in some types of consumer products have been found to be a source of pollution in our environment and have the potential to harm humans. Reducing toxic chemicals in products over time will lower the risks to people and the environment. Ecology uses several strategies to achieve this goal, including:

- Identifying chemicals of concern in consumer products and promoting safer alternatives to identified chemicals;
- Promoting green chemistry;
- Promoting environmentally preferred purchasing;
- Sampling and enforcing statutory reporting requirements and standards related to children's products;
- Enforcing toxics limits in such products as lead wheel weights, coal tar sealants, and copper brake pads; and
- Testing for metal and enforcing limits in packaging.

Expected Results

Toxic chemicals in products are reduced over time to lower health risks to people and the environment. This is accomplished through:

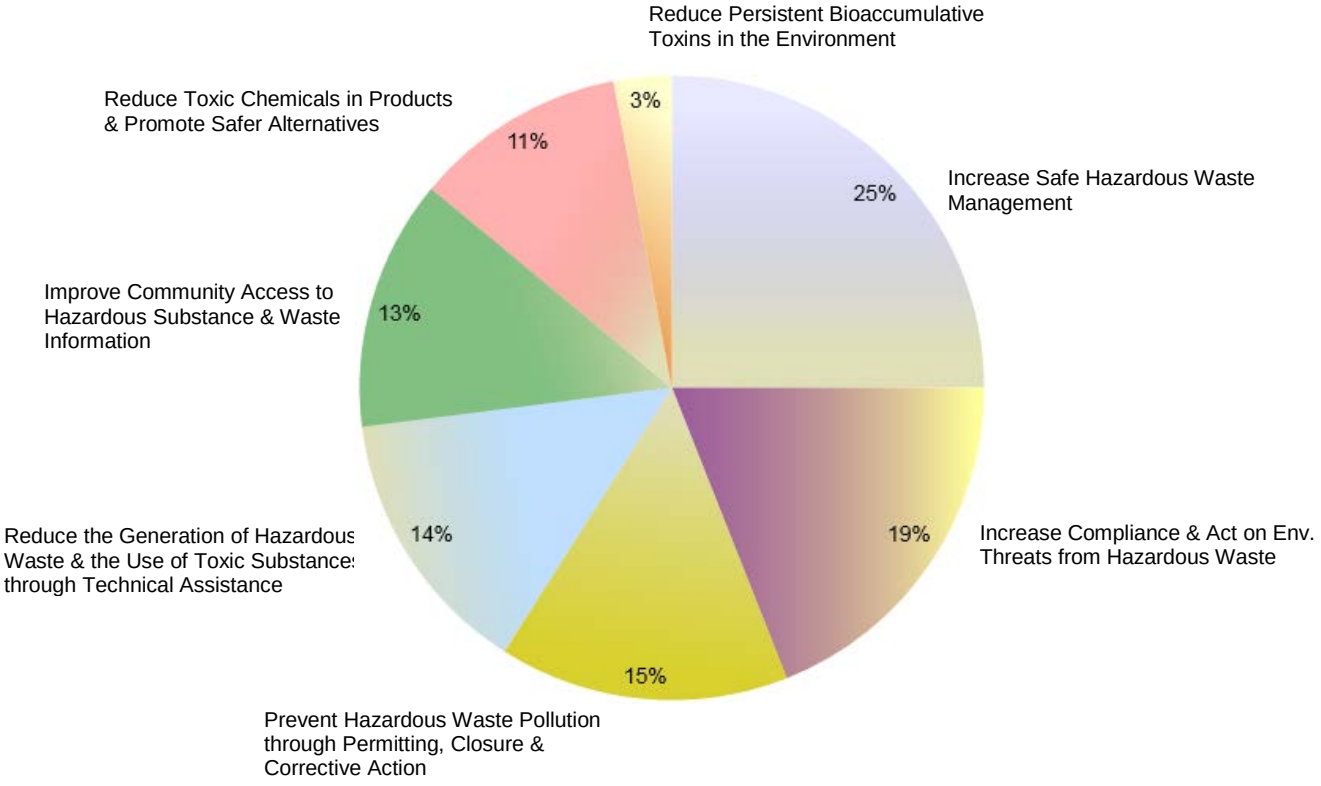
- Collecting or capturing an additional 4,500 pounds of mercury from sources such as schools, labs, florescent lamps, automotive switches and thermometers.
- Certifying compliance with the Better Brakes product law by reducing the average concentration of copper in brakes sold in the state and assessing the availability of alternative materials for brake pads, such as copper-free brake pads.
- Implementing state consumer product laws limiting the presence of toxic chemicals, including product testing.
- Promoting and sharing with businesses up to 100 hazard assessments to replace chemicals of concern with safer alternatives.
- Working with the Department of Enterprise Services to increase the number and use of contracts offering environmentally-preferred products, including Correctional Industries making flame retardant free furniture available.

Performance Measure

- Pounds of toxic substances used by Washington industries.
- Pounds of mercury collected and/or captured.

Hazardous Waste & Toxics Reduction Program 2015-17 Biennium Budget By Activities

Operating Budget = $34.7 Million; FTEs = 130.5



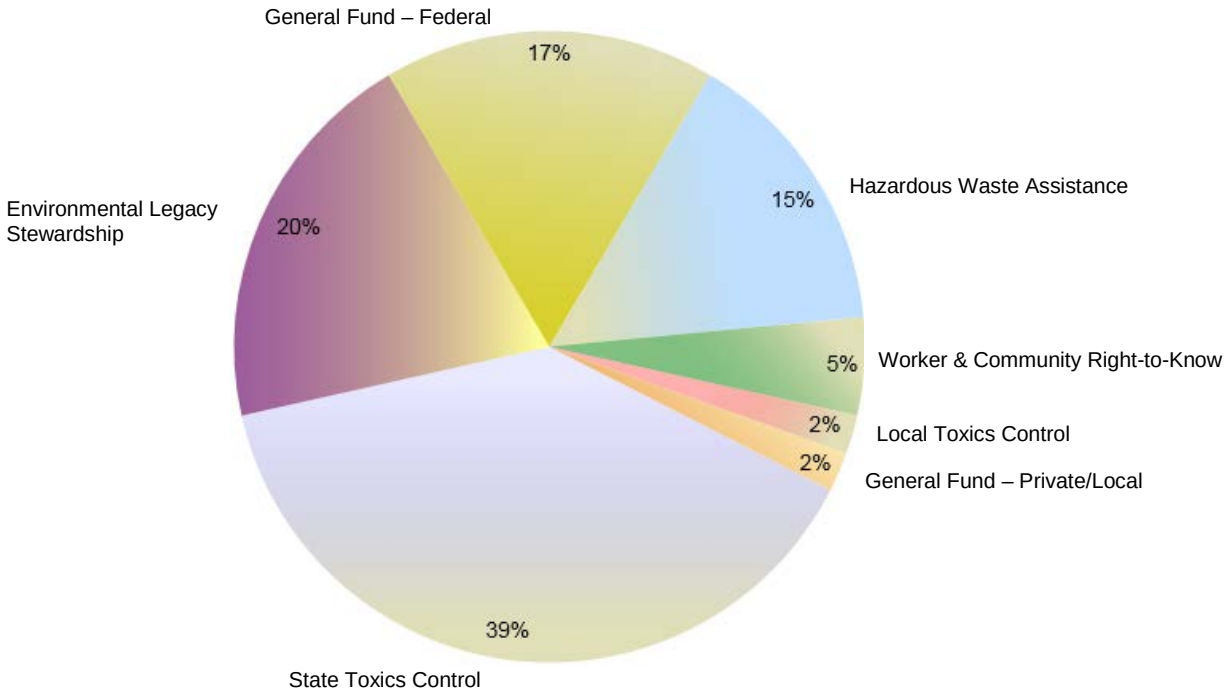
Activities	Dollars	FTEs
Increase Safe Hazardous Waste Management (A022)	$8,893,189	18.2
Increase Compliance & Act on Environmental Threats from Hazardous Waste (A021)	6,801,204	32.5
Prevent Hazardous Waste Pollution Through Permitting, Closure & Corrective Action (A031)	5,269,192	19.2
Reduce the Generation of Hazardous Waste & the Use of Toxic Substances Through Technical Assistance (A052)	5,065,283	22.6
Improve Community Access to Hazardous Substance & Waste Information (A019)	4,594,534	24.5
Reduce Toxic Chemicals in Products & Promote Safer Alternatives (A065)	3,799,905	12.5
Reduce Persistent Bioaccumulative Toxins (PBTs) in the Environment (A050)	233,038	1.0
Hazardous Waste & Toxics Reduction Operating Budget Total	**$34,656,345**	**130.5**

Hazardous Waste & Toxics Reduction Program 2015-17 Biennium Budget By Fund Source

Operating Budget = $34.7 Million
Pie shown below is operating budget ONLY.

Capital Budget = $0.3 Million
Funded entirely by State Toxics Control Account (173).

FTEs = 130.5



Operating Fund Sources	Amount	Uses
State Toxics Control (173)	$13,622,659	Promote pollution prevention and safe waste management, primarily through technical assistance to 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.
Environmental Legacy Stewardship (19G)	6,974,474	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.
General Fund – Federal (001)	5,901,300	Grant funds received from EPA to implement federal Resource Conservation and Recovery Act (RCRA) and pollution prevention innovations.
Hazardous Waste Assistance (207)	5,371,736	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 citizens make better choices on what to use and buy.

Worker & Community Right-to-Know (163)	1,632,485	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.
Local Toxics Control (174)	622,690	Compile information on hazardous substance use and make this information available to citizens and other public entities.
General Fund – Private/Local (001)	531,001	Manage cleanups at facilities that treat, store, or dispose of hazardous waste.
Operating Budget Total	**$34,656,345**	

Capital Fund Sources	**Amount**	**Uses**
State Toxics Control (173)	$309,430	Remove known toxic components in vehicles and appliances, including switches containing mercury, prior to crushing and shredding.
Capital Budget Total	**$309,430**	

Haz. Waste & Toxics Reduction Operating & Capital Budget Total	**$34,965,775**

Dwayne Crumpler of the Nuclear Waste Program working with Hanford employees collecting soil samples from a large, 85 foot deep, excavation site to determine where additional hexavalent chromium contaminated soil needs to be removed. An additional 10 feet of the aquifer soil material was removed by the end of the project and the project successfully removed the sources of chromium contamination to prevent it from migrating to the Columbia River.

Program Mission

The Nuclear Waste Program's mission is to:

- Lead the effective and efficient cleanup of the U.S. Department of Energy's Hanford site.
- Ensure sound management of mixed hazardous wastes in Washington.
- Protect the state's air, water, and land at and adjacent to the Hanford site.

Environmental Threats

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

- Removing and vitrifying (changing into glass) an estimated 56 million gallons of radioactive and chemically hazardous waste in Hanford's 177 underground storage tanks.
- Removing the residual corrosion sludge left after removal of 38 cubic yards of disintegrating nuclear fuel rods in containers stored in the remaining water-filled concrete basin at the "K-Reactor" near the Columbia River.
- Providing monitoring for approximately 190 square miles of contaminated groundwater that flows toward and eventually enters the Columbia River. Approximately 70 square miles of contaminated groundwater currently exceed federal and state drinking water standards.
- Permitting the operation and closure of 37 hazardous waste treatment, storage, and disposal sites ranging from small demolition sites to half-mile long nuclear chemical processing buildings.
- Cleaning up 1,200 waste sites ranging from liquid waste disposal ditches to former reactor facilities, including 9.35 million tons of contaminated soil adjacent to the Columbia River.

Authorizing Laws

The U.S. Department of Energy (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 May 15, 1989. The Hanford Federal Facility Agreement and Consent Order, or Tri-Party Agreement (TPA), directs 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, the USDOE did not fully comply with state hazardous waste, air, or water pollution standards. The Hanford TPA includes a consent order requiring the USDOE at the Hanford site to come into compliance with the same hazardous waste rules that regulate private industry.

Those laws include:

- *Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund)*
- *Hazardous and Solid Waste Amendments of 1984*
- *Resource Conservation and Recovery Act (RCRA)*
- *Toxic Substances Control Act*
- *Chapter 70.105 RCW, Hazardous Waste Management Act*

- *Chapter70.105D RCW, Model Toxics Control Act*
- *Chapter 70.94 RCW, Clean Air Act*
- *Chapter 90.48 RCW, Clean Water Act*

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 the 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 citizens.*
- *Washington State Departments of Health and Fish and Wildlife and the Northwest Interstate Compact on Low-Level Radioactive Waste.*

Issues

Slowed Progress in Site Cleanup

The USDOE Environmental Management Program is the largest environmental cleanup program in the nation. The Hanford site cleanup is the largest effort in this program.

The USDOE has missed several major cleanup milestones and will not meet many critical, near-future milestones. Ecology engaged the USDOE in unsuccessful negotiations, and then initiated litigation to address the missed milestones and establish an enforceable and achievable plan for cleaning up Hanford. The state and USDOE agreed to a final settlement, which was put in place October 2010.

USDOE has notified Ecology that tank retrieval and Waste Treatment Plant (WTP) construction milestones from the 2010 agreement and accompanying TPA changes are in jeopardy. Ecology and USDOE are in court over these issues.

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 has been retrieving radioactive wastes from failing and aging single-shell tanks and placing the waste in interim, stable double-shell tanks for eventual treatment and disposal at Hanford or shipment offsite. Retrieval has slowed, and USDOE has proposed delays in all retrievals due to WTP issues.

USDOE has stopped construction on some parts of the WTP due to technical issues. The part still under construction is approximately 63 percent complete, but the construction schedule has been repeatedly delayed, and the enforceable consent decree schedule included in the lawsuit settlement is in jeopardy.

Continuing Hanford Cleanup Progress

Cleanup progress has started on major contaminated Hanford facilities. Ecology is working with the USDOE to continue seeking ways to maintain progress to stabilize and decommission these facilities to reduce hazards to workers and the environment.

Progress must be maintained on issuing closure or final operating permits for waste treatment, storage, and disposal at the Hanford site.

Current federal funding levels have recently brought a number of activities to a halt. Cleanup of the very contaminated central part of Hanford will be delayed for two decades unless Congress increases the federal budget funding.

Protecting the Columbia River

Work must continue to clean up sites that could add to groundwater or river contamination. That work includes removing sludge that resulted from decaying fuel rods in concrete storage areas located near the Columbia River. Groundwater cleanup, close monitoring of liquid waste discharges, and cleaning up contaminated soil must also continue.

As part of the legal settlement, Ecology, EPA, and the USDOE added TPA milestones that

provided the schedule for groundwater and soil cleanup along the Columbia River. Substantial progress has been made in cleaning up along the river, but has slowed. Final completion will take longer than the originally agreed to date of 2015 due to funding and technical challenges.

Decisions about Additional Waste Storage or Treatment at Hanford

Over 10 years ago, many pending national decisions identified Hanford as a potential storage, treatment, and disposal site for not only wastes and materials generated onsite, but also for wastes from many other sites in the country.

Currently, as a result of a settlement agreement, the USDOE cannot import low-level mixed or transuranic wastes from other USDOE sites to Hanford. The settlement of the tank waste lawsuit extends this ban on importing waste until the tank waste treatment facility is operational.

Ecology is participating in national forums that deal with these issues to advise state policy makers on responses to these cleanup plans. This important cleanup work is severely limited by current federal funding levels.

Activities, Results & Performance Measures

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 Nuclear Reservation by cleaning up contaminated sites from past activities. Radioactive and hazardous contaminants are removed, residual contaminants are contained and monitored, and mitigation of natural resource damage on Hanford occurs.

Expected Results

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

Performance Measures

- Gallons of groundwater contaminated by hexavalent chromium that is remediated at Hanford (millions).
- Tons of radioactive and/or chemically contaminated soil and debris removed and securely disposed.

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

Ecology oversees decommissioning the large, complex, and high-risk facilities throughout the Hanford Nuclear Reservation, including nuclear reactors and chemical processing facilities used for nuclear weapons material production.

Transitioning these facilities to safe and stable conditions requires coordination of multiple regulatory and technical requirements.

Ecology is also responsible for regulatory oversight of waste management activities at four facilities not under the management of the U.S. Department of Energy (Energy Northwest, AREVA, Perma-Fix Northwest, and the U.S. Navy's Puget Sound Naval Shipyard).

Expected Results

- All major facilities on the Hanford Site are decontaminated and decommissioned, and either demolished or placed into a long-term safe storage configuration.
- Removal and remediation actions for the 324 Building and soil contamination are performed.
- Decontamination and decommissioning activities at the Plutonium Finishing Plant facilities are completed to slab on grade.
- Permitting and compliance oversight at Perma-Fix Northwest, AREVA, Puget Sound Naval Shipyard, and Energy Northwest continue.

Performance Measures

- Percentage completion of decontamination/decommission of the Hanford plutonium finishing plant by 2016.

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 Nuclear Reservation. This activity is focused on designing, permitting, constructing, and

operating the Hanford Waste Treatment Plant, the Integrated Disposal Facility (a mixed, low-level waste landfill), and immobilized high-level waste storage facility.

Expected Results

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

Performance Measures

- Percentage of the Hanford Tank Waste Treatment Plant construction completed.

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

Ecology protects public health and natural resources by ensuring 53 million gallons of high-level radioactive tank waste at the Hanford Nuclear Reservation are safely stored and managed. The Hanford Tank Waste Project is focused on permitting the double-shelled tank waste storage system, removing liquid wastes from the single-shelled tanks, and beginning to close portions of the tank waste storage system. In coordination with the Hanford Tank Waste Disposal Project, the tank waste will be removed and treated, leading to eventual closure of all 177 Hanford tanks by 2040.

Expected Results

- Public health and environmental risk from the highly toxic, mixed radioactive and hazardous tank waste is reduced, and tank wastes are safely managed until treated and properly disposed of.
- One double-shell tank is emptied and waste safely stored.
- Nine single-shell tanks are retrieved by 2019.
- A permit is issued for the Double Shell Tank Farms by 2017.
- A closure plan is issued for the Single Shell Tank Farms by March 2017.

Performance Measures

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

Ensure the Safe Management of Radioactive Mixed Waste at Hanford

Ecology provides regulatory oversight for safe storage, treatment, and disposal of liquid and solid dangerous and radioactive mixed wastes at the Hanford Nuclear Reservation, as well as at radioactive mixed-waste sites throughout the state. This activity regulates management of this historic and ongoing waste stream, and ensures high-risk transuranic and high activity wastes currently buried in shallow, unlined trenches are retrieved, treated, and disposal of safely.

Expected Results

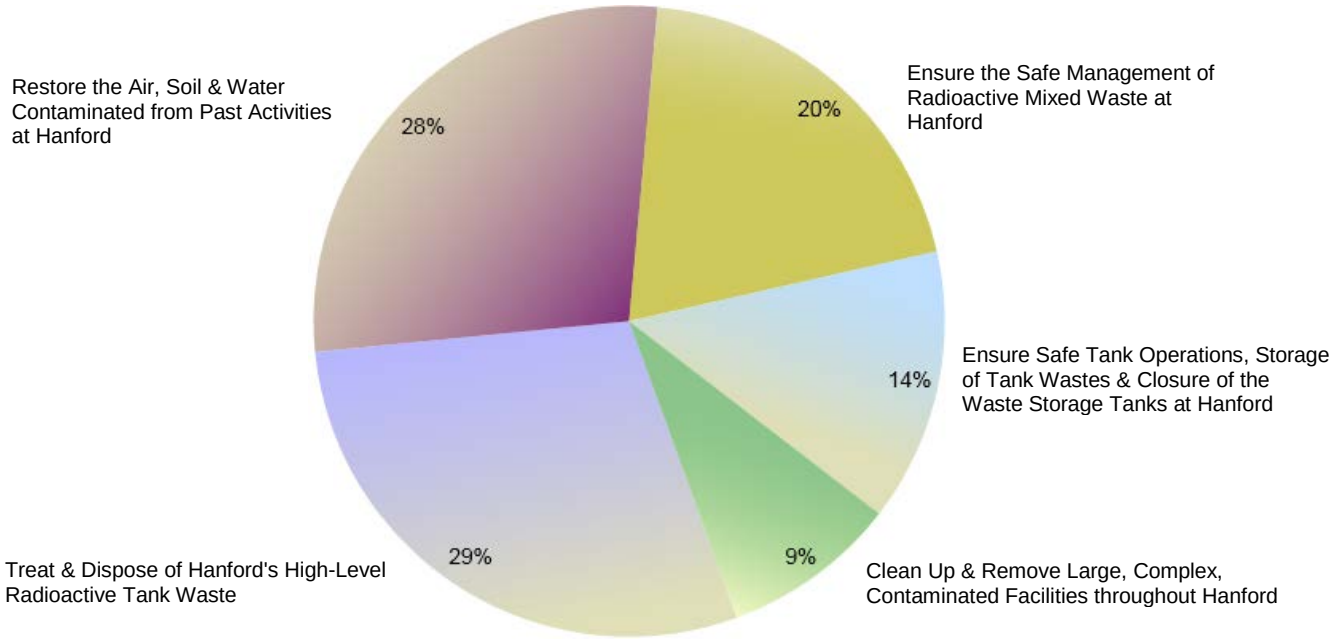
- Transuranic and mixed low-level waste is managed and retrieved, treated/processed, stored and dispose of in compliance with existing regulations to reduce risks posed to Hanford workers and the environment.
- 15,058 cubic meters (cumulative) of retrievably stored waste are retrieved from the burial grounds at Hanford by September 30, 2028.
- U.S. Ecology commercial low-level radioactive waste site MTCA remediation is completed in coordination with closure activities being directed by the Washington Department of Health.

Performance Measures

- Amount of transuranic waste removed from the low-level burial grounds at Hanford (in cubic meters).

Nuclear Waste Program 2015-17 Biennium Budget
By Activities

Operating Budget = $21.0 Million; FTEs = 89.2



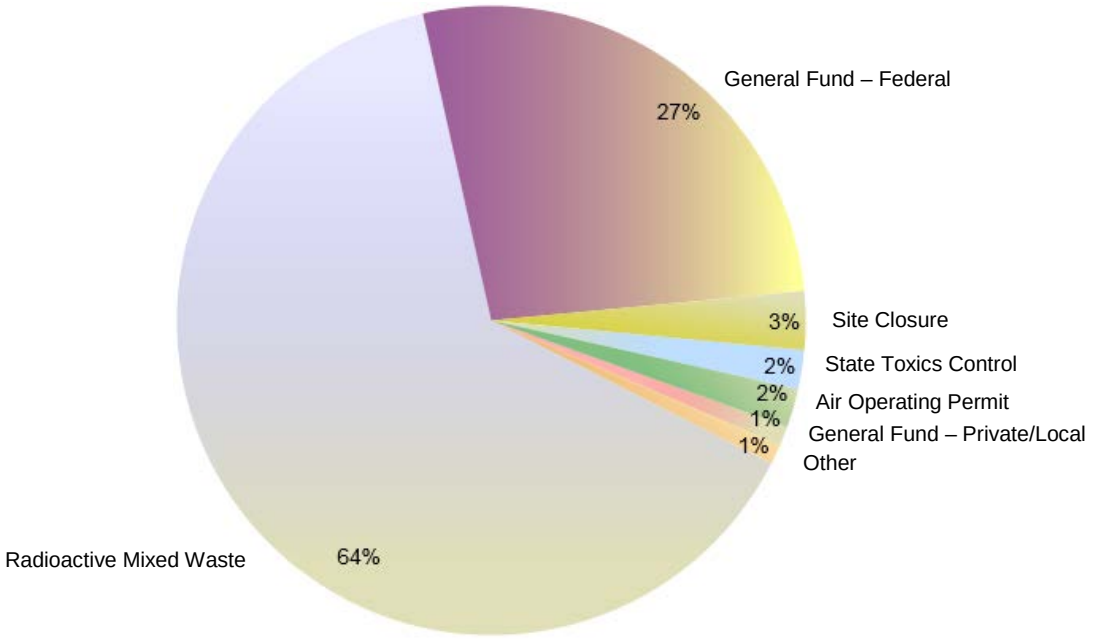
Activities	Dollars	FTEs
Treat & Dispose of Hanford's High-Level Radioactive Tank Waste (A016)	$6,037,961	31.0
Restore the Air, Soil & Water Contaminated from Past Activities at Hanford (A014)	5,769,821	15.5
Ensure the Safe Management of Radioactive Mixed Waste at Hanford (A018)	4,255,138	17.4
Ensure Safe Tank Operations, Storage of Tank Wastes & Closure of the Waste Storage Tanks at Hanford (A017)	3,025,122	16.1
Clean Up & Remove Large, Complex, Contaminated Facilities Throughout Hanford (A015)	1,896,334	9.2
Nuclear Waste Operating Budget Total	**$20,984,376**	**89.2**

Nuclear Waste Program 2015-17 Biennium Budget
By Fund Source

Operating Budget = $21.0 Million
Pie shown below is operating budget ONLY.

Capital Budget = $14.4 Million[3]
Funded entirely by Site Closure Account (125).

FTEs = 89.2



Other = Water Quality Permit (0.57%), General Fund – State (0.37%), and Air Pollution Control (0.11%).

Operating Fund Sources	Amount	Uses
Radioactive Mixed Waste (20R)	$13,508,184	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.
General Fund – Federal (001)	5,621,756	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.
Site Closure (125)	546,423	Northwest Interstate Compact low-level radioactive waste management policy oversight for commercial low-level radioactive waste disposal within the state (Disposal site on Hanford).

[3] Capital budget of $14.4 million is comprised of $1.4 million in allotted funding, and $13.0 million in unallotted spending proviso.

State Toxics Control (173)	512,512	Oversee management of hazardous and radioactive mixed wastes on Hanford and other mixed waste facilities, early treatment of Hanford wastes, provide regulatory assistance to the USDOE and EPA and implement the provisions of the Hanford Federal Facility Agreement and Consent Order and the Hazardous Waste Management.
Air Operating Permit (219)	411,816	Conduct permitting and compliance assurance activities for air emissions sources on the Hanford site.
General Fund – Private/Local (001)	163,854	All moneys except the $600 required for Ecology's annual prime lease payment to USDOE are passed through to Benton County.
Water Quality Permit (176)	119,780	Activities needed to maintain safe facilities for treating wastewater discharges at the Hanford site.
General Fund – State (001)	77,816	Regulation of air pollutants at new or modified Hanford facilities subject to the Clean Air Act.
Air Pollution Control (216)	22,235	Reduce air pollution from industrial sources.
Operating Budget Total	**$20,984,376**	

Capital Fund Sources	**Amount**	**Uses**
Site Closure	$1,409,230	Investigation, closure, and decommissioning of the Hanford low-level radioactive waste disposal facility. (Total Capital appropriation is $14,413,041. $13,037,770 is unallotted pending satisfaction of budget proviso.)
Capital Budget Total	**$1,409,230**	

Nuclear Waste Operating & Capital Budget Total	**$22,393,606**

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George Kaminsky and Diana McCandless rinse a data logger after taking measurements of sound velocity vs. depth in the water column during bathymetric mapping in the Puget Sound.

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 citizens. 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.

In the last 100 years, many shorelines, floodplains, and wetland systems have been damaged or destroyed. 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 Act*
- *Chapter 43.143 RCW, Ocean Resource Management Act*
- *Chapter 43.21C RCW, State Environmental Policy Act (SEPA)*
- *Chapter RCW 43.220 RCW, Washington Conservation Corps (WCC)*
- *Chapter 43.372 RCW, Marine Waters Planning and Management*
- *Chapter 78.56 RCW, Metals, Mining and Milling Act*
- *RCW 86.12.200, Comprehensive Flood Control Management Plans*
- *Chapter 86.16 RCW, Floodplain Management Act*
- *Chapter 86.26 RCW, State Participation in Flood Control Maintenance*
- *RCW 90.03.265 and 43.21a.690, Cost Reimbursement*
- *Chapter 90.48 RCW, Water Pollution Control Act*
- *Chapter 90.58 RCW, Shoreline Management Act*
- *Chapter 90.71 RCW, Puget Sound Water Quality Program*
- *Chapter 90.74 RCW, Aquatic Resources Mitigation*
- *Chapter 90.84 RCW, Wetlands Mitigation Banking*

Constituents/Interested Parties

- *Citizens.*
- *Property owners.*
- *Local governments.*
- *State and federal resource agencies.*
- *Tribes.*
- *Business.*
- *Environmental organizations.*

Issues

Shoreline Master Program Updates

Shoreline Master Programs (SMPs) are Ecology's most 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.

The Washington State Legislature adopted a schedule and began providing funding for comprehensive updates to all SMPs in 2003. Since that time, Ecology has been providing grants and technical support to communities throughout the state. Once SMPs are complete, Ecology will shift emphasis to technical assistance on implementing plans to ensure they are efficient and effective. Ecology will also update Shoreline Management Act (SMA) rules to clarify requirements for periodic review and update of SMPs and address other issues, as needed.

Sustaining Our Remaining Wetlands

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

To stop this 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, in-lieu fees, 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 and voluntary stewardship programs in agricultural areas.
- Protecting important coastal wetlands through acquisition grant programs.

Protecting and Restoring Puget Sound Watersheds

Ecology received funding from the U.S. Environmental Protection Agency (EPA) through the National Estuary Program (NEP) to implement priority work consistent with the 2020 Action Agenda for protecting and restoring Puget Sound. The primary focus of the watershed grant is to implement a comprehensive, integrated watershed protection and restoration strategy that advances ecosystem recovery.

Ecology is coordinating with the Department of Commerce to implement a six-year strategy to guide investments that help protect and restore Puget Sound watersheds. The strategy uses watershed characterization to guide land use decisions and outlines three strategic areas of investment:

- Protecting and restoring watersheds.
- Effectively managing stormwater.
- Protecting ecologically significant and working lands.

During federal Fiscal Year 2015, EPA added an additional priority: Protecting and restoring riparian zones in agricultural areas. In response to Tribal Treaty Rights at Risk, EPA provided Ecology additional NEP funding to implement a riparian protection program through purchasing conservation easements in agricultural areas.

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

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 will work with stakeholders to improve coastal and ocean resource management by:

- Developing a Marine Spatial Plan for Washington's Pacific Coast that helps us understand 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.

Ecology will complete this work 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.

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 citizens 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 new approach, Floodplains by Design (FbD).

FbD is a growing 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 2013, the Washington Legislature provided $50 million in grant funds for FbD projects in the 2013-15 Biennium. The 2015-2017 capital budget includes $35.5 million.

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

In Washington's current economy, unemployment disproportionately affects young adults (ages 18-25) and military veterans. 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 SoundCorps.

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 responded to wildfires, floods, drought, landslides, and debris removal. Assistance has included logistical support and direct service. These efforts will continue in the 2015-2017 Biennium as these hazards continue to threaten Washington's communities.

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.

With an additional one million people expected to move to the Puget Sound area by 2025, Washington must become more effective in protecting our shorelines and upland habitats. In the 2015-2017 Biennium, Ecology will help counties and cities update their rules that protect shorelines and other important habitats, such as SMPs and critical area ordinances. Ecology will improve the effectiveness of wetland mitigation and floodplain management, provide training and technical assistance, complete habitat restoration projects through the WCC/Puget SoundCorps, and create partnerships to promote appropriate development.

Activities, Results & Performance Measures

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. Ecology is involved in shoreline management in four primary ways:

- Developing guidelines for local shoreline programs.
- Providing technical assistance to local governments and applicants on shoreline planning and permitting activities.
- Reviewing and approving amendments to local Shoreline Master Programs and reviewing permits to ensure resource protection and implementation of the law.
- Working 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.
- Permits approved by local governments are consistent with their Shoreline Master Programs.

Performance Measures

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

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 Measures

- Number of days it takes to make a final decision on 401 water quality certifications.

Protect, Restore, and Manage Wetlands

Ecology has the lead responsibility in implementing the state Water Pollution Control Act, which

requires the protection of wetlands. We provide technical assistance to local governments, helping them implement requirements in the Shoreline Management and Growth Management acts. Staff also provide technical assistance to non-government entities on wetlands conservation and stewardship programs.

Ecology provides leadership on wetlands issues, coordinating statewide policy issues, and developing new approaches for managing and restoring wetlands. Properly functioning wetlands protect water quality, reduce flooding, provide aquifer recharge for drinking water and other uses, and provide critical habitat for fish and wildlife.

Expected Results

- Wetlands are protected, restored, and managed consistent with state and local permits and laws.
- Local governments and other parties get technical assistance to carry out local wetland protection efforts.
- Wetland losses are fully replaced by improving the success rate of wetland mitigation.
- Approved mitigation achieves compliance through meaningful performance standards and monitoring project success.

Performance Measures

- Number of completed watershed characterizations.
- Percentage of mitigation sites inspected within 18 months after receipt of as-built reports.
- Percentage of wetland banking certification documents reviewed within 30 days of receipt.

Provide Technical and Financial Assistance to Local Governments to Reduce Flood Hazards

Ecology administers the Flood Control Assistance Account Program, providing grants and technical assistance to local governments for flood damage reduction projects and comprehensive flood hazard management planning. Staff review and approve local Comprehensive Flood Hazard Management Plans and inspect construction of flood damage reduction projects.

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, Ecology 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 Measures

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

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

SEPA was adopted in 1971 to ensure that state and local decision makers consider the environmental impacts of their actions. The SEPA law provides an opportunity for local citizen involvement in the environmental review process and provides developers an opportunity to identify mitigation opportunities that facilitate overall project approval and minimize development costs. 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 intend to apply what they learned.

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

The Padilla Bay National Estuarine Research Reserve is one of 25 national reserves established to protect estuaries for research and education. The Padilla Bay Reserve in Skagit County conducts a broad array of:

- Public education programs.
- Technical and professional training.
- Coastal restoration.
- Scientific research and monitoring.

The reserve, managed in partnership with the National Oceanic and Atmospheric Administration (NOAA), includes:

- Over 11,000 acres of tidelands and uplands.
- The Breazeale Interpretive Center, which includes:
  - A research laboratory.
  - Residential quarters.
  - Trails.
  - Support facilities.

The reserve also provides funding and technical support to local Marine Resource Committees as part of the Northwest Straits Initiative, and administers the Northwest Straits Marine Commission as established by Senator Murray in 1998.

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 carry out environmental policies and rules in Western Washington and gain a better understanding of issues, science, innovative methods, and rules.
- Teachers and students of all ages gain increased 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 people participating in Puget Sound education and training programs at Padilla Bay Reserve.
- Percentage Puget Sound and coastal training workshop participants who intend to apply what they learned.

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

The Washington Conservation Corps (WCC) was established in 1983 to conserve, rehabilitate, and enhance the state's natural and environmental resources, while providing educational opportunities and meaningful work experiences for young adults (ages 18-25). The WCC creates partnerships with federal, state, and local agencies, private entities, and nonprofit groups to complete a variety of conservation-related projects. These include stream and riparian restoration, wetlands restoration and enhancement, soil stabilization, and other forest restoration activities, fencing, and trail work. The WCC also provides emergency response and hazard mitigation services to local communities.

Expected Results

Local communities receive assistance from WCC crews to carry out conservation and emergency response projects.

Performance Measures

- 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.
- Number of native trees and shrubs planted by WCC crew members.

Provide Streamlined Project Permitting for Transportation Projects

Ecology contracts with the Washington State Department of Transportation (WSDOT) to provide dedicated personnel focused on improving and implementing the permitting and regulatory process for state transportation projects. To address traffic congestion and allow businesses to efficiently transport products in Washington, the Legislature

and Governor have approved significant spending on transportation projects with the expectation of expedient project delivery.

Interagency agreements with WSDOT allow Ecology to permit and mitigate transportation projects through multi-agency transportation permitting teams, multi-agency programmatic approvals, watershed-based mitigation alternatives, and assigning dedicated organizational infrastructure at Ecology.

Right now, this activity is wholly funded by interagency agreements with WSDOT. Agreements expected to total $1,655,000 for the biennium fund 8.43 FTEs. Additional agreements may be signed that would increase both FTEs and funding.

Expected Results

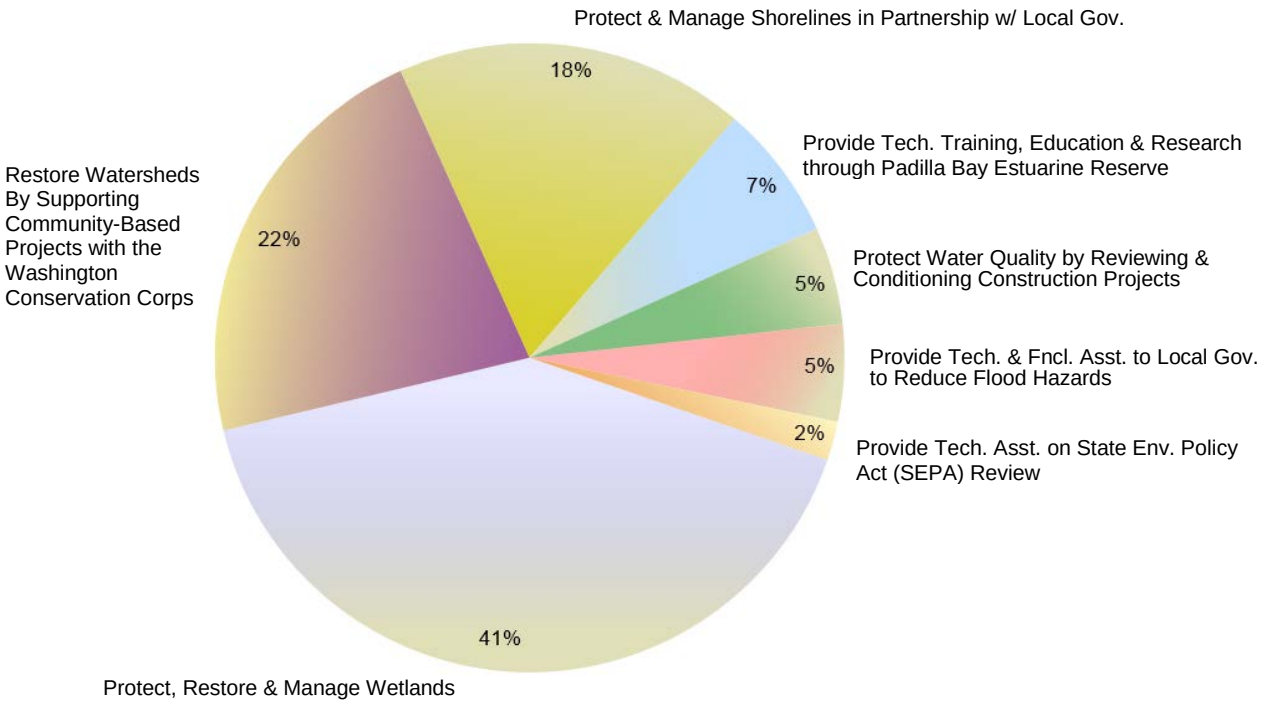
- State transportation projects meet environmental laws.
- WSDOT gets technical help on reducing impacts and receives timely decisions.
- Projects achieve compliance with permit conditions.

Performance Measure

- Percentage of reviews and decisions from Ecology's Transportation Team made within agreed upon timeframes for WSDOT's applications, permits, NEPA/SEPA documents, or other environmental documents.

Shorelands & Environmental Assistance Program 2015-17 Biennium Budget By Activities

Operating Budget = $62.2 Million; FTEs = 165.5



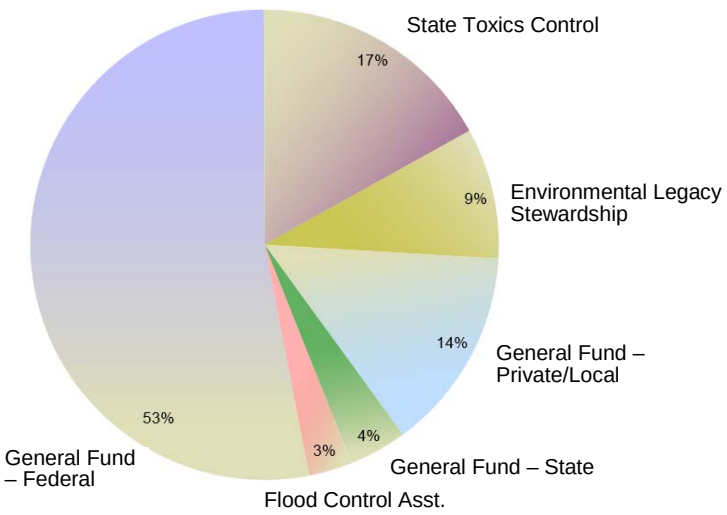
Provide Streamlined Project Permitting for Transportation Projects (0.23%) not shown in operating budget pie above (too small for display).

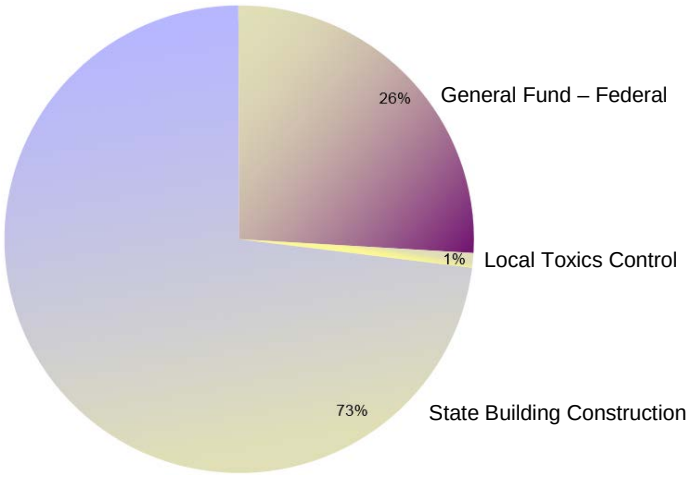
Activities	Dollars	FTEs
Protect, Restore & Manage Wetlands (A038)	$25,765,535	29.1
Restore Watersheds by Supporting Community-Based Projects with the Washington Conservation Corps (A056)	13,640,956	60.3
Protect & Manage Shorelines in Partnership with Local Governments (A036)	11,061,468	30.2
Provide Technical Training, Education & Research through Padilla Bay Estuarine Reserve (A042)	4,457,125	17.5
Protect Water Quality by Reviewing & Conditioning Construction Projects (A037)	2,795,641	12.9
Provide Technical & Financial Assistance to Local Governments to Reduce Flood Hazards (A040)	2,790,043	8.0
Provide Technical Assistance on State Environmental Policy Act (SEPA) Review (A041)	1,510,120	6.7
Provide Streamlined Project Permitting for Transportation Projects (A058)	144,768	0.8
Shorelands & Environmental Assistance Operating Budget Total	**$62,165,656**	**165.5**

Shorelands & Environmental Assistance Program 2015-17 Biennium Budget By Fund Source

Operating Budget = $62.2 Million **Capital Budget = $78.7 Million**

FTEs = 165.5





Operating Fund Sources	Amount	Uses
General Fund – Federal (001)	$32,469,904	Primary grant: National Oceanic and Atmospheric Administration Coastal Zone Management. 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. Padilla Bay operating grants. Washington Conservation Corp activities. FEMA flood management federal grant. EPA Performance Partnership Grant for water quality certifications. FEMA Floodplain Map Modernization Grant.
State Toxics Control (173)	10,711,868	Base funding for Washington Conservation Corps to support crews performing natural resource restoration projects for federal, state, and local agency sponsors. Match for federal Coastal Zone Management and wetlands grants. Washington State Department of Transportation permitting. Water quality certifications for water-related construction projects, including dredging. Ocean policy review. Wetlands banking and environmental mitigation. Wetlands technical assistance.
Environmental Legacy Stewardship (19G)	5,670,423	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 protection and Puget Sound Agenda implementation requirements.
General Fund – Private/Local (001)	8,688,026	Coastal erosion. Permit and project reviews. Padilla Bay. Washington Conservation Corps.

General Fund – State (001)	2,689,264	Support Padilla Bay National Estuarine Reserve Research and education activities. Training and assistance on SEPA for local governments and the public. State Environmental Policy Act reviews.
Flood Control Assistance (02P)	1,936,171	Administer Flood Control Assistance Program. Grants to local governments for comprehensive flood mitigation projects, flood hazard mitigation plans, repair of damaged dikes and levees, emergency flood response.
Operating Budget Total	**$62,165,656**	

Capital Fund Sources	**Amount**	**Uses**
State Building Construction (057)	$57,138,049	Habitat Mitigation. Floodplain management and control grants. Floodplain by Design.
General Fund – Federal (001)	20,309,718	Brazeale Interpretive Center, Padilla Bay boat shed. Federal grant awards for coastal wetland acquisitions (funds passed through to local entities).
Local Toxics Control (174)	1,245,000	Flood levee improvements at Briscoe-Desimone.
Capital Budget Total	**$78,692,767**	

Shorelands & Env. Assistance Operating & Capital Budget Total	**$140,858,423**

Anna Harris and Jim Pearson, after-hour spill responders from the Central Regional Office, sample an abandoned drum for hazard characterization and safe disposal in Wenatchee.

Program Mission

The mission of the Spill Prevention, Preparedness and Response Program (Spills Program) is to protect Washington's environment, public health and safety through a comprehensive spill prevention, preparedness, and response program. 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 ship, pipeline, rail, and road. 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 the market and new technological innovations. These threats—whether on land or water—endanger public health, safety, and the environment, and can ultimately damage the state's economy and quality of life.

Authorizing Laws

The harm caused by major oil spills and other toxics 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 Federal Oil Pollution Act of 1990*
- *Ports and Tanker Safety Act of 1978, and its Amendments to the Ports and Waterways Safety Act of 1972*
- *Chapter 70.105 RCW, Hazardous Waste Management Act*
- *Chapter 70.105D RCW, Model Toxics Control Act*
- *Chapter 70.136 RCW, Hazardous Materials Incidents 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 (includes early legislation from the 1970s)*
- *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:

- *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.*
- *City, county, and regional fire, police, health, and planning departments.*
- *The governments of British Columbia, Oregon, Idaho, and other West Coast states.*
- *Commercial vessel owners and operators worldwide, marine transportation trade associations, public ports, and maritime trade unions.*

- *Oil refineries, marine oil terminals, oil pipelines, rail companies, and oil trucking companies.*
- *Spill response cooperatives and contractors.*
- *Advisory councils, environmental organizations, the general public, and others.*

Issues

The Spills Program is an adaptive organization that takes pride in responding to shifting political climates, dynamic economic trends, legislative direction, and public demands. The Spills Program's core services include vessel and facility inspections, oil transfer monitoring, plan review and approvals, contingency plan drills, environmental restoration, and 24/7 response to oil and hazardous materials spills. In delivering these services, the Spills Program plays a key role in minimizing the long-term release of toxics into the environment and helps to protect the waters, soil, air, and public health of the state.

In addition to the core services, the Spills Program has identified tasks we plan to accomplish in the next two years to address the challenges associated with the changing spill risks facing Washington State. A comprehensive list of tasks is described in the Spills Program's 2015-2017 Program Plan. These tasks address the following:

- The need to secure sustainable funding for Ecology to continue to manage oil spill risk, planning, and response activities.
- Implementing the 2015 Oil Transportation Safety Act (ESHB 1449), which provided new measures and authority to help Ecology to address the changing oil picture with a focus on crude by rail.
- Other rulemakings to ensure regulations are updated when needed to keep current with the needs of the state.

Develop a Funding Options Plan for the 2017 Legislative Session

New funding is needed to manage oil spill risk, planning, and response activities expected by the Legislature and our citizens. The current barrel taxes have not kept pace with inflation. And the change in oil movement in Washington is reducing the volume of oil imported by tank vessels and increasing the amount of oil imported by pipeline and rail. Oil imported by rail was added to the tax base as a result of ESHB 1449, but the tax still does not apply to oil imported by pipeline. Oil that passes through the state to be exported is also not subject to the tax (as a result of a tax credit), and poses a risk of spills each time it is transported and transferred.

To fund ESHB 1449 work, the Legislature provided a one-time Oil Spill Response Account (OSRA) transfer of $2.225 million into the Oil Spill Prevention Account (OSPA). But, without a permanent resolution for a stable revenue stream into the OSPA, Ecology will face a significant shortfall beginning in the 2017-19 Biennium. The funding options plan will address the potential funding gap and changing risk picture, and will identify options to ensure stable future revenue for this important work.

Work With the Legislature to Close the Vessel Response Account

The Vessel Response Account was once used to fund the emergency response tug stationed at Neah Bay, which is now funded by industry. The account is no longer in use, and Ecology is proposing a legislative fix in the 2016 legislative session to discontinue the account. Any remaining balance will be transferred to the Coastal Protection Account where it can be used for post-spill restoration projects.

Evaluate Whether the $9 Million Cap on the Oil Spill Response Account (OSRA) is Adequate or Needs to Be Raised in Order to Effectively Respond to a Prolonged Spill

The OSRA was initially capped at $25 million. The cap has been reduced to $9 million. The statutory structure must allow the state to mount a rapid, aggressive, and well-coordinated response to all oil spills, whether major or minor. The current cap limits the amount of resources the state can provide to respond to a spill.

Complete a Vessel Traffic Safety Evaluation and Assessment for the Columbia River and Update the 2010 Vessel Traffic Risk Assessment (VTRA) for Puget Sound

Ecology has an important regulatory and public trust responsibility to assess and help manage the risk from oil and hazardous materials spills. A number of regional developments have presented

new challenges, including expanding Canadian crude oil sources (e.g. Alberta Tar Sands oil); Bakken and other shale oil from North Dakota, Montana, and Utah; expanded use of pipelines; decline in crude oil by tanker from Alaska; oil terminal/refinery rail expansion projects; Liquefied Natural Gas (LNG) being employed as vessel fuel; and several proposed coal terminals.

Proactive risk analysis, risk management techniques, and assertive risk communication must be used to substantiate and target efforts to reduce the risk of an oil spill. Ecology will continue analyzing the oil transportation risk picture. We will consider all transportation modes, but focus on vessel, rail, and pipeline, and their interfaces. We will also consider risks associated with transporting LNG, coal, propane, and other hazardous oil-based cargos.

The Vessel Traffic Safety Evaluation and Assessment for the Columbia River will include:

- Recommendations to the Legislature on vessel traffic management and vessel traffic safety to include tug escorts for vessels transporting oil as bulk cargo, best achievable protection (BAP), and oil being transferred to vessels from rail.
- Completing an initial draft by June 30, 2017 and submitting a draft report to the Legislature by December 15, 2017. Submitting a final report by June 30, 2018.
- Work with the Lower Columbia River Harbor Safety Committee to encourage involvement in the Vessel Traffic Safety Evaluation and Assessment.

The VTRA update for Puget Sound will include:

- An update to the George Washington University VTRA analysis tool and model to better reflect the changing oil transportation environment in Greater Puget Sound/Salish Sea.
- Work with the Puget Sound Harbor Safety Committee to encourage involvement in the Puget Sound VTRA update.

Review All Existing Geographic Response Plans (GRPs), Provide a Gap Analysis Report to the Legislature, and Continue GRP Developments During the Biennium

ESHB 1449 directs Ecology to continue to develop and enhance GRPs for inland and marine areas at risk from oil spills, and outlines requirements for completing new plans and plan updates. Ecology must provide a report to the Legislature by December 31, 2015, of a review of state GRPs and federal requirements. The report will identify the number of GRPs that will need to be developed or updated.

To protect sensitive state resources, Ecology will develop new GRPs for areas of the state that do not currently have plans, and will update and maintain existing GRPs to keep them current. The work will include data collection and stakeholder engagement, and we will use geospatial planning tools and up-to-date, at-risk information to develop strategies.

Complete Rulemaking to Develop Contingency Plan and Drill Requirements for Railroads Transporting Oil in Bulk

ESHB 1449 expands the definition of "facility" to include railcars for the purpose of oil spill preparedness, and extends contingency planning and drill requirements to railroads transporting oil in bulk.

Develop Rail and Pipeline Reporting Requirements through Rulemaking as Directed in ESHB 1449

Through ESHB 1449, the Legislature gave Ecology authority to conduct rulemaking to develop rail and pipeline reporting requirements. By collecting and sharing information about oil transportation by rail and pipeline, local communities will be better prepared to respond to incidents from these modes. The rulemaking and larger effort will address:

- Weekly rail advance notices.
- Biannual pipeline reporting.
- Providing key information on oil movement to other governments and local responders.
- Public quarterly reports.

Develop an Equipment Cache Grant Program

In 2007, Ecology established 99 response equipment caches throughout the state to assist local and tribal responders to provide rapid spill containment and cleanup capability. New challenges from transporting crude oil in unit trains have resulted in the need for more response equipment caches and replenishment of the existing caches. ESHB 1449 directs Ecology to create and administer a grant program that provides firefighting equipment and oil spill response equipment caches and training to local responders. The work will include the following:

- Convening a stakeholder group to assist in developing and administering the grant program.
- An assessment to identify training and equipment needs.
- Developing and delivering a training program for first responders and cache recipients.
- Planning for ongoing implementation to maintain the grant program and equipment.

Extend the Best Achievable Protection (BAP)Requirement to Facilities through Rulemaking that will Update the Oil Spill Contingency Plan Standards for Pipelines

The Oil Spill Contingency Plan standards were updated in 2013 to incorporate the BAP requirement for vessels. Rulemaking is needed to extend the BAP requirement to pipelines.

Initiate Rulemaking to Modernize the Prevention Design Standards for Facilities

The Facility Oil Handling Standards rule needs updating to address all modes of oil handling in and out of facilities, including facilities with rail transfers.

Activities, Results & Performance Measures

Prepare for Aggressive Response to Oil and Hazardous Material Incidents

Large commercial vessels and oil handling facilities operators are required to maintain state-approved oil spill contingency plans to ensure they can rapidly and effectively respond to major oil spills. State planning standards ensure equipment and response personnel are strategically staged throughout the state. This work is done through our review and approval of contingency plans to ensure plan holders and spill response contractors maintain readiness.

Ecology also conducts scheduled and unannounced drills, partners with other agencies to maintain a regional contingency plan that guides how spills are managed in the Northwest, and works with other natural resource experts and communities to develop Geographic Response Plans (GRPs).

Expected Results

- Ecology and the regulated community are fully prepared to promptly respond to oil spills, and damages from spills are minimized.
- GRPs are developed for areas that do not currently have plans, and existing GRPs are updated to keep them current.
- The ongoing maintenance of response equipment is documented by industry and records verified by Ecology.
- Ecology targets oil spill related outreach efforts to tribes and shellfish growers.

Performance Measures

- Number of GRPs completed for inland spill response.
- Percentage of vessel emergency occurrences reported to Ecology.

Prevent Oil Spills from Vessels and Oil Handling Facilities

Ecology works with the regulated community and others to minimize the environmental threat of oil spills from vessels and oil handling facilities by focusing on human procedural and organizational factors. This work is done through the following core activities:

- Inspecting facilities and vessels and monitoring oil handing facility transfers.
- Boarding vessels for educational and compliance purposes.
- Overseeing oil transfer operations.
- Requiring and reviewing operations manuals and prevention plans.
- Overseeing implementation of the industry-funded Neah Bay response tug to ships in difficulty.
- Helping and recognizing oil tanker and barge companies for achieving best achievable protection.
- Investigating near-miss and actual accidents to identify new prevention strategies.

Expected Results

- Reduced oil spills from vessels and oil handling facilities.
- Spills are prevented and/or reduced through risk management and targeted inspections.
- Reduced number of oil spills entering surface waters, particularly from marine sources.

- Reduced percentage of vessel and oil transfer accidents resulting in spills by boarding and inspecting targeted high-priority vessels and facility operations.
- Increased tanker and tank barge enrollment in the Exceptional Compliance Program (also known as ECOPRO) focused on improved vessel safety and environmentally secure operations.
- Reduced incidence of intentional waste oil discharges at sea from vessels.

Performance Measures

- Gallons of oil spilled to surface water during a transfer for every 100 million gallons transferred.
- Number of oil spills to surface waters from all sources.
- Percentage of potential high-risk vessels boarded and inspected.
- Percentage of regulated marine oil transfer operations inspected.
- Total volume of oil spilled to surface waters from all sources.
- Total volume of oil spilled to water from regulated facilities and vessels.

Rapidly Respond to and Clean Up Oil and Hazardous Material Spills

Oil and hazardous materials spills present a danger to human health and the environment. Ecology is responsible for rapidly responding to and overseeing the cleanup of oil spills, hazardous material incidents, methamphetamine drug labs, and helping other "first response" organizations during Weapons of Mass Destruction (WMD) incidents. This work is done through the following core activities:

- 24-hours-a-day, statewide response capability from six field offices.
- Coordination with local, state, and federal law enforcement agencies for methamphetamine drug lab cleanup.
- Compliance actions for violations related to oil and hazardous material spills.

Expected Results

- Oil spills, hazardous material spills, and clandestine drug labs are responded to and cleaned up rapidly to protect public health, natural resources, and property.
- Spill response capability is maintained 24 hours a day and seven days a week throughout the state.
- All oil spills are responded to within 24 hours from the time they are reported.
- Approximately 4,000 annual spill reports are managed.

Performance Measure

- Percentage of reported incidents that receive a field response.

Restore Public Natural Resources Damaged by Oil Spills

Ecology leads a multi-agency natural resource trustee committee to assess damages to publicly-owned natural resources from oil spills. This work is done through the following core activities:

- Assessing the monetary value of damaged natural resources.
- Seeking fair compensation from the responsible parties.
- Chairing the Coastal Protection Committee to ensure the money collected is used for projects to restore the environmental damage.
- Conducting site follow-up visits to ensure accountability of project success after the project is completed.

Expected Results

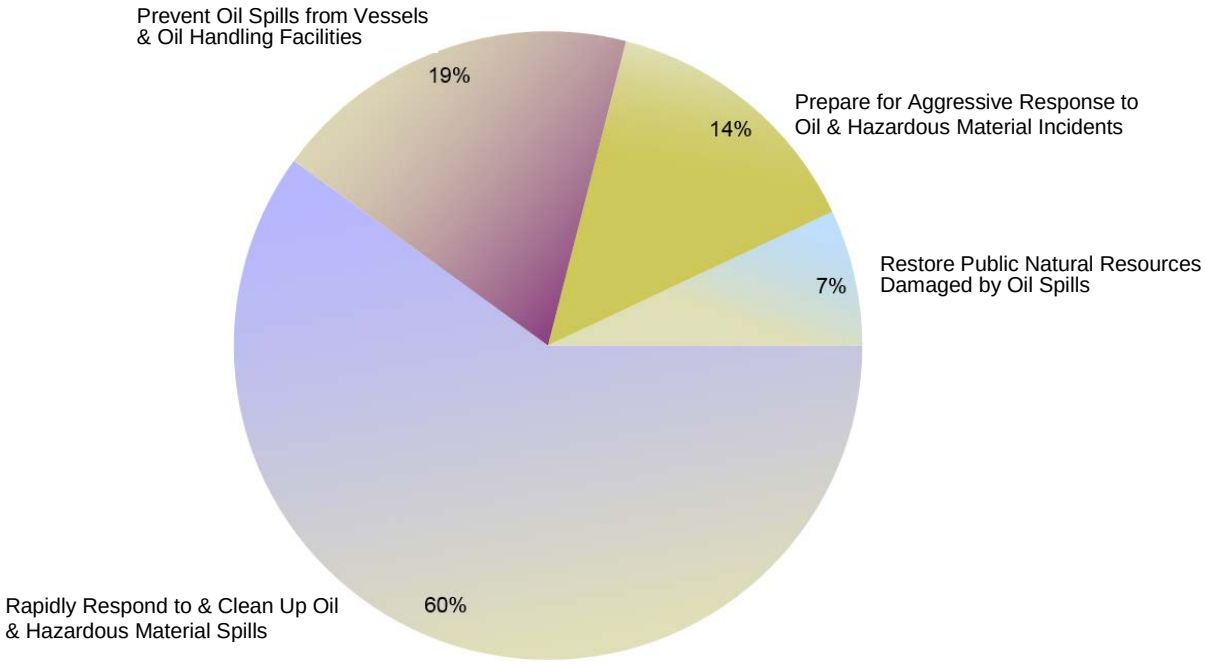
- Environmental impacts to publicly-owned natural resources from oil spills are partially mitigated (compensated for) using damage assessment funding.
- Natural resource damage assessment is done on 100 percent of oil spills where 25 or more gallons reach surface waters.
- Priority wildlife habitat is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

Performance Measure

- Percentage of completed restoration projects that meet plan specifications.

Spill Prevention, Preparedness & Response Program 2015-17 Biennium Budget By Activities

Operating Budget = $31.5 Million; FTEs = 89.2

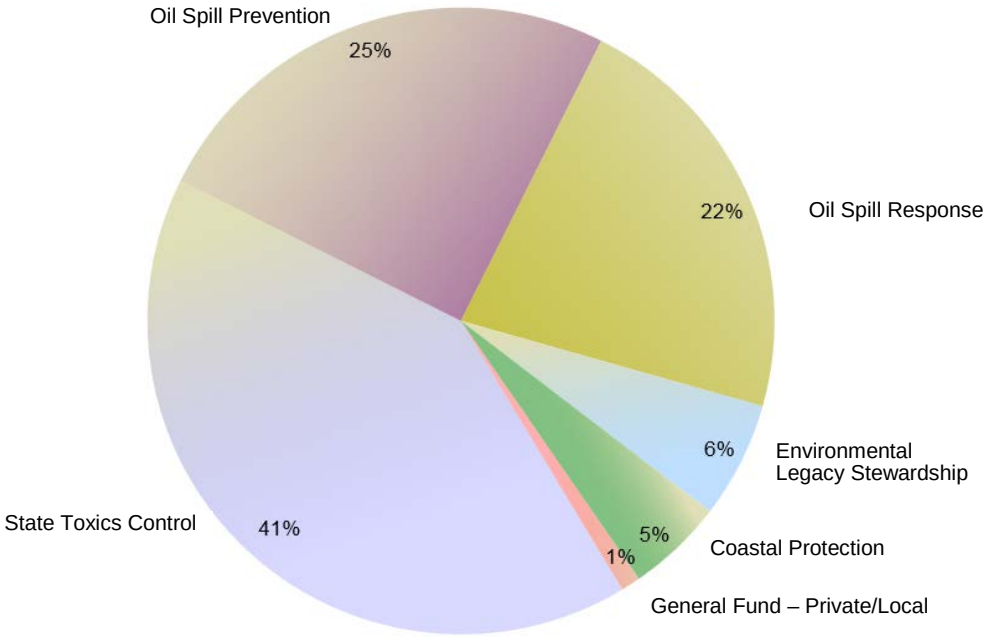


Activities	Dollars	FTEs
Rapidly Respond to & Clean Up Oil & Hazardous Material Spills (A054)	$18,855,450	41.9
Prevent Oil Spills from Vessels & Oil Handling Facilities (A033)	5,942,281	22.4
Prepare for Aggressive Response to Oil & Hazardous Material Incidents (A030)	4,525,716	22.1
Restore Public Natural Resources Damaged by Oil Spills (A055)	2,177,061	2.8
Spill Prevention, Preparedness & Response Operating Budget Total	**$31,500,508**	**89.2**

Spill Prevention, Preparedness & Response Program 2015-17 Biennium Budget By Fund Source

Operating Budget = $31.5 Million **No Capital Budget**

FTEs = 89.2



Operating Fund Sources	Amount	Uses
State Toxics Control (173)	$12,782,939	Oil spill prevention, preparedness, and hazardous material and oil spill response work including drug lab clean up.
Oil Spill Prevention (217)	7,896,003	Oil spill prevention, preparedness, and response work.
Oil Spill Response (223)	7,076,000	Oil spill cleanup where state response costs are expected to exceed $1,000.
Environmental Legacy Stewardship (19G)	1,851,696	Hazardous material and oil spill response and cleanup work.
Coastal Protection (408)	1,556,000	Restoration of natural resources damaged by oil spills and non-personnel related oil projects, research, and studies.
General Fund – Private/Local (001)	337,870	British Columbia & Pacific States oil spill task force.
Operating Budget Total	**$31,500,508**	

Spill Prev., Prep. & Resp. Operating & Capital Budget Total	**$31,500,508**

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Lower Duwamish dredging and restoration work at a site in Seattle.

Program Mission

The mission of the Toxics Cleanup Program is to protect human health and the environment for the people of Washington. 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 12,000 toxics contaminated sites since the mid-1980s. Over 6,500 of these sites resulted from underground storage tanks leaking contents into the environment and contaminating the soil or groundwater. Of the 12,065 contaminated sites, 53 percent (6,344) require no further cleanup action, and 31 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, and backyards, as well as 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 70.105D RCW, Model Toxics Control Act*
- *Chapter 90.48 RCW, Water Pollution Control Act*
- *Chapter 90.71 RCW, Puget Sound Water Quality Protection*
- *Chapter 90.76 RCW, Underground Storage Tanks*

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 citizens. Constituents interested in cleaning up contaminated sites include:

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

Issues

Managing Capital Budget

Declining oil prices have had a significant impact on Hazardous Substance Tax revenues—the main source of funding for the three MTCA accounts. The revenue decline and expenditure assumptions made in the enacted 2015-17 Capital Budget has led to changes in the management of the accounts and timing for environmental work.

The 2013 Legislature provided explicit direction when it passed 2E2SSB 5296 to manage the MTCA accounts on a cash flow basis. In 2015, the enacted Capital Budget (2EHB 1115, Section 7038) authorized Ecology to make account transfers, take a loan, and delay cleanup projects to maintain positive account balances in the three MTCA accounts. If Ecology delays cleanup projects, the following criteria must be used in the decision: acuity of need; readiness for the cleanup to proceed; cost efficiency; and the need to ensure geographic distribution throughout the state.

Ecology developed a MTCA Cash Management Plan for the 2015-17 Biennium with the Office of Financial Management (OFM) review and approval. The Plan guides how Ecology manages the MTCA accounts as we implement Section 7038 and the enacted budget's expenditure assumption. The assumption is that MTCA accounts will spend less than 100 percent of selected new appropriations and reappropriations in the 2015-2017 Biennium.

Now, tightened assumptions and criteria are in place to make decisions about starting cleanup projects. The same process will also determine if and when a cleanup project should be delayed. Decisions to stop signed contracts or grants will be the last option we consider.

In all decisions, protecting human health will be the most important consideration.

Yard Programs and Mine Cleanups Using the Asarco Bankruptcy Settlement

Large areas of Western Washington soils are contaminated with low to moderate levels of arsenic and lead from the Asarco smelters in the Everett and Tacoma areas. Asarco filed for Chapter 11 bankruptcy, the largest environmental bankruptcy ever filed in the United States. Washington received a settlement in late 2009 to address the smelter contamination. The settlement also provided funds for cleanup at mine sites in Northwestern and Eastern Washington, and for the B&L Woodwaste site.

Ecology is working under a 10-year plan to address the Tacoma Smelter Plume contamination (impacting over 1,000 square miles). In 2013, Ecology began the new Residential Yard Sampling and Cleanup Program (Yard Program). It provides free soil sampling for nearly 5,000 yards in the most highly impacted areas of the plume, and cleanup for yards with over 100 parts per million (ppm) of arsenic. Planned and completed yard work includes:

- Nearly 3,000 yards have already completed sampling and the remainder will be completed this biennium.
- Over 60 yards have already completed cleanup and plans are underway for over 100 more yards to be cleaned up this biennium.

Ecology is providing free technical assistance to developers doing soil sampling and cleanup as part of their projects. Local governments are being encouraged to require sampling and cleanup as a permit condition. We are meeting with local governments to discuss possible strategies to institutionalize sampling and cleanup during development throughout the plume area. To date, over 300 acres have been cleaned up during development.

Last year, the Soil Safety Program completed cleanup on eight acres at Vassault Park, one of Tacoma Metro Parks' largest facilities. Ecology will complete cleanup at the last three Metro Parks facilities over the next two years. Cleanup is underway at Baltimore and Optimist Parks, and plans are set for Fort Nisqually for winter 2016.

Ecology continues to partner with the local health departments in King, Pierce, and Thurston counties. The health departments provide broad-based and targeted outreach to residents in their counties—including free home soil testing educational programs in areas likely to have elevated arsenic and lead.

Ecology also developed a 10-year plan to address Everett Smelter contamination and four mine sites in Central and Eastern Washington. In the next two years, Ecology will continue sampling and soil cleanup in residential yards in Everett. To date, more than 280 properties have been cleaned

up. Outreach and education also continue in Everett. Cleanup is planned in three city parks over the next two years. American Legion Memorial Park cleanup is already underway and should be complete by early 2016.

An investigation and study were completed for the Lowlands Area (industrial area on the east side of the cleanup area) in 2014-15. A draft plan will be developed over the next two years, followed by cleanup actions when funding becomes available.

At the mine sites, sampling and cleanup work continue at three of the four sites. Investigations at the Cholette Mine determined no cleanup was needed. Ecology continues to manage cleanup activities at the B&L Woodwaste site, including treating arsenic-contaminated groundwater near the landfill.

Record of Decision for the Lower Duwamish Waterway Cleanup (November 2014)

The Lower Duwamish Waterway (LDW) site is located within King County and is approximately five miles long (10 miles of shorelands). It is the only major river that flows through the largest city in the state. There are nearly 200 confirmed or suspected contaminated sites within the 32 square miles of stormwater drainage area to the LDW. This drainage area makes up the Source Control area that Ecology, with local governments, is working to identify where and how contaminants are reaching the LDW. Ecology's Source Control area includes both residential and industrial upland uses, making for a very large and complex site with its multiple sources of contamination.

The U.S. Environmental Protection Agency (EPA) added the waterway to the National Priorities List under its Superfund cleanup program in 2001. A 2014 Record of Decision provided a cleanup plan and estimated that the cost for in-water cleanup work will be $342 million. Contaminants found in waterway sediments include polychlorinated biphenyls (PCBs), carcinogenic polycyclic aromatic hydrocarbons (cPAHs), dioxins/furans, phthalates, arsenic, and other metals. These contaminants may pose a threat to people, fish, and wildlife.

Ecology's source control effort is a critical part of reducing contaminants in the LDW so that EPA's in-water sediment cleanup is effective. Ecology's goal is to sufficiently control contaminant sources before EPA's active sediment remediation work begins. Source control will reduce the potential for recontamination and allow partially cleaned up sediments to naturally recover.

There are several major concerns for human and environmental health due to the river's active use. The river:

- Is used for recreation.
- Is used for fishing including tribal use.
- Has contaminants in the sediments that can be carried through the food chain to fish and then to people.
- Is a working waterway and a large number of people live and work there.
- Has current and active industry (unlike Commencement Bay, where polluting activities have declined).

Cross-program efforts between Ecology's Toxics Cleanup and Water Quality Programs are critical. Challenges arise between Ecology and complementary federal divisions because the regulations that guide them are not always in sync with the cleanup efforts. How Ecology is addressing these challenges has gained national recognition. The LDW is one of two projects in the nation where EPA is also bringing their cleanup and water quality staff together to solve very complex cleanup issues in active industrialized areas.

There are currently 30 major cleanup efforts under formal orders by the various federal and state agencies in the LDW source control area.

Underground Storage Tanks

Ecology currently regulates more than 9,200 tanks at more than 3,400 facilities. Facilities include gas stations, industries, commercial properties, and governmental facilities. Ecology works to ensure these tanks are installed, managed, and monitored to prevent releases into the environment. This includes protecting groundwater that may be the drinking water source for a community. Ecology conducts compliance inspections at about 1,200 facilities each year and also provides technical assistance to tank owners.

Earlier this year, EPA adopted changes to the federal underground storage tank (UST) rule (40 CFR Part 280). This is the first major revision to the federal rule since 1988. The changes implement requirements in the UST Compliance Act of 2005, add new operation and maintenance requirements

for UST systems, and establish requirements for certain types of UST systems deferred in the 1988 rules.

EPA also adopted changes to the state program approval requirements (40 CFR Part 281) to reflect the changes in the federal UST rule. States with approved programs must incorporate the new federal requirements within three years (by June 2018) to maintain program approval.

Washington State has an approved UST program. This means that state law, not federal law, applies to regulated UST systems in the state (except for those in Indian country). This also means that the new federal requirements do not apply to UST systems in the state unless or until they are incorporated into the state's rules. Some of the new federal requirements, such as those governing operator training, are already included in the state's rules.

To maintain state program approval, the state's requirements must be revised to be at least as stringent as the new federal requirements. Ecology plans to amend the state rule (Chapter 173-360 WAC) by EPA's June 2018 deadline to incorporate any new federal requirements not already included in the state rule.

Right now, Washington's UST law (Chapter 90.76 RCW) has a sunset date of June 30, 2020. Without the law, the state program would be dissolved, and EPA would take responsibility for inspections and enforcement in Washington. Ecology is better suited to handle these tasks. Ecology staff are more knowledgeable about local concerns and issues and emphasize assistance and education. A state is also able to be more responsive and accountable to the regulated community when implementing and enforcing the law. Ecology will work with the Legislature over the next few years to extend the sunset date beyond June 30, 2020.

Continuing to Implement SB 5296

Ecology started the Integrated Planning Grant Program (IPG) in 2007. This stemmed from our desire to clean up more sites and also help local governments take the next step in cleaning up and redeveloping property. Over the next six years, the program proved successful and was formalized in 2013 through SB 5296 (RCW 70.105D.150).

The IPGs help local governments understand the risks and opportunities with contaminated sites so they can move more confidently into cleanup and redevelopment. Local governments were also authorized to create brownfield renewal authority and redevelopment opportunity zones (ROZ).

The benefit of these zones is that they become a way for local governments to focus theirs and Ecology's resources within a limited geographic area with multiple contaminated sites. This allows for expedited cleanups in these areas so redevelopment can happen more quickly. This change also supports access to a "brownfield redevelopment and trust fund account," which can be used to secure long-term funding for cleanup (RCW 70.105D.140).

New Remedial Action Grant categories were also developed to reflect legislative requests. Clear criteria to establish eligibility and funding priorities were developed to determine which applications have the greatest chance for success. Criteria includes considerations like:

- Threat to human health and the environment.
- Within a ROZ or highly impacted community.
- Strong land reuse potential.
- Readiness to proceed with cleanup.
- Whether the will grant expedite the cleanup.

Ecology was also directed to implement new tools, such as model remedies, to streamline and accelerate the pace of cleanups. We have completed seven models for sites with petroleum contaminated soils. Petroleum contamination is the most common contaminate found.

Sites that meet the eligibility criteria and provisions for a specific model remedy can bypass the Feasibility Study and/or Disproportionate Cost Analysis, which saves the site owner time and money. Ecology expects to develop model remedies for sites with groundwater impacts from petroleum and other contaminants in 2016.

Use of the Voluntary Cleanup Program Grows as the Economy Recovers

The Voluntary Cleanup Program (VCP) helps site owners who want to voluntarily clean up their contaminated sites. Cleaning up contaminated sites not only protects human health and the environment, it also makes it easier for property owners during property transactions.

People may enroll in the voluntary program if Ecology is not currently conducting work under an order or decree, or if access to the property with the

contamination has been acquired. Entering the voluntary program is not an admission of liability, and people can withdraw from the program at any time.

The benefits of entering the voluntary program include control over the scope and schedule of the cleanup, and the extent of state involvement. Limitations include liability or contribution protection.

Interest in the VCP continues to be a workload challenge for Ecology. The number of property owners that approach Ecology for assistance fluctuates with changes in the market, redevelopment needs, and access to financing. With the steady rise in the economy, more people are requesting to enter the VCP and begin cleanup actions.

The intent of the VCP is to handle less complex sites. The current trend and influx of site work includes requests to work on more complex sites, which are traditionally cleaned up through a formal process. This trend suggests there are more complex sites that need to be cleaned up, and these sites take more time to clean up. Ultimately, Ecology wants sites to go through a cleanup route that is best for our communities and the site owners, and we also want to keep less complex sites flowing through the voluntary program.

Activities, Results & 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.
- May affect people that are living, working, or recreating near the site.
- 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.

Manage Underground Storage Tanks to Minimize Releases

Ecology currently regulates over 10,000 active tanks on over 3,600 different properties, including gas stations, industries, commercial properties, and governmental entities. We ensure tanks are installed, managed, and monitored according to federal standards and in a way that prevents releases into the environment. This is done through compliance inspections and providing technical assistance to tank owners and operators. Properly managing such tanks saves millions of dollars in cleanup costs and prevents contamination of limited drinking water and other groundwater resources.

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.

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.
- Independent, with some Ecology assistance or review.
- With Ecology oversight under a signed legal agreement (an agreed order or consent decree).

Voluntary cleanups may be done through:

- Consultations.
- Prepayment agreements.
- Prospective purchaser agreements.
- Brownfields redevelopment.

The voluntary cleanup program minimizes the need for public funding used for such cleanup and promotes local economic development through new industries and other beneficial uses of cleaned properties.

Expected Results

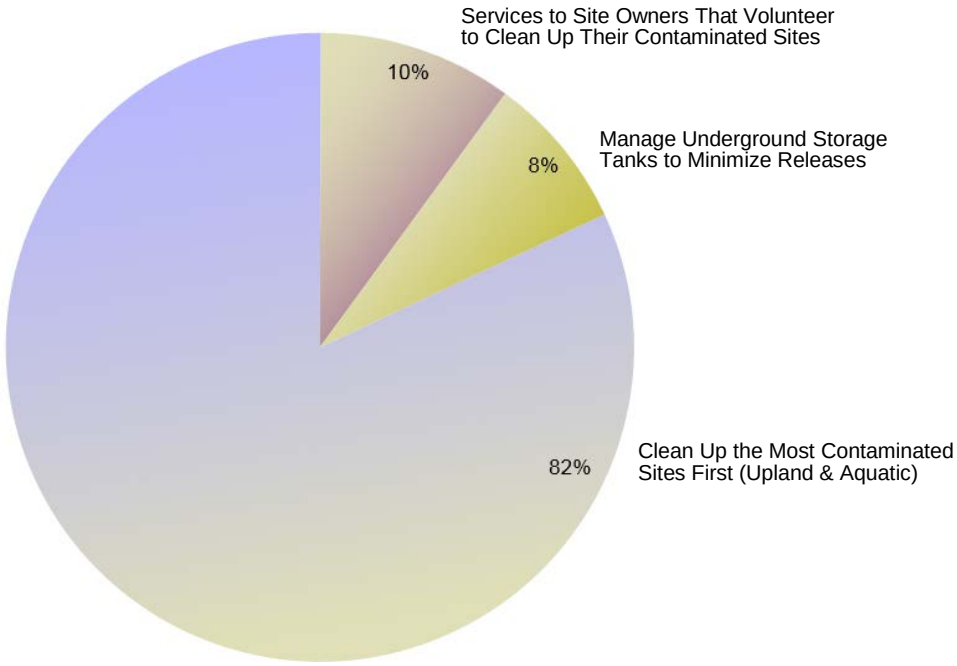
- Three percent increase in the number of contaminated sites that are voluntarily cleaned up by site owners and prospective buyers using private funding.
- Public and environmental health is protected. Cleaned sites are ready for redevelopment and job creation.
- Increased number of sites with cleanup 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

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

Toxics Cleanup Program 2015-17 Biennium Budget
By Activities

Operating Budget = $55.2 Million; FTEs = 196.6

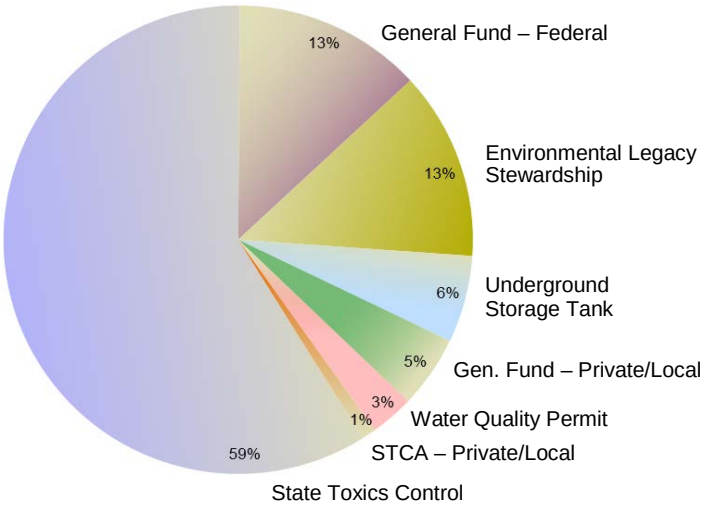


Activities	Dollars	FTEs
Clean Up the Most Contaminated Sites First (Upland & Aquatic) (A005)	$45,345,273	145.0
Services to Site Owners that Volunteer to Clean Up Their Contaminated Sites (A057)	5,485,200	28.0
Manage Underground Storage Tanks to Minimize Releases (A023)	4,382,046	23.6
Toxics Cleanup Operating Budget Total	**$55,212,519**	**196.6**

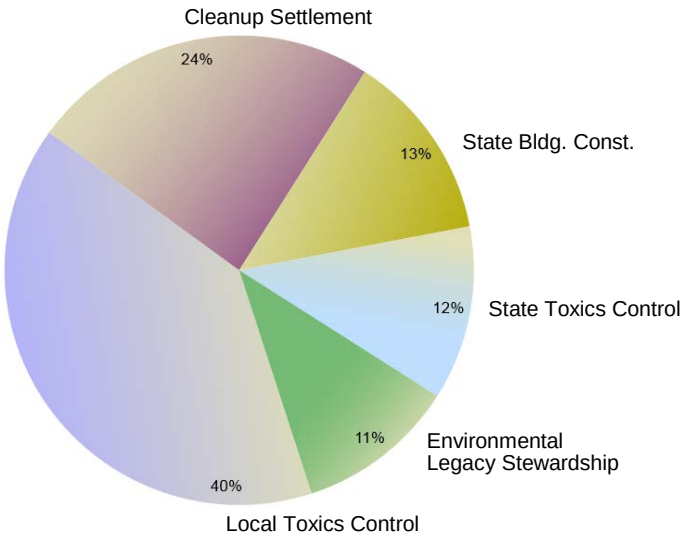
Toxics Cleanup Program 2015-17 Biennium Budget
By Fund Source

Operating Budget = $55.2 Million

FTEs = 196.6



Capital Budget = $171.8 Million



Operating Fund Sources	Amount	Uses
State Toxics Control (173)	$32,709,034	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.
General Fund – Federal (001)	7,386,894	Activities and funding for cleanup at National Priorities List sites and federal Superfund sites at military facilities, and technical assistance/cleanup related to leaking underground storage tanks.
Environmental Legacy Stewardship (19G)	7,101,606	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.
Underground Storage Tank (182)	3,210,111	Pollution prevention, inspection, and permitting activities related to underground storage tanks.
General Fund – Private/Local (001)	3,003,740	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)	1,302,134	Sediment source control.

State Toxics Control – Private/Local (173)	499,000	Activities related to the cleanup of leaking underground storage tanks (LUST). Prepayment agreements and recovered LUST.
Operating Budget Total	**$55,212,519**	

Capital Fund Sources	**Amount**	**Uses**
Local Toxics Control (174)	$68,582,100	Remedial Action Grant Program funding local government grants. Administration of the Remedial Action Grants, which provides fiscal oversight of the program.
Cleanup Settlement (15H)	41,521,028	Skykomish Cleanup Project and continues remediation activities for the Asarco Tacoma smelter plume, Everett smelter site, and mine sites in central Washington.
State Building Construction (057)	22,756,000	Remedial Action Grant Program funding local government grants. Administration of the Remedial Action Grants, which provides fiscal oversight of the program. Land purchases on Vashon/Maury Island.
State Toxics Control (173)	20,444,000	Investigate and cleanup toxic sites. Includes new and reappropriations for Cleanup Toxic Sites – Puget Sound and the Eastern Washington Clean Sites Initiative to cleanup orphaned or abandoned sites, cleanup 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. Safe soils remediation at school sites in central Washington.
Environmental Legacy Stewardship (19G)	18,504,829	Investigate and cleanup toxic sites. Includes reappropriations for Cleanup Toxic Sites – Puget Sound and the Eastern Washington Clean Sites Initiative to cleanup orphaned or abandoned sites, cleanup sites with non-compliant owners, fund emergency removals, and invest where state funding can advance cleanups and build partnerships.
Capital Budget Total	**$171,807,957**	
Toxics Cleanup Operating & Capital Budget Total	**$227,020,476**	

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Ecology's Waste 2 Resources Program works with solid waste landfills, recycling facilities, and composting operations in Washington. Through permitting, efficient regulation, and technical assistance, the W2R Program helps these facilities protect our state's land, air, and water.

Program Mission

The mission of the Waste 2 Resources Program is to reduce wastes through prevention and reuse; keep toxics out of the environment; and safely manage what remains.

Environmental Threats

Washington State has a system of waste management that relies on partnerships of state and local governments, and the private sector. State law requires Ecology to develop regulations for solid waste handling and disposal facilities, and a state plan, called *The Solid and Hazardous Waste State Plan: Moving Washington Beyond Waste and Toxics*.

Local governments are required to develop local solid and hazardous waste plans that align with the State Plan, and address their needs for managing local solid and hazardous wastes. Solid waste facilities, waste and recycling collection and processing, waste prevention programs, and funding for those programs must be included in plans approved by Ecology. Local fund sources, such as tipping fees and Coordinated Prevention Grants that Ecology oversees, support implementing those plans and programs.

Ecology provides technical assistance to local governments for their plan development and implementation. The private sector provides much of the waste and recycling services in the state, and owns and operates many of the waste handling, recycling, and disposal facilities.

As Washington's population grows, so does the amount of waste it produces. The character of the waste stream has changed over time, along with the way we manage the waste. There is increasing demand to recover and reuse materials for a higher use than disposal.

Chapter 70.95 RCW, Solid Waste Management – Reduction and Recycling, the primary statute for solid waste management in the state, establishes waste prevention as the first goal for solid waste management. This is reflected in *The State Solid and Hazardous Waste Plan: Moving Washington Beyond Waste and Toxics.* Preventing waste in the first place is the smartest, cheapest, and healthiest approach to waste management.

Consistent with implementing state and federal laws, Ecology develops regulations to prevent improper disposal of hazardous and toxic wastes, and requires better designed landfills that are environmentally monitored while they are actively used, and for 30 years or more after they have closed. The goal is to ensure contaminants do not reach the environment through groundwater, surface water, or discharges to the air.

Ecology provides technical assistance to facility owners and operators and local jurisdictional health departments (JHDs), which are responsible for permitting and compliance of solid waste handling facilities within their boundaries. Ecology provides hydrogeologic and engineering assistance to the majority of JHDs, because they lack this technical expertise. This assistance includes reviewing landfill cover design and operational issues, like landfill liners, leachate collection systems, and groundwater sampling. This protects ground and surface water, and air.

Ecology also provides technical assistance for other solid waste handling facilities, such as transfer stations, compost facilities, and household hazardous waste facilities. Ecology staff review all

permits JHDs issue and help interpret the state's regulations.

While solid waste landfills have become more protective of the environment, disposal of certain wastes still poses potential threats. The waste stream itself has changed with new products, such as electronics and mercury lamps, which contain toxic materials. Keeping toxics out of the landfill in the first place provides the best environmental protection.

The need to reduce potential environmental threats from toxic components in electronic products and mercury lamps has helped create two product stewardship or take-back laws in Washington: E-Cycle Washington, for computers, monitors, and TVs; and the new LightRecycle Washington Program for mercury-containing lights. The E-Cycle Washington Program began in 2009 and has resulted in keeping 280 million pounds of electronics containing toxic substances out of landfills. The LightRecycle Washington Program started on January 1, 2015. There are now 315 collection sites around the state that collected more than 422,000 lights in the first six months of the program's operation.

We dispose of many wastes now that have value and could be used in a beneficial way. Ecology is working with others to improve recovery and management of those beneficial materials. We need to ensure those uses protect the environment, reduce the use of expensive raw materials, and benefit economic vitality.

Recycling traditional commodities, such as aluminum cans and paper, has become common in most areas, as has comingled curbside collection of these materials. Recycling helps reduce the amount of waste going to landfills. Recycling also reduces the need for raw materials, when recycled commodities can be substituted, which conserves energy and reduces greenhouse gas emissions.

Organic materials make up about 30 percent of the municipal solid waste generated by Washington residences, businesses, and institutions. Despite increasing infrastructure to beneficially reuse these materials, many organic materials—food waste, yard waste, compostable paper, and clean wood—are still landfilled or incinerated. Keeping organics out of landfills reduces greenhouse gas emissions by decreasing methane production, a potent greenhouse gas that is released during decomposition. Turning organics into compost, bioenergy, biofuels, and other products instead of landfilling them, promotes economic vitality in growing industries; provides valuable soil amendments that provide nutrients to plants; holds moisture in soils; and can sequester carbon.

Ecology oversees the state's biosolids program. We develop the standards and permit wastewater treatment plants, biosolids beneficial use facilities, septage management facilities, and compost facilities that use biosolids as feedstocks. Applying biosolids to land provides a valuable soil additive that improves soil structure and moisture holding capacity, and can substitute for chemical fertilizers.

Ecology enforces requirements for proper handling, quality standards, and rates at which biosolids are applied to the land. This protects human health and the environment, while providing farmers and foresters a beneficial nutrient source. A fee paid by wastewater treatment plants supports Ecology's biosolids program.

Major industries in the state, such as pulp and paper, aluminum smelting, and oil refineries have the potential to have a major impact on the environment. Washington's industries want a level playing field, clear permit conditions, and communication with regulators. Ecology's Industrial Section provides industries with a single point of contact for improved environmental permitting, compliance, and technical assistance to help industries minimize impacts to our air, land, and water.

Authorizing Laws

- *Chapter 49.70 RCW, Worker and Community Right-to-Know Act*
- *Chapter 70.105 RCW, Hazardous Waste Management*
- *Chapter 70.105D RCW, Hazardous Waste Clean Up – Model Toxics Control Act*
- *Chapter 70.132 RCW, Beverage Containers*
- *Chapter 70.138 RCW, Incinerator Ash Residue*
- *Chapter 70.270 RCW, Replacement of Lead Wheel Weights*
- *Chapter 70.275 RCW, Mercury-containing Lights – Proper Disposal*
- *Chapter 70.295 RCW, Storm water pollution-Coal Tar*

- *Chapter 70.93 RCW, Waste Reduction, Recycling and Model Litter Control Act*
- *Chapter 70.94 RCW, Washington Clean Air Act*
- *Chapter 70.95 RCW, Solid Waste Management – Reduction and Recycling*
- *Chapter 70.95C RCW, Waste Reduction*
- *Chapter 70.95D RCW, Solid Waste Incinerator*
- *Chapter 70.95F RCW, Labeling of Plastics*
- *Chapter 70.95I RCW, Used Oil Recycling*
- *Chapter 70.95J RCW, Municipal Sewage Sludge – Biosolids*
- *Chapter 70.95M RCW, Mercury*
- *Chapter 70.95N RCW, Electronic Product Recycling*
- *Chapter 90.48 RCW, Water Pollution Control Act*
- *Chapter 90.52 RCW, Pollution Disclosure Act*

Constituents/Interested Parties

- *Federal, state, and local governments.*
- *Environmental organizations.*
- *Businesses.*
- *Citizens.*
- *Solid waste and recycling companies.*

Issues

Coordinated Prevention Grants for Local Governments

Coordinated Prevention Grants (CPGs) are grants to local governments to support essential programs that implement local solid and hazardous waste plans. Local solid and hazardous plans are required under Chapter 70.95 RCW, Solid Waste Handling and Chapter 70.105 RCW, Model Toxics Control Act (MTCA). These plans help protect human health and the environment through proper management and disposal of solid and hazardous waste. Grant projects fund regulation of local solid waste facilities, reduce human exposure to toxins by providing safe collection of household hazardous wastes, and support resource conservation through recycling and reuse programs.

The availability and amount of CPG funds depends on legislative appropriations. Ecology requested $29.6 million for the 2015-17 Biennium, but was only appropriated $15 million. Estimated repercussions of this 49 percent budget reduction include:

- 2,500 fewer actions for solid waste enforcement for illegal dumping and technical assistance.
- 70,000 fewer tons of materials recycled, composted, or otherwise diverted from disposal.
- 180 grant-funded jobs eliminated, along with the associated waste and recycling services.

Given the importance of this funding to local governments for solid waste enforcement, recycling, and reduction work, Ecology plans to ask the Legislature to restore CPG up to the requested level when MTCA revenue recovers.

Waste Reduction, Recycling and Litter Control Account Reductions for the 2015-17 Biennium

Since the recession, funds from the Waste Reduction, Recycling, and Litter Control Account (WRRLCA) have been diverted away from Ecology for other purposes. The 2013 Legislature passed ESSB 5897, requiring $10 million of revenue from WRRLCA to be deposited in the State Parks Renewal and Stewardship Account in the 2013-15 and 2015-17 biennia. The funding is to be used for maintaining state parks. Because of this reduction, some specific activities were suspended.

Preventing and Cleaning Up Litter with Reduced Funding

The two-biennium fund diversion caused a significant reduction in the work we have been able to do. In the 2013-15 Biennium, the Legislature also appropriated $1.7 of WRRLCA to State Parks, in addition to the $10 million diversion. But, in the 2015-17 Biennium, the Legislature appropriated the fund balance in WRRLCA to Ecology rather than State Parks, which will increase litter pickup and other work we can do this biennium. With this increase in funding, we plan to increase a number of activities, targeting money toward high-performing partners. These activities are:

- Hire more crews for the Ecology Youth Corps.
- Increase funding to our local government partners in the Community Litter Cleanup Program for litter pickup on county roads, and tools and trucks for them to do this work.
- Increase funding to our state agency partners for recycling and litter pickup through interagency agreements. In the 2013-15 Biennium, we were only able to provide funding to the departments

of Corrections and Natural Resources. This biennium we will also be able to provide funding to the departments of Fish and Wildlife and Transportation, and potentially the State Patrol.
- Start the competitive grant program that was authorized by the Legislature in 2015. Local governments and nongovernmental organizations can apply for grants to provide education on litter prevention and recycling.

Although none of these activities will be fully funded at previous levels, there will be an increase over the past biennium.

Other specific litter related activities are still suspended due to reduced funding:

- Ecology's litter prevention campaign and the litter survey are suspended. Surveys had shown a 25 percent reduction in litter because of the prevention campaign.
- The litter hotline where citizens could report observed littering is no longer in service, resulting in less education and outreach to the public.
- Washington State Patrol's emphasis on secured load requirements is suspended. This has resulted in loss of immediate feedback to violators of the litter laws, and not getting motorists with dangerous unsecured loads off the state highways.

Ecology continues focusing on the most problematic waste streams as discussed in the following sections.

Managing Waste Prevention and Recycling Issues with Reduced Funding

Ecology works on many different issues that deal with waste prevention and recycling. Because of continued WRRLCA fund reductions, some specific activities are still suspended:

- The School Awards Program is suspended, resulting in fewer incentives for exceptional waste reduction and recycling efforts in schools.
- With increased funding in the 2015-17 Biennium, Ecology was able to increase the hours of operation for the 1-800-RECYCLE Hotline; but the overall number of operation hours remains below full-time operation.

We are prioritizing our technical assistance to support work on priority waste streams as discussed below.

Organics Management

Organic materials, including yard waste, food waste, land clearing debris, and construction and demolition debris have historically been a significant portion of the waste stream. To meet the state goal of recycling and reuse of organic materials, those materials are being diverted from disposal to other management options. There are concerns associated with some of the management options.

In major population centers of Western Washington, there has been an increased demand for landfill diversion options for organic wastes like residential yard debris and food wastes. Local governments and waste management companies have responded with increased collection and diversion programs. In addition to increased quantities of food and yard waste, there has also been an increase in noncompostable materials placed in collection bins. Unfortunately, the composting infrastructure has not been fully able to support the increased collection. The result has included odor problems and excess product supply.

To address these issues, in 2013, Ecology revised WAC 173.350.220, Composting Facilities. We provide technical assistance to JHDs and compost facility owners to address feedstocks, materials management, odor issues, and conditions for exempt compost facilities to improve organics management per the rule revision. Ecology is also working with local governments in their planning processes to encourage them to assess whether they have adequate facility infrastructure to handle organic materials before they implement collection programs.

Some local governments have looked at sending organics to new Eastern Washington compost facilities to reduce burdens on the facilities in Western Washington. Also, there is a desire for finished compost for agricultural uses in Eastern Washington.

Concerns about spreading apple maggots into pest-free areas is significantly impacting transport of organic materials from Western to Eastern Washington. This has become an emerging issue that could upset the flow of solid waste in Washington.

Reducing and Recycling Materials from Construction

Ecology is also focusing technical assistance efforts on reducing and recycling materials related to the construction industry. This involves using less material in the construction process, reducing the use of toxic building materials, and recovering more through deconstruction, reuse, and recycling of the construction and demolition (C&D) debris.

C&D debris makes up about 37 percent of the waste stream. Reducing, reusing, and recycling this material not only keeps it out of landfills, it reduces greenhouse gas emissions and creates needed jobs and economic stimulation. Ecology will focus efforts to ensure C&D debris collected for recycling is sent to the appropriate facility and recycled, and not disposed.

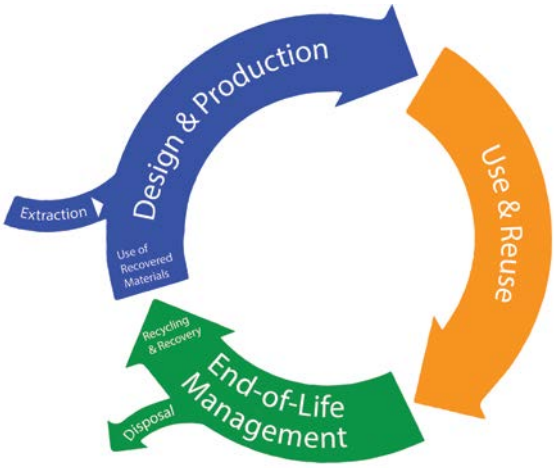
Curbside Recycling

Many communities now use comingled curbside recycling collection. While this convenient, one-bin system makes residential participation simple, it can create problems with processors and end users. Previously, Ecology assembled stakeholders in the southwest region of the state to fully understand the problems and propose solutions. Ecology is now doing this work in the northwest region and plans to extend it to the east side of the state later in the biennium.

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

The state of Washington is required by statute to have a Solid and Hazardous Waste Plan and update it regularly. The plan's purpose is to guide waste and toxics reduction and safe waste management in the state. With extensive stakeholder input, Ecology completed the 2015 update and is now beginning implementation. Goals of the plan include reducing waste and toxics, addressing issues of concern, and continuing to improve current waste management practices.

The State Plan focuses on sustainable materials management. This means looking 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 either disposed or recycled. 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. Looking at 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. A sustainable materials management approach is essential to conserving our natural resources to meet both today's needs and those of future generations.

Revising the Solid Waste Handling Standards and other Rule Revisions

In 2009, Ecology began a process to update Chapter 173-350 WAC, Solid Waste Handling Standards. In 2010, Governor Gregoire issued an executive order that temporarily suspended noncritical rule development. Ecology determined that portions of the rule were critical, and proceeded with rule revisions for composting and anaerobic digesters. Those were completed in early 2013.

In 2013, Ecology restarted the revision process for the remainder of the rule. To begin this update, stakeholder groups were formed to work on different sections of the rule, and issues were discussed in detail. This pre-work will lead to draft rule language that will then be put out for public review and comment. We expect this rule revision to be completed in the next two years.

The Waste 2 Resources Program manages 15 rules. We have reviewed them and created an update schedule. In addition to Chapter 173-350, we are currently updating six rules:

- Chapter 173-312 - Coordinated Prevention Grants.
- Chapter 173-313 - Local Solid Waste Enforcement Grants.

- Chapter 173-331 - Vehicle Battery Recycling.
- Chapter 173-351 - Criteria for Municipal Solid Waste Landfills.
- Chapter 173-900 - Electronic Products Recycling Program.
- Chapter 173-910 - Mercury-Containing Lights Product Stewardship Program.

The Waste 2 Resources Program has also participated in an agencywide Lean rule template project to help simplify and streamline Ecology's internal rulemaking process.

Increased Reliance by Local Governments on Ecology for Technical Assistance at Solid Waste Facilities

Ecology engineers, hydrogeologists, and facility specialists are funded through the Model Toxics Control Act (MTCA) accounts. These positions provide technical assistance to local jurisdictional health departments and solid waste facility owners and operators. As local governments face reduced resources, their reliance on Ecology for technical review assistance for facility designs, operations, permits, and regulatory interpretation has increased. Ecology is also providing increased technical assistance for MTCA cleanups at landfills.

Keeping Mercury out of the Environment by Recycling Mercury-Containing Lights

In 2010, the Legislature passed a law requiring producers of mercury-containing lights sold in or into Washington State for residential use to fully finance and participate in a take-back program, effective January 1, 2013. These producers were to fund Ecology's administration and enforcement costs. Guidelines and rules were developed to implement this program.

A lawsuit related to funding the program was filed and delayed implementation. The industry proposed, and legislation was passed in 2014, that allowed producer funding options to include using an "environmental handling charge" of 25 cents on each bulb sold. A producer organization, Product Care, submitted a plan to run the program, which began in January 2015. As of June 2015, there were 315 collection sites across the state and 200,000 pounds, or 422,000 bulbs, had been collected for safe recycling, keeping toxic mercury out of the environment. Ecology is currently updating the rule to reflect changes made by the 2014 legislation.

Recycling Electronics through E-Cycle Washington

E-Cycle Washington, the successful product stewardship program for computers, monitors, and TVs, is now in its seventh year. Amounts collected continue to increase or remain steady. There are regular requests from the public to accept more electronic items in this program, such as printers, keyboards, gaming systems, and other peripherals. In 2015, Ecology worked with stakeholders to consider adding these items to the law. Right now, no agreement has been reached. But requests from the public continue.

Industrial Redevelopment

Ecology works with Washington's largest refineries, pulp and paper mills, and aluminum smelters. When industries close after decades of operation, there are often residual chemical contamination issues that 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.

An example is the former Reynolds Metals aluminum smelter in Longview. This facility produced high purity aluminum for almost 60 years, and left behind residual soil and groundwater contamination. Millennium Bulk Terminals recently purchased the operations and has proposed building a coal export terminal.

As the environmental review process for the proposed coal port progresses, Ecology is working with the landowner, Northwest Alloys (Alcoa), and Millennium to clean up residual contamination at the site. Our goal is a transparent public process and a thorough cleanup so the site is ready for whatever its future use may be.

The Lilyblad site is another important cleanup project we manage. Located in Tacoma's tide flats area, years of operation as a distributer and recycler of petroleum products and solvents led to soil and groundwater contamination. While the facility no longer handles solvents or dangerous waste, some of the contamination migrated offsite and threated to reach nearby Commencement Bay. In 2009, Ecology installed an onsite treatment system using funds secured through a legal settlement and supplemented with MTCA appropriations. The treatment system captures solvents and petroleum in

groundwater and remediates residual soil contamination. We expect the treatment system will operate through 2019. This project will help protect our significant public investments in the Commencement Bay cleanup by preventing recontamination of water and sediments.

Activities, Results & Performance Measures

Eliminate Waste and Promote Material Reuse

To eliminate waste whenever possible and use the remaining waste as resources, Ecology:

- Provides technical assistance to local governments for waste reduction and recycling programs.
- Works with industry to overcome barriers to construction and demolition material reuse and recycling.
- Develops regulations and provides technical assistance to promote reuse of organic materials and ensure an environmentally compliant biosolids program in the state.
- Advises state and local governments on how to promote environmentally preferred purchasing.
- Oversees producer-managed recycling programs for electronics and mercury-containing lights.

Expected Results

- Solid waste generation per capita decrease, saving businesses and people money and saving resources for future generations.
- The state sees:
  - An increase in the recovery and use of valuable materials that traditionally have entered the waste stream.
  - An increase in the reuse and recycling of construction and demolition materials, organic matter, compost and biosolids.
  - An increase in recycling of electronics and mercury containing lights, and less waste for disposal.

Performance Measures

- Millions of tons of solid waste generated annually.
- Percentage of materials reused or recycled annually.
- Pounds of solid waste disposed annually per person by Washington residents and businesses.
- Pounds of solid waste generated per dollar (State GDP).
- Tons of electronics collected for recycling through E-Cycle Washington.
- Tons of organics recycled and diverted from landfills.

Prevent and Pick Up Litter

Litter control efforts include:

- Ecology Youth Corps litter pickup crews.
- Community Litter Cleanup contracts and coordination with other state and local efforts to maximize litter pickup.

Litter prevention and pickup helps keep Washington green, supports tourism, and provides employment opportunities to youth.

Expected Results

- Litter is picked up and illegal dumps are cleaned up in coordination with local government and state agency partners.
- Youth are employed for litter pickup by the Ecology Youth Corps.

Performance Measures

- Pounds of litter picked up annually.
- Road cleanliness rating (1 = cleanest, 6 = very littered).

Fund Local Efforts to Clean Up Toxic Sites and Manage or Reduce Waste

Coordinated Prevention Grants (CPGs) provide financial support to local governments that are:

- Implementing local solid and hazardous waste plans.
- Enforcing solid waste laws and regulations.
- Operating recycling and reuse programs.
- Reducing hazardous substance use.
- Collecting moderate risk waste (hazardous waste generated from households and small businesses).
- Increasing reuse of organic materials.
- Decreasing the amount of building construction waste generated.

Public Participation Grants (PPGs) provide funding for interest groups to inform residents of local cleanups and inform the public about waste reduction efforts.

PPGs include contaminated site focused grants that:

- Educate communities affected by contaminated site cleanups.
- Allow residents to have a voice in cleanup investigation and remediation.

PPGs also include waste management grants that educate Washington residents on:

- Reducing waste generation.
- Reducing the use of toxics.

Expected Results

- CPG projects help ensure that:
  - Over 800 solid waste facilities statewide comply with regulatory standards.
  - Instances of illegal dumping are reduced.
  - Groundwater is protected from toxins resulting from improperly disposed solid waste and toxics.
  - Moderate-risk waste is collected and handled safely.
  - Use of recycling and composting increases.
  - Use of toxics and generation of waste declines.
- Successful PPG contaminated site projects help ensure cleanup investigations have support and input from affected residents.
- Successful PPG waste management projects inform participants on environmental issues, propose solutions, and begin a process of behavioral change.

Performance Measures

- Millions of tons of solid waste generated annually.
- Percentage of materials reused or recycled annually.
- Pounds of household and small quantity generator hazardous wastes that are recycled or properly disposed.
- Tons of organics recycled and diverted from landfills.

Improve Environmental Compliance at State's Largest Industrial Facilities

Ecology provides a single point of contact for petroleum refineries, pulp and paper mills, and aluminum smelters. Rather than having multiple inspectors work on the many environmental issues at a facility, one engineer provides coverage for all media. This means more balanced regulation for these major industries.

Expected Results

- Pulp and paper facilities, oil refineries, and aluminum smelters will have improved compliance rates through:
  - One stop environmental permitting.
  - Compliance review.
  - Technical assistance.
  - Timely issuance of environmental permits.
- Current permits ensure industries meet new state and federal requirements in a timely way.

Performance Measure

- Percentage of industrial section permit actions that meet Ecology's timeliness goals.

Manage Solid Waste Safely

As the state moves toward reducing the amount and toxicity of waste, there are still wastes that need to be managed properly. Improper disposal practices of the past have resulted in today's cleanup sites. Ecology negotiates and implements cleanup orders under the Model Toxics Control Act (MTCA) at solid waste facilities.

Local health jurisdictions are responsible for facility permitting and compliance. Ecology provides:

- Technical assistance.
- Engineering and hydrogeology expertise.
- Oversight to local health departments to ensure solid waste handling and disposal facilities are in compliance with environmental requirements.

Expected Results

- Disposed solid waste is managed in environmentally compliant facilities.
- Solid waste handling and disposal practices are carried out in a way that minimizes toxic contamination to the state's groundwater, surface water, and air.
- Technical assistance is provided to jurisdictional health departments to ensure facility compliance with environmental regulations.

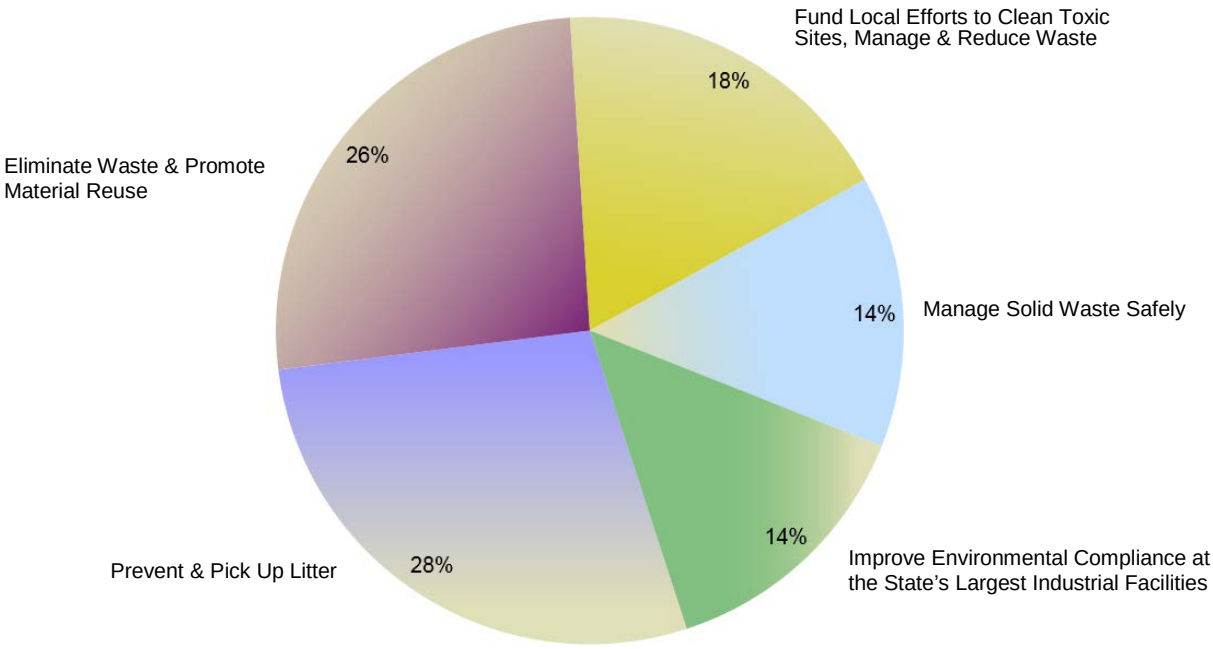
Performance Measures

- Millions of tons of solid waste generated annually in Washington.
- Pounds of household and small quantity generators hazardous wastes recycled or properly disposed.

- Percentage of regulated solid waste facilities completing annual reports.

Waste 2 Resources Program 2015-17 Biennium Budget By Activities

Operating Budget = $32.6 Million; FTEs = 113.1



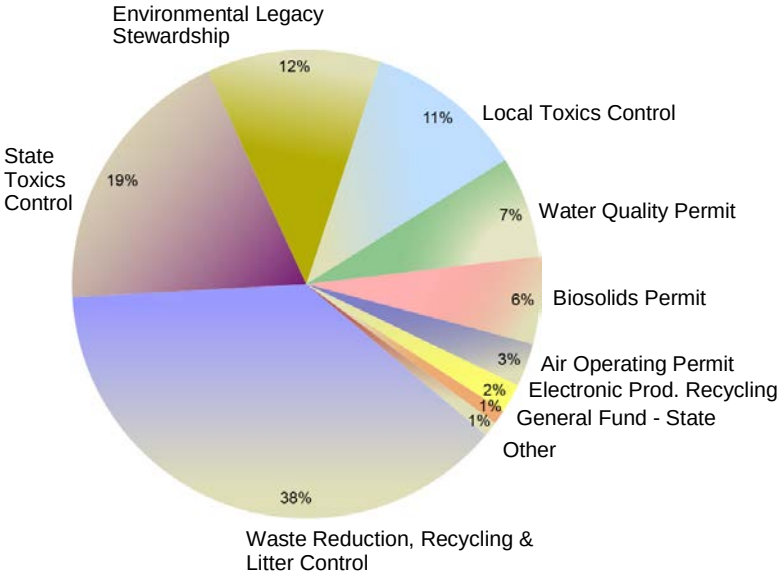
Activities	Dollars	FTEs
Prevent & Pick Up Litter (A010)	$9,118,707	29.4
Eliminate Waste & Promote Material Reuse (A009)	8,482,654	31.9
Fund Local Efforts to Clean Up Toxic Sites & Manage or Reduce Waste (A013)	5,933,027	12.1
Manage Solid Waste Safely (A064)	4,553,164	21.2
Improve Environmental Compliance at the State's Largest Industrial Facilities (A028)	4,532,823	18.5
Waste 2 Resources Operating Budget Total	**$32,620,375**	**113.1**

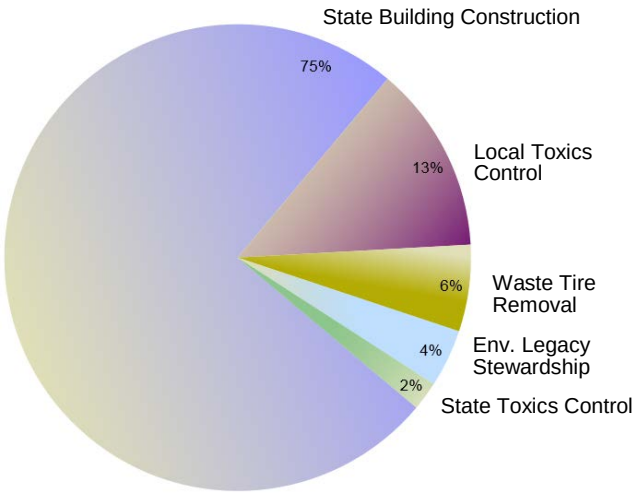
Waste 2 Resources Program 2015-17 Biennium Budget By Fund Source

Operating Budget = $32.6 Million

FTEs = 113.1

Capital Budget = $19.7 Million





Other = Product Stewardship Programs (0.61%) and General Fund – Private/Local (0.15%).

Operating Fund Sources	Amount	Uses
Waste Reduction, Recycling & Litter Control (044)	$12,395,846	Support the Ecology Youth Corps, as well as other state agency efforts to clean up litter (50%); technical assistance in waste reduction and recycling (30%); litter grants to local governments (20%).
State Toxics Control (173)	6,366,087	Provide engineering and hydrogeologic support to local health departments; regulatory compliance assistance; industrial dangerous waste and cleanup activities; provide funding for Waste to Fuels Technology project to WSU.
Environmental Legacy Stewardship (19G)	3,896,994	Provide public participation grants to citizen groups and non-profit public interest organizations to facilitate public participation in the investigation and remediation of contaminated sites.
Local Toxics Control (174)	3,637,917	Provide administrative, planning and technical assistance to local governments related to solid waste implementation and solid waste enforcement grants, and administers regional implementation of the Coordinated Prevention Grant Program (CPG). Provide technical assistance to local government to implement and regulate local hazardous waste facilities.
Water Quality Permit (176)	2,146,837	Industrial water quality permitting, inspections, and sediment source control.
Biosolids Permit (199)	1,930,869	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.
Air Operating Permit (219)	1,111,968	Industrial air quality permitting, inspections, and enforcement.

Electronic Products Recycling (11J)	682,617	Administer manufacturer registration fee collections, as well as monitor, evaluate, and implement the regulations adopted for the EPR program in rule.
General Fund – State (001)	202,738	Water quality and biosolids permit enforcement actions.
Product Stewardship Programs (16T)	198,502	Administer mercury containing lights collection and recovery program; review and approve plans and plan revisions; monitor and evaluate program operations and implement the regulations.
General Fund – Private/Local (001)	50,000	Appropriation authority for potential projects with local communities.
Operating Budget Total	**$32,620,375**	

Capital Fund Sources	**Amount**	**Uses**
State Building Construction (057)	$15,000,000	Funding grants to local governments to support essential programs that implement local solid and hazardous waste plans. Grant projects fund regulation of local solid waste facilities, reduce human exposure to toxins by providing safe collection of household hazardous wastes, and support resource conservation through recycling and reuse programs.
Local Toxics Control (174)	2,600,000	Pass through funding for cleaning up the Harbor Paper Mill site in Grays Harbor.
Waste Tire Removal (08R)	1,158,749	Statewide waste tire pile cleanup and prevention.
Environmental Legacy Stewardship (19G)	577,171	Re-appropriation for the Lilyblad site cleanup.
State Toxics Control (173)	336,000	New funding for the Lilyblad site cleanup.
Capital Budget Total	**$19,671,920**	

Waste 2 Resources Operating & Capital Budget Total	**$52,292,295**

Ralph Svrjcek examines a backwater area of the Pilchuck River in search of cool water refuges for fish.

Program Mission

The mission of the Water Quality Program is to protect and restore Washington's waters to sustain healthy watersheds and communities. Our work ensures state waters support beneficial uses including recreational and business activities, supplies for clean drinking water, and the protection of fish, shellfish, wildlife, and public health.

Environmental Threats

Water pollution threatens lakes, estuaries, streams, and groundwater across Washington State. Fish, shellfish, and other aquatic animals require clean water to survive. Water quality impacts to rivers and streams include high water temperature, low dissolved oxygen, low pH, toxics, and bacteria.

Several sources contribute to poor water quality, and chief among them is stormwater. Stormwater is rain and snow melt 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 might flow into a local waterway. And, the large impervious surfaces in urban areas increase the quantity of peak flow runoff. Untreated stormwater can make water and shellfish unsafe for humans and other 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 (TMDLs) to address those pollutants. The TMDL establishes limits on pollutants that can be discharged to the waterbody and still allow state standards to be met.

Toxic pollution 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. In spite of our efforts to date, Washington already has a significant number of waterbodies, marine sediments, and groundwater polluted by an array of contaminants.

Authorizing Laws

- *Federal Clean Water Act*
- *Federal Safe Drinking Water Act*
- *RCW 43.21A.650, Freshwater Aquatic Weeds Account*
- *Chapter 70.105D RCW, Model Toxics Control Act*
- *Chapter 70.146 RCW, Water Pollution Control Facilities Financing Act*
- *Chapter 76.09 RCW, Forest Practices Act*
- *Chapter 90.42 RCW, Water Resources Management Act*
- *Chapter 90.46 RCW, Reclaimed Water Use*
- *Chapter 90.48 RCW, Water Pollution Control Act*
- *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 Act*
- *Chapter 90.71 RCW, Puget Sound Water Quality Protection*

Constituents/Interested Parties

- *Citizens and special interest groups.*
- *Local governments, cities, and counties.*
- *Businesses and industries.*
- *Environmental organizations.*
- *State and federal governments and agencies.*
- *Tribes and tribal governments.*
- *Conservation districts.*

Issues

Point Source Water Pollution

Ecology regulates discharges of pollutants to surface and groundwaters by writing and managing wastewater discharge permits for sewage treatment plants, industrial facilities, and other general categories of wastewater dischargers. Ecology will:

- Help dischargers comply with existing permits.
- Make permits understandable and effective in protecting water quality.
- Work to increase the use of reclaimed water.

Clean Up Polluted Waters

Ecology will help local communities and businesses clean up polluted waters to meet water quality standards. Ecology will:

- Assess state waters and update the list of polluted waterbodies.
- Work with communities to clean up nonpoint source pollution.
- Identify Best Management Practices (BMPs) for nonpoint pollution sources.

Nonpoint Source Water Pollution

Nonpoint pollution is Washington's most serious pollution problem, and 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 and structural management practices. Ecology will:

- Secure federal funding to support nonpoint source work.
- Make sure forest practices are on a path to meet water quality standards.

Stormwater

Ecology helps local governments build stormwater programs in cities and counties. Our stormwater permits cover municipalities, industries, and construction projects. Ecology will:

- Help dischargers improve compliance with existing stormwater permits.
- Work to ensure that having a permit is not a competitive disadvantage.
- Help dischargers reduce contaminated stormwater run-off from their sites.

Financial Assistance

Ecology will award approximately 380 million dollars in new water quality grants and loans and continue to manage approximately 600 active grants and loans this biennium to protect public health and the environment through water quality protection and improvement. Ecology will:

- 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 to properly manage public funds with a high level of integrity and accountability.
- Effectively manage new stormwater capital improvement grants for cities and counties.
- Continue to develop an ongoing, comprehensive, statewide stormwater financial assistance program for local governments.

Activities, Results & Performance Measures

Clean Up Polluted Waters

The federal Clean Water Act requires Ecology to develop water quality standards. We identify polluted waters by reviewing thousands of water quality data samples and publishing an integrated water quality assessment report. This report lists the waterbodies that do not meet standards. Ecology then works with local interests to prepare TMDLs to reduce pollution, establish waste load allocations in discharge permits and nonpoint-source

identification and correction, and monitor the effectiveness of the improvement plan.

Expected Results

- Water quality cleanup addressing at least 53 segments and associated technical reports are submitted each year to the Environmental Protection Agency (EPA).
- Local communities get help implementing water quality cleanup plans.

Performance Measures

- Number of water quality cleanup plans submitted to the EPA.

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. Ecology provides training and assistance to communities and industries on stormwater manuals and the Western Washington hydrology model. Ecology works with local governments and other stakeholders to implement a municipal stormwater program and permitting system.

Expected Results

- Reduced contamination of streams, rivers, estuaries, lakes, and groundwater due to stormwater runoff from roads and other impervious surfaces.
- Approximately 3,800 construction and industrial stormwater dischargers that require permits are managed.
- New permit applicants get a response within 60 days of application receipt.
- Approximately 160 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.
- Number of construction stormwater inspections conducted.
- Percentage of city and county Phase II Municipal Stormwater permittees in substantial compliance with their permit.
- Percentage of construction stormwater facilities submitting discharge monitoring reports as required by permit.
- Percentage of industrial stormwater facilities submitting discharge monitoring reports as required by Permit.

Prevent Point Source Water Pollution

Ecology protects Washington's water by regulating point source discharges of pollutants to surface and groundwaters. 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. We follow the permit with regular inspections and site visits, and we use various means to provide technical assistance and follow-up on permit violations.

Expected Results

- Fewer wastewater discharges and lower toxicity through administering the permit program for 6,000 permit holders.
- 80 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 5,300 dischargers.
- 2,000 site visits are done each year.
- Approximately 2,000 wastewater treatment plant operators maintain their 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.

Provide Water Quality Financial Assistance

Ecology provides grants, low-interest loans, and technical assistance to local governments, state agencies, and tribes to allow 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, including stormwater, 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.
- Water quality is improved by awarding about $150 million in water quality grants and loans per year to local communities.
- About 150 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 600 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.

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 and providing technical assistance to address sources of pollution; encouraging community action; providing funding; progressive enforcement; and supporting local decision makers.

Expected Results

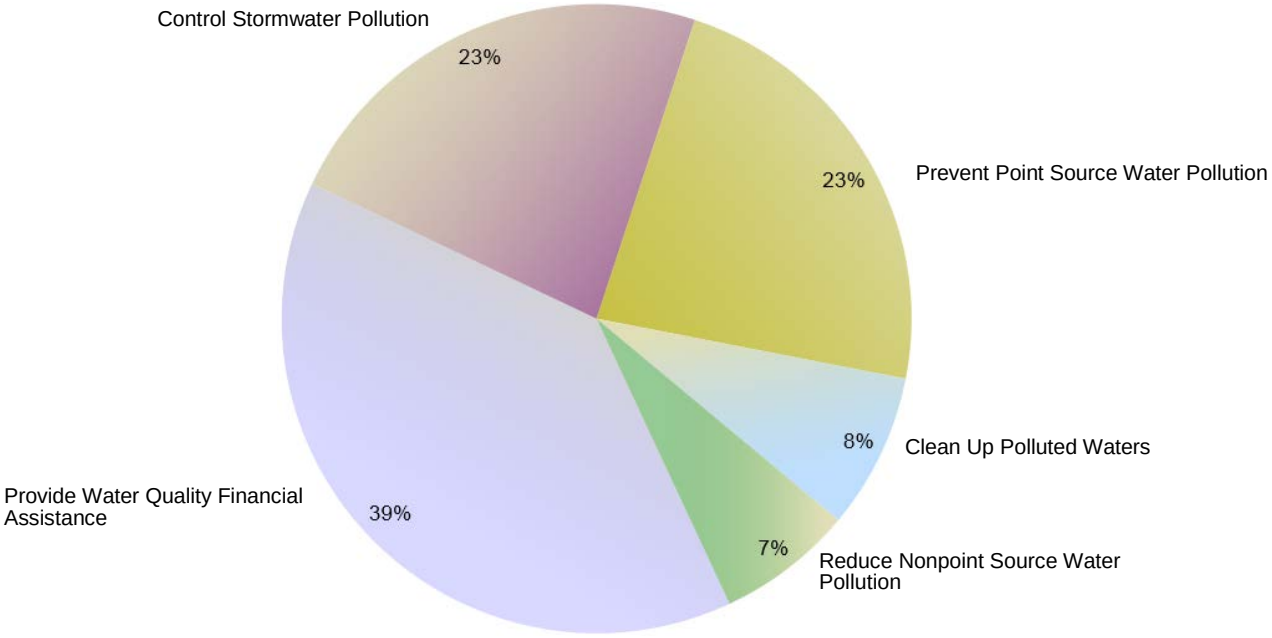
- Protection of surface and groundwater is improved through implementing the state's Water Quality Management Plan to Control Nonpoint Pollution and by implementing water quality cleanup plans (TMDLs).
- Local communities and groups get help from Ecology to implement their cleanup plans. Best management practices necessary to address non-point 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 2015-17 Biennium Budget By Activities

Operating Budget = $97.8 Million; FTEs = 260.1

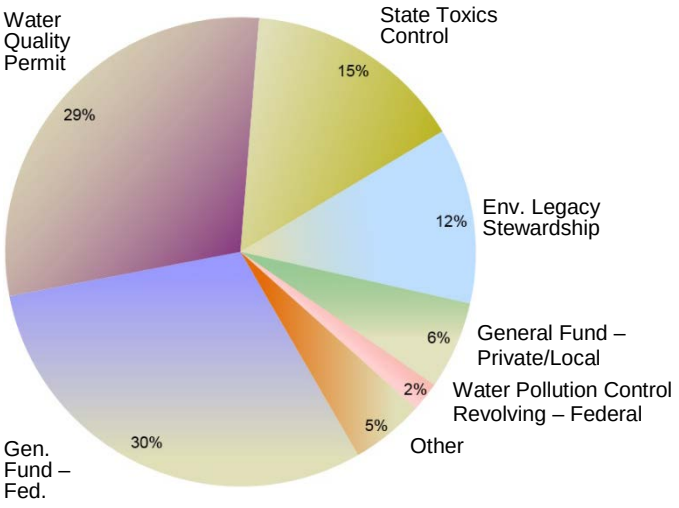


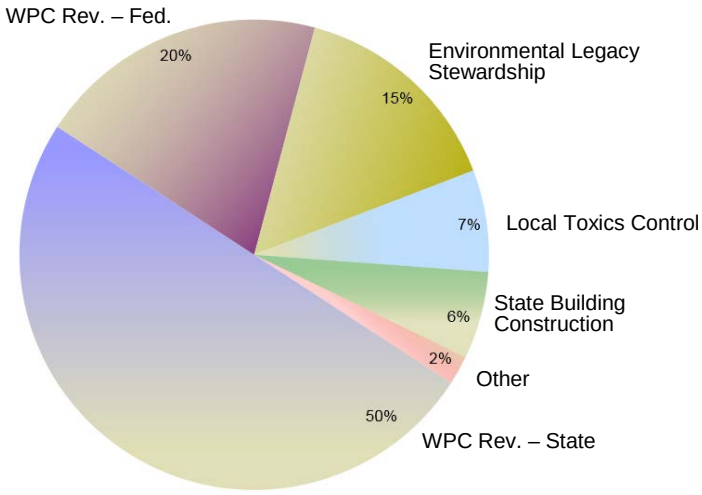
Activities	Dollars	FTEs
Provide Water Quality Financial Assistance (A043)	$38,386,233	49.2
Control Stormwater Pollution (A008)	22,595,763	58.4
Prevent Point Source Water Pollution (A032)	21,860,560	89.0
Clean Up Polluted Waters (A006)	8,109,450	33.5
Reduce Nonpoint Source Water Pollution (A049)	6,841,342	30.0
Water Quality Operating Budget Total	**$97,793,348**	**260.1**

Water Quality Program 2015-17 Biennium Budget
By Fund Source

Operating Budget = $97.8 Million **Capital Budget = $524.0 Million**

FTEs = 260.1





Other = Freshwater Aquatic Weeds (1.18%), Reclamation (1.12%), Aquatic Algae Control (0.52%), Water Pollution Control Revolving – State (0.48%), Water Pollution Control Revolving Administration (0.45%), and General Fund – State (0.38%).

Other = State Toxics Control (1.60%) and Columbia River Basin Water Supply Development (0.01%).

Operating Fund Sources	Amount	Uses
General Fund – Federal (001)	$29,594,648	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.
Water Quality Permit (176)	28,880,265	Issue and manage federal and state wastewater discharge permits.
State Toxics Control (173)	15,138,152	Stormwater management; water quality standards; aquatic pesticides management; water quality financial assistance.
Environmental Legacy Stewardship (19G)	11,862,155	Funding originally appropriated in STCA and LTCA are partially shifted on an ongoing basis pursuant to Chapter 1, Laws of 2013, 1st sp. S. (2E2SB 5296) into the Environmental Legacy Stewardship Account (ELSA). This includes $8.9M from the LTCA designated for stormwater capacity grants and stormwater grants of regional or statewide significance. Also, provides funding for Water Quality staff that work with local governments and other stakeholders to implement a municipal stormwater program and permitting system.
General Fund – Private/ Local (001)	6,047,368	Administer the Regional Stormwater Monitoring Program (RSMP) and provide technical expertise to local government water quality projects such as King County's Brightwater Wastewater Treatment Plant and the Sound Transit Authority's light rail project.
Water Pollution Control Revolving – Federal (727)	2,222,665	Administer a loan program for constructing or replacing water pollution control facilities. Activities include portfolio management and technical assistance to local governments for point, nonpoint, and estuary projects.

Freshwater Aquatic Weeds (222)	1,158,837	Grants to local governments to prevent, remove, or manage invasive freshwater aquatic weeds.
Reclamation (027)	1,095,250	Funding provided to Ecology and the Department of Fish and Wildlife to license, re-license, and monitor the effects of hydroelectric projects on water, fish and wildlife.
Aquatic Algae Control (10A)	508,950	Grants to local governments to prevent, remove, or manage freshwater and saltwater aquatic blue-green algae.
Water Pollution Control Revolving – State (727)	469,582	Administer a loan program for constructing or replacing water pollution control facilities. Activities include portfolio management and technical assistance to local governments for point, nonpoint, and estuary projects.
Water Pollution Control Revolving Administration (564)	442,439	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 – State (001)	373,037	Enforcement of permit requirements; Puget Sound Plan activities such as nonpoint source watershed management; forest practices compliance; water cleanup plans; data management, and aquatic plant management. This funding is also utilized as state match needed to secure federal funding.
Operating Budget Total	**$97,793,348**	

Capital Fund Sources	**Amount**	**Uses**
Water Pollution Control Revolving – State (727)	$264,515,000	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)	102,887,000	Federal funds for loans for constructing or replacing water pollution control facilities, nonpoint source control activities, and estuary management.
Environmental Legacy Stewardship (19G)	77,431,895	Funding for long-term competitive stormwater projects (statewide).
Local Toxics Control (174)	38,612,779	Grants for statewide stormwater projects to local governments for plan, design, and construct stormwater retrofit or low-impact development projects.
State Building Construction (057)	32,169,482	New appropriations and re-appropriations for the Centennial Clean Water Program provide grants for water pollution control facilities and nonpoint source control. New appropriations provide grants for the Stormwater Financial Assistance Program.
State Toxics Control (173)	8,392,000	Re-appropriations for the Centennial Clean Water Program provide grants for water pollution control facilities and nonpoint source control.
Columbia River Basin Water Supply Development (10P)	35,000	State dollars provide funding for the Lower Yakima Valley Groundwater Management Area (GWMA) in Yakima County and are used to develop the groundwater management program in accordance with WAC 173-100.
Capital Budget Total	**$524,043,156**	

Water Quality Operating & Capital Budget Total	**$621,836,504**

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Buck Smith, a hydrogeologist with the Northwest Regional Office, measures river flow levels during drought in the Snoqualmie River.

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 in Washington face an abundance of challenges in ensuring that adequate water supplies are available to meet the needs of current and future users.

Washington increasingly lacks water where and when it is needed for fish, farms, and communities. Population growth and economic demand are fueling the increased demand for water. These demands are often in conflict with the need to restore stream flows to save fish from extinction.

While environmental threats to water resources loom larger than ever, we have increased public awareness of water supply problems across the state. Once abundant fish stocks face the threat of extinction, and the federal Endangered Species Act requires us to improve fish habitat. Climate change is likely to increase the frequency and severity of droughts resulting in dry streams, withered crops, dead fish, wildlife hazards, and reduced hydropower production.

Declining snow pack, another result of climate change, threatens water supplies in many basins of the state. Record low stream flows and declining aquifers are impacting groundwater supplies in some areas of the state. 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 Act (1971)*
- *Chapter* 43.21A *RCW, Department of Ecology (1970)*
- *Chapter* 43.27A *RCW, Water Resources (1967)*
- *Chapter* 43.83B *RCW, Water Supply Facilities (1972)*
- *Chapter* 43.99E *RCW, Water Supply Facilities – 1980 Bond Issue (Referendum 38) (1979)*
- *RCW* 86.16.035*, Department of Ecology Control of Dams and Obstructions (1935)*
- *Chapter* 90.03 *RCW, Water Code (1917)*
- *Chapter* 90.08 *RCW, Stream Patrolmen (1925)*
- *Chapter* 90.14 *RCW, Water Rights Claims Registration and Relinquishment (1967)*
- *Chapter* 90.16 *RCW, Appropriation of Water for Public and Industrial Purposes (1869)*
- *Chapter* 90.22 *RCW, Minimum Water Flows and Levels (1969)*
- *Chapter* 90.24 *RCW, Regulation of Outflow of Lakes (1939)*
- *Chapter* 90.28 *RCW, Miscellaneous Rights and Duties (1927)*
- *Chapter* 90.36 *RCW, Artesian Wells (1890)*
- *Chapter* 90.38 *RCW, Yakima River Basin Water Rights (Trust Water) (1989)*
- *Chapter* 90.40 *RCW, Water Rights of United States (1905)*
- *Chapter* 90.42 *RCW, Water Resource Management (Trust Water) (1991)*
- *Chapter* 90.44 *RCW, Regulation of Public Groundwaters (1945)*

- *Chapter* 90.46 *RCW, Reclaimed Water Use (1992)*
- *Chapter* 90.54 *RCW, Water Resources Act of 1971*
- *Chapter* 90.66 *RCW, Family Farm Water Act (1977)*
- *Chapter* 90.80 *RCW, Water Conservancy Boards (1997)*
- *Chapter* 90.82 *RCW, Watershed Planning (1997)*
- *Chapter* 90.86 *RCW, Joint Legislative Committee on Water Supply During Drought (2005)*
- *Chapter* 90.90 *RCW, Columbia River Basin Water Supply (2006)*
- *Chapter* 90.92 *RCW, Pilot Local Water Management Program (Walla Walla) (2009)*

Constituents/Interested Parties

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

Issues

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 combined 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 efficiently making decisions on new water rights applications. We will look at improving our applications to help facilitate sales, transfers, and changes in water use for better of water supply management.

The 2015-17 enacted budget includes a proviso directing the Water Resources Program to make at least 500 water right decisions in Fiscal Year 2016. If the program does not make 500 decisions, it will forfeit $500,000 of General Fund-State funding in Fiscal Year 2017. The current pending application backlog is 5,788 applications (as of July 2015), which is down from 7,018 applications in 2011. In the two-year period from July 1, 2013 to June, 30, 2015, Ecology made 1,227 water right decisions.

Legislative support has brought funding to several water management initiatives. These initiatives are discussed in further detail below.

Dungeness Water Supply Solutions Proviso

The 2013 Legislature approved $2.05 million in funding to develop projects and acquire water rights to enhance stream flows and provide mitigation water for rural development in the Dungeness Watershed on the Olympic Peninsula. This funding was reappropriated in the 2015-17 Capital Budget and will be used to continue efforts to find water supply solutions in the basin.

Increased demand for water supplies in the Dungeness Watershed has had a negative impact on fish populations and caused concern about supplies for human needs. This has been the result of steady growth in Eastern Clallam County, particularly near Sequim.

Ecology adopted a water management rule for the Dungeness Watershed in January 2013. This was a result of a cooperative effort with local and tribal governments, irrigators, and public utility districts. Since then, well owners making new groundwater withdrawals have been required to offset or mitigate their water use. Budgeted funds provide support for the Dungeness basin fund water supply solutions that include:

- Aquifer recharge.
- Source substitution.
- Water right acquisition.
- Off-stream storage projects.

Skagit Water Supply Solutions Proviso
The 2012 Legislature approved $2.25 million for efforts to balance instream and out-of-stream benefits in the Skagit River sub-basins. This funding was re-appropriated in the 2015-17 budget and will be used to continue efforts to fund balanced water supply projects that provide instream and out-of- stream benefits.

Ecology is targeting water supply projects in the Carpenter-Fisher and Nookachamps sub-basins through:

- Purchasing water rights.
- Creating water banks.
- Building storage.
- Developing aquifer recharge projects.

Ecology is focusing on implementing options that address both the instream needs of fish and the development needs of people. We are working with local government, tribal leaders, and stakeholders to determine the best and most cost-effective package of options that address both instream and out-of-stream needs.

Yakima Basin Integrated Plan
The 2013-15 Capital Budget provided over $131 million in funding to kick-off implementing the Yakima River Basin Integrated Water Resource Management Plan (YBIP). The 2015-17 Capital Budget provided an additional $30 million to continue implementing the YBIP. The YBIP 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.

Office of Columbia River
Beginning in 2006, $200 million was provided to Ecology to implement Chapter 90.90 RCW. This directed Ecology to "aggressively pursue the development of water supplies to benefit both instream and out-of-stream uses."

Columbia River projects create infrastructure to mitigate drought and climate change conditions by securing a water supply for families, farms, and fish. Significant projects include:

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

As of December 2014, the Office of Columbia River had secured approximately 375,815 acre-feet of additional water supply for instream and out-of-stream uses. To tackle future water management challenges, Ecology will follow the model of collaboration with local partners that is working in the Dungeness and Columbia River basins.

Future Focus
Ongoing challenges for the Water Resources Program include:

- Drought funding. A number of factors including increased population, climate change, and a growing economy, all contribute to increased water demand, reduced water supply, and greater vulnerability to drought conditions. Ecology is limited in its ability to provide emergency funding to water users if drought conditions manifest, because there are no reserve funds included the Drought Preparedness Account.
- Finding innovative water supply solutions. As traditional water supplies become increasingly scarce, and acquiring new water rights is more difficult, water users are turning to innovative water supply solutions. Ecology is working with stakeholders on water supply solutions that include developing awareness of readily usable water limits, and providing incentives and institutional capacity for new water efficiency technologies, water storage, reclaimed water, and stormwater management projects.

- Improving water use accountability. We are increasing water use metering and reporting, maintaining the stream gauging network, responding to local watershed requests for compliance service, and taking actions on water law violations within resource constraints.
- Providing clarity on water rights and claims. We are close to completing the Yakima River Basin Adjudication, which will bring clarity and certainty regarding the validity and extent of surface water rights and claims in the basin.
- Improving the availability of water resource data and information. We are developing, maintaining, and enhancing our water management data systems. This includes mapping and keeping pace with increased demands of modern water management, public service expectations and technology.

Activities, Results & Performance Measures

Clarify Water Rights

Water rights adjudication is a legal process conducted in a county superior court to determine who has valid water rights, how much water can be used under each right, and who has priority during shortages. Eighty-two basins have been adjudicated since the adoption of the Washington Water Code in 1917, and four are in the process of adjudication. Our current focus is on completing those four basins, referred to as the Yakima River Basin surface water adjudication. We are maintaining project readiness for the Spokane Adjudication pending a legislative/budget decision.

Expected Results

- Water right change notices are filed timely with Yakima County Superior Court.
- In the event of a Final Decree:
  - Water right holders are notified of fees required to obtain their water right certificates.
  - Fees are collected and all adjudicated certificates for water rights are issued within one year of notification to water right holders.

Performance Measure

- Percentage of Water Right Change Notices filed timely with the Yakima County Superior Court.

Implement Integrated Solutions to Protect Instream Resources

Water is a limited resource. Washington State seeks to meet increasing demands from population growth, while protecting instream resources and adapting to climate change. To accomplish this activity, Ecology works with local partners to develop creative solutions, such as new storage (above and below ground), more efficient use of water, collaborative agreements to share water between users, and legal structures to facilitate water transfers between users (water banks).Ecology manages water resources by developing watershed-specific instream flow rules; Ecology has adopted such rules in 29 of 62 watersheds in the state. Where these rules are in place, Ecology works collaboratively with local partners to develop water supply options for communities, while protecting stream flows for fish and wildlife, recreational uses and senior water right holders. In watersheds without instream flow rules, Ecology works to establish these regulatory protections, working in collaboration with local partners. To accomplish our goals, Ecology provides technical assistance and scientific expertise.

Expected Results

- Water is available to meet the needs today and into the future, for communities, agriculture, industry, and fish.
- Success includes developing permanent instream flow protection through implementing administrative rules to protect flows, coupled with water supply options to meet community and agricultural needs.

Performance Measures

- Volume of water acquired for instream flow in acre-feet.
- Number of local organizations that are provided technical assistance.

Ensure the Safety of Washington's Dams

Ecology has primary responsibility for ensuring that non-federal dams in Washington are properly designed, constructed, operated, and maintained.

There are over 1,000 dams in Washington where Ecology is the sole regulatory agency. Of those dams, 351 are located above populated areas.

Expected Results

- The structural integrity, flood, and earthquake safety of existing state dams not managed or licensed by the federal government are inspected.
- New dam construction and repairs are approved and inspected.
- Compliance and emergency actions are taken to remediate unsafe dams.

Manage Water Right Applications, Claims, Permits, and Certificates

Ecology allocates surface and groundwater to meet the State's many water supply needs. Ecology is responsible for making decisions on applications for new water rights and for changes to existing water rights. Ecology is also responsible for managing an existing water right portfolio of approximately 50,000 certificates, 3,000 permits, 170,000 claims, and an estimated 400,000 permit-exempt groundwater withdrawals.

Expected Results

- 500 water right decisions (new water rights and changes to existing rights) are processed through sound and timely permit decision-making.
- Water needs are met and existing water users and the environment are protected.

Performance Measure

- Number of total water right decisions completed.

Prepare and Respond to Drought

Ecology provides services to reduce the impact of droughts and prepare for future droughts and climate change. When droughts are declared, services include providing water through emergency transfers, water right changes, and temporary wells.

Ecology also provides drought related information and financial assistance and coordinates drought response efforts. Emerging information on climate change is also monitored for future water supply implications.

Expected Results

Drought effects are monitored and, where feasible, mitigated (such as impacts to water supply and drought preparedness) through improved planning, communication, coordination, and loss-prevention efforts.

Performance Measures

- No measures are associated with this activity.

Ensure Compliance with Water Laws

Ecology helps ensure that water users comply with the state's water laws so other legal water users are not impaired; water use remains sustainable over the long term; and the environment is protected for the benefit of people and nature. Activities include water metering and reporting 80 percent of water use in 16 fish critical basins, along with education, technical assistance, and strategic enforcement in egregious cases.

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

- Number of formal enforcement actions (penalties, orders, and notices) taken to achieve compliance.
- Percentage of annual reports received from water users required to meter in 16 fish critical basins.

Provide Water Resources Data and Information

Collecting, managing, and sharing data and information is critical to modern water management. It is essential to local watershed groups, conservancy boards, businesses, local governments, nonprofit groups, the Legislature, other agencies, and the media. It supports daily Ecology operations, including making water allocation decisions; setting and achieving stream flows; identifying the location and characteristics of wells, dams, and water diversions; supporting compliance actions; metering; tracking progress;

communicating with constituents; and serving other water resource functions.

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 number 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.

Regulate Well Construction

Ecology protects consumers, well drillers, and the environment by licensing and regulating well drillers, investigating complaints, approving variances from construction standards, and providing continuing education to well drillers. The work is accomplished in partnership with delegated counties. Technical assistance is delivered to homeowners, well drillers, tribes, and local governments.

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.

Promote Water Use Efficiency

Ecology provides agricultural, commercial/industrial, and nonprofit water use sectors with expertise and services to support more efficient water use. This includes technical information, planning, engineering, on-site inventories and assessments, and financial assistance.

Ecology also supports review of municipal and industrial reclaimed water projects and the Department of Health's review of municipal water service plans. Water use efficiency opportunities are greatest in the agricultural sector, where many very old water delivery systems are still in use, and modern technology can easily make substantial gains in water use efficiency.

Expected Results

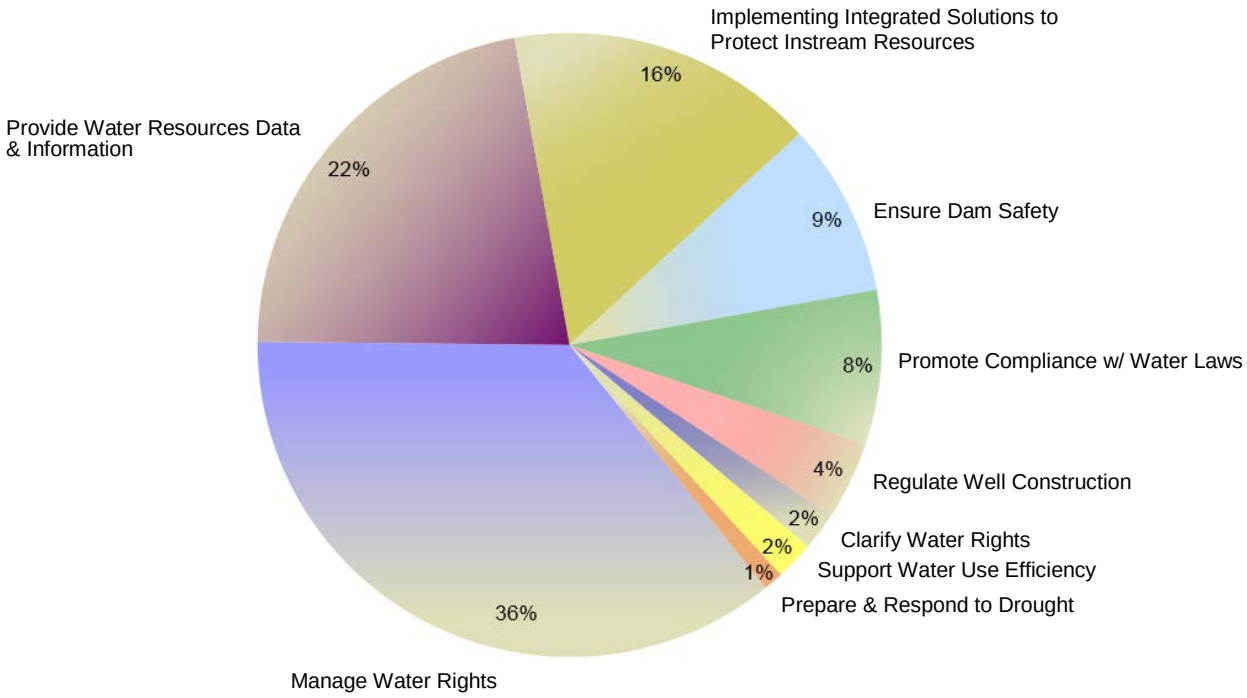
A portion of the saved water is placed into the Trust Water Rights Program to benefit stream flows for fish.

Performance Measure

- Volume of water acquired from projects that improve irrigation efficiency (IEGP).

Water Resources Program 2015-17 Biennium Budget
By Activities

Operating Budget = $39.1 Million; FTEs = 141.0



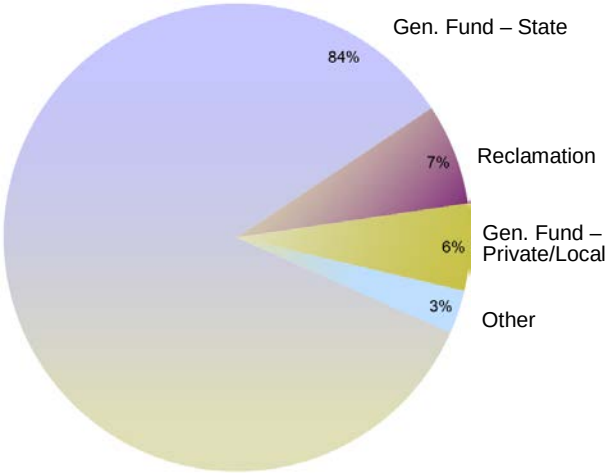
Activities	Dollars	FTEs
Manage Water Rights (A024)	$14,244,483	52.8
Provide Water Resources Data & Information (A044)	8,556,304	32.6
Implementing Integrated Solutions to Protect Instream Resources (A003)	6,126,600	17.3
Ensure Dam Safety (A011)	3,593,376	13.5
Promote Compliance with Water Laws (A035)	2,941,181	12.5
Regulate Well Construction (A053)	1,638,445	6.8
Clarify Water Rights (A001)	975,790	2.8
Support Water Use Efficiency (A061)	753,269	2.7
Prepare & Respond to Drought (A029)	244,000	0.0
Water Resources Operating Budget Total	**$39,073,448**	**141.0**

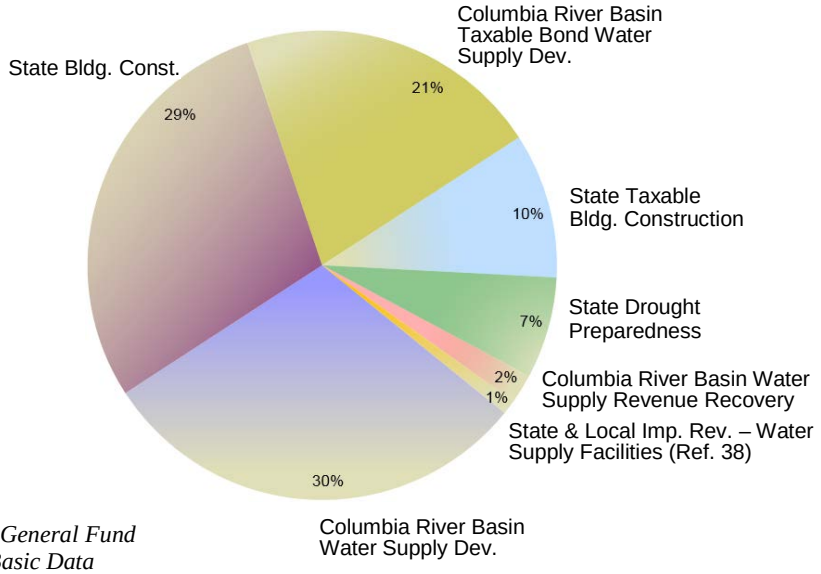
Water Resources Program 2015-17 Biennium Budget
By Fund Source

Operating Budget = $39.1 Million

FTEs = 141.0

Capital Budget = $100.9 Million





Other = Water Supply Facilities - Referendum 38 (1.08%), General Fund – Federal (1.04%), State Drought Preparedness (0.52%), Basic Data (0.44%), Water Rights Tracking System (0.11%), State Emergency Water Projects Revolving (0.10%), and Water Rights Processing (0.10%).

Operating Fund Sources	Amount	Uses
General Fund – State (001)	$32,764,284	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.
Reclamation (027)	2,587,429	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 the U.S. Geological Survey for stream gauging data collection and studies.
General Fund – Private/Local (001)	2,399,533	Instream flow projects, water acquisition, and cost reimbursement contracts for water rights processing.
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38 (072)	421,411	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).
General Fund – Federal (001)	405,898	Dam safety scanning project and guidelines, Yakima River Enhancement liaison, Spokane Valley Rathdrum Prairie Aquifer Study.
State Drought Preparedness (05W)	204,000	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.

Basic Data (116)	170,000	Pass through to the U.S. Geological Survey for stream gauging data collection and studies.
Water Rights Tracking System (10G)	41,893	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.
State Emergency Water Projects Revolving (032)	40,000	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	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	**$39,073,448**	

Capital Fund Sources	**Amount**	**Uses**
Columbia River Basin Water Supply Development (10P)	$30,416,208	Capital new appropriations and re-appropriations support grants for feasibility studies and construction of storage and water conservation projects, along with purchase or leases of water rights.
State Building Construction (057)	29,211,730	New appropriations and re-appropriations 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.
Columbia River Basin Taxable Bond Water Supply Development (18B)	21,101,493	Capital new appropriations and re-appropriations support grants for feasibility studies and construction of storage and water conservation projects, along with purchase or leases of water rights.
State Taxable Building Construction (355)	10,000,000	Capital new appropriations to support grants and feasibility studies and construction of storage and water conservation projects, along with purchase or leases of water rights supporting implementation of the Yakima Integrated Plan.
State Drought Preparedness (05W)	7,500,000	Capital new appropriations 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.
Columbia River Basin Water Supply Revenue Recovery (296)	2,200,000	Capital new appropriations to support grants and feasibility studies and construction of storage and water conserva-tion projects, along with purchase or leases of water rights.
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	456,000	Grants/loans for agricultural water supply facilities. Grants for on-farm water use efficiency improvements, water conveyance improvements, and storage studies.
Capital Budget Total	**$100,885,431**	

Water Resources Operating & Capital Budget Total	**$139,958,879**

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Agency Administration Program

Debbie Stewart, Information Technology Services, 360.407.7048
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Denise Clifford, Governmental Relations, 360.407.7003
Sandi Stewart, Human Resources, 360.407.6218
Erik Fairchild, Financial Services, 360.407.7005
Sandi Peck, Communications, 360.407.7004

Main receptionist staff Connie Bergren and Becky Parker manage the telephone switchboard, assist with scheduling meeting rooms, and greet and direct visitors to appointments.

Program Mission

The mission of the agency 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 citizens 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.

Authorizing Laws

- *Chapter 41.06 RCW, State Civil Service Law*
- *Chapter 41.80 RCW, State Collective Bargaining Law.*
- *Chapter 43.21A RCW, Department of Ecology (1970)*
- *Chapter 43.21M RCW, Integrated Climate Change Response Strategy*
- *Chapter 70.235 RCW, Limiting Greenhouse Gas Emissions*
- *Chapter 80.80 RCW, Greenhouse Gas Emissions*

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.*

Issues

Facilities

Ecology projects a decrease of 9,301 square feet and a decrease in annual facility related costs of approximately $7,336,000 for office space between July 2014 and June 2021. The decrease in square feet is mostly the result of relocating two large Ecology offices to improve service delivery and address building condition issues. The decrease in cost is the result of retiring debt obligation and relocating to more cost efficient locations. During the 2015-17 Biennium, Ecology plans to relocate both its Vancouver Field Office and Bellingham Field Office to locations within the same general areas. Also, Ecology will close its Wenatchee Field Office in 2016.

Ecology will continue to pursue co-location opportunities where it makes sense, while maintaining and protecting our state-owned assets (Ecology Headquarters Building, Eastern Regional Office in Spokane, the Padilla Bay Preserve, and the Zoesel Dam).

Managing MTCA Revenue Shortfall

Model Toxics Control Act (MTCA) account funds are used for both operating and capital budget investments in core toxics, hazardous waste, solid waste, air quality, and environmental health protection and monitoring programs. Since the May 2015 forecast, actual and projected revenue for the MTCA accounts dropped by $60 million, leaving a negative fund balance of about $63 million for the 2015-17 Biennium.

This revenue decline and the direction provided in the enacted 2015-17 Capital Budget mean funding is not available to start the majority of important new cleanup projects appropriated in the budget.

Ecology is following the direction included in the enacted Capital Budget on how to manage and mitigate this revenue decline. Authorized actions include delaying cleanup projects until funding is available. We will also follow the MTCA Cash Management Plan for the 2015-17 Biennium that we developed with the Office of Financial Management to maintain positive cash balances in all MTCA accounts.

In addition to the tools mentioned above, we are actively managing the shortfall by closely monitoring actual revenue collections and expenditures on a monthly basis, and communicating this situation and information to our local funding partners and other state agencies that receive MTCA dollars. Ecology is also closely screening MTCA-supported operating budget spending.

Ecology submitted a 2016 Supplemental Budget request for bond backfill funding and other possible solutions needed to implement the enacted budget and ensure critical cleanup projects and move forward. Backfill funding will keep important cleanup work on schedule and in line with the original legislative budget assumptions.

Information Governance

Ecology is implementing a holistic information governance program to better align records management, public records disclosure, litigation discovery, and information technology (IT) services. This effort is expected to improve government transparency, compliance with laws and rules, and organizational efficiency.

In the 2015-17 Biennium, Ecology is focusing on four major initiatives. 1) email cleanup and consolidation into the Washington Technology Services (WaTech) Enterprise Vault shared service offering. This will allow email records retention timing to better match expected lifecycles and enable highly efficient and defensible enterprise search capability; 2) implementing an agencywide electronic file plan and taxonomy that will organize unstructured content on the network file shares; 3) purchasing and implementing an Enterprise Content Management solution from the Department of Information Services (DES) master contract currently in final negotiations; and 4) public disclosure policy, process, and procedure improvements, including upgrading or replacing the current public disclosure tracking system.

Human Resource Management

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

- Expanding our interagency and private industry partnerships for recruiting, selecting, and hiring highly qualified candidates. This includes a special emphasis on the goal that Ecology's diversity reflects the people we serve. We will do this through efforts to increase the percentage of Ecology's workforce who self-identify as a person living with a disability and/or a veteran.
- Promoting a culture of respect, engagement, performance, and recognition by continuing to update our leadership development program and succession planning efforts. This includes revised supervisory and management training to meet the challenges of a dynamic employment environment.
- Continuing to promote a safe and healthy work environment by engaging workers in identifying and reducing hazards in the workplace, strengthening our employees' connection to wellness, and maintaining the high percentage of employees who are accident free.

Labor System Replacement

Ecology's time management system is outdated, inefficient, and no longer meets the business and compliance needs for our work.

In 2013, Washington State procured user licenses for the WorkForce Software EmpCenter product as part of the planned enterprise time, leave, and attendance project that Ecology and the Department of Transportation participated in. Even though this project was discontinued, Ecology still needs to replace our obsolete system and implement a labor tracking system that leverages the state's recent investment.

This solution will reduce risk to Ecology by improving compliance with statutory, regulatory, and collective bargaining agreement rules and improve accuracy and efficiency in labor time reporting.

Information Technology Services

Ecology leverages Information Technology to improve public access to information and create useful technology services that support our environmental mission. Examples include:

- Enhancing and investing in environmental data management solutions used to communicate environmental conditions to the public, businesses, and government entities.
- Developing a new system to improve Ecology's response to environmental events and track responsiveness.
- Developing and implementing a mobility strategy to support Ecology business needs.
- Enhancing and supporting file and document management structures that support our records management needs.
- Modernizing our billing and revenue tracking processes and systems by implementing a commercially available and scalable vendor hosted solution for billing fees, tracking revenue from those fees, and accepting electronic payments for those fees.

We ensure that Ecology IT services and architecture are aligned with agency business strategies, performance levels, security standards, and industry trends for the future.

Using Customer Feedback for Process Improvement

Ecology is using results from our biennial survey of permitted and inspected customers to identify opportunity for improvement. Improvement action plans identify metrics and track where actions respond to customer feedback. Where appropriate, action plans build on and improve electronic submittal options, effective web-based information delivery, and Lean process improvement opportunities.

Streamlining Business Processes

In 2013, Ecology launched a formal process for reviewing agency regulations. Every two years, we review all regulations to determine whether updates are needed. We prioritize future updates based on need, clarity, consistency, process streamlining, regulatory burden reduction, compliance and technical changes, sunset provisions, and possible legislative changes.

Strategic Priority Alignment

We are working agencywide to align environmental programs with Results Washington and target agency strategic priorities. Working across program boundaries, staff coordinate projects to leverage data, investments, and expertise. Between June 2014 and July 2015, agencywide multi-program collaboration focused on two strategic priorities: reducing toxic threats and protecting and restoring Puget Sound. This biennium will extend to the strategic priorities of providing integrated water solutions and reducing and preparing for climate change. The collaboration develops regionally-focused, multi-program teams that share cooperative partnerships and foster innovative solutions.

Communications

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

We support Ecology leadership, programs, and regions to help address some of the toughest environmental challenges of our time.

We lead proactive external communications to explain, educate, and engage diverse audiences through multiple channels—the web, social media, news media, and public events.

Directing the transformation of Ecology's website is a high priority—it's our largest communications and business venue, with seven million visitors a year. We are committed to making

our website easy for businesses and other audiences to navigate, understand, and find the information they need. Our rapidly evolving social media presence also continues to be a priority focus with amazing growth on Facebook, Twitter, Instagram, Flickr, and our blog (ECOconnect).

We create, lead, and foster innovative partnerships inside and outside Ecology—especially with our new Outreach and Public Education Network (OPEN). This Ecology network of experts in outreach and public involvement constantly strives to improve our engagement with communities and stakeholders.

News media remains a key customer of ours; we average 100 media interviews a month. 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-jurisdictions incident response teams.

Climate Policy

Washington State is particularly vulnerable to a changing climate—especially our snow-fed water supplies that provide our drinking water and irrigation for agriculture—and nearly three-fourths of the electrical power we produce. Communities along our 2,300 miles of shoreline are threatened by rising sea levels. Ocean acidification, which is created when carbon dioxide reacts with seawater and reduces the water's pH, threatens our abundant shellfish. And the devastating drought and wildfire season we experienced in 2015 is an example of what our future could look like if we don't take action.

The Legislature established statewide greenhouse gas (GHG) emission limits in 2008, and also directed efforts to prepare for and respond to climate changes already underway. We have made significant progress reducing GHG emissions and preparing strategic responses to address impacts of climate change and ocean acidification. Despite that progress, meeting the statutory emissions reduction limits will require additional action. Recognizing the need to do more and to take action now, Governor Inslee directed Ecology to design and implement a regulatory cap on GHG emissions by the summer of 2016.

Most of the policy work that supports the Governor's initiatives is led by the Special Assistant for Climate Policy in Ecology's Administration Program, with heavy support from the Air Quality Program for developing and administering rules and providing technical analysis. In addition to responding to requests from the Governor's office, the Special Assistant for Climate Policy also:

- Oversees work implementing adaptation/response for climate change and ocean acidification.
- Coordinates state agencies' climate leadership and related activities (such as adaptation coordination/collaboration with federal, regional, state, tribal and local governments, universities, and others).

Ecology's Air Quality Program is leading development of the rule to cap GHG emissions, as well as the implementation plan for compliance with federal regulations to reduce carbon pollution from power plants. The Air Quality Program is also implementing current policies and tracking progress through inventory and mandatory GHG reporting, administering the state agencies' GHG quantification, and providing expertise on GHG emissions from the transportation sector.

Activities, Results & Performance Measures

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

The administration activity supports Ecology functions by providing leadership, cross-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 citizen groups.

Administration helps managers and employees create a safe, supportive, and diverse work environment by providing comprehensive human resource services. It also oversees information management (desktop and network services,

application development, and data administration) and facility and vehicle management; maintains Ecology's centralized records and library resources; responds to public records requests; and provides mail services.

Expected Results

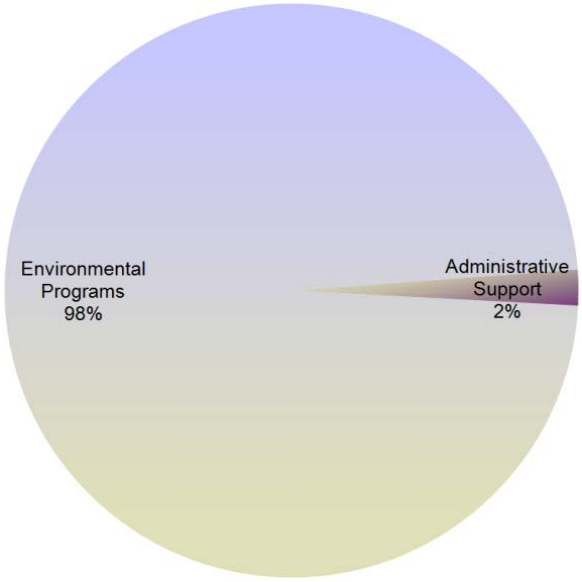
- Ecology managers, the Governor, the State Auditor, the Office of Financial Management (OFM), and the Legislature have confidence in Ecology's financial information and can use it to make decisions affecting the environment.
- The public is educated about Ecology's work and role in environmental protection and understands the policies Ecology is developing and the opportunities available to influence its decisions.
- Washington's environmental laws and rules are improved through Ecology's relationships with legislators, local governments, businesses, Indian tribes, and environmental and citizen groups.
- Ecology managers and supervisors possess the highest quality communication, performance management, hiring, and leadership skills.
- Ecology's work environment reflects the diversity of the community we serve.
- Ecology 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

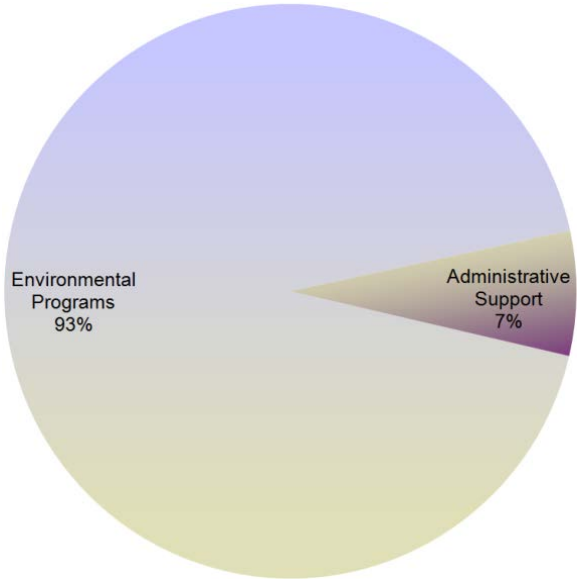
- Number of agency audit findings.
- Percentage of Ecology-administered dedicated accounts with a positive cash balance at the end of each quarter.
- Energy use index for Ecology facilities over 10,000 sq. ft.
- The number of pages printed and copied per quarter.
- Percentage of current employees who have completed performance development plans.
- Percentage of Ecology employees taking the annual employee survey.
- Percentage of Ecology employees who are accident-free.
- Percentage of Ecology's workforce who self-identify as a veteran.
- Percentage of Ecology's workforce who self-identify as a person living with a disability.
- By survey, percentage of employees indicating they are usually or always satisfied with their jobs.

Administration as a Percentage of Ecology's 2015-17 Budget

Operating & Capital Budget



Operating Budget Only



Environmental Programs:

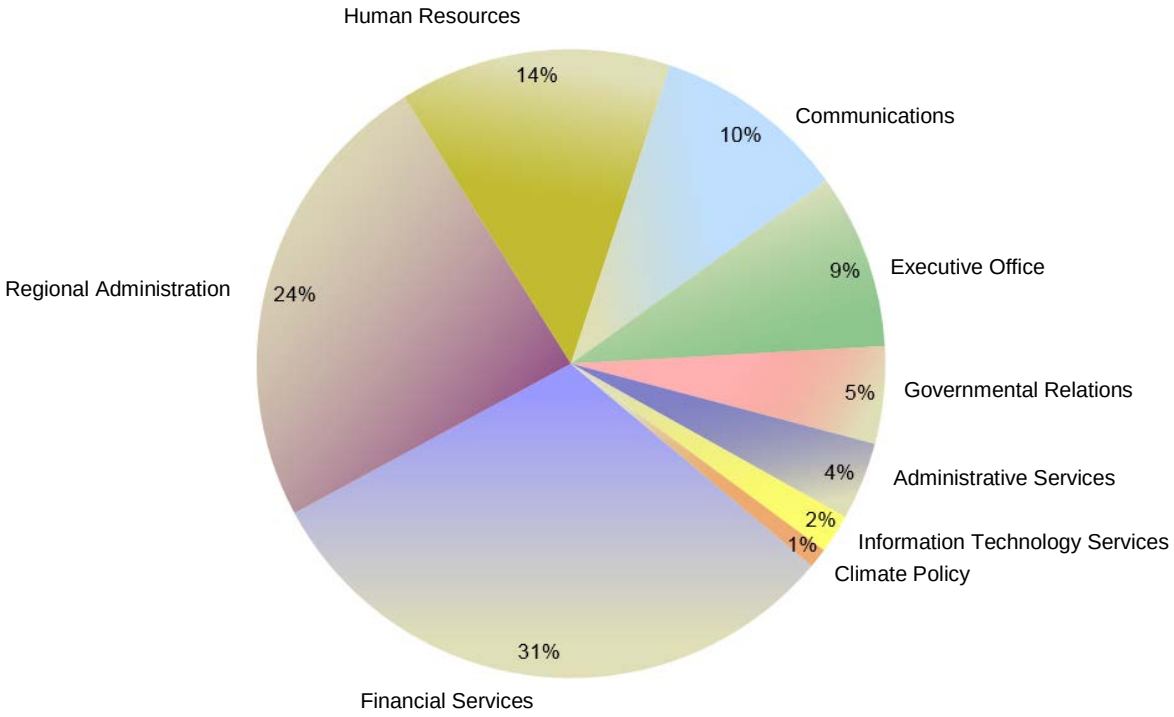
- Water Quality
- Toxics Cleanup
- Water Resources
- Shorelands & Environmental Assistance
- Waste 2 Resources
- Air Quality
- Environmental Assessment
- Hazardous Waste & Toxics Reduction
- Nuclear Waste
- Spill Prevention, Preparedness & Response

Program A – ***includes Ecology central business services:***

- Financial Services (Budget, Fiscal, Purchasing)
- Regional Directors & Support
- Human Resources
- Communications
- Executive (Director, Special Assistants, Tribal Relations)
- Governmental Relations
- Administrative Services Management
- Information Technology Services Management
- Climate Policy

Administration Program 2015-17 Biennium Operating Budget By Activities

Operating Budget = $32.2 Million; FTEs = 155.6



Activities	Dollars	FTEs
Financial Services	$9,979,514	52.9
Regional Administration	7,755,824	44.0
Human Resources	4,442,783	20.3
Communications	3,229,388	13.0
Executive Office	2,827,986	8.3
Governmental Relations	1,552,612	6.1
Administrative Services	1,525,755	7.3
Information Technology Services	608,121	2.7
Climate Policy	269,804	1.0
Agency Administration Operating Budget Total	**$32,191,787**	**155.6**

Administration Program 2015-17 Biennium Budget
By Fund Source

Operating Budget = $32.2 Million **Capital Budget = $1.1 Million**

FTEs = 155.6

Operating Fund Sources	Amount
State Toxics Control (173)	$10,735,797
General Fund – State (001)	4,353,865
General Fund – Federal (001)	4,319,131
Water Quality Permit (176)	3,715,763
Environmental Legacy Stewardship (19G)	2,434,757
Radioactive Mixed Waste (20R)	1,391,816
Waste Reduction, Recycling & Litter Control (044)	767,154
Oil Spill Prevention (217)	697,997
Hazardous Waste Assistance (207)	657,264
General Fund – Private/Local (001)	524,935
Local Toxics Control (174)	367,393
Air Pollution Control (216)	336,164
Underground Storage Tank (182)	333,889
Air Operating Permit (219)	322,789
Reclamation (027)	243,321
Biosolids Permit (199)	177,131
Worker & Community Right-to-Know (163)	157,515
Water Pollution Control Revolving Administration (564)	136,561
Flood Control Assistance (02P)	131,829
Water Pollution Control Revolving – Federal (727)	114,335
Electronic Products Recycling (11J)	76,383
Freshwater Aquatic Weeds (222)	41,262
Wood Stove Education & Enforcement (160)	37,497
Site Closure (125)	31,577
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	25,589
Product Stewardship Programs (16T)	23,498
Water Pollution Control Revolving – State (727)	23,418
Aquatic Algae Control (10A)	9,050
Water Rights Tracking System (10G)	4,107
Operating Budget Total	**$32,191,787**

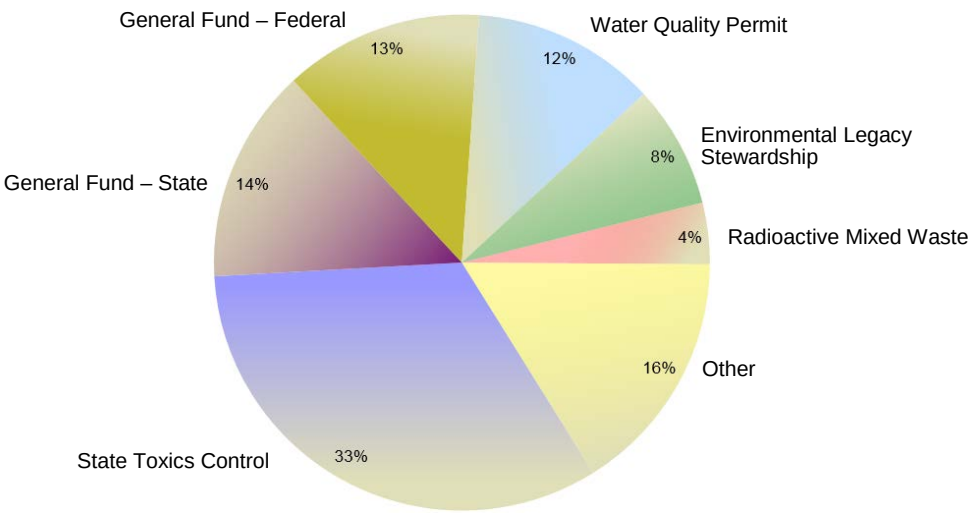
Capital Fund Sources	Amount
Cleanup Settlement (15H)	$309,367
State Building Construction (057)	228,955
Environmental Legacy Stewardship (19G)	201,105
Local Toxics Control (174)	188,077
Columbia River Basin Water Supply Development (10P)	132,003
State Toxics Control (173)	37,171
Waste Tire Removal (08R)	20,251
State Taxable Building Construction (355)	12,669
General Fund – Federal (001)	5,282
Capital Budget Total	**$1,134,880**

Agency Administration Operating & Capital Budget Total	**$33,326,667**

Note: Agency Administration is supported by each fund source available to the Department of Ecology. Each fund contributes to Agency Administration in the same percentage that each fund contributes to the total of the environmental programs' salaries and benefits.

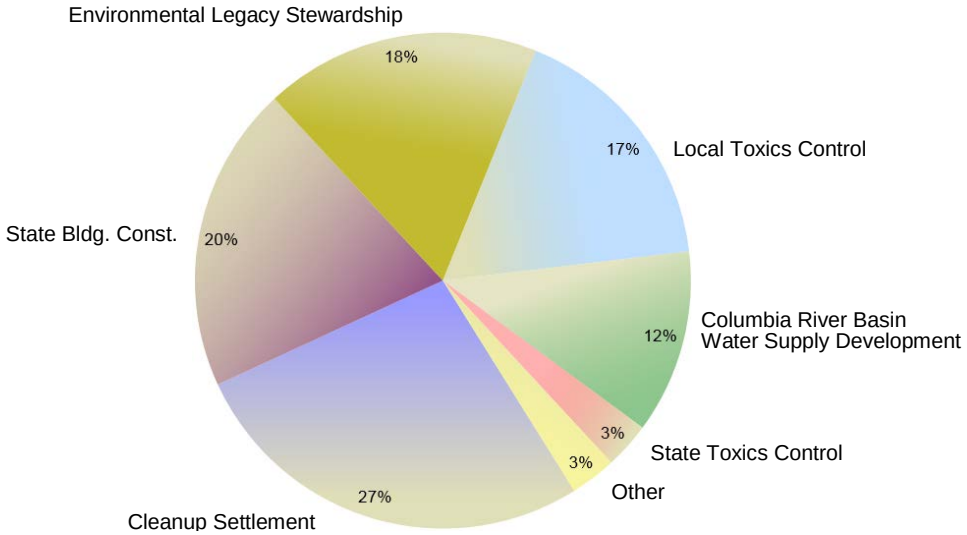
Agency Administration Program 2015-17 Biennium Budget By Fund Source

Operating Budget = $32.2 Million

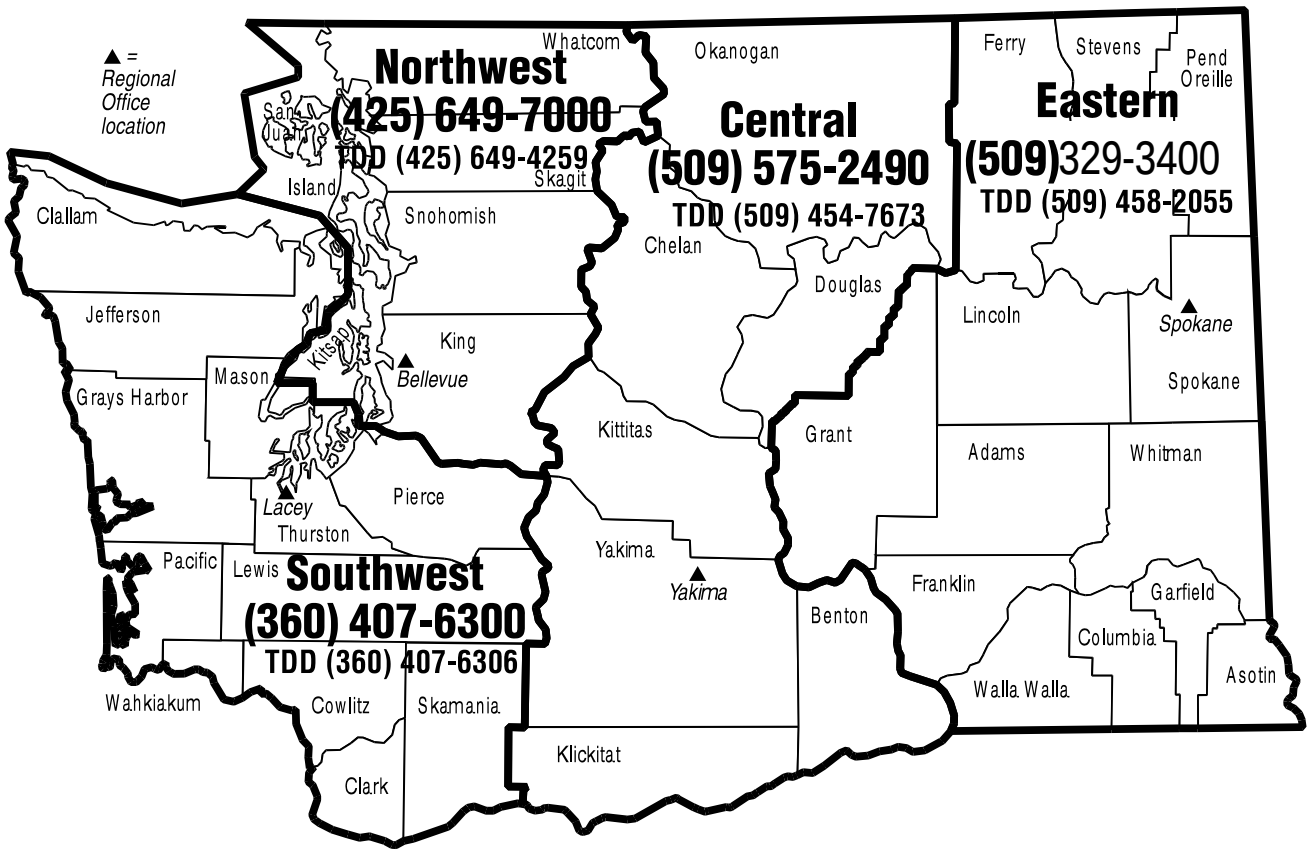


Other = Waste Reduction, Recycling & Litter Control (2.38%), Oil Spill Prevention (2.17%), Hazardous Waste Assistance (2.04%), General Fund – Private/Local (1.63%), Local Toxics Control (1.14%), Air Pollution Control (1.04%), Underground Storage Tank (1.04%), Air Operating Permit (1.00%), Reclamation (0.76%), Biosolids Permit (0.55%), Worker & Community Right-to-Know (0.49%), Water Pollution Control Revolving Administration (0.42%), Flood Control Assistance (0.41%), Water Pollution Control Revolving – Federal (0.36%), Electronic Products Recycling (0.24%), Freshwater Aquatic Weeds (0.13%), Wood Stove Education & Enforcement (0.12%), Site Closure (0.10%), State & Local Improvements Revolving - Water Supply Facilities (Referendum 38) (0.08%), Product Stewardship Programs (0.07%), Water Pollution Control Revolving – State (0.07%), Aquatic Algae Control (0.03%), and Water Rights Tracking System (0.01%).

Capital Budget = $1.1 Million



Other = Waste Tire Removal (1.78%), State Taxable Building Construction (1.12%), and General Fund – Federal (0.47%).



Ecology Headquarters & Regional Offices

Headquarters
300 Desmond Drive SE
Lacey, WA
360.407.6000

PO Box 47600
Olympia, WA 98504-7600

Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452
425.649.7000

Central Regional Office
1250 West Alder Street
Union Gap, WA 98903-0009
509.575.2490

Southwest Regional Office
300 Desmond Drive SE
Lacey, WA
360.407.6300

PO Box 47775
Olympia, WA 98504-7775

Eastern Regional Office
N. 4601 Monroe Street, Suite 202
Spokane, WA 99205-1295
509.329.3400

Ecology Field Locations

Bellingham Field Office
1440 10th Street, Suite 102
Bellingham, WA 98225-7028
360.715.5200

Vancouver Field Office
2108 Grand Boulevard
Vancouver, WA 98661-4622
360.690.7171

Ecology Program Locations

Ecology Nuclear Waste Program, Richland Office
3100 Port of Benton Boulevard
Richland, WA 99354-1670
509.372.7950

Office of Columbia River[4]
303 S. Mission Street, Suite 200
Wenatchee, WA 98801-6142
509.665.5377

Padilla Bay National Estuarine Research Reserve
Ecology Shorelands and Environmental Assistance Program
10441 Bayview-Edison Road
Mt. Vernon, WA 98273-9668
360.428.1558

Ecology Limited Purpose Locations

Staff available by appointment only in these offices.

Manchester Environmental Laboratory
7411 Beach Drive East
Port Orchard, WA 98366
360.871.8800

Laboratory Accreditation Office
Postal Mail: PO Box 488; Manchester, WA 98353-0488
Physical Location: 7411 Beach Drive East; Port Orchard, WA 98366
360.871.8840

Environmental Assessment Program Operations Center
Postal Mail: PO Box 47710; Olympia, WA 98504-7710
Physical Location: 8270 28th Court, NE; Lacey, WA 98516-7148
360.480.9224

Methow Valley Water-Master Office
134 Riverside Avenue, Suite E
Winthrop, WA 98862
509.996.8273

Walla Walla Water-Master Office
500 Tausick Way
Walla Walla, WA 99362-9270
509.329.3400

[4] This location will close March 2016. The Office of Columbia River will move into the Central Regional Office located in Union Gap.

Ecology's Data – Where does it come from?

This publication relies on financial data for tables and graphs. Data is based on the initial 2015-17 biennial operating and capital budgets. The following identifies the sources.

Agency Level

Operating [1]

Operating funds by account and program are based on the enacted biennial budget appropriations, and approved allotments (spending plans) from the Office of Financial Management (OFM). They include unallotted funds.

Operating funds pass-through are based on allotments for grants and other pass-through functions from program's initial detailed allotments.

[1] Note: $1.5 million for Reducing Toxics Threats was moved from the Waste 2 Resources program to the Hazardous Waste & Toxics Reduction program to align with the way the structure will be adjusted between programs pending approval by OFM and the Legislative Evaluation and Accountability Program (LEAP) Committee in 2016.

Capital [2, 3]

Capital funds by account and program are based on OFM approved allotments for the enacted biennial 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 and contracts as approved by OFM. They include new appropriations and reappropriations. They do not include unallotted funds.

[2] Note: Capital funds include MTCA allotment reductions made as a result of the September HST revenue forecast decline. $121 million in Model Toxics Control Act (MTCA) appropriations were made based on an assumed spending rate in the capital budget and are not allotted. An additional $50 million in MTCA allotments were reduced due to further revenue decline in September 2015. Therefore, a total of $171 million in MTCA capital appropriations are not captured in the total.

[3] Note: Capital funds include a reappropriation correction between programs. $297,101 ELSA Capital was moved from the Waste 2 Resources program to the Toxics Cleanup Program to account for the correct reappropriation allocation between programs.

Program Level

Operating

Operating funds by activity are based upon activity inventory funding amounts for the enacted biennial budget as approved by OFM.

Operating funds by account are based upon OFM approved allotments.

Capital

Capital funds by account are based upon OFM approved allotments as of October 2015. It includes new appropriations and reappropriations. It does not include unallotted or reserve funds.

2015-17 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 Corp 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	2015-17 Allotment
WCC Crews Salaries	Shorelands & Environmental Assistance	$11,963,987
Stormwater Grants (ELSA)	Water Quality	8,617,107
Nonpoint Source Grants EPA 319 (GF-Federal)	Water Quality	7,156,127
Core Grant to Local Air Authorities (GF-Federal & STCA)	Air Quality	6,327,941
NEP Watershed Grants EPA (GF-Federal)	Shorelands & Environmental Assistance	5,976,799
Public Participation Grants (ELSA)	Waste 2 Resources	3,576,911
Shoreline Master Program Grants (ELSA)	Shorelands & Environmental Assistance	3,200,000
NEP Toxics and Nutrients Grants EPA (GF-Federal)	Water Quality	2,808,823
Community Litter Cleanup Program (WRRLCA)	Waste 2 Resources	2,479,169
Environmental Restoration Projects (Coastal Protection)	Spill Prevention, Preparedness & Response	1,556,000
EYC Crews Salaries	Waste 2 Resources	1,270,196
Freshwater Aquatic Weed Grants (Fr. Aquatic Weeds)	Water Quality	960,000
Oil Spill Response Equipment Caches (STCA)	Spill Prevention, Preparedness & Response	777,000
Aquatic Algae Grants (Aquatic Algae Control)	Water Quality	400,000
Flood Control Assistance Emergency Grants (FCAA)	Shorelands & Environmental Assistance	400,000
DERA Clean Diesel Grant Program Grants to School Districts (GF-F & ELSA)	Air Quality	352,978
PM 2.5 Grant to Local Air Authorities (GF-Federal)	Air Quality	349,450
Lower Columbia Estuary Partnership (STCA)	Water Quality	300,000
Woodstove Education & Enforcement Grants to Local Air Authorities (Wood Stove)	Air Quality	273,504
WCC Crews Salaries	Environmental Assessment	60,000
Total		**$58,805,992**

Ecology Administered Accounts

The Department of Ecology uses 52 accounts and is the administering agency for 46 of these accounts. This section is an inventory of the accounts Ecology administers. 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, you can find additional information in the alphabetical listing.

Since the previous version of this publication, one new Ecology administered account was created as a result of legislation enacting environmental regulations (19N – Diesel Idle Reduction Account), one account changed to a different administering agency (16P – Marine Resources Stewardship Trust Account), and one account was added to the accounts Ecology uses, but does not administer (355 – State Taxable Building Construction Account).

027 – Reclamation Account
02P – Flood Control Assistance Account
032 – State Emergency Water Projects Revolving Account
044 – Waste Reduction, Recycling, and Litter Control Account
051 – State and Local Improvements Revolving Account – Waste Disposal Facilities (Ref. 26)
055 – State and Local Improvements Revolving Account – Waste Disposal Facilities (Ref. 39)
05W – State Drought Preparedness Account
072 – State and Local Improvements Revolving Account – Water Supply Facilities (Ref. 38)
07C – Vessel Response Account
08R – Waste Tire Removal Account
10A – Aquatic Algae Control Account
10G – Water Rights Tracking System Account
10P – Columbia River Basin Water Supply Development Account
116 – Basic Data Account
11J – Electronic Products Recycling Account
11W – Water Quality Capital Account
125 – Site Closure Account
15H – Cleanup Settlement Account
15K – Columbia River Water Delivery Account
160 – Wood Stove Education and Enforcement Account
16T – Product Stewardship Programs Account
16V – Water Rights Processing Account
173 – State Toxics Control Account
174 – Local Toxics Control Account
176 – Water Quality Permit Account
182 – Underground Storage Tank Account
18B – Columbia River Basin Taxable Bond Water Supply Development Account
199 – Biosolids Permit Account
19G – Environmental Legacy Stewardship Account
19K – Yakima Integrated Plan Implementation Account
19N – Diesel Idle Reduction Account
207 – Hazardous Waste Assistance Account
20B – Brownfield Redevelopment Trust Fund Account
20C – Yakima Integrated Plan Implementation Taxable Bond Account
20R – Radioactive Mixed Waste Account
216 – Air Pollution Control Account
217 – Oil Spill Prevention Account
219 – Air Operating Permit Account
222 – Freshwater Aquatic Weeds Account
223 – Oil Spill Response Account
296 – Columbia River Basin Water Supply Revenue Recovery Account
408 – Coastal Protection Account
500 – Perpetual Surveillance and Maintenance Account
564 – Water Pollution Control Revolving Administration Account
565 – Yakima Integrated Plan Implementation Revenue Recovery Account
727 – Water Pollution Control Revolving Account

Ecology uses the following accounts, but is not the administering agency:

001 – General Fund
03K – Industrial Insurance Premium Refund Account
057 – State Building Construction Account
355 – State Taxable Building Construction Account
163 – Worker and Community Right to Know Account
277 – State Agency Parking Account

Air Operating Permit Account (Fund #219) (RCW 70.94.015)

Fund Manager: Air Quality Program. Contact Matthew Vandrush 360.407.6646

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 reducing air pollution.

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 70.94.015)

Fund Manager: Air Quality Program. Contact Matthew Vandrush 360.407.6646

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). In addition, annual fees are charged for small industrial air pollution sources and greenhouse gas emission sources.

Aquatic Algae Control Account (Fund #10A) (RCW 43.21A.667)

Fund Manager: Water Quality Program. Contact Garret Ward 360.407.7544

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 360.407.6617

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 79.95J.025)

Fund Manager: Waste 2 Resources Program. Contact My-Hanh Mai 360.407.6996

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: For administering permit applications, reviewing related plans and documents, monitoring, evaluating, conducting inspections, overseeing performance of delegated program elements, and providing 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. There is an annual fee of $956.09 plus an additional fee for each residential equivalent. The fee for each residential equivalent ranges from $0.081 to $0.342, depending on the type and size. New biosolids facilities also pay a one-time review fee of $2,868.28.

Brownfield Redevelopment Trust Fund Account (Fund #20B) (RCW 70.105D)

Fund Manager: Toxics Cleanup Program. Contact Angie Wirkkala 360.407.7219

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 70.105D 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 173-322 WAC.

Revenue Source: Money deposited voluntarily or 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).

Cleanup Settlement Account (Fund #15H) (RCW 70.105D.130)

Fund Manager: Toxics Cleanup Program. Contact Angie Wirkkala 360.407.7219

Purpose: To conduct remedial actions at a specific facility caused by the release of hazardous substances.

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).

Coastal Protection Account (Fund #408) (RCW 90.48.390)

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Tra Thai 360.407.7454

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 longterm 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)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617

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, non-profit 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: Over $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. (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 360.407.6617

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: Over $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. (This account retains interest.)

Columbia River Basin Water Supply Revenue Recovery Account (Fund #296) (RCW 90.90)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617

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.

Columbia River Water Delivery Account (Fund #15K) (RCW 90.90.070)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617

Purpose: To resolve water conflicts in the Columbia River Basin through new releases of Lake Roosevelt water of approximately eighty-two thousand five hundred acre feet of water, increasing to no more than one hundred thirty-two thousand five hundred 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 70.325.040)

Fund Manager: Air Quality Program. Contact Matthew Vandrush 360.407.6646

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: None. There has been no appropriation to date. After an initial appropriation, the remittances from loan recipients deposited into the account will fund future loans.

Electronic Products Recycling Account (Fund #11J) (RCW 70.95N.130)

Fund Manager: Waste 2 Resources Program. Contact My-Hanh Mai 360.407.6996

Purpose: To provide the public with free collection, transportation, and recycling of covered electronic products, including televisions, computers, monitors, and e-readers.

Authorized Use: To administer manufacturer registration fee collections, review and approve plans and plan revisions, monitor, evaluate, and implement the regulations set for the Electronic Products Recycling 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 this tier structured fee based on their percentage of the total unit market share in the state of Washington. Depending on the market for the time period in question, 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. The seven-tiered structure fee ranges from $0 in tier-7 to $40,992 in tier-1 (Preliminary rates for CY 2015).

Environmental Legacy Stewardship Account (Fund #19G) (RCW 70.105D)

Fund Manager: Water Quality Program. Contact Garret Ward 360.407.7544

Purpose: To effect cleanup of contaminated sites in the state. However, many other toxic pollution and contamination issues also qualify for funding under the Model Toxics Control Act.

Authorized Use: Funding is used for clean up of contamination, and prevention and management of toxics which pose a threat to the environment in the state

Revenue Source: The Environmental Legacy Stewardship Account (ELSA) provides funds to Ecology and other state agencies having responsibility for cleaning up contaminated sites, improving hazardous waste management, and preventing future contamination. The Hazardous Substance Tax is the source of revenue for ELSA. This is a tax on hazardous substances at their first possession in the state of Washington. Currently, the majority of the revenue is generated from petroleum products and the remaining from pesticides, industrial chemicals, acids, and other hazardous substances. By statute 56 percent of the Hazardous Substance Tax is deposited in the State Toxics Control Account. The other 44 percent is deposited in the Local Toxics Control Account up to $140 million each Fiscal Year. Moneys above $140 million each Fiscal Year are deposited into ELSA.

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. For the 2013-15 and 2015-17 biennia, the enacted budget transfers $2 million back to the State General Fund.

Freshwater Aquatic Weeds Account (Fund #222) (RCW 43.21A.650)

Fund Manager: Water Quality Program. Contact Garret Ward 360.407.7544

Purpose: To prevent and control or manage invasive freshwater aquatic weeds.

Authorized Use: Funds are used to 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 70.95E.080)

Fund Manager: Hazardous Waste and Toxics Reduction Program. Contact Vince Chavez 360.407.6561

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 70.95E.020 and 70.95E.030) Annual fee also charged to businesses required to prepare reduction plans under RCW 70.95C.200.

Local Toxics Control Account (LTCA) (Fund #174) (RCW 70.105D.070)

Fund Manager: Toxics Cleanup Program. Contact Angie Wirkkala 360.407.7219

Purpose: To provide grants or loans to local governments for remedial actions, stormwater pollution source projects, hazardous waste plans and programs, local solid waste planning, plan implementation and oversight of solid waste facilities, and programs and cleanup of petroleum-based plastic or polystyrene foam debris in fresh or marine waters. The grant programs historically funded from the Local Toxics Control Account include: Remedial Action, Coordinated Prevention, Public Participation, Centennial Cleanwater and Stormwater grants. Remedial Action Grants (RAG) are provided to clean up hazardous sites throughout Washington. RAG categories include oversight remedial action grants, independent remedial action grants, site hazard assessment grants, integrated planning grants, safe drinking water action grants, and area-wide groundwater remedial action grants.

Authorized Use: To fund the remedial action grant program, stormwater pollution source projects, coordinated prevention grant program, and the public participation grant program, and to provide technical assistance to local governments.

Revenue Source: Revenue for the Local Toxics Control Account comes from the hazardous substance tax (HST). This tax is applied to all hazardous substances including petroleum products, pesticides, industrial chemicals, and acids on the first possession in the state of Washington. Moneys collected from the HST are deposited 44% to the Local Toxics Control Account and 56% to the State Toxics Control Account, up to $140 million each Fiscal Year. Moneys above $140 million each Fiscal Year are deposited to the Environmental Legacy Stewardship Account.

Oil Spill Prevention Account (Fund #217) (RCW 90.56.510)

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Tra Thai 360.407.7454

Purpose: To provide funding for oil spill prevention, preparedness, and response activities.

Authorized Use: These funds are used for: routine responses to spills; development of rules and policies; facility and vessel plan review and approval; spill drills; inspections; 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.

Oil Spill Response Account (Fund #223) (RCW 90.56.500)

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Tra Thai 360.407.7454

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.

Perpetual Surveillance and Maintenance Account (Fund #500) (RCW 43.200.080)

Fund Manager: Nuclear Waste Program. Contact Steve Moore 360.407.7212

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.)

Product Stewardship Programs Account (Fund #16T) (RCW 70.275.130)

Fund Manager: Waste 2 Resources Program. Contact My-Hanh Mai 360.407.6996

Purpose: To provide a convenient and environmentally sound product stewardship program for mercury-containing lights.

Authorized Use: Oversight of mercury containing lights collection and recovery, 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 a fee of $5,000 per year.

Radioactive Mixed Waste Account (Fund #20R) (RCW 70.105.280)

Fund Manager: Nuclear Waste Program. Contact Steve Moore 360.407.7212

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 three non-Hanford facilities.

Reclamation Account (Fund #027) (RCW 89.16.020)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617

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, 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).

Site Closure Account (Fund #125) (RCW 43.200.080)

Fund Manager: Nuclear Waste Program. Contact Steve Moore 360.407.7212

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 Implict Price Deflator. (This account retains interest.)

State & Local Improvements Revolving Account – Waste Disposal Facilities (Ref. 26) (Fund #051) (RCW 43.83B)

Fund Manager: Water Quality Program. Contact Kim Wagar 360.407.6614

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 principle 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, 1980 (Ref. 39) (Fund #055) (RCW 43.99F)

Fund Manager: Water Quality Program. Contact Kim Wagar 360.407.6614

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 principle 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 43.83B.030)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617

Purpose: To provide grants and loans to agriculturlal 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 revenue deposited to this account includes proceeds from the sale of bonds plus payment of principle 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 360.407.6617

Purpose: To provide assistance for drought preparedness activities and projects.

Authorized Use: To provide grants and loans to public entities to alleviate drought conditions.

Revenue Source: Funds are only transferred to this account when there is a state-declared drought. Recent state drought declarations were in 2001, 2005, and 2015. In 2001, funds were transferred into the account from the State General Fund. In 2005, funds were transferred from the State Taxable Building Construction Account. In 2015, funds were transferred into the account from the State General Fund. Revenues also include payments of principle and interest on loans.

State Emergency Water Projects Revolving Account (Fund #032) (RCW 43.83B.360)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617

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 principle paid on loans to local jurisdictions for drought relief are also deposited into this account.

State Toxics Control Account (Fund #173) (RCW 70.105D.070)

Fund Manager: Toxics Cleanup Program. Contact Angie Wirkkala 360.407.7219

Purpose: Cleanup toxic sites and address other toxic pollution and contamination issues qualifying for funding under the Model Toxics Control Act.

Authorized Use: Funding is used to carry out the Model Toxics Control Act, including support for toxic cleanup, toxic pollution prevention, hazardous and solid waste management, and other water and environmental health monitoring programs.

Revenue Source: Revenue for the State Toxics Control Account comes from the hazardous substance tax (HST). This tax is applied to all hazardous substances including petroleum products, pesticides, industrial chemicals, and acids on the first possession in the state of Washington. Moneys collected from the HST are deposited 56% to the State Toxics Control Account and 44% to the Local Toxics Control Account, up to $140 million each Fiscal Year. Moneys above $140 million each Fiscal Year are deposited to the Environmental Legacy Stewardship Account. The STCA 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 and approval for the cleanup of contamination at properties under an order or decree. The Voluntary Cleanup Program (VCP) offers a service to customers who request review of a planned or completed cleanup to determine whether or not there should be any further action taken. Ecology bills for this service. Other revenues include fines and penalties issued against persons or businesses which have not complied with environmental contamination and cleanup laws.

Underground Storage Tank Account (Fund #182) (RCW 90.76.100)

Fund Manager: Toxics Cleanup Program. Contact Angie Wirkkala 360.407.7219

Purpose: To prevent underground storate tank contamination into soil and groundwater and mitigate explosive hazards.

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. The current fee is $160 per tank.

Vessel Response Account (Fund #07C) (RCW 90.56.335)

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Tra Thai 360.407.7454

Purpose: The original purpose was to provide funds for emergency vessel towing to prevent vessel casualties and major oil spills.

Authorized Use: Funds are for a standby emergency response tug at Neah Bay.

Revenue Source: Only penalties under RCW 90.56.330 support the account. In prior biennia, revenues from vehicle title fees collected by the Department of Licensing were distributed into the account, however statury changes changed the distribution to the Transportation 2003 (Nickel) Account starting in FY 2008.

Waste Reduction, Recycling, and Litter Control Account (Fund #044) (RCW 70.93.180)

Fund Manager: Waste 2 Resources Program. Contact My-Hanh Mai 360.407.6996

Purpose: To control, remove and prevent litter and develop public education programs concerning the litter problem. Also, to recover and recycle waste materials, including those related to litter.

Authorized Use: Litter prevention and pickup (through Ecology Youth Corps, and contracts and grants with local and other state agencies), litter campaign, litter survey, administration of litter program. Funds are also to be used to implement waste reduction and recycling (including composting) efforts, provide technical assistance to local governments for commercial business and residential recycling programs to educate citizens about waste and litter reduction and recycling programs and to increase access to recycling programs especially for food packaging and plastic bags.

The 2013 Legislature diverted $10 million in revenue each biennium to the State Parks Renewal and Stewardship Account in the 2013-15 and 2015-17 biennia. Without this funding, Ecology will not be able to conduct a litter prevention campaign or a litter survey.

Revenue Source: Wholesalers and retailers in Washington State pay a litter tax of $0.15 per $1,000 of gross profit 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 70.95.510, 70.95.521, 70.95.532)

Fund Manager: Waste 2 Resources Program. Contact My-Hanh Mai 360.407.6996

Purpose: To use the funds for the cleanup of unauthorized waste tire piles, and measures that prevent future accumulation of unauthorized waste tire piles.

Authorized Use: To accomplish the following: administer and manage contracts 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 70.95.510 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. 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.

Water Pollution Control Revolving Account (Fund #727) (RCW 90.50A.020)

Fund Manager: Water Quality Program. Contact Kim Wagar 360.407.6614

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 $18-20 million. The second source of revenue is principle 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)

Fund Manager: Water Quality Program. Contact Kim Wagar 360.407.6614

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.

Water Quality Capital Account (Fund #11W) (RCW 70.146HB.1137)

Fund Manager: Water Quality Program. Contact Kim Wagar 360.407.6614

Purpose: To provide grants to public bodies for financing construction of water pollution control facilities and nonpoint source activities.

Authorized Use: Grants to local governments.

Revenue Source: There is no specific revenue source for this account. It was intended that this account would be supported by a special appropriation from the Water Quality Account (WQA). In the 2009 legislative session, the WQA fund balance and statutory distribution from tobacco taxes was transferred to the State General Fund.

Water Quality Permit Account (Fund #176) (RCW 90.48.465)

Fund Manager: Water Quality Program. Contact Garret Ward 360.407.7544

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: $110-155,288 for industries; $1.72-$2.16 (per residential equivalent) for municipalities; and $83-$52,680 for general permits (FY 2016). Fees are reviewed each biennium by stakeholders. Ecology must go through formal rule-making to amend the fee. 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 360.407.6617

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 360.407.6617

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.

Wood Stove Education & Enforcement Account (Fund #160) (RCW 70.94.483)

Fund Manager: Air Quality Program. Contact Matthew Vandrush 360.407.6646

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.

Yakima Integrated Plan Implementation Account (Fund #19K) (RCW 90.38)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617

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 RCW 90.38, and any other sources deposited to the account. (This account retains interest.)

Yakima Integrated Plan Implementation Revenue Recovery Account (Fund #565) (RCW 90.38)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617

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 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)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617

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 RCW 90.38, and any other sources deposited to the account. (This account retains interest.)