



DEPARTMENT OF
ECOLOGY
State of Washington



Washington Department of Ecology

Budget & Program Overview

2013-2015



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Cover photo: Ecology promotes composting as a good way to recycle waste, however, some people living or working near composters complain of nuisance odors. Ecology's John Cleary samples for odor at Cedar Grove Composting in Maple Valley.

Washington Department of Ecology

Budget & Program Overview

2013-2015

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A Message from the Director

Welcome to the ninth edition of the Washington State Department of Ecology Budget and Program Overview book. This document provides information about the work we do and our budget for the 2013-15 biennium.

I have been honored and excited to be a part of Governor's Inslee's team mapping out a vision for Washington's future. Governor Inslee is committed to building a thriving Washington through five data-driven goals and continuous improvement. Ecology is committed to those goals.

Much of our work to protect human health and the environment either directly or indirectly supports all five of the Results Washington goals. For example, our Padilla Bay teacher workshops, green chemistry webinars for high school students, and online curricula and tools for teachers support the education outcome to increase training for teachers and learning opportunities for young children in math and science. Goal #3, Sustainable Energy and a Clean Environment, is where Ecology will play a major role.

We have recently refreshed our Strategic Framework to align with the Governor's Results Washington initiative. Throughout this book, you will see that our core work has not changed – and we will ensure that our resources are focused on achieving measurable results.

Ecology continues to face the challenges from a slowly recovering economy and pressure from growing demands on water supplies, toxic substances used in industrial processes and consumer products, and climate change. We know that we do not stand alone in taking on these challenges – so as part of our Strategic Framework, we begin this two-year budget cycle with a renewed vision that our innovative partnerships sustain healthy land, air and water in harmony with a strong economy. To accomplish this, we will be focused on the following priority areas:

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

Please use this book to become more familiar with Ecology's programs, including the laws we implement and uphold, the amount of money appropriated to the agency over the next two years, what we are doing to meet our priorities and goals - and how we will measure results. I hope this information is useful and enlightening.

Sincerely,

A handwritten signature in black ink that reads "Maia D. Bellon". The signature is fluid and cursive, with a long horizontal line extending to the right.

Maia D. Bellon
Director

2013-15 Introduction – Agency Budget

The Department of Ecology— Working with you for a better Washington

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.

This book provides an overview of Ecology's 2013-15 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.

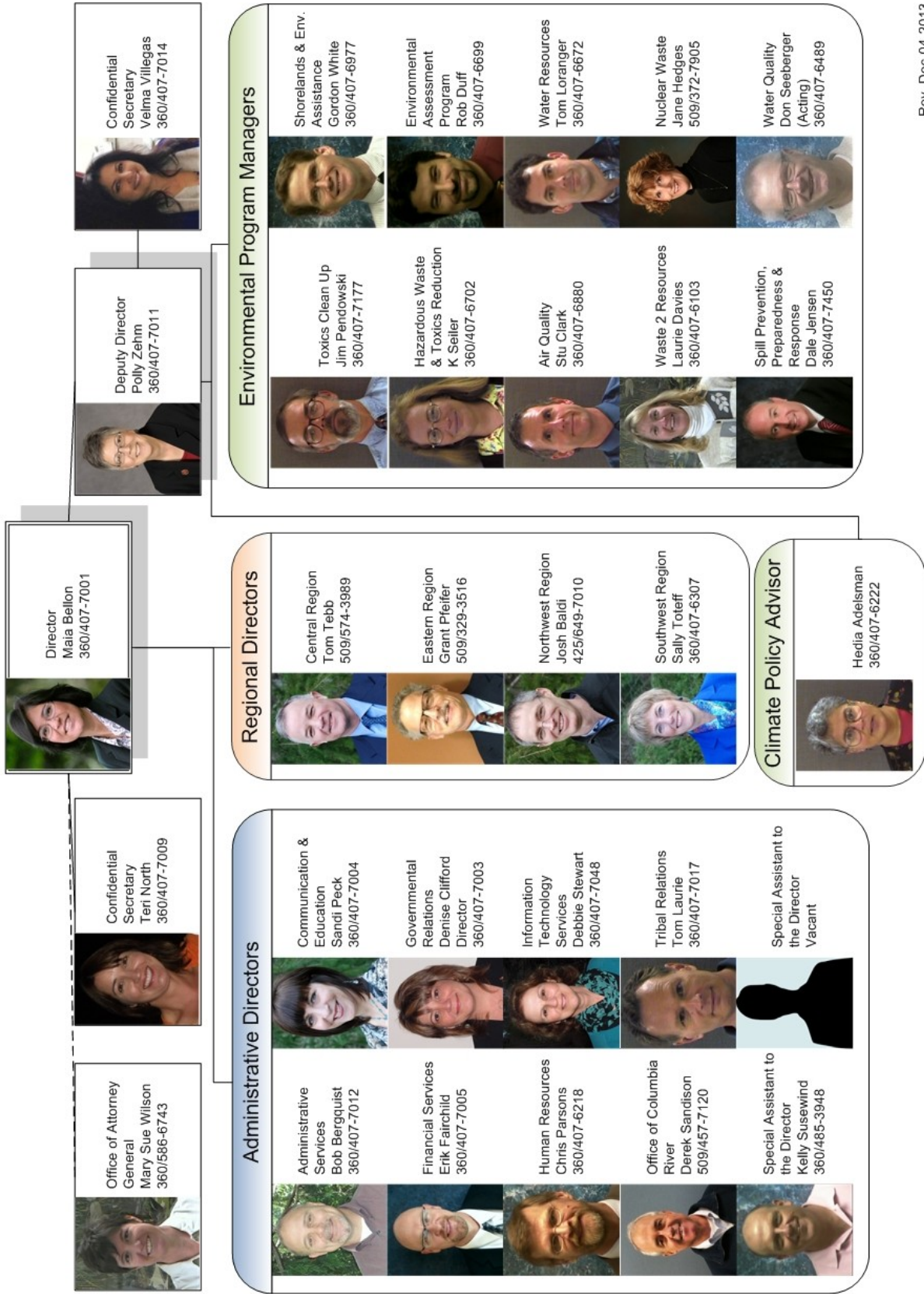
In 2013-15, Ecology's operating budget is \$458.1 million, and our capital budget is \$1.0 billion (new and reappropriated dollars). When you combine the two, 73 percent of the total is money passed through to local governments and communities to do environmental work. The remainder supports Ecology activities, which are discussed in more detail in the program sections of this book.

Since the start of the 2007-09 biennium, Ecology's near General Fund-State (GF-S) has been reduced by \$80.9 million, or 61 percent. About 11 percent of our current base 2013-15 operating budget is supported by GF-S, with the remainder coming from dedicated environmental accounts and federal dollars. During this same period, over a quarter billion dollars (\$280 million) in dedicated environmental funds managed by the agency have been transferred directly to the GF-S.

During this same six year period, legislative fund shifts and appropriations have increased our reliance on Model Toxics Control Act (MTCA) funding for base environmental program work by \$69 million, or 59 percent. 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. Approximately 38 percent of our current base operating budget is now supported by MTCA.

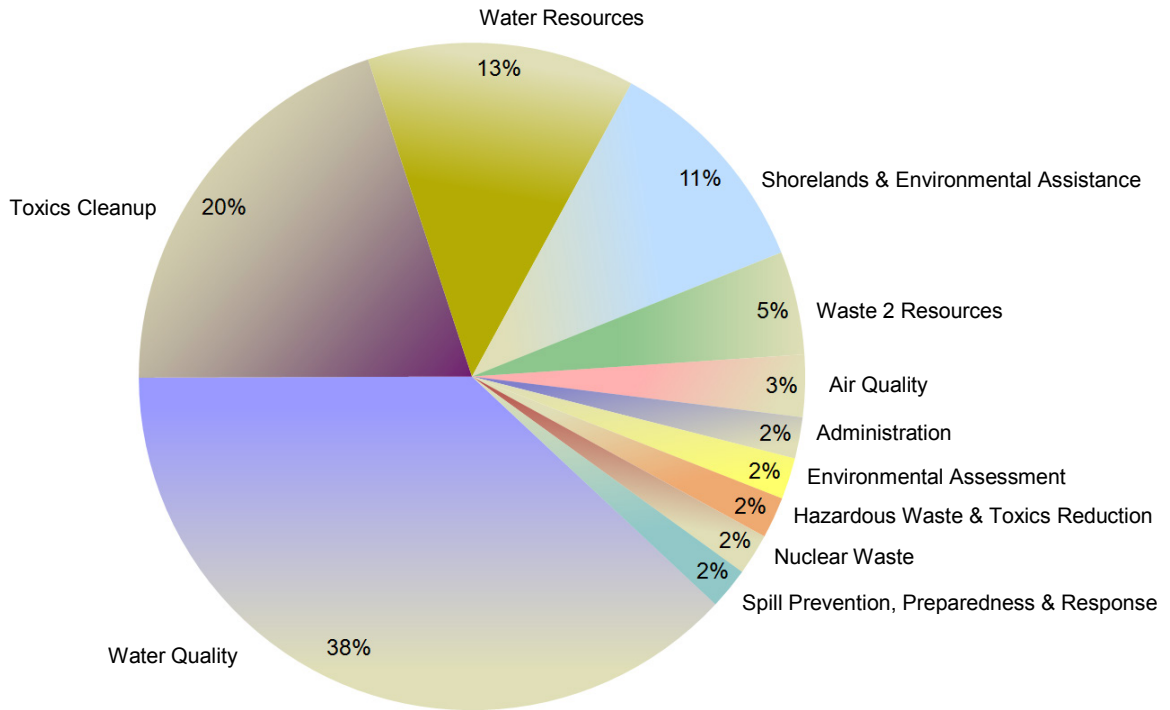
Each program's profile includes the context for its work and descriptions of the activities funded in the 2013-15 budget, including the intended results and how performance will be measured. Throughout the book, pie charts and tables are used to show the source of funding and how it is allocated. Information about our accounts is in the back of the book.

Department of Ecology – Executive Management



Ecology 2013-15 Biennium Budget By Program

Ecology carries out its mission through ten 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.



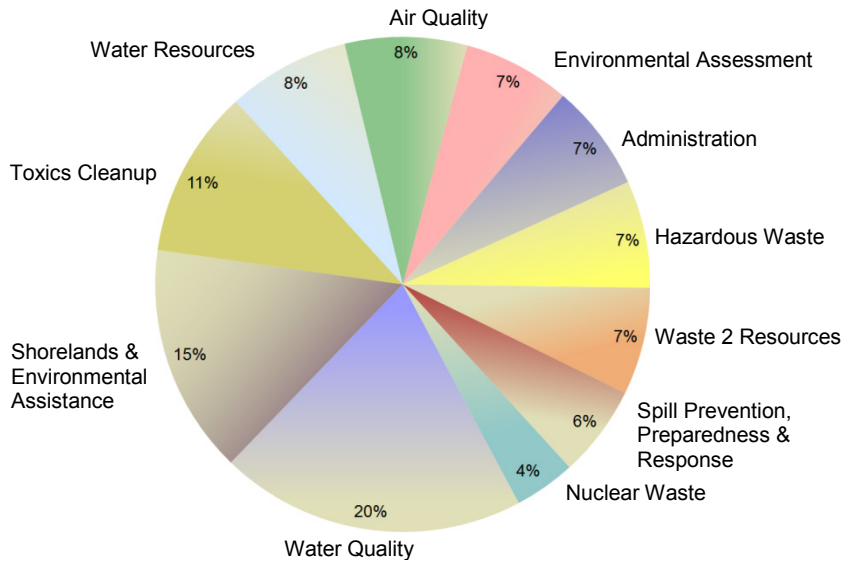
Programs	FTEs	Operating	Capital	Operating + Capital
Water Quality	255.1	\$91,817,881	\$475,402,411	\$567,220,292
Toxics Cleanup	184.9	52,444,796	235,972,848	288,417,644
Water Resources	141.0	37,919,598	155,313,971	193,233,569
Shorelands & Environmental Assistance	167.4	68,954,869	88,176,499	157,131,368
Waste 2 Resources	119.0	29,606,922	36,699,729	66,306,651
Air Quality	114.1	34,213,277	14,328,542	48,541,819
Administration	151.5	32,036,848	1,317,480	33,354,328
Environmental Assessment	155.0	32,770,435	0	32,770,435
Hazardous Waste & Toxics Reduction	123.9	31,627,961	281,090	31,909,051
Nuclear Waste	82.8	19,762,104	11,885,000	31,647,104
Spill Prevention, Preparedness & Response	75.9	26,958,309	0	26,958,309
Total	1,570.6	\$458,113,000	\$1,019,377,570	\$1,477,490,570

Ecology 2013-15 Biennium Operating Budget

Operating Budget = \$458.1 Million

By Program

Programs	Operating
Water Quality	\$91,817,881
Shorelands & Environmental Assistance	68,954,869
Toxics Cleanup	52,444,796
Water Resources	37,919,598
Air Quality	34,213,277
Environmental Assessment	32,770,435
Administration*	32,036,848
Hazardous Waste & Toxics Reduction	31,627,961
Waste 2 Resources	29,606,922
Spill Prevention, Preparedness & Response	26,958,309
Nuclear Waste	19,762,104
Total	\$458,113,000



*Note: The Administration Program is funded by operating and capital budgets and is 2% of the total budget. See page 116 for more detail.

By Fund Source

General Funds	Amount	%
General Fund – Federal (001)	\$105,230,000	23.0
General Fund – State (001)	51,435,000	11.2
General Fund – Private/Local (001)	16,912,000	3.7
Dedicated Accounts	Amount	%
State Toxics Control (173)	\$124,238,000	27.1
Environmental Legacy Stewardship (19G)	43,748,000	9.5
Water Quality Permit (176)	40,982,000	8.9
Radioactive Mixed Waste (20R)	13,800,000	3.0
Waste Reduction, Recycling & Litter Control (044)	9,722,000	2.1
Oil Spill Response (223)	7,076,000	1.5
Hazardous Waste Assistance (207)	6,037,000	1.3
Oil Spill Prevention (217)	5,684,000	1.2
Local Toxics Control (174)	3,774,000	0.8
Reclamation (027)	3,735,000	0.8
Underground Storage Tank (182)	3,347,000	0.7
Air Operating Permit (219)	3,132,000	0.7
Air Pollution Control (216)	3,128,000	0.7
Flood Control Assistance (02P)	1,985,000	0.4
Biosolids Permit (199)	1,848,000	0.4
Worker & Community Right to Know (163)	1,701,000	0.4
Coastal Protection (408)	1,556,000	0.3

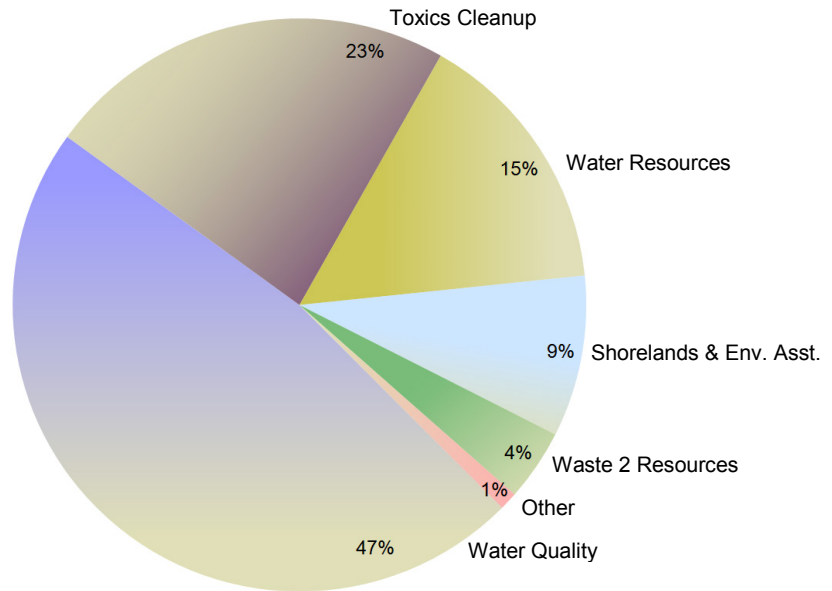
Water Pollution Control Revolving – Federal (727)	1,505,000	0.3
Freshwater Aquatic Weeds (222)	1,409,000	0.3
Water Pollution Control Revolving Administration (564)	1,021,000	0.2
State Toxics Control – Private/Local (173)	979,000	0.2
Electronic Products Recycling (11J)	721,000	0.2
Wood Stove Education & Enforcement (160)	612,000	0.1
Site Closure (125)	556,000	0.1
Aquatic Algae Control (10A)	513,000	0.1
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	426,000	0.1
Water Pollution Control Revolving – State (727)	356,000	0.1
Basic Data (116)	310,000	0.1
Product Stewardship Programs (16T)	210,000	<0.1
State Drought Preparedness (05W)	204,000	<0.1
Water Rights Processing (16V)	135,000	<0.1
Water Rights Tracking System (10G)	46,000	<0.1
State Emergency Water Projects Revolving (032)	40,000	<0.1
Total	\$458,113,000	100.0

Ecology 2013-15 Biennium Capital Budget

Capital Budget = \$1.0 Billion

By Program

Programs	Capital
Water Quality	\$475,402,411
Toxics Cleanup	235,972,848
Water Resources	155,313,971
Shorelands & Environmental Assistance	88,176,499
Waste 2 Resources	36,699,729
Air Quality	14,328,542
Nuclear Waste	11,885,000
Administration	1,317,480
Hazardous Waste & Toxics Reduction	281,090
Environmental Assessment	0
Spill Prevention, Preparedness & Response	0
Total	\$1,019,377,570



Other = Air Quality (1.41%), Nuclear Waste (1.17%), Administration (0.13%), and Hazardous Waste (0.03%).

By Fund Source

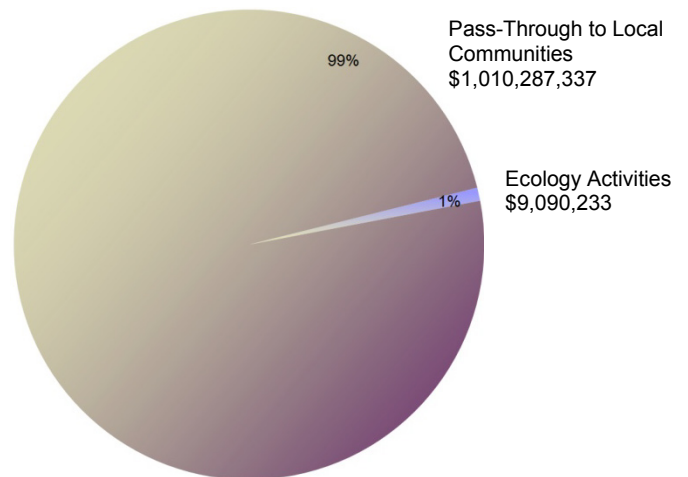
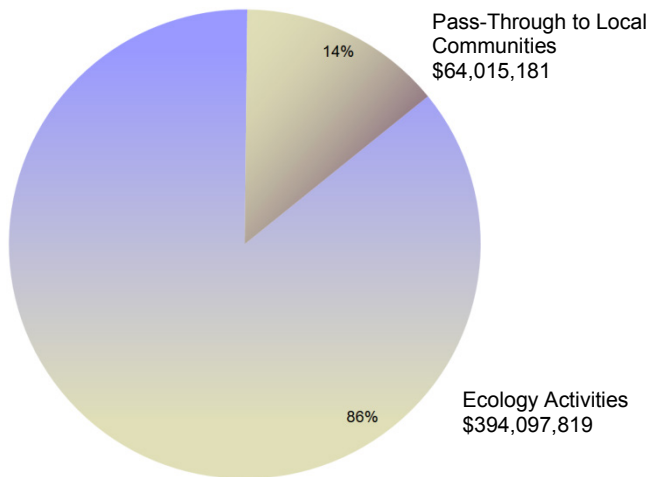
Accounts	Amount	%
Water Pollution Control Revolving – State (727)	\$229,275,760	22.5
Local Toxics Control (174)	208,251,160	20.4
State Building Construction (057)	167,032,284	16.4
Environmental Legacy Stewardship (19G)	98,800,000	9.7
Water Pollution Control Revolving – Federal (727)	80,000,000	7.8
Columbia River Basin Water Supply Development (10P)	65,570,438	6.4
State Toxics Control (173)	62,889,907	6.2
Cleanup Settlement (15H)	37,586,822	3.7
Columbia River Basin Taxable Bond Water Supply Development (18B)	30,545,000	3.0
General Fund – Federal (001)	21,289,000	2.1
Site Closure (125)	11,885,000	1.2
Water Pollution Control Revolving – Federal ARRA (727)	2,720,000	0.3
Waste Tire Removal (08R)	1,263,000	0.1
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	807,000	0.1
State & Local Improvements Revolving – Waste Disposal Facilities (Referendum 26) (051)	708,319	0.1
Air Pollution Control (216)	350,000	<0.1
Water Quality Capital (11W)	233,000	<0.1
State & Local Improvements Revolving – Waste Disposal Facilities (Referendum 39) (055)	170,880	<0.1
Total	\$1,019,377,570	100.0

Ecology 2013-15 Biennium Budget Pass-Through Funding

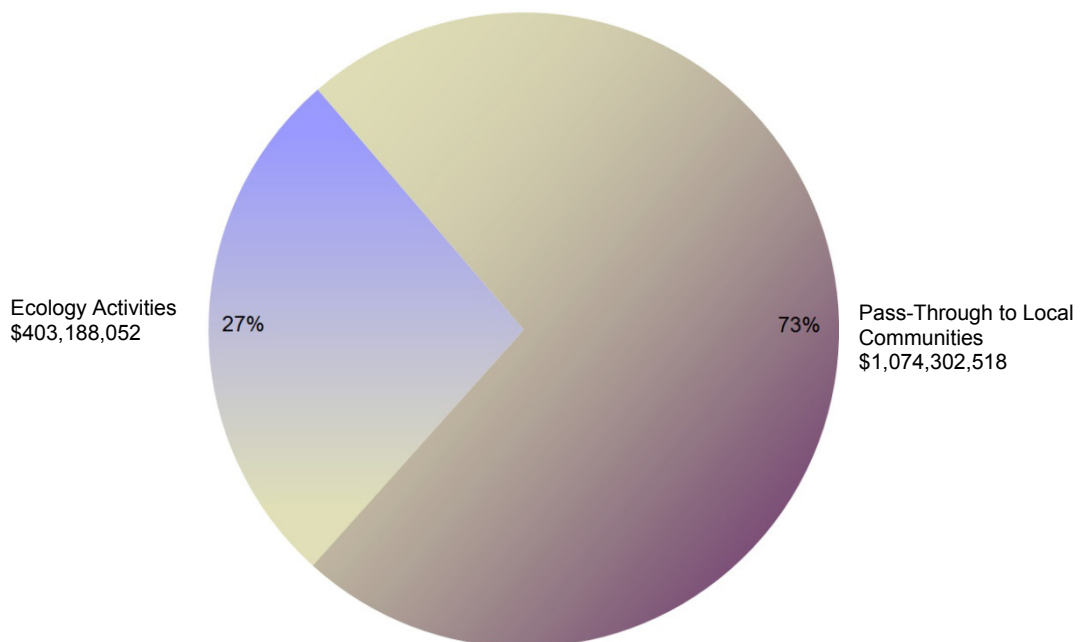
Most of the money Ecology manages is “passed through” to local governments and communities to do environmental work. This money is awarded as grants or loans and is also contracted directly for things such as watershed planning, building water pollution control facilities, cleaning up publicly-owned 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 124 and 125 for information on data sources.

Operating Budget = \$458,113,000

Capital Budget = \$1,019,377,570



Combined Operating + Capital Budget = \$1,477,490,570



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Frank Van Haren of Ecology's Air Quality Program inspects cargo handling equipment at the Port of Seattle to determine if the equipment is a suitable candidate for an exhaust emission control device.

Program Mission

The mission of the Air Quality Program is to protect, preserve, and enhance the air quality of Washington; to safeguard public health and the environment; and to support a high quality of life for current and future generations.

Environmental Threats

Air pollution is a public health concern. Air pollution causes lung disease, worsens existing heart and lung diseases, increases chronic breathing problems and 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.

Overall air quality in Washington has improved since 1991 when the Washington State Legislature expanded statewide air quality protection. In the mid-1990s, 13 areas of Washington did not meet national health-based air quality standards for six chemicals known as “criteria” pollutants. More than three million people lived within these areas and were exposed to high pollution levels. By 2005, thanks to federal, state, and local efforts, all 13 of those areas met federal air quality standards.

Based on health research, the U.S. Environmental Protection Agency (EPA) began adopting tighter air quality standards in 2006. A large area in Pierce County violated the new federal

standard for fine particle pollution, and up to eight other communities around the state are at risk of violating that standard. In coming years, Ecology expects EPA to once again tighten its fine particle and ozone standards. When that happens, multiple areas in the state could violate the new health-based limits.

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 climate and weather. 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.

Authorizing Laws

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

Air Quality Program

Stu Clark, Program Manager, 360.407.6880

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 High 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. Ecology also expects a tougher standard for ozone to be adopted during the 2013-15 biennium. 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 people whose existing health problems put them at risk (sensitive populations). Also affected are economically disadvantaged communities that are exposed to a higher amount of air pollution than other populations.

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 10,000 diesel engines, resulting in reductions of more than 31 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, 9 to 16 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.

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.

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 3,000 uncertified wood stoves with cleaner forms of home heat. These replacements are targeted to lower-income, high wood-using homes in communities that either violate the national standard for fine particles or are at high risk of violating the standard. During the 2013-15 biennium, Ecology's goal is to replace an additional 1,200 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 to burn 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 also 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 completed an evaluation of 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 gases, citizens 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 create and operate a greenhouse gas reporting program requiring individual entities that emit certain quantities of greenhouse gases to report those emissions. This information will be used to better inform the emissions inventory. And it will help guide future federal and state climate policy direction and decisions that target emissions reductions across Washington.

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. Our staff worked to develop recommendations for Governor Gregoire regarding adopting a low-carbon fuel standard for Washington

Air Quality Program

Stu Clark, Program Manager, 360.407.6880

(Executive Order 09-05). Ecology will implement any changes required by new federal clean car standards for greenhouse gas emissions, and will provide support for recommendations made by the Climate Legislative/Executive Workgroup established by Governor Inslee and the Legislature in 2013.

In addition, Ecology will implement new federal climate regulations for major industrial sources. These new requirements place an increased burden on the rule development and commercial/industrial permitting 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 on-going 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 individual 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 applying for permits easier and to speed permit issuance.

Ecology conducts regular surveys of its permitting and inspection clients. We seek regular feedback on our webpage to foster 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 forecasts (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 Measures

- Percent 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 ensure the air in Washington is both safe to breathe and meets federal standards. Ecology will work to reduce ambient air pollutant concentrations, 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.
- Violations of ambient air quality standards are prevented.
- State Implementation Plan strategies are implemented for areas out of compliance with federal air quality standards: Pierce County/Tacoma. 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 one central Washington community is implemented.

Performance Measures

- Number of areas in Washington measuring air quality levels that are not in compliance with federal air quality standards (Non-Attainment Areas).
- Number of citizens exposed to levels of pollution that exceed federal air quality standards.

Reduce Air Pollution from Commercial and Industrial Sources

Ecology issues permits and conducts inspections of 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 under law).

Ecology provides technical assistance, permit application and processing guidance, interpretation

of rules, pre-application assistance, and permit review. Permits are conditioned and approved to ensure all federal and state laws are met, 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.

- 100 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 Measures

- 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 significant emission reductions, Ecology cannot ensure healthy air to breathe, future attainment of federal air quality standards, avoid multi-million 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:

- Carries out Washington's Clean Car standards.
- Runs a vehicle emissions check program of nearly two million cars and trucks.

Air Quality Program

Stu Clark, Program Manager, 360.407.6880

- 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 ten 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.
- Tons of diesel soot emissions produced in counties contiguous to Puget Sound.

Reduce Health and Environmental Threats from Smoke

Nagging 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, where required by law, Ecology issues conditioned permits for agricultural, land clearing, fire training, and other outdoor burning. Ecology also produces daily burn forecasts; responds to and resolves complaints related to smoke; provides technical assistance to manage and prevent outdoor burning impacts; and uses technical assistance, research, and demonstration projects to promote development and use of practical alternatives to burning.

To address smoke from residential wood heating, Ecology:

- Coordinates burn curtailments.
- Conducts wood stove change-out programs.
- Sets strict emission limits for new stoves and promotes development of clean burning technologies.
- Coordinates with the EPA 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

Ecology's ongoing goal is to achieve and maintain air quality levels in all Washington communities that experts agree is sufficient to protect human health.

- 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 burning devices.

Performance Measures

- Number of citizens exposed to air quality that does not meet healthy levels for fine particle pollution.
- 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 Ecology and policy maker understanding of ambient concentrations and sources of priority toxics.
- Diesel soot emissions are reduced 18 percent by 2016 compared to a 2011 baseline.
- State funds are used to reduce diesel emissions near ports and other high exposure areas (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 (school buses and public and private sector fleets) retrofitted with pollution control equipment.
- Number of woodstoves replaced with cleaner burning technologies.
- Tons of diesel soot emissions produced statewide.
- Tons of diesel soot emissions produced in counties contiguous to Puget Sound.

Responding to Climate Change

State law sets limits on emissions of greenhouse gases 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 emissions inventory and will implement 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 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, businesses, and local governments cope with existing and projected climate changes, Ecology has worked with other designated agencies to develop an integrated climate change response strategy.
- Ecology will continue 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 recommendations of the Climate Legislative and Executive Workgroup.

Performance Measures

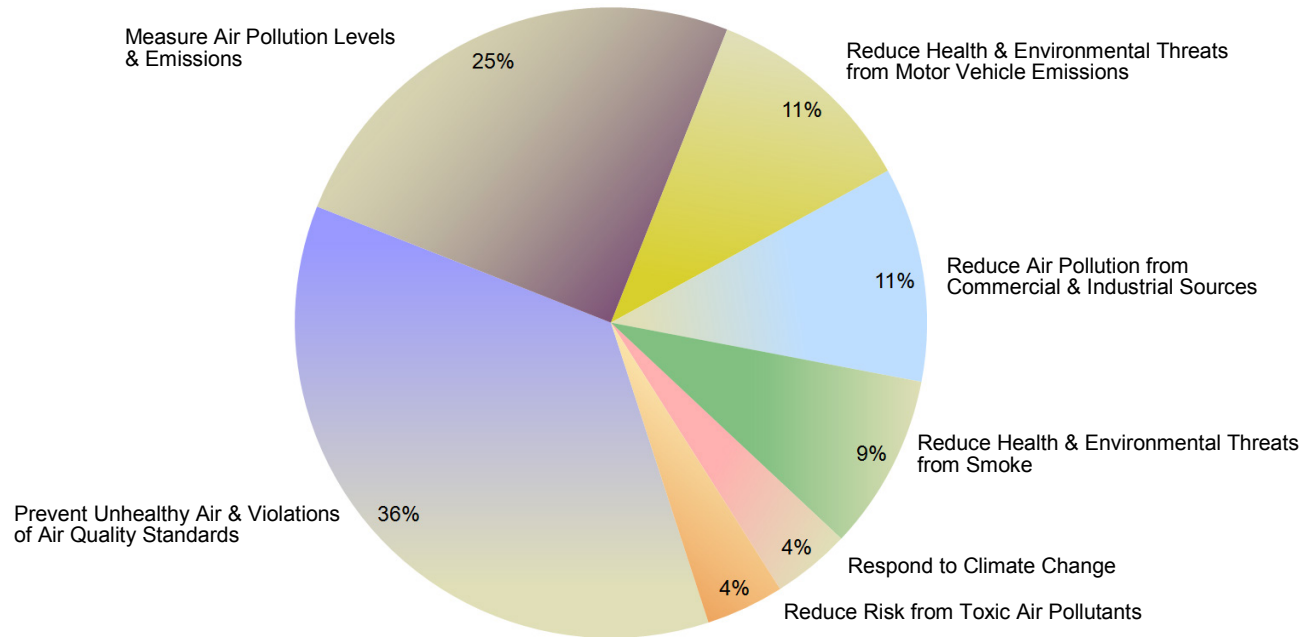
- Tons of greenhouse gas emissions produced statewide.

Air Quality Program

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Air Quality Program 2013-15 Biennium Budget By Activities

Operating Budget = \$34.2 Million; FTEs = 114.1



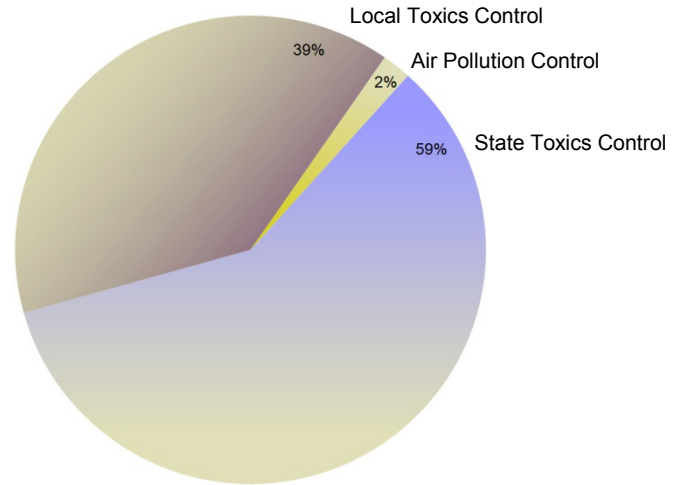
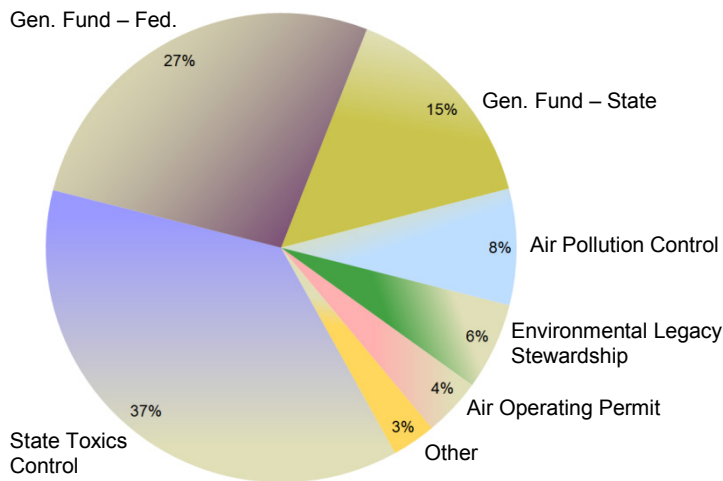
Activities	Dollars	FTEs
Prevent Unhealthy Air & Violations of Air Quality Standards (A034)	\$12,151,355	24.5
Measure Air Pollution Levels & Emissions (A025)	8,384,634	25.9
Reduce Health & Environmental Threats from Motor Vehicle Emissions (A047)	3,969,391	17.8
Reduce Air Pollution from Commercial & Industrial Sources (A045)	3,906,664	18.0
Reduce Health & Environmental Threats from Smoke (A048)	3,039,351	14.6
Responding to Climate Change (A063)	1,503,562	7.1
Reduce Risk from Toxic Air Pollutants (A051)	1,258,320	6.2
Air Quality Operating Budget Total	\$34,213,277	114.1

Air Quality Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$34.2 Million

FTEs = 114.1

Capital Budget = \$14.3 Million



Other = Wood Stove Education & Enforcement (1.73%) and General Fund - Private/Local (0.96%).

Operating Fund Sources	Amount	Uses
State Toxics Control (173)	\$12,681,670	Developing strategies to respond to and prevent violations of national ambient air quality standards in Washington communities.
General Fund - Federal (001)	9,283,528	State and local air authority grants for ambient air monitoring, emission inventory, modeling, meteorology, and other air quality activities.
General Fund - State (001)	5,288,065	Ambient air monitoring, grants to local air authorities, new source permitting, modeling and meteorology, emission inventory, vehicle emission testing, outdoor and agricultural burning permitting, woodstove education, climate change.
Air Pollution Control (216)	2,663,807	Minor source and new source permitting, agricultural burning permitting, agricultural burning alternatives research, greenhouse gas reporting.
Environmental Legacy Stewardship (19G)	2,005,649	Returning areas to attainment with federal standards and preventing at risk areas from going into nonattainment; ultra-fine particulate study in Port Angeles and Port Townsend.
Air Operating Permit (219)	1,369,014	Permitting of major air pollution sources, small business technical assistance.
Wood Stove Education & Enforcement (160)	592,235	Enforcement of and education regarding proper woodstove use, grants to local air authorities.
General Fund - Private/Local (001)	329,309	Implement activities associated with a regional haze program, ambient air monitoring, and telemetry system.
Operating Budget Total	\$34,213,277	

Air Quality Program

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Capital Fund Sources	Amount	Uses
State Toxics Control (173)	\$8,448,542	Reducing harmful emissions from heavy duty diesel engines and woodstove burning.
Local Toxics Control (174)	5,530,000	Reducing harmful emissions from heavy duty diesel engines through use of anti-idling technologies in public fleets statewide. Reducing harmful emissions from wood stoves in at-risk communities statewide.
Air Pollution Control (216)	350,000	Reducing harmful emissions from heavy duty diesel engines in Tacoma. Reducing harmful emissions from wood stoves in Tacoma.
Capital Budget Total	\$14,328,542	
Air Quality Operating & Capital Budget Total	\$48,541,819	

Environmental Assessment Program

Rob Duff, Program Manager, 360.407.6699



Chris Hartman assembles electroshocking equipment as he prepares to collect biological samples in Twenty-five Mile Creek as part of Ecology's statewide program to monitor watershed health and salmon recovery.

Program Mission

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

Environmental Threats

Ecology conducts monitoring programs and designs scientific studies to measure the quality of water, sediments, and fish tissue in marine and fresh waters 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.

Authorizing Laws

- *Federal Clean Water Act*
- *RCW 43.21A, Department of Ecology*
- *RCW 70.105D, Model Toxics Control Act*

- *RCW 70.119A.080, Public Water Systems – Penalties and Compliance*
- *RCW 90.48, Water Pollution Control*
- *RCW 90.71, Puget Sound Water Quality Protection*

Constituents/Interested Parties

- *Federal and local governments; 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 waterbodies that don't meet water quality standards. As part of a lawsuit agreement, a memorandum of agreement with the U.S. Environmental Protection Agency (EPA) required Ecology to develop nearly 1,500 water quality improvement plans by 2013. We will not meet this goal and Ecology is working with EPA and the lawsuit plaintiffs to renegotiate the settlement agreement and extend the time frame for compliance.

Marine Waters – Linking Models with Monitoring

For Washington marine waters, linking water quality and hydrodynamic (circulation) models to a carefully designed monitoring program could provide a powerful new approach to assessing and predicting environmental impacts. Ecology is using

Environmental Assessment Program

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this approach right now in our South Puget Sound dissolved oxygen study. South Puget Sound is particularly vulnerable to pollutants due to the large number of sources and limited water circulation.

When completed, this combined modeling/monitoring program will provide the data we need to specify measures to reduce pollutant discharge (e.g., denitrification requirements for wastewater treatment plants).

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 in-stream flow rule setting and compliance monitoring in response to watershed planning requirements and efforts to restore salmon.

Beach Monitoring

Using BEACH Act grant funds from the EPA, Ecology is working with the Department of Health and local health agencies to monitor bacterial contamination at many (but not all) 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 is scheduled to end in 2014. Ecology plans to submit a 2014 Supplemental Budget request for state funding to continue the program after federal funding ends.

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?" (e.g., "is the water getting cleaner or dirtier?"). Site-specific sampling only tells us 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 (such as Puget Sound or the Columbia Basin).

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

Status and Trends In Freshwater

Beginning in the 2009-11 biennium, the Legislature provided ongoing funding for a statewide status and trends monitoring program. This program will provide 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.

Groundwater Monitoring

We have no program in place to systematically monitor groundwater quality or quantity. This represents a significant gap in our understanding of pollution sources and transport, and means we can't predict how groundwater levels may change as a result of water withdrawals, surface flows, climate, and precipitation trends, etc. Without an adequate groundwater monitoring program, we will not be able to properly manage drinking and irrigation water supplies, or evaluate this important pollution pathway. We are continuing 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 Elliott Bay/Lower Duwamish in 2013 (last sampled in 2007).

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. That's why, during the past biennium, we have developed an ambient biological monitoring program with a network of 33 sites statewide.

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 of these groups 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 (or streamlining) among these groups is critical. Recently, EPA has adopted a new method of providing funding through its National Estuary Program (NEP) grants using "lead organizations" to distribute the funding. This change has increased coordination between state agencies that receive the 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, Water Pollution Control Act, and Model Toxics Control Act. 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 water cleanup studies, which calculate the total maximum daily load (TMDL) of a pollutant a waterbody can absorb without causing violations of water quality standards. 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 ecological 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 Measures

- 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 us. 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.

Environmental Assessment Program

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Performance Measures

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

Improve the 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 the data, Ecology uses our staff to:

- Provide guidance and training on developing quality assurance project plans.
- Review project proposals.
- Consult on sampling design requirements and interpretation of results.

This quality assurance function is 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 agency 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 Measures

- Percent 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, and supports work conducted under the federal Clean Water Act, Water Pollution Control Act, Puget Sound Water Quality Protection Act, and Model Toxics Control Act.

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 the basis for environmental decisions.

Performance Measures

- Percent of acceptable performance testing analyses completed by Manchester Environmental Laboratory.
- Number of chemical analyses completed for clients 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 waterbodies, 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 70 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

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

Environmental Assessment Program

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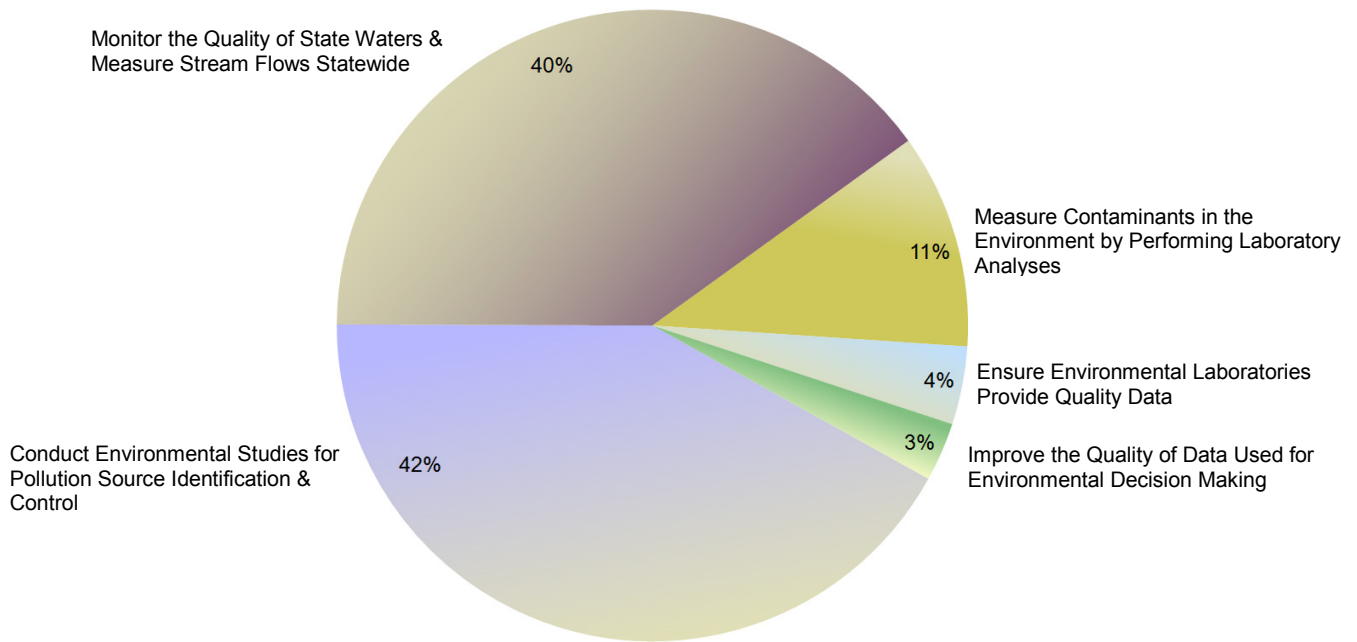
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Environmental Assessment Program

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Environmental Assessment Program 2013-15 Biennium Budget By Activities

Operating Budget = \$32.8 Million; FTEs = 155.0



Activities	Dollars	FTEs
Conduct Environmental Studies for Pollution Source Identification & Control (A007)	\$13,805,753	62.2
Monitor the Quality of State Waters & Measure Stream Flows Statewide (A027)	12,934,737	53.4
Measure Contaminants in the Environment by Performing Laboratory Analyses (A026)	3,579,156	28.6
Ensure Environmental Laboratories Provide Quality Data (A012)	1,380,145	6.2
Improve the Quality of Data Used for Environmental Decision Making (A020)	1,070,644	4.6
Environmental Assessment Operating Budget Total	\$32,770,435	155.0

Environmental Assessment Program

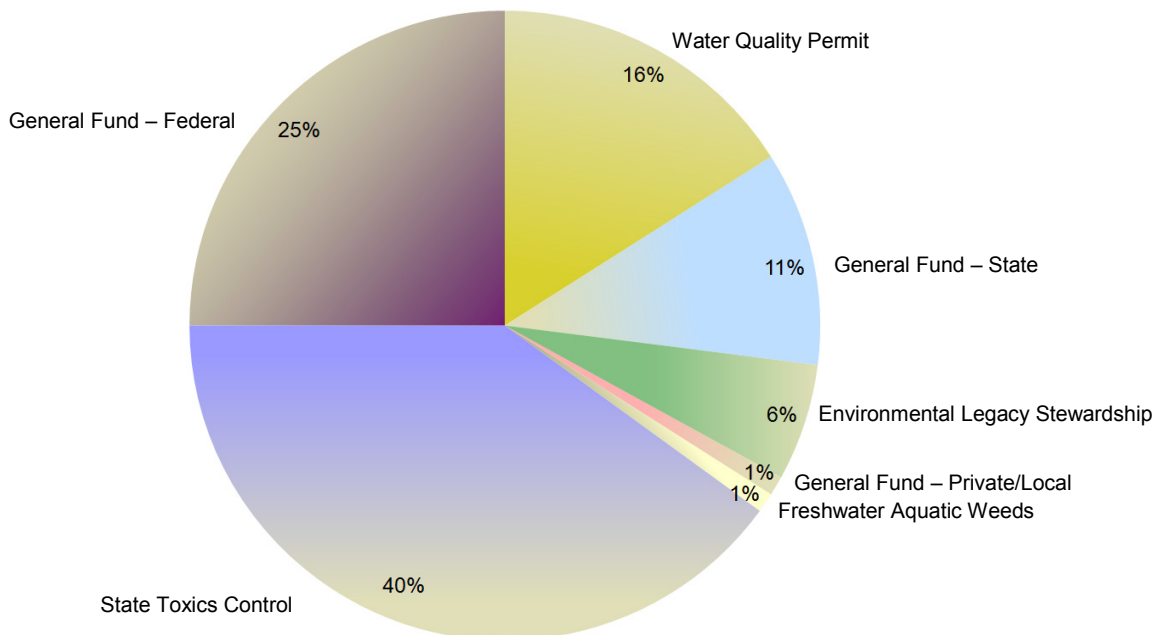
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Environmental Assessment Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$32.8 Million

No Capital Budget

FTEs = 155.0



Operating Fund Sources	Amount	Uses
State Toxics Control (173)	\$13,208,367	Water quality monitoring, toxics monitoring, marine sediment monitoring, groundwater investigations, water cleanup studies.
General Fund - Federal (001)	8,187,131	Water quality monitoring, marine sediment monitoring, groundwater investigations, water cleanup studies, effectiveness monitoring.
Water Quality Permit (176)	5,315,812	Water cleanup studies, groundwater investigations, technical assistance, compliance monitoring.
General Fund - State (001)	3,604,727	Water quality monitoring, marine sediment monitoring, streamflow monitoring, groundwater investigations, technical assistance, water cleanup studies, laboratory accreditation, quality assurance.
Environmental Legacy Stewardship (19G)	1,871,003	Water quality monitoring, biological monitoring.
General Fund - Private/Local (001)	337,444	Water quality monitoring, marine sediment monitoring, laboratory analytical work.
Freshwater Aquatic Weeds (222)	245,951	Technical assistance, monitoring.
Operating Budget Total	\$32,770,435	
Environmental Assessment Operating & Capital Budget Total	\$32,770,435	

Environmental Assessment Program

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Hazardous Waste & Toxics Reduction Program

K Seiler, Program Manager, 360.407.6702



Aurana Lewis, coordinator for the mercury switch program, explains how to find and remove mercury capsule switches from vehicles sent for salvage.

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

Washington¹. 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 6,107 toxic sites cleaned up or reported cleaned up in the state, nearly 300 new sites are reported each year. 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, HWTR 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 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

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.

Hazardous Waste & Toxics Reduction Program

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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*
 - *Federal Resource Conservation and Recovery Act (1980)*
 - *RCW 15.54, Fertilizer Regulation Act (Ecology's oversight authority over waste-derived fertilizers)*
 - *RCW 49.70, State Worker and Community Right-to-Know Act*
 - *RCW 70.102.020, Hazardous Substance Information Act*
 - *RCW 70.105 (1976), Washington's Hazardous Waste Management Act*
 - *RCW 70.105D (1989), State Hazardous Waste Clean Up (MTCA)*
 - *RCW 70.95, Hazardous Waste Reduction Act*
 - *RCW 70.95C, State Solid Waste Act*
 - *RCW 70.95E, Hazardous Waste Fees*
 - *WAC 173-303, Dangerous Waste Regulations (2000)*
 - *WAC 173-305, Hazardous Waste Fees (1992)*
 - *WAC 173-307, Pollution Prevention Plans (1991)*
-

Constituents/Interested Parties

- *The 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.

During the 2011-13 biennium, HWTR staff performed nearly 800 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.

The inspections also revealed how well facilities complied with state and federal regulations. We found serious environmental violations at 54 percent of regulated businesses we inspected during the 2011-2013 biennium, down from almost 60 percent in the 2009-11 biennium. A federal study by the U.S. Environmental Protection Agency (EPA) of Washington businesses showed a 20 percent increase in environmental threats when more than three years passed between inspections. During the 2011-13 biennium, we completed the highest number of inspections in a decade. 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

Businesses of all types and sizes use and produce a variety of hazardous substances. Mismanaging even small amounts of hazardous substances can contaminate sites and pollute stormwater. Many smaller businesses had never received an environmental inspection or technical assistance

Hazardous Waste & Toxics Reduction Program

K Seiler, Program Manager, 360.407.6702

visit until Ecology created the Local Source Control Program.

In 2008, Ecology established performance contracts with 12 Puget Sound counties (in addition to Spokane County). These contracts provide for Local Source Control Specialists to conduct technical assistance visits to small businesses. These technical assistance visits help small businesses comply with dangerous waste and stormwater control laws.

By the end of the 2011-13 biennium, Local Source Control Specialists had conducted over 12,000 small business visits. Ecology's technical assistance helped them better manage their stormwater and dangerous wastes. Almost half of these visits found and addressed minor dangerous waste, stormwater, or spill issues or concerns. In the 2013-15 biennium, the program will add more local government partners and exceed 18,000 total site visits.

State Solid & Hazardous Waste Plan

The state of Washington is required by law to have, and regularly update, a Solid and Hazardous Waste Plan. The plan is designed to guide safe waste management and prevention in the state.

Washington citizens, businesses, and governments have made big advancements in our waste management practices over the years. During the 2013-15 biennium, the Waste 2 Resources Program and the Hazardous Waste and Toxics Reduction Program will work with our partners to update the plan. Our goal is to continue to improve current practices, address issues of concern, and advance waste and toxics prevention consistent with the law.

Lean Efforts

Lean is a business philosophy that identifies what is valuable to the customer and eliminates unnecessary steps that get in the way of efficient outcomes or service delivery. The approach identifies and eliminates wasteful and non-value-added activities, without compromising the environment.

For several years, HWTR has helped Washington businesses use Lean to improve manufacturing processes. This has increased profits and customer satisfaction while reducing the amount of hazardous substances used and waste created. For example, Accra-Fab in Liberty Lake is

saving nearly \$180,000 each year because of Lean (see the video at

http://www.youtube.com/watch?v=_4wFciigtFE).

The ten businesses that participated in Ecology's Lean and Green Project reported total savings of \$2.1 million per year.

HWTR is also applying Lean to its own work to improve services to our customers and create an internal culture that values continuous improvement. Recently, we streamlined the way we prepare, conduct, and follow up on dangerous waste inspections. Our goal is to free up time to do more inspections because a stronger field presence results in fewer serious violations that can harm people or the environment. We will track our results during the 2013-15 biennium.

Updated Rules

As EPA updates its regulations, the state is required to amend the Dangerous Waste Regulations. In the 2013-15 biennium, Ecology will incorporate new federal hazardous waste rules into the Dangerous Waste Regulations. This rulemaking is necessary 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. HWTR will also evaluate the need to update and streamline other rules, such as pollution prevention plans (WAC 173-307).

Pollution Prevention Planning

\$56 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.

Businesses must submit P2 planning 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.

P2 planning is just one of Ecology's programs that help businesses reduce costs and avoid risks while protecting the environment. These businesses have reduced their waste by more than 50 percent over the past 20 years.

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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 2011-13 biennium, HWTR staff conducted over 900 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.

Savings of more than \$3 million per year are projected for the 35 companies Ecology's Technical Resources for Engineering Efficiency (TREE) Team has assisted. TREE provides a team of engineers who are experts in industrial processes and pollution prevention to work with small and medium-sized businesses that don't have in-house resources.

For example, Huntwood Industries, a Spokane area cabinet manufacturer, requested help from Ecology's TREE team. Huntwood's goals were to:

- Reduce their wash solvent. Huntwood is a Large Quantity Generator of dangerous waste, and solvent waste is by far their largest dangerous waste stream.
- Cut the amount of dangerous and solid waste generated by their manufacturing processes.

- Conserve water used to irrigate the landscape and lawn surrounding the plant.

As a result of the TREE team review, Huntwood found they could save over \$300,000 each year by reducing water use, solvent purchases, and generation of dangerous waste.

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—including cancer, hormone disruption, and harm to normal development—associated with toxic chemicals. 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 significant 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 2013-15, including:

- The Toxics in Packaging Clearinghouse—a consortium of states working to keep regulated toxic metals out of consumer products packaging.
- Increased distribution and use of Ecology's Quick Screen method for identifying highest-risk chemicals and safer chemical alternatives.
- 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.
- 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

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toxic substances are being washed off roads into streams, rivers, and Puget Sound.

- 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 cross-sector 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.
 - Support training and information exchange on green chemistry and hazard assessments in Washington State.

Permitting and Corrective Action

Ecology issues permits to specially-designed dangerous waste treatment, storage, and disposal (TSD) facilities. The state's three active commercial TSD facilities received permit renewals in the 2009-11 biennium. 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 these and former 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 sites because of their significance as designated by EPA. Ecology expects to have these 41 cleanups finished, or in maintenance mode, by 2020. We had completed an overall average of 79 percent of the work at these sites by the close of the 2011-13 biennium. The full cleanup process takes 10-12 years to complete.

Human exposures are under control at 90 percent of these facilities. Contaminated groundwater is under control at 79 percent of the facilities. This exceeds EPA's national goals for 2013 of 85 and 73 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

HWTR's data systems gather, maintain, and report hazardous substance and dangerous waste information. We retrieve and report the data to individuals and 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 current hazardous substance and dangerous waste information. These resources help businesses and the public make informed decisions on using and safely managing hazardous substances. During 2011-13, our HWTR Program websites logged more than 560,000 visits, and Shoptalk distribution more than doubled to reach over 4,000 subscribers.

Activities, Results & Performance Measures

Improve Community Access to Hazardous Substance and Waste Information

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 and its proper transport, treatment, and/or disposal.
- Identify toxic chemicals released and stored by businesses.
- Track information on facilities that prepare pollution prevention plans and pay fees.

These data systems provide Ecology, the public, and local governments with accurate information about the type, location, and source of hazardous substances that affect them. Consistent with federal and state Community Right-to-Know laws, Ecology also responds to public inquiries about toxic chemicals and provides a website for this purpose.

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Expected Results

Dangerous waste and chemical data (type, location, amount, etc.) is available to emergency responders, and local governments. Citizens and decision makers have access to dangerous waste and hazardous substance data in their communities.

Ecology accomplishes this through:

- Creating new public webpages for environmental justice issues and toxic chemical releases.
- Increasing Shoptalk newsletter distribution to 5,000 readers.
- Creating or updating 50 business publications each year and posting them to the web.
- Writing and distributing 10 business P2 success stories during the biennium.
- Using the results of a new business survey to update our compliance and toxics reduction web content.
- Updating our P2 planning reporting system (Turbo Plan) so it is easier for businesses to use.

Performance Measures

- Number of visits to toxics-related websites.

Increase Compliance and Act on Environmental Threats from Hazardous Waste

Each year, Ecology conducts formal compliance enforcement inspections at large and medium quantity generators and hazardous waste management facilities to ensure compliance with state and federal regulations. A credible, formal enforcement capability is essential to preserving the effectiveness of technical assistance and informal enforcement efforts.

Ecology staff do not take formal enforcement action often, but repeated refusal or inability of a facility to correct violations and comply with regulations will escalate to formal enforcement action. When possible, we use a streamlined enforcement and settlement approach. This frees up inspectors to do more inspections instead of spending excess time with legal proceedings.

The state periodically amends our Dangerous Waste Regulations. This keeps our rules current with the federal program and maintains the state's 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 to add capacity for additional inspections.
- Responding to 100 percent of dangerous waste related complaints (approximately 120-180 complaints per year).
- Using streamlined enforcement and settlement approaches as opportunities arise.
- Issuing timely enforcement actions that result in a deterrent to businesses and change behavior.
- Focusing on reducing the number of significant environmental threats found during inspections.

Performance Measures

- Number of significant toxics-related environmental threats resolved.
- Percent 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. Safely managing hazardous waste protects the public and the environment and allows 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 20 Puget Sound local governments (and Spokane County). These contracts provide for Local Source Control Specialists who 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:

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- Conducting up to 200 compliance-related technical assistance visits to businesses each year.
- Creating new web-based dangerous waste workshop modules to help businesses properly manage dangerous waste and fill out their annual reports.
- Issuing guidance for heavy metals found in zone-marking paint and properly managing auto shred residue.

Performance Measures

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

Prevent Hazardous Waste Pollution through Permitting, Closure, and Corrective Action

Facilities that treat, store, and/or dispose of dangerous wastes are required to obtain a permit to ensure that their design, construction, maintenance, and operating procedures protect public health and the environment. Washington currently has 14 active facilities that are either in "interim status" or have a final permit.

When business needs or requirements change, Ecology works with facilities to modify their permits. When these facilities close, Ecology ensures they have a required closure plan in place to effectively deal with the end of their waste management activities. Environmental contamination found at any time before closure requires a corrective action cleanup plan. Ecology is currently working on 22 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 of dangerous wastes.

Expected Results

Facilities that treat, store, or dispose of dangerous wastes are constructed and operated to prevent soil, water, or air contamination. We accomplish this through:

- Striving to meet EPA's cleanup goals for protecting human health, controlling migration of contaminated groundwater, and sites reaching "remedy construction complete."

- Issuing one high-priority draft operating permit.

Performance Measures

- Percent progress toward completed corrective action.

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

The state Hazardous Waste Reduction Act calls for reduced hazardous waste generation and use of toxic substances, and requires certain businesses to prepare a plan for voluntary reduction. Ecology staff provide onsite assistance through innovative programs designed to reduce source and waste generation. Ecology also 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 generation of hazardous waste, minimizes disposal costs, reduces the need for cleanup, minimizes public exposure, and saves businesses money.

Expected Results

Less dangerous waste produced and fewer toxic chemicals used, resulting in disposal cost savings for businesses, reduced public exposure, and fewer site cleanups. We accomplish this through:

- Completing nearly 500 toxics-related technical assistance visits to businesses each year.
- Reviewing 100 percent of 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 to four comprehensive engineering or Lean-based technical assistance projects with businesses each year.

Performance Measures

- Pounds of hazardous waste generated.

Reduce Toxic Chemicals in Products and Promote Safer Alternatives

Toxic chemicals in some consumer products have been found to be a source of pollution in our environment and potentially harmful to humans. Reducing toxic chemicals in products over time will lower the risks to humans and the environment.

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Making significant progress toward achieving this goal requires several strategies:

- Identifying chemicals of concern in consumer products and promoting safer alternatives to identified chemicals.
- Promoting green chemistry.
- Promoting environmentally preferred purchasing.

Expected Results

Exposure to toxic chemicals will be reduced over time. This is accomplished through:

- Sampling children's products and enforcing reporting requirements and standards of the Children's Safe Products Act (CSPA).
- Enforcing limits in bisphenol A (BPA), lead wheel weights, coal tar sealants, polybrominated diphenyl ethers (BPDE), and copper brake pads.
- Testing for metals and enforcing limits in packaging.
- Developing Ecology alternative assessment guidelines and a Green Chemistry Center to provide businesses with tools and resources to reformulate chemical products with less toxic materials.

Performance Measures

- Pounds of toxic substances used by Washington businesses and facilities required to submit P2 plans.
- Pounds of mercury collected and/or captured.

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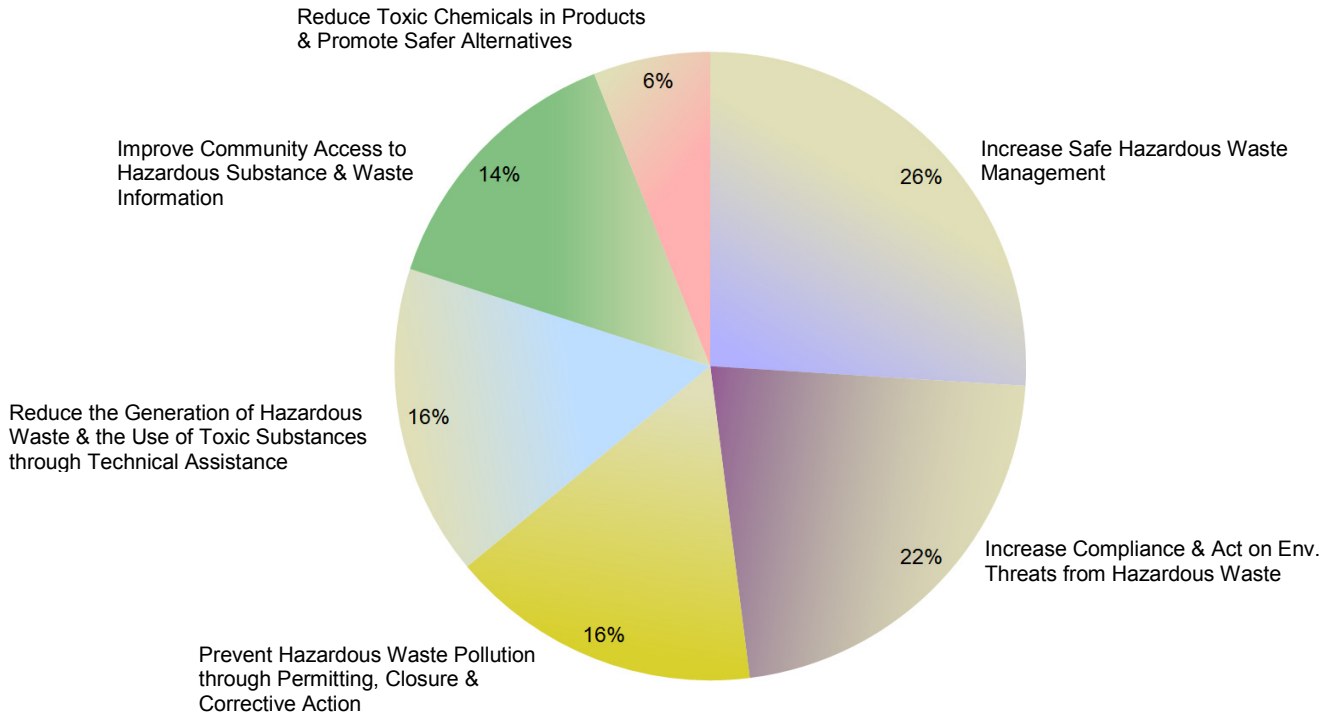
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Hazardous Waste & Toxics Reduction Program

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Hazardous Waste & Toxics Reduction Program 2013-15 Biennium Budget By Activities

Operating Budget = \$31.6 Million; FTEs = 123.9



Activities	Dollars	FTEs
Increase Safe Hazardous Waste Management (A022)	\$8,103,212	17.3
Increase Compliance & Act on Environmental Threats from Hazardous Waste (A021)	6,760,946	32.5
Prevent Hazardous Waste Pollution Through Permitting, Closure & Corrective Action (A031)	5,144,316	19.2
Reduce the Generation of Hazardous Waste & the Use of Toxic Substances Through Technical Assistance (A052)	5,102,145	22.6
Improve Community Access to Hazardous Substance & Waste Information (A019)	4,526,321	24.5
Reduce Toxic Chemicals in Products & Promote Safer Alternatives (A065)	1,991,021	7.8
Hazardous Waste & Toxics Reduction Operating Budget Total	\$31,627,961	123.9

Hazardous Waste & Toxics Reduction Program

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Hazardous Waste & Toxics Reduction Program 2013-15 Biennium Budget By Fund Source

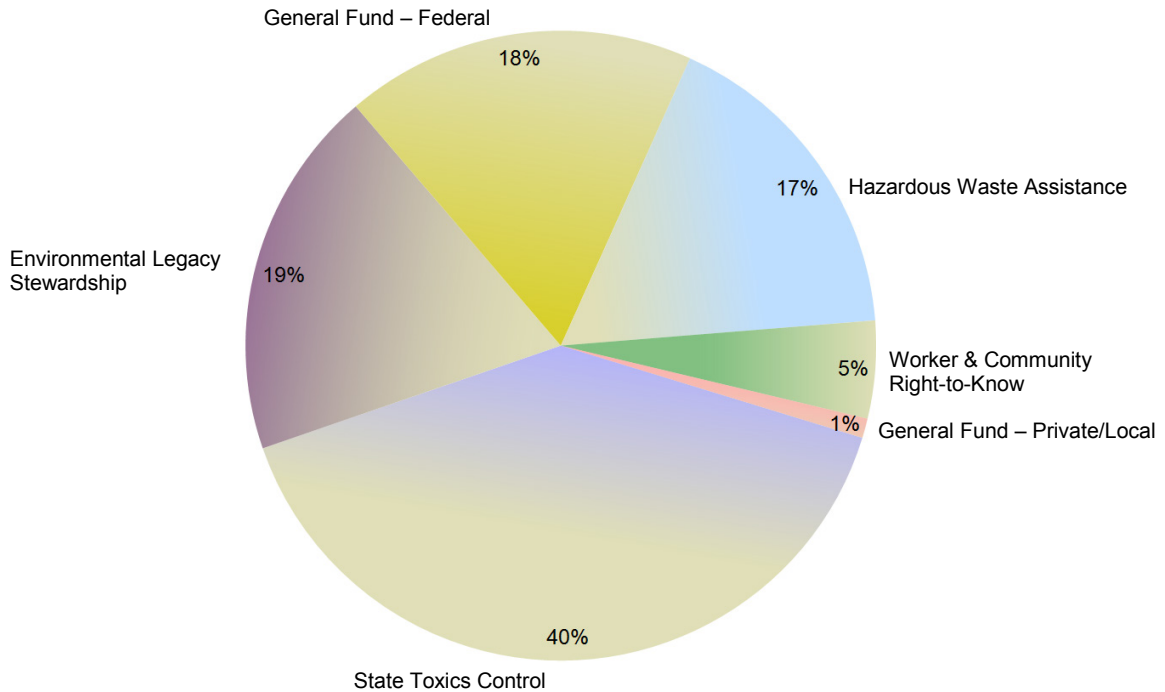
Operating Budget = \$31.6 Million

Pie shown below is operating budget ONLY.

Capital Budget = \$0.3 Million

Funded entirely by State Toxics Control Account.

FTEs = 123.9



Operating Fund Sources	Amount	Uses
State Toxics Control (173)	\$12,572,112	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)	6,107,692	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)	5,526,142	Grant funds received from EPA to implement federal Resource Conservation and Recovery Act (RCRA) and pollution prevention innovations.
Hazardous Waste Assistance (207)	5,480,944	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)	1,544,280	Compile information on hazardous substance use and make this information available to citizens and other public entities.
General Fund – Private/Local (001)	396,791	Manage cleanups at facilities that treat, store, or dispose of hazardous waste.

Hazardous Waste & Toxics Reduction Program

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Operating Budget Total	\$31,627,961	
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Capital Fund Sources	Amount	Uses
State Toxics Control (173)	\$281,090	Remove known toxic components in vehicles and appliances, including switches containing mercury, prior to crushing and shredding.

Capital Budget Total	\$281,090	
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Haz. Waste & Toxics Reduction Operating & Capital Budget Total	\$31,909,051	
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Nuclear Waste Program

Jane Hedges, Program Manager, 509.372.7905



The Waste Treatment Plant, commonly called the vit plant, in September 2013 (photo courtesy of Bechtel).

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 80 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, concrete 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 Act*
- *RCW 70.94, Clean Air Act*
- *RCW 70.105, Hazardous Waste Management Act*
- *RCW 70.105D, Model Toxics Control Act*
- *RCW 90.48, Clean Water Act*
- *Resource Conservation and Recovery Act (RCRA)*
- *Toxic Substances Control Act*

Constituents and Interested Parties

- *Congress, USDOE, EPA, the Defense Nuclear Facility Safety Board, and the U.S. Fish and Wildlife Service.*
- *Environmental Council of States, National Governors Association, Western Governors' Association, State and Tribal Government Working Group funded by the USDOE, and the Oregon Office of Energy.*

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- *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 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.

In November 2011, USDOE notified Ecology that some of the newly agreed to milestones were in jeopardy, mainly those regarding constructing the facility to treat tank waste (the Waste Treatment Plant or WTP).

In June 2013, USDOE notified Ecology that tank retrieval and other milestones regarding the WTP under this agreement may also be in jeopardy.

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 storage tanks and placing the waste in

interim, stable storage tanks for eventual treatment and storage.

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.

The USDOE received nearly two billion dollars in American Recovery and Reinvestment Act (ARRA) funding for work at Hanford. Those funds were used for a number of projects that will support reducing the contaminated Hanford "footprint."

The projects include soil and groundwater cleanups; additional groundwater monitoring, characterization, and treatment; large nuclear facility decontamination and demolition; and upgrades to tank farm facilities, equipment, and infrastructure.

Current funding levels have recently brought a number of activities to a halt and will remain a concern for a number of years.

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 new TPA milestones that provided the schedule for groundwater and soil cleanup along the Columbia River. Progress cleaning up along the Columbia River has slowed and will take a few years longer due to funding and technical challenges.

Decisions About Additional Waste Storage or Treatment at Hanford

Many recent and pending national decisions center on 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.

As a result of a settlement agreement, the USDOE currently 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.

At the same time, long-term plans for Hanford cleanup include shipping transuranic and high-level wastes, spent nuclear fuel, and surplus plutonium to other sites for disposal. Ecology is participating in national forums that deal with these issues to advise state policy makers on responses to these cleanup plans.

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

Expected Results

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

Performance Measures

- Tons of radioactive and/or chemically contaminated soil and debris removed and securely disposed at Hanford.

- Gallons of groundwater contaminated by hexavalent chromium that is remediated at Hanford.
- Pounds of chromium removed from contaminated groundwater at Hanford.

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

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

Transition of these facilities to safe and stable conditions requires coordinating multiple regulatory and technical requirements. Ecology also provides regulatory oversight of waste management activities at four facilities not managed by the USDOE (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. This is accomplished through:

- Completing 60 percent of the 324 Building removal and remediation actions.
- Completing 65 percent of the decontamination and decommissioning effort at the Plutonium Finishing Plant.
- Completing 100 percent of the interim safe storage of the N Reactor 105-N/109-N Building.

Performance Measures

- Percent completion of the decontamination and decommission of the plutonium finishing plant on Hanford 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 the design, permitting, construction, and operation of the Hanford Waste Treatment Plant, the Integrated Disposal Facility (a mixed, low-level waste landfill), and immobilized high-level waste storage facility.

Nuclear Waste Program

Jane Hedges, Program Manager, 509.372.7905

Expected Results

56 million gallons of high-level radioactive mixed waste from Hanford's interim storage tanks is retrieved and treated during the life of the tank treatment project. This is accomplished through:

- Continued construction of the Hanford Waste Treatment Plant at a rate that supports approved milestones, with completion of construction by 2019.

Performance Measures

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

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

Ecology protects public health and natural resources by ensuring safe storage and management of 56 million gallons of high-level radioactive tank waste at the Hanford Nuclear Reservation.

The Hanford Tank Waste Storage 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 Treatment Project, the tank waste will be removed and treated, leading to eventual closure of all 177 Hanford tanks by 2028.

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. This is accomplished through:

- Two single-shell tanks being emptied each year and waste stored safely through 2019.
- A permit issued for the double shell tank farms.
- A closure plan issued for the single shell tank farms.

Performance Measures

- Number of tanks containing radioactive hazardous waste emptied at Hanford's C-Tank Farm.

Ensure the Safe Management of Radioactive Mixed Waste at Hanford

Ecology provides regulatory oversight for the safe storage, treatment, and disposal of liquid and solid

dangerous and radioactive mixed wastes at the Hanford site, as well as at radioactive mixed-waste sites throughout the state. This activity regulates management of this historic and ongoing waste stream, and ensures retrieval, treatment, and safe disposal of transuranic and high-level mixed wastes currently buried in shallow, unlined trenches.

Expected Results

Transuranic and mixed low-level waste is managed, retrieved, treated, processed, stored, and disposed in compliance with existing regulations to reduce risks posed to Hanford workers and the environment.

This is accomplished through:

- Complete retrieval of contact-handled retrievably-stored waste from the low-level burial grounds at Hanford.
- Completion of the commercial low-level radioactive waste site Model Toxics Control Act Feasibility Study and Cleanup Action Plan.

Performance Measures

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

Nuclear Waste Program

Jane Hedges, Program Manager, 509.372.7905

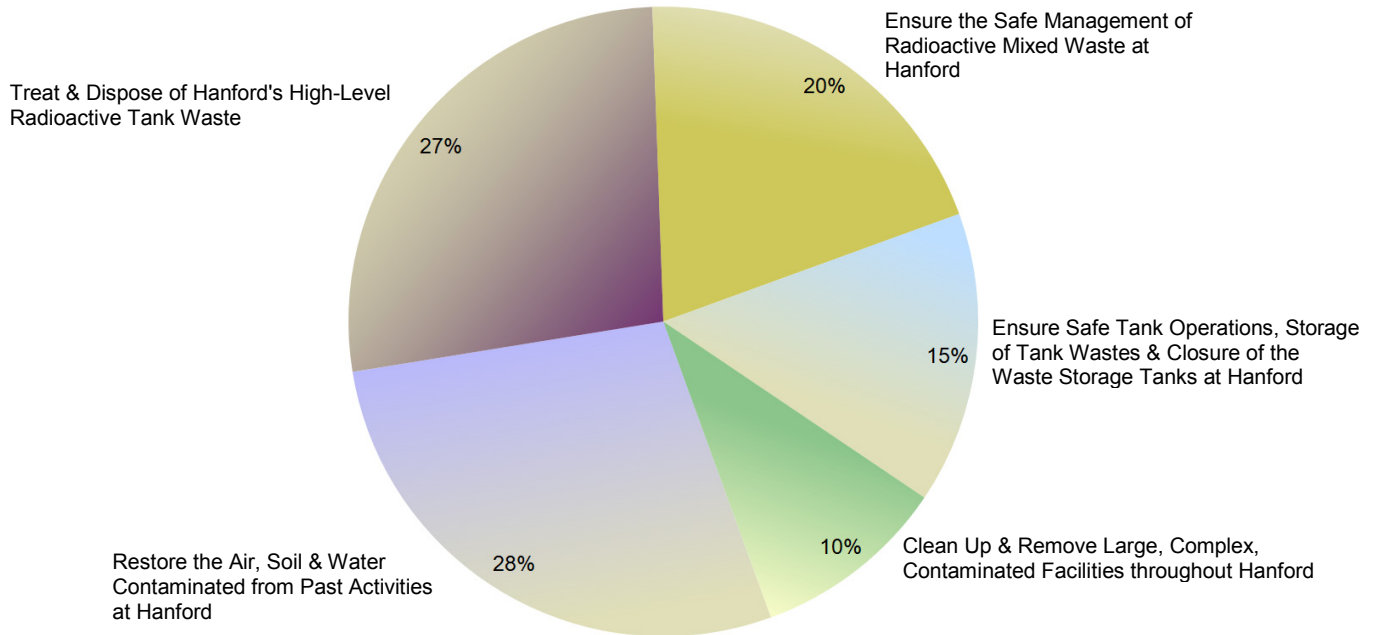
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Nuclear Waste Program

Jane Hedges, Program Manager, 509.372.7905

Nuclear Waste Program 2013-15 Biennium Budget By Activities

Operating Budget = \$19.8 Million; FTEs = 82.8



Activities	Dollars	FTEs
Restore the Air, Soil & Water Contaminated from Past Activities at Hanford (A014)	\$5,566,468	15.3
Treat & Dispose of Hanford's High-Level Radioactive Tank Waste (A016)	5,349,071	26.6
Ensure the Safe Management of Radioactive Mixed Waste at Hanford (A018)	3,990,450	16.0
Ensure Safe Tank Operations, Storage of Tank Wastes & Closure of the Waste Storage Tanks at Hanford (A017)	2,987,512	15.8
Clean Up & Remove Large, Complex, Contaminated Facilities Throughout Hanford (A015)	1,868,603	9.1
Nuclear Waste Operating Budget Total	\$19,762,104	82.8

Nuclear Waste Program

Jane Hedges, Program Manager, 509.372.7905

Nuclear Waste Program 2013-15 Biennium Budget By Fund Source

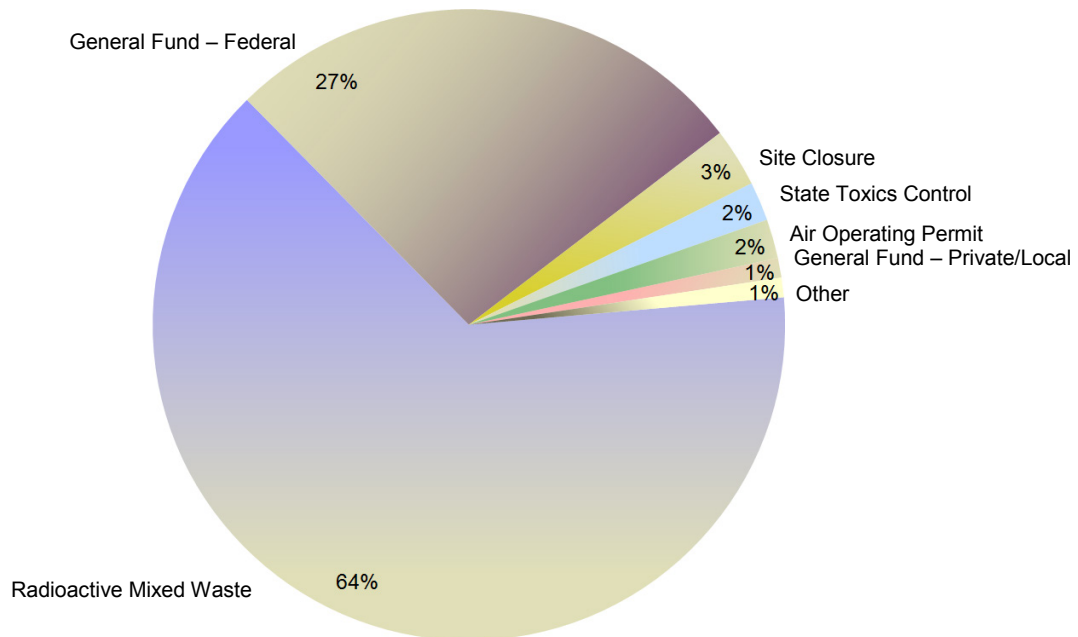
Operating Budget = \$19.8 Million

Pie shown below is operating budget ONLY.

Capital Budget = \$11.9 Million

Funded entirely by Site Closure Account.

FTEs = 82.8



Other = Water Quality Permit (0.54%), General Fund - State (0.37%), and Air Pollution Control (0.10%).

Operating Fund Sources	Amount	Uses
Radioactive Mixed Waste (20R)	\$12,624,597	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)	5,342,859	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)	525,861	Disposal permit issuance and Northwest Interstate Compact low-level radioactive waste management policy oversight for commercial low-level radioactive waste disposal within the state (Hanford site).
State Toxics Control (173)	479,833	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 Act.

Nuclear Waste Program

Jane Hedges, Program Manager, 509.372.7905

Air Operating Permit (219)	424,470	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)	106,613	Activities needed to maintain safe facilities for treating wastewater discharges at the Hanford site.
General Fund – State (001)	73,386	Regulation of air pollutants at new or modified Hanford facilities subject to the clean air act.
Air Pollution Control (216)	20,631	Reduce air pollution from industrial sources.
Operating Budget Total	\$19,762,104	
Capital Fund Sources	Amount	Uses
Site Closure	\$11,885,000	Investigation, closure, and decommissioning of the Hanford low-level radioactive waste disposal facility.
Capital Budget Total	\$11,885,000	
Nuclear Waste Operating & Capital Budget Total	\$31,647,104	

Shorelands & Environmental Assistance Program

Gordon White, Program Manager, 360.407.6977



SEA Program's Rick Mraz examining a geoduck tube at a shellfish farm in Mason County.

Program Mission

The Shorelands and Environmental Assistance Program's mission is to work in partnership with communities to support healthy watersheds and promote statewide environmental interests.

Environmental Threats

Washington's quality of life is defined by its beautiful environment. Our state has an abundance of shorelines, rivers, streams, lakes, wetlands, floodplains, and marine waters. These natural treasures attract people to the state. At the same time, population growth and development can threaten the very resources that we all value.

In the last 100 years, many shorelines, floodplains, and wetland systems have been damaged or completely destroyed. The challenge facing our citizens and communities is to manage development for the 21st century, ensure the health of watersheds and adequate water supplies, and restore Puget Sound. As population growth continues to pressure remaining natural habitats, we must find more effective ways to preserve them and their connections to other functioning habitats.

Authorizing Laws

- *Federal Clean Water Act*
- *Federal Coastal Zone Management Act*
- *RCW 43.21C, State Environmental Policy Act (SEPA)*

- *RCW 43.42, Office of Regulatory Assistance*
- *RCW 43.143, Ocean Resource Management Act*
- *RCW 43.220, Washington Conservation Corps (WCC)*
- *RCW 78.56, Metals, Mining and Milling Act*
- *RCW 86.16, Floodplain Management Act*
- *RCW 86.26, State Participation in Flood Control Maintenance*
- *RCW 90.03.265 and 43.21a.690, Cost Reimbursement*
- *RCW 90.36A, Growth Management Act*
- *RCW 90.48, Water Pollution Control Act*
- *RCW 90.58, Shoreline Management Act*
- *RCW 90.71, Puget Sound Water Quality Program*
- *RCW 90.74, Aquatic Resources Mitigation*
- *RCW 90.82, Watershed Planning Act*
- *RCW 90.84, 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 are Ecology's most important tools in protecting and restoring shorelines. Local governments and Ecology work in partnership to develop Shoreline Master Programs that include goals, policies, and regulations for managing shorelines. They help us protect and restore important habitats, keep water clean, protect homes and property from shoreline hazards, and provide opportunities for public access. All local governments with shorelines must update their Shoreline Master Programs by 2015.

The Washington State Legislature adopted a schedule and began providing funding for this in 2003. Ecology places a high priority on shoreline program updates and provides grants and technical support to communities throughout the state. In 2013, the Legislature provided a total of \$6.8

Shorelands & Environmental Assistance Program

Gordon White, Program Manager, 360.407.6977

million for pass-through grants to governments, and a half-million dollars for Ecology staffing. As of July 2013, over 80 percent of these updates were complete or underway.

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. But mitigation only works part of the time. Ecology organized the *Environmental Mitigation That Works* initiative to improve the success of wetland mitigation. Our priorities are:

- A compliance program to make sure the mitigation we approve is successful.
- Ensuring wetlands are protected and replaced by conditioning projects through water quality certifications.
- Support alternative mitigation approaches, such as wetland banking, in-lieu fees and advance mitigation, and provide templates, guidance, and training on these approaches.
- Provide technical training to communities.
- Assist local governments in managing wetlands through technical assistance on updated critical areas ordinances and on voluntary stewardship programs in agricultural areas.
- Protect important coastal wetlands through acquisition grant programs.

Protecting Puget Sound Habitat

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

With another million people expected to move into the Puget Sound area by 2025, Washington must become more effective in protecting our shorelines and upland habitats. In the 2013-15 biennium, Ecology will help counties and cities update their rules that protect shorelines and other important habitats, such as Shoreline Master Programs and critical area ordinances. Ecology will improve the effectiveness of wetland mitigation,

and we will provide trainings and work in partnerships to promote appropriate development.

Protecting and Restoring Puget Sound Watersheds

Ecology received funding from EPA through the National Estuary Program to help 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 develop a six-year strategy to guide investments that will help protect and restore Puget Sound watersheds. The six-year strategy will outline three strategic areas of investment:

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

Climate Change and Preparing for Sea-Level Rise

One aspect of climate change is the anticipated rise in sea level. Nearly 40 communities along our 2,300 miles of shoreline will be affected by rising sea levels. Climate change is predicted to bring higher tides, stronger storms, bigger waves, increased flooding, heavier rains, smaller snow packs, and engulf low-lying shorelines.

Reducing and preparing for climate impacts is a strategic priority for Ecology. We are supporting local community planning for sea-level rise and flood protection by:

- Providing technical guidance and financial help for local government planning through Shoreline Master Program grants.
- Offering professional training for planners and coastal managers through the Coastal Training Program.
- Coordinating with other west coast states through the West Coast Governors Alliance on Ocean Health to share information and advance our understanding of climate change impacts on coastal communities.

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Ocean and Coastal Health

Washington's spectacular Pacific Coast and ocean waters are faced with their own set of challenges and opportunities.

Aquatic invasive species, toxic algal blooms, hypoxic events, and ocean acidification threaten the health of our ecosystems and our coastal economies. Shoreline erosion threatens infrastructure and property, and will be even more problematic as sea levels rise. The emergence of new, renewable ocean energy facilities heightens the need for more thoughtful planning for new and existing ocean uses. Ecology will work with other agencies and 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 new proposed ocean uses and establishes appropriate strategies to manage these activities.
- Improving basic research, monitoring, and understanding of our ocean resources.
- Addressing erosion and sediment management issues.
- Supporting development of sustainable coastal communities by supporting local and regional planning processes.
- Coordinating implementation of other recommendations in Washington's Ocean Action Plan.

Ecology will complete this work in partnership with the interagency State Ocean Caucus, the Washington Coastal Marine Advisory Council, and other regional and international partnerships, such as the West Coast Governors Alliance.

Protecting Floodplain Resources

Ecology helps local governments and citizens with awareness, planning, and project funding for flood hazard reduction and floodplain management. We support multi-benefit approaches that improve public safety and prevent damage to property and public infrastructure, while protecting the natural functions of our floodplains. Floodplains provide many environmental benefits, including flood storage, groundwater recharge, and habitat for aquatic and terrestrial species. The Federal Emergency Management Agency (FEMA) has established minimum standards for local communities to participate in the National Flood

Insurance Program (NFIP), and the state of Washington has adopted those standards. Ecology assists local governments meet NFIP requirements.

In the 2013-15 biennium, the Legislature provided \$50 million to Ecology for floodplain management grants. This will support 11 legislative proviso floodplain projects totaling \$38.75 million, as well as \$11.25 million for a statewide competitive grant program. All projects are expected to provide multiple benefits, in addition to flood hazard reduction. These include salmon recovery, water quality, habitat restoration, and agricultural land protections.

Activities, Results & Performance Measures

Protect and Manage Shorelines in Partnership with Local Governments

The Shoreline Management Act is a joint program between local and state governments for managing shorelines to provide habitat for fish and wildlife, and for minimizing flooding and property damage. Local governments develop and manage local Shoreline Master Programs.

Ecology provides support and oversight to local governments through:

- Developing guidelines for local shoreline programs.
- Providing technical assistance to local governments and applicants on shoreline planning and permitting activities.
- Reviewing and approving amendments to local Shoreline Master Programs.
- Reviewing permits to ensure resources are protected and the law is followed.

Ecology works with local governments on permit compliance by:

- Responding to public inquiries and complaints.
- Making field visits.
- Providing compliance-related technical assistance.
- Issuing notices of correction, orders, and penalties.

Expected Results

State shorelines are protected, restored, and managed consistent with state and local laws.

Shorelands & Environmental Assistance Program

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- Local governments get technical and financial assistance to update their Shoreline Master Programs.
- Permits approved by local government are consistent with their Shoreline Master Programs.

Performance Measures

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

Protect Water Quality by Reviewing and Conditioning Construction Projects

The federal Clean Water Act and Coastal Zone Management Act set up water and coastal protection programs. Ecology reviews construction proposals that may impact streams, lakes, rivers, wetlands, shorelines, or marine waters. We implement these laws in four ways:

- Offering technical assistance to applicants from the beginning to the end of the permit process.
- Providing applicants a joint/multi-agency permit application.
- Coordinating with other regulatory agencies that have interests in proposals.
- Making permit decisions that protect water, sediments, fish, and shellfish habitat.

This allows Ecology to participate in federal permitting activities to ensure state water quality interests are identified 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, efficient, thorough, and consistent.
- 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

The Water Pollution Control Act and Shoreline Management Act set the framework for wetland protection. Local governments write wetland protection and mitigation rules into local Shoreline Master Programs and critical area ordinances.

Ecology provides support to local governments and carries out independent wetland protection and restoration programs in the following ways:

- Providing technical assistance to local governments to implement wetland protection programs.
- Developing mitigation requirements for state water quality certifications that offset unavoidable impacts to wetlands.
- Inspecting, monitoring, and collecting data on wetlands and mitigation sites.
- Coordinating state policies, rules, and guidelines for wetland management, banking, protection, and conservation.
- Helping individuals and organizations create and maintain wetland conservation and stewardship programs.

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, replaced, 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

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

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

The Flood Plain Management Act sets up programs to reduce flood damage. Local governments develop and manage local floodplain restrictions, and Ecology provides support to local governments

Shorelands & Environmental Assistance Program

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and carries out independent prevention and response programs through:

- Providing grants and technical help to local governments for flood management planning and flood reduction projects.
- Administering the National Flood Insurance Program, which helps over 250 cities and towns enrolled in this program.
- Doing outreach on recognizing and reducing potential flooding hazards.

In this role, Ecology makes regularly scheduled technical assistance visits to communities and assesses local regulatory programs for compliance with state and federal requirements. 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 receiving direct support on regulatory issues, flood hazard reduction, and the protection of floodplain functions and values.

Provide Technical Assistance on State Environmental Policy Act Review

The State Environmental Policy Act (SEPA) sets up a joint program between local and state governments designed to ensure environmental impacts from private or public actions are considered by government officials. Local and state governments review project impacts and determine how projects can be done with minimal impacts. Ecology provides technical support and carries out independent actions through:

- Conducting training and giving technical assistance to local and state government.
- Maintaining the SEPA register, which catalogs SEPA projects across the state.

- Coordinating the SEPA process when Ecology is the decision making agency.

SEPA provides an opportunity for local citizen involvement in the environmental review process, and provides developers an opportunity to identify mitigation opportunities that help overall project approval and minimize development costs.

Expected Results

- The public has input into projects that may have environmental impacts.
- 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.
- Percent of SEPA workshop participants who said they intend to apply what they learned in their work.

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

The Padilla Bay National Estuarine Research Reserve is one of 25 national reserves established to protect estuaries for research and education. The Padilla Bay Reserve in Skagit County conducts a broad array of public education programs, technical and professional training, coastal restoration, and scientific research and monitoring. The reserve is managed in partnership with the National Oceanic and Atmospheric Administration (NOAA). It includes:

- Over 11,000 acres of tidelands and uplands.
- The Breazeale Interpretive Center, 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.

Shorelands & Environmental Assistance Program

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Expected Results

- Efficiently manage and maintain the 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 the Padilla Bay Reserve.
- Percent of Puget Sound and coastal training workshop participants who said they intend to apply what they learned in their work.
- Acres of Puget Sound cleaned of derelict fishing nets.

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). Ecology manages the WCC program through:

- Creating 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, other forest restoration activities, fencing, and trail work.
- Providing emergency response and hazard mitigation services to local communities.

Expected Results

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

Performance Measures

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

Provide Streamlined Project Permitting for Transportation Projects

A contract between Ecology and the Washington State Department of Transportation (WSDOT) is set up to support environmental permitting for state transportation projects. WSDOT submits transportation project applications and documents, and a dedicated Ecology team facilitates the permit process. This expedited permit review process was designed to address traffic congestion and allow businesses to efficiently transport products in Washington.

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 Measures

- Percent of reviews and decisions made within agreed upon time frames for WSDOT applications or other documents.

Provide Regulatory Assistance for Significant Projects and Small Businesses

A contract between Ecology and the Governor's Office of Regulatory Innovation and Assistance is set up to support permit assistance services.

Expected Results

- People and businesses who contact the Office of Regulatory Innovation and Assistance receive permit information.
- Helpful information is available to applicants on environmental permits such as web-based tools,

Shorelands & Environmental Assistance Program

Gordon White, Program Manager, 360.407.6977

directories, fact sheets, guidance, and other materials.

Performance Measures

- Number of applicants and customers provided permit assistance by the Office of Regulatory Innovation and Assistance.

Support Watershed-Based Water Supply and Resource Stewardship

Ecology supports watershed-based management of water for people, farms, and fish. We provide technical support, staff support, scientific expertise, and financial assistance to help local groups design and implement integrated watershed management and locally-tailored water supply solutions. Work in this activity focuses on improving long-term reliability and availability of water for in-stream and out-of-stream needs per locally developed watershed plans and activities.

Expected Results

- Water supply solutions are developed and implemented in water-short areas of the state to provide water for people, farms, and fish.
- Targeted technical and financial assistance is provided for plan implementation and updates where community/watershed-based groups are active partners in identifying in-stream and out-of-stream water availability solutions and projects.

Performance Measures

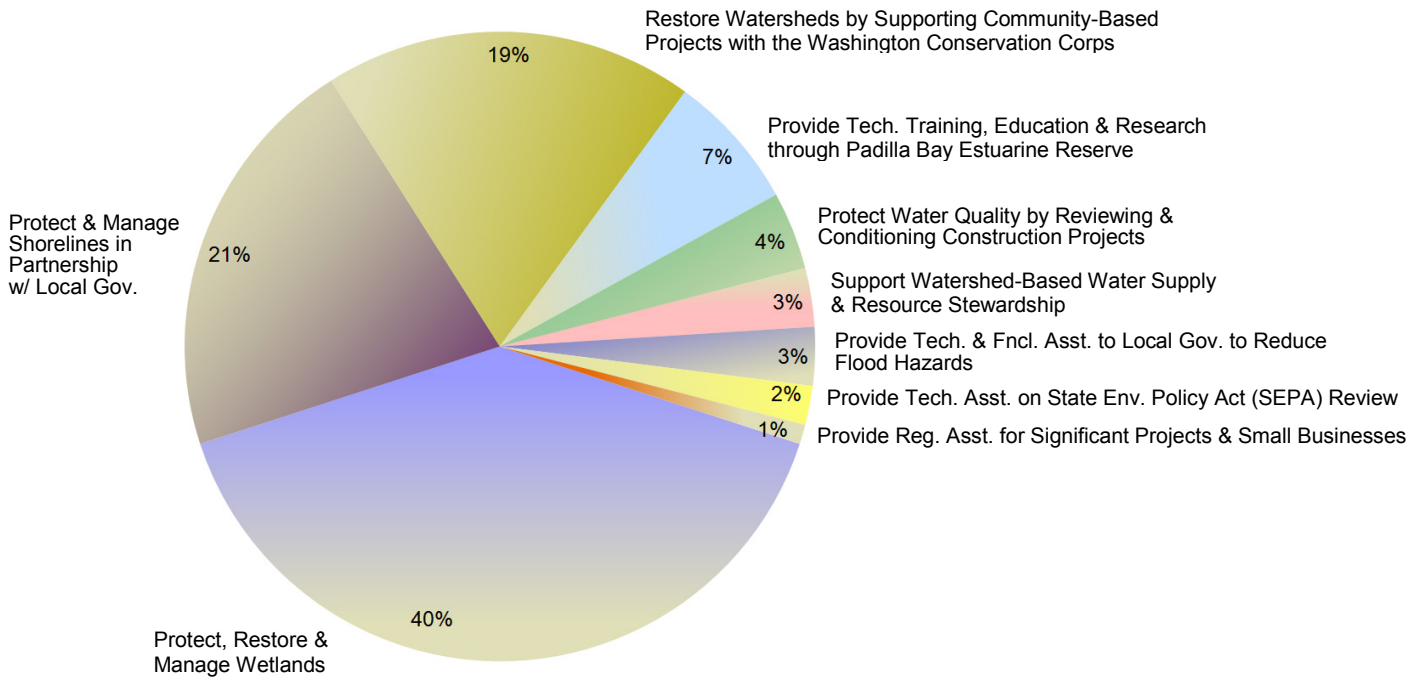
- Number of watersheds in the implementation phase of watershed planning.

Shorelands & Environmental Assistance Program

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Shorelands & Environmental Assistance Program 2013-15 Biennium Budget By Activities

Operating Budget = \$69.0 Million; FTEs = 167.4



Provide Streamlined Project Permitting for Transportation Projects (0.22%) not shown in operating budget pie above (too small for display).

Activities	Dollars	FTEs
Protect, Restore & Manage Wetlands (A038)	\$27,549,932	29.1
Protect & Manage Shorelines in Partnership with Local Governments (A036)	14,615,044	33.2
Restore Watersheds by Supporting Community-Based Projects with the Washington Conservation Corps (A056)	12,836,009	57.2
Provide Technical Training, Education & Research through Padilla Bay Estuarine Reserve (A042)	4,436,690	17.5
Protect Water Quality by Reviewing & Conditioning Construction Projects (A037)	2,676,599	12.3
Support Watershed-Based Water Supply & Resource Stewardship (A067)	2,366,322	2.1
Provide Technical & Financial Assistance to Local Governments to Reduce Flood Hazards (A040)	2,348,978	7.8
Provide Technical Assistance on State Environmental Policy Act (SEPA) Review (A041)	1,413,959	6.5
Provide Regulatory Assistance for Significant Projects & Small Businesses (A060)	562,158	0.9
Provide Streamlined Project Permitting for Transportation Projects (A058)	149,178	0.8
Shorelands & Environmental Assistance Operating Budget Total	\$68,954,869	167.4

Shorelands & Environmental Assistance Program

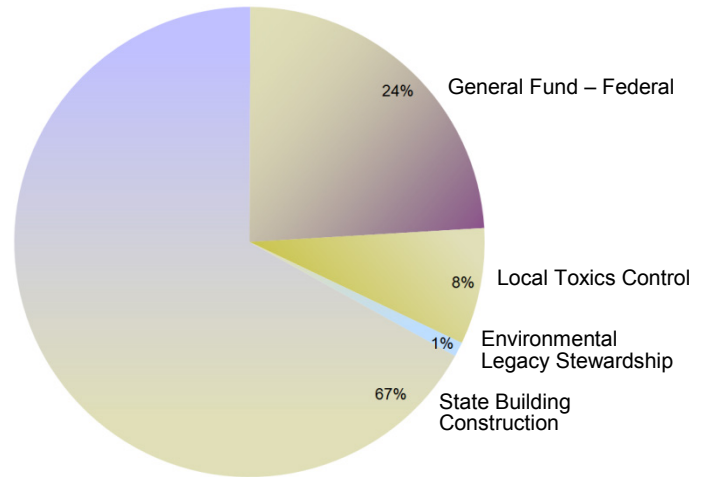
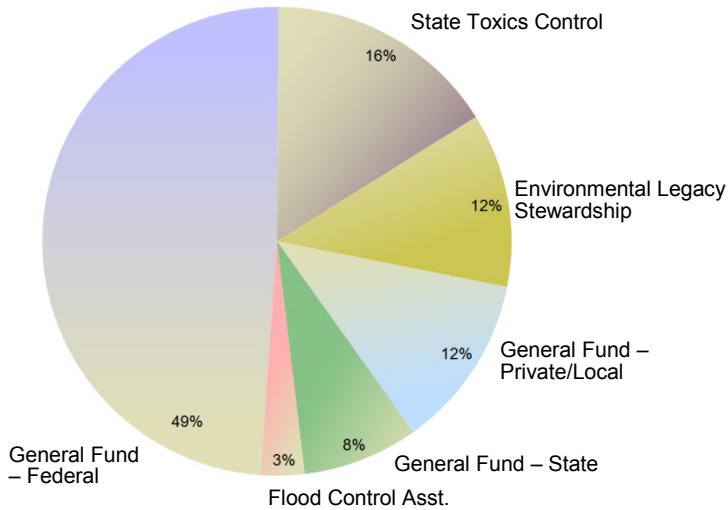
Gordon White, Program Manager, 360.407.6977

Shorelands & Environmental Assistance Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$69.0 Million

FTEs = 167.4

Capital Budget = \$88.2 Million



State Toxics Control (0.23%) not shown in capital budget pie above (too small for display).

Operating Fund Sources	Amount	Uses
General Fund – Federal (001)	\$33,901,305	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)	10,818,379	Water quality certifications for water-related construction projects, including dredging. Staff to provide technical assistance to local governments updating local master shoreline programs and updating wetland protection standards in local critical area ordinances. Support Padilla Bay National Estuarine Reserve research and education activities. Base funding for Washington Conservation Corps to support crews performing natural resource restoration projects for federal, state, and local agency sponsors.
Environmental Legacy Stewardship (19G)	8,595,280	Local government financial assistance to update their Shoreline Master Programs, training, and assistance on SEPA for local governments and the public.
General Fund – Private/Local (001)	8,474,521	Coastal erosion. Permit and project reviews. Padilla Bay. Washington Conservation Corps.

Shorelands & Environmental Assistance Program

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General Fund – State (001)	5,344,330	Shoreline management planning, implementation, enforcement, and technical assistance and planning grants to local governments. Wetlands protection and Puget Sound Agenda implementation requirements. Match for federal Coastal Zone Management and wetlands grants. State Environmental Policy Act reviews. Office of Regulatory Assistance. Washington State Department of Transportation permitting. Water quality certifications. Ocean policy review. Padilla Bay. Watershed implementation grants. Wetlands banking and environmental mitigation. Wetland technical assistance.
Flood Control Assistance (02P)	1,821,054	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	\$68,954,869	
Capital Fund Sources	Amount	Uses
State Building Construction (057)	\$58,704,244	Horseshoe Bend levy repair, King County Fire Protection District flood control, flood damage grants.
General Fund – Federal (001)	21,272,255	Brazeale Interpretive Center, Padilla Bay boat shed. Federal grant awards for coastal wetland acquisitions (funds passed through to local entities).
Local Toxics Control (174)	7,000,000	Updating local master shoreline programs. Funding provided to speed up completion of Puget Sound Shoreline Master Program updates.
Environmental Legacy Stewardship (19G)	1,000,000	Veterans Corps (Washington Conservation Corps).
State Toxics Control (173)	200,000	Puget Sound cleanups. Restoration work including creosoted debris removal, stream fencing, plantings.
Capital Budget Total	\$88,176,499	
Shorelands & Env. Assistance Operating & Capital Budget Total	\$157,131,368	

Spill Prevention, Preparedness & Response Program

Dale Jensen, Program Manager, 360.407.7450



Ron Holcomb, a spill responder from the Southwest Regional Office, takes samples from a residential methamphetamine lab to test and categorize for proper disposal.

Program Mission

The mission of the Spill Prevention, Preparedness and Response Program (Spills Program) is to protect Washington's environment, public health, safety, and economy through a comprehensive regulatory and technical assistance program. The program focuses on preventing oil spills to Washington's waters and land, as well as planning for and delivering a rapid, aggressive, and well coordinated response to oil and hazardous substance spills wherever they occur.

Environmental Threats

Over 20 billion gallons of oil and hazardous chemicals are transported through Washington State each year by ship, barge, pipeline, rail, and road. Human error and natural calamities can all lead to spills and toxic release with unintended and potentially disastrous consequences. Oil and chemical spills can threaten some of Washington's most productive and valuable ecosystems. These incidents can kill fish, birds, and marine mammals and contaminate beaches, shellfish, and groundwater. All spills—whether on land or water—can threaten public health, safety, the

environment, and 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*
- *RCW 70.105, Hazardous Waste Management Act*
- *RCW 70.105D, Model Toxics Control Act*
- *RCW 70.136, Hazardous Materials Incidents Act*
- *RCW 82.23B, Oil Spill Response Tax*
- *RCW 88.40, Transport of Petroleum Products – Financial Responsibility*
- *RCW 88.46, Vessel Oil Spill Prevention and Response*
- *RCW 90.48, Water Pollution Control (includes early legislation from the 1970s)*
- *RCW 90.56, 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, and oil trucking companies.*
- *Spill response cooperatives and contractors.*

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- *The Puget Sound Partnership, 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. In working to fulfill the following commitments, we continue to align policies and procedures to ensure efficient and effective service delivery within the current economic environment.

The initiatives described in this document are in addition to our core services. Core services include vessel and oil transfer inspections, plan review and approvals, contingency plan drills, environmental restoration, and response to oil and hazardous materials spills delivered 24/7 from field offices. 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. To meet these many challenges, we will focus on the following strategic initiatives during the 2013-15 biennium:

- Identifying and developing strategies to address the changing spill risk picture in Washington State waters and lands.
- Implementing House Bill 1186, passed in 2011.
- Addressing potential funding revenue shortfall in the changing business climate of oil movement.
- Ensuring regulated vessels and oil facilities demonstrate an appropriate level of financial responsibility.
- Developing a new information data system.
- Implementing funding and policy legislation related to derelict vessels.

The Spills Program will pursue these strategic initiatives within its current level of funding.

Identify and Develop Strategies to Address the Changing Risk Picture in Washington State Waters and Lands

The Spills Program has an important regulatory and public trust responsibility to assess and help manage the risk from oil and hazardous materials spills. Regional developments have presented us with new challenges. These include expansion of

Canadian crude oil sources; Bakken shale oil from Montana and North Dakota; pipeline expansion; oil terminal projects; and several proposed coal terminals. The Spills Program will:

- Conduct risk assessment studies to determine the level of risk posed by increased oil movement in Puget Sound.
 - Use the George Washington University Vessel Traffic Risk Assessment (VTRA) model as a tool to further assess changing risks in north Puget Sound and the Strait of Juan de Fuca.
 - Identify risk mitigation measures from the results of the VTRA study.
 - Identify resources to continue work in risk assessments, mitigation, and management.
 - Enhance collaboration and coordination with the U.S. Coast Guard to implement working protocols and develop a risk management plan, including a system to monitor and support future implementation of prevention measures.
 - Continue active participation and leadership in the Puget Sound Harbor Safety Committee. Encourage development of non-regulatory (voluntary), industry-adopted standards of care to address identified risks to the region.
- Better understand the risks of oil spills related to vessel traffic and new crude oil storage terminals in the Columbia River and Grays Harbor.
 - Identify resources to conduct risk assessment studies, mitigation, and management.
 - Encourage funding contracts for additional risk assessments to be completed for the Columbia River and Grays Harbor.
 - Continue active participation in the Columbia River and Grays Harbor Safety Committees.
 - Improve local preparedness with additional equipment and pre-identified response strategies in the harbor area.
- Develop additional expertise to help us better understand how oil is moved by rail, the current federal regulatory structure, and what safety measures currently and should apply to rail transportation of bulk oil.
 - Identify and understand the regulatory gaps between federal and state jurisdictions for rail

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- by determining existing federal requirements for railroads to prepare for oil spills.
- Determine oil spill history of railroads and monitor the trends. Look at broader risks that may impact accidents that can result in spills (mud slides, etc.).
 - Determine the need for legislation and/or rulemaking to expand the definition of facility to include rail yards where fuel transfers occur, to ensure adequate oil spill preparedness and prevention plans exist.
 - Better understand the characteristics of Canadian Oil Sands Products and/or other oils that are moved through Washington.
 - Work with Northwest Area Committee and partner federal and state agencies to test and characterize hazards and fate, and effects of Canadian Oil Sands Products and other similarly unfamiliar oils, as the physical and chemical characteristics of these products appear to be different than conventional crude oils.
 - Communicate the changing risks picture to our response partners at the federal, state, and local levels, and to other stakeholders in Washington and the Pacific Northwest.

Implement House Bill 1186

House Bill 1186, passed in 2011, required Ecology to update the Oil Spill Contingency Plan rule to ensure our state achieves the highest standards of protection by requiring best technology, staffing levels, training procedures, and operational methods in oil spill plans. The bill also required Ecology to address volunteer management and Vessels of Opportunity (VOO). The Spills Program will:

- Work collaboratively with stakeholders through a five-year review cycle for Best Achievable Protection to understand and address spills risks.
- Launch the Public Information for Emergency Response system to register volunteers and the Vessel of Opportunity program.
- Develop a volunteer plan to be included in the Northwest Area Contingency Plan.
- Conduct a stakeholder outreach campaign to inform and educate communities about volunteers and VOOs.

- Collect data on the effectiveness of current equipment standards for inland pipelines and consider appropriate changes.

Address Potential Funding Revenue Shortfall in the Changing Business Climate of Oil Movement

Changing oil movement in the state is expected to reduce the volume of oil imported by tank vessels and increase the amount of oil imported by pipeline and rail. If these changes in oil movement continue, the Oil Spill Prevention Account (OSPA) may be negatively affected. The barrel tax only applies to the first possession of oil imported into the state by tank vessel—it does not apply to oil imported by pipeline and rail. If the Legislature continues to rely on this tax to fund Spills Program activities, the changing oil movement picture could begin to reduce the availability of program funding. The Spills Program will:

- Continue to monitor revenues in the OSPA to establish a trend in the revenue (tax receipts).
- Develop a consistent standardized data collection method or other data sources to measure the volume of oil imported and exported by tank vessels, pipelines, and railroads.
- Develop a strategy to address the potential funding gap, identify options to ensure stable future revenue, address risk as it changes nationally, and ensure adequate funding for the state's oil spill program.

Ensure Regulated Vessels and Oil Facilities Demonstrate an Appropriate Level of Financial Responsibility

Washington State law provides for unlimited liability for oil spills. The cost of oil spills is also increasing. We should consider whether current financial responsibility levels are acceptable to assure the responsible party's ability to pay for cleanup, claims, penalties, and natural resource damages resulting from a large spill. In addition, there are new modes of transportation and more foreign shipping companies now in the business of transporting oil as cargo. For these and other reasons, we need to reassess the appropriate level of financial responsibility for companies shipping oil in Washington State. The Spills Program will:

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- Evaluate current levels and proof of financial responsibility for companies shipping oil in Washington State to ensure it meets Washington’s statutory limits of liability.
- As a result of evaluation, determine if there is a need to:
 - Use existing authority to impose financial responsibility on facilities.
 - Assess how railroads demonstrate financial responsibility.
 - Request legislation or write rules to expand state financial responsibility requirements.

Develop a New Information Data System

The Spills Program data systems—the Environmental Report Tracking System (ERTS) and the Marine Information System (MIS)—are tools used by Ecology. These systems help us:

- Track and monitor data for regulated vessels and facilities.
- Record spills to state waters and lands.
- Analyze trends for risk management.
- Track work processes for regulatory requirements.
- Share information with stakeholders.

The Spills Program will integrate existing legacy systems into the Spills Program Integrated Information Systems (SPIIS). This will ensure efficiencies and avoid duplication of systems, provide integrated information, and facilitate a mobile working environment.

Implement Funding and Policy Legislation Related to Derelict Vessels

Derelict vessels continue to pose a threat to the public and environment. The Department of Natural Resources, which is Washington’s lead agency for derelict vessel issues, has legislative authority and funding to remove derelict vessels up to 200 feet in length. This program has been highly successful for several years and has been a model for other states.

Through participation on the Columbia River and Puget Sound Derelict Vessel Task Forces, the Puget Sound Partnership Oil Spill Work Group, and by meeting with stakeholders, we continue to evaluate legislative policy and funding improvements to enhance the program. We will also coordinate with our federal congressional delegation to seek out federal policy and funding options to combat the growing derelict vessel

challenge in Washington, especially for larger derelict vessels.

Discontinue the Vessel Response Account

On July 1, 2010, industry began funding operation of the emergency response tug stationed at Neah Bay. The Spills Program proposes a legislative fix to discontinue the Vessel Response Account, once relied on to fund the tug. Any remaining balance will be transferred to the Coastal Protection Fund, where it can be used for post-spill restoration projects.

Activities, Results & Performance Measures

Prepare for Aggressive Response to Oil and Hazardous Material Incidents

Operators of large commercial vessels and oil handling facilities 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 carried out through staff 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.
- Develops geographic response plans in consultation with other natural resource experts and communities.

Expected Results

- Ecology and the regulated community are fully prepared to promptly respond to oil spills and ensure damages from spills are minimized.
- Compliance with the industry sponsored Neah Bay response tug is documented in approved vessel contingency plans.
- Four Geographic Response Plan chapters are updated.
- The ongoing maintenance of response equipment is documented by industry and records verified by Ecology.
- Ecology targets oil spill related outreach efforts to local governments in coastal communities.

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Performance Measures

- Number of Geographic Response Plans 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 vessels and monitoring oil handling 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

- Strive to achieve zero oil spills from vessels and oil handling facilities.
- Minimize or prevent spills through risk management and targeted inspections.
- Reduced number of oil spills entering surface waters, particularly from marine sources.
- Reduced total volume of oil entering surface waters to less than one gallon for each 100 million gallons transferred over water.
- Reduced percent of vessel and oil transfer accidents resulting in, or potentially leading to, spills by:
 - Boarding and inspecting targeted high priority vessels and facility operations.
 - Neah Bay rescue tug helping vessels as needed.
- 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

- Number of oil spills to surface waters from all sources.
- Total volume of oil spilled to surface waters from all sources.
- Percent of potential high risk vessels boarded and inspected.
- Gallons of oil spilled to surface waters during oil transfers for every 100 million gallons of oil transferred.
- Percent of regulated marine oil transfer operations inspected.
- 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-hour-a-day statewide response capability from 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, chemical spills, and methamphetamine 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.

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- Approximately 3,800 annual spill reports are managed.

Performance Measures

- Percent of reported oil and hazardous material spill incidents that receive field responses.

Restore Public Natural Resources Damaged by Oil Spills

Ecology leads a multi-natural resource agency 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

- The 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 Measures

- Percent of completed restoration projects that meet plan specifications.

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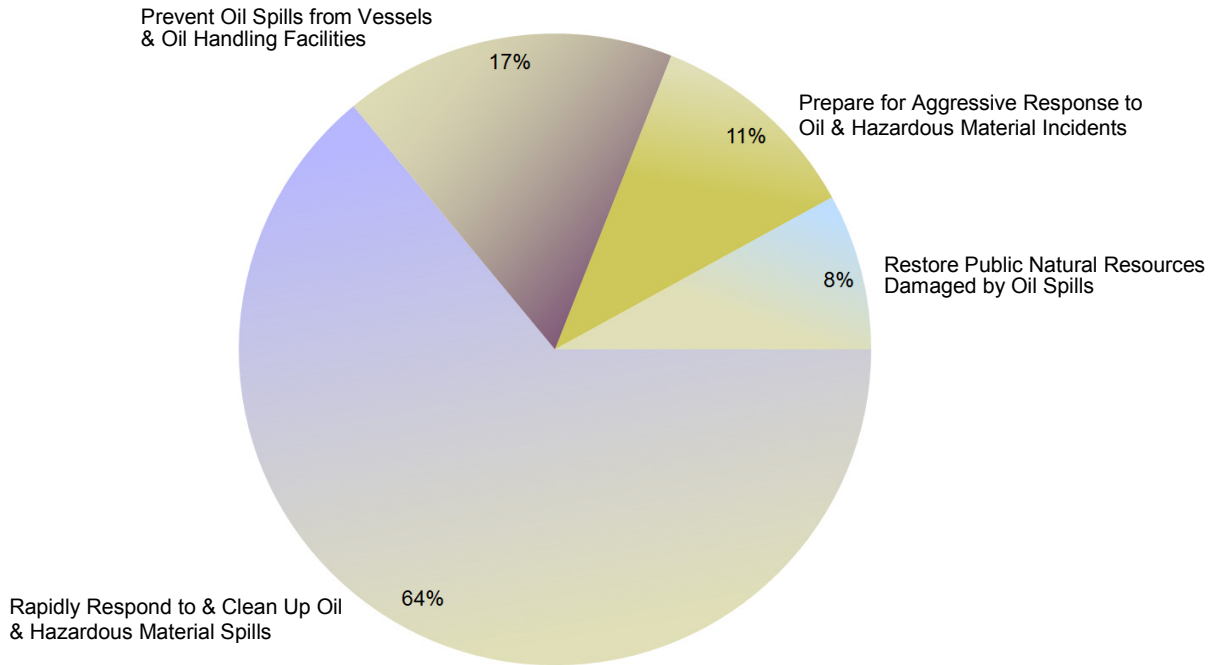
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Spill Prevention, Preparedness & Response Program 2013-15 Biennium Budget By Activities

Operating Budget = \$27.0 Million; FTEs = 75.9



Activities	Dollars	FTEs
Rapidly Respond to & Clean Up Oil & Hazardous Material Spills (A054)	\$17,130,756	37.9
Prevent Oil Spills from Vessels & Oil Handling Facilities (A033)	4,681,673	18.8
Prepare for Aggressive Response to Oil & Hazardous Material Incidents (A030)	2,962,664	16.4
Restore Public Natural Resources Damaged by Oil Spills (A055)	2,183,216	2.8
Spill Prevention, Preparedness & Response Operating Budget Total	\$26,958,309	75.9

Spill Prevention, Preparedness & Response Program

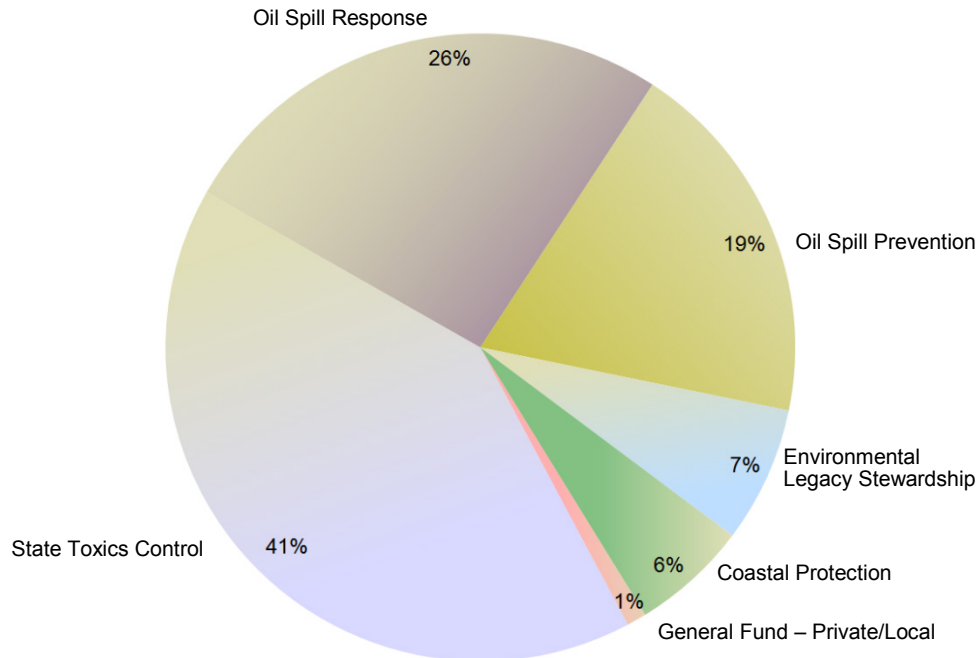
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Spill Prevention, Preparedness & Response Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$27.0 Million

FTEs = 75.9

No Capital Budget



Operating Fund Sources	Amount	Uses
State Toxics Control (173)	\$10,925,218	Hazardous material and oil spill response work including drug lab clean up.
Oil Spill Response (223)	7,076,000	Oil spill cleanup where state response costs are expected to exceed \$50,000.
Oil Spill Prevention (217)	5,168,973	Oil spill prevention, preparedness, and response work.
Environmental Legacy Stewardship (19G)	1,894,248	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	\$26,958,309	
Spill Prev., Prep. & Resp. Operating & Capital Budget Total	\$26,958,309	

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Toxics Cleanup Program

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Crews perform final dredging to remove contaminated sediments at the Custom Plywood cleanup site in Anacortes. Habitat along beaches was restored which included expanding eel grass beds. Active spawning by surf smelt was immediate.

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 nearly 11,700 toxics contaminated sites since the mid-1980s. Nearly 6,500 of these sites resulted from underground storage tanks leaking contents into the environment and contaminating the soil or groundwater. Of the 11,675 contaminated sites, nearly 52 percent 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

- *RCW 70.105D, Model Toxics Control Act*
- *RCW 90.48, Water Pollution Control Act*
- *RCW 90.71, Puget Sound Water Quality Protection*
- *RCW 90.76, 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.*

Toxics Cleanup Program

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Issues

Amendments to the Model Toxics Control Act

The 2013 Legislature passed Second Engrossed Second Substitute Senate Bill 5296, which amended the Model Toxics Control Act (MTCA). These amendments made the most significant changes to the state's cleanup law in years.

They changed the way the hazardous substance tax is used and directed Ecology to be more attentive to economic drivers. The amendments also prioritized large cleanup project's long-term funding needs; gave Ecology new tools to reduce the time it takes to clean up contaminated sites; required cash management of the MTCA accounts; and created the new Environmental Legacy Stewardship Account. Ecology is responding to and managing the changes required by the new law.

- **Brownfield Defined and Creation of Redevelopment Opportunity Zones:** For the first time, incentives and a working definition of brownfield have been developed. A Brownfield Redevelopment Trust Fund has also been created. Expenditures from the Brownfield Redevelopment Trust Fund Account are to be used for the purposes of remediation and cleanup at the specific redevelopment opportunity zone or specific brownfield renewal authority projects.
- **Increasing Use of Model Remedies at Low Risk Sites:** Model remedies are a standard set of technologies, procedures, and monitoring protocols used in routine types of cleanup projects at facilities with common features. Ecology is establishing model remedies for common categories of facilities, types of hazardous substances, types of media, or geographic areas to streamline and accelerate the selection of remedies for routine cleanups at facilities. Ecology will oversee development and implementation of model remedies.
- **Cash Management of MTCA Accounts:** The new law requires Ecology to plan to clean up hazardous waste sites and prevent future hazards at a pace that matches the estimated cash resources in three of the MTCA accounts—the State Toxics Control Account (STCA), the Local Toxics Control Account (LTCA), and the Environmental Legacy Stewardship Account

(ELSA). The law also creates several new categories of Remedial Action Grants that include Area-wide Ground Water Grants and Integrated Planning Grants.

- **More Accountability:** Several one-time reports will be required to show Ecology's progress in implementing these amendments and speeding up cleanups. The first report is due at the end of 2013.

Lean and MTCA

Last year, Ecology independently began work to speed cleanups and expend appropriated funds at a faster rate by adopting Lean principles. A Lean event was held in June 2012, with a subsequent event in November 2012. The events identified the following deliverables to achieve these targets.

- A standardized set of expectations for cleanup project managers.
- A workbook for use by cleanup project managers.
- A document tracker ("dashboard") for measuring Ecology review time associated with key project documents.
- Training for all current cleanup project managers.

For Puget Sound sites, cleanups have typically taken 10-12 years. Ecology is proposing to reduce that time by almost half (to five to six years on average) at publicly funded sites. Targets were set at two years to complete a Remedial Investigation/Feasibility Study (phase 1); three years to complete the cleanup (phase 2); and encouraging Ecology's review of key project documents to a single review cycle.

Ecology is developing and implementing results of our Lean work. Our objectives are to reduce (for all public or privately financed cleanups) the time it takes to move through the cleanup process; and improve (for publicly funded cleanup sites) the accuracy of budget requests to project spending plans so that re-appropriation balances are reduced.

Voluntary Cleanup Program Use Continues to Grow

The Voluntary Cleanup Program helps site owners voluntarily clean up their contaminated sites. This program provides property owners an opportunity to engage with Ecology in cleaning up their contaminated site. Completing contaminated site

cleanup not only provides protection for human health and the environment, it also makes it easier for property owners during property transactions.

Interest in the Voluntary Cleanup Program continues to create a workload challenge for Ecology. A large number of sites shift to voluntary cleanups when possible. These cleanups are faster than non-voluntary sites, as they are generally less complex cleanups, though some may involve multiple properties.

Rule Adoption and Implementation

Ecology adopted the Sediment Management Standards (SMS) rule revisions on February 22, 2013. These became effective on September 1, 2013. There were four main rulemaking topics:

- An update to the rule framework for making decisions on sediment cleanup standards and sediment cleanup actions based on human health protection.
- Harmonization of the MTCA and SMS rule requirements and terminology to support more effective cleanup decisions.
- Establishing chemical and biological criteria to support cleanup decisions at freshwater sites.
- Clarifying policies for coordinating cleanup actions and source control measures.

Since adoption of the new SMS rule, Ecology has been engaged in implementing the provisions. This includes developing sediment cleanup guidance, which will be available for public comment in October 2013, and establishing regional background in high priority areas of Puget Sound. Regional background is a key provision in the new SMS rule, and Ecology has decided to lead the initial work to implement this provision.

Ecology is also revising the Underground Storage Tank (UST) rule. We plan to incorporate the new federal rule requirements, which EPA is currently developing, and make additional corrections to the state rule. We expect broader changes will be made during this second phase. To maintain state program approval, we will have three years to incorporate the new federal rule requirements after they are adopted.

We plan to resume efforts to revise the MTCA rule but have not yet established a time line. We need to make changes to ensure cleanup standards stay current with changes in science and/or amendments to the MTCA law. Also, given the

changes to MTCA with SB 5296, we will also need to work on rewriting the rules governing these changes and limited changes to the Remedial Action Grants. Ecology plans to complete these changes by August 2014.

Safe Soils Program 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 ten-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 will provide 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. Ecology has identified 700 yards in the Ruston/North Tacoma Superfund Study Area that have already been sampled and qualify for the Yard Program. Ecology estimates that 500 more homes not yet sampled in west Tacoma and southern Vashon-Maury Island will qualify for cleanup.

Ecology is providing free technical assistance to developers doing soil sampling and cleanup as part of their projects. We are encouraging local governments to require sampling and cleanup as a permit condition.

The Soil Safety Program continues to sample soils in play areas at new child care facilities. This biennium, Ecology will complete all planned park play area cleanups, including several Tacoma parks in highly-impacted areas. Ecology will continue broad-based and targeted outreach to residents in Pierce, King, and Thurston counties—including free home soil testing educational programs in areas likely to have elevated arsenic and lead.

Ecology also developed a ten-year plan to address Everett Smelter contamination and four

Toxics Cleanup Program

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mine sites in central and eastern Washington. In the next biennium, Ecology will continue sampling and soil cleanup in residential yards in Everett. Outreach and education also continue in Everett. Two park cleanups are planned for 2014, and Ecology plans to complete a study of contamination in the industrial lowland area by the end of 2013.

Sampling and cleanup work continue at three of the four mine 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.

Lake Roosevelt/Upper Columbia River

The Upper Columbia River site extends over a distance of approximately 151 miles—from the U.S./Canadian border, downstream to the Grand Coulee Dam. Lake Roosevelt, created by the construction of Grand Coulee Dam, is the largest reservoir (by volume) in Washington, and spans a length of approximately 133 miles. Upper Columbia River and Lake Roosevelt sediments and beaches contain elevated concentrations of metals such as zinc, cadmium, lead, copper, and mercury. Studies also show metals such as mercury and arsenic at elevated levels in fish. Upland soils and sediments also are documented at elevated concentrations due to historical smelter emissions. The primary source of metals is directly attributed to the Teck Resources, Limited (Teck) lead-zinc smelting complex in Trail, British Columbia.

In 2003, the U.S. EPA issued a Unilateral Administrative Order to Teck requiring the company to study the extent of contamination in the reservoir and river between Grand Coulee Dam and the international border. Teck did not comply. The Colville Confederated Tribes filed a citizens' suit, later joined by the state of Washington, to compel their compliance. In 2006, EPA and Teck Cominco entered into a settlement contract in which Teck agreed to complete a remedial investigation and feasibility study (RI/FS). Ecology, tribal, and federal government counterparts are presently advising EPA in their oversight of the study.

Ecology continues to advance its joint-litigation partnering with the Confederated Tribes of the Colville Reservation to demonstrate Teck's liability at the Upper Columbia River sites. The state and the tribes received a favorable decision on December

14, 2012, in Phase 1 of the litigation. The Eastern District of Washington found Teck liable for contamination in Washington, caused by its century-long practice of discharging waste to the Columbia River in Canada.

Earlier, Teck lost a defense seeking to divide liability upfront among all potentially responsible parties (PRPs), which—with this ruling—now makes it subject to joint and several liability for contamination at the site. Teck wastes continue to be present and redistributed throughout the site, polluting the Upper Columbia River site. Affirming Teck's liability will establish the foundation for properly achieving the cleanup and natural resource restoration of the Upper Columbia River.

In addition to the litigation and participation in the RI/FS, Ecology is representing the state's interest on the Upper Columbia River/Lake Roosevelt Natural Resource Trustee Council (Council). Other Council members include the Confederated Tribes of the Colville Reservation, the Spokane Tribe of Indians, and the United States Department of the Interior. The Council's primary objective is to determine what natural resources have been injured, and ensure the injured resources are restored. The Council is starting to implement the Injury Assessment Plan.

Puget Sound Initiative: Spotlight on Anacortes

For the past several years, Ecology has worked with local partners to remake the shoreline and ecosystem of Fidalgo Bay in Skagit County. In mid-July, the latest phase started at a historical industrial site on the Anacortes waterfront. Ecology is overseeing the project at the former Custom Plywood site. The work will:

- Remove about 1,100 old creosote pilings and more than 7,000 tons of other structures and materials.
- Dig up and dispose of about eight acres of in-water sediment contaminated with dioxins and wood waste.
- Build a jetty extension and a new aquatic spit to prevent waves from eroding the shoreline and to improve the near-shore habitat.
- Connect Fidalgo Bay with a wetland area that was created in 2011.

Work is expected to wrap up by the end of October 2013.

Custom Plywood is one of several Anacortes-area TCP cleanup sites under the Puget Sound Initiative. It is an effort by local, tribal, state, and federal governments; business, agricultural, and environmental communities; and scientists and the public to restore and protect the health of Puget Sound.

The Custom Plywood site was home at various times to a sawmill, a wood box factory, and a plywood mill. Fire destroyed the closed mill in 1992. The site was littered with concrete, metal, and other debris from the destroyed mill.

Investigations showed the soil contained elevated concentrations of heavy metals, petroleum hydrocarbons, dioxins, and furans. Groundwater beneath the site also contained elevated levels of arsenic, copper, and nickel.

In 2011, work crews removed pilings, other structures, and mill debris from the six-acre upland portion of the site. They dug up and disposed of about 33,600 tons of contaminated soil, which they replaced with about 39,000 tons of clean soil. They also created a wetland. The current site owner, GBH Investments LLC, is already using the property's upland portion to store boats.

About 25 workers are employed daily on the project. Typically, cleanup workers provide a boost to the local economy because they spend money on food, fuel, lodging, and other goods and services in the community where they're employed.

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. Contamination may be in the soil, air, sediments, underground water, drinking water, or surface water. 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.

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.
- Cleaned sites are ready for redevelopment and job creation.
- The number of sites with cleanup actions in progress will increase.

Performance Measures

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

Manage Underground Storage Tanks to Minimize Releases

Ecology currently regulates over 10,000 active underground storage 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 that are cleaned up.

Toxics Cleanup Program

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- Increased percent of underground storage tanks inspected that pass compliance for leak detection.

Performance Measures

- Percent 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.
- Independently 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, or brownfields redevelopment. The Voluntary Cleanup Program minimizes the need for public funding used for such cleanups, 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 who voluntarily cleaned up sites.

Performance Measures

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

Toxics Cleanup Program

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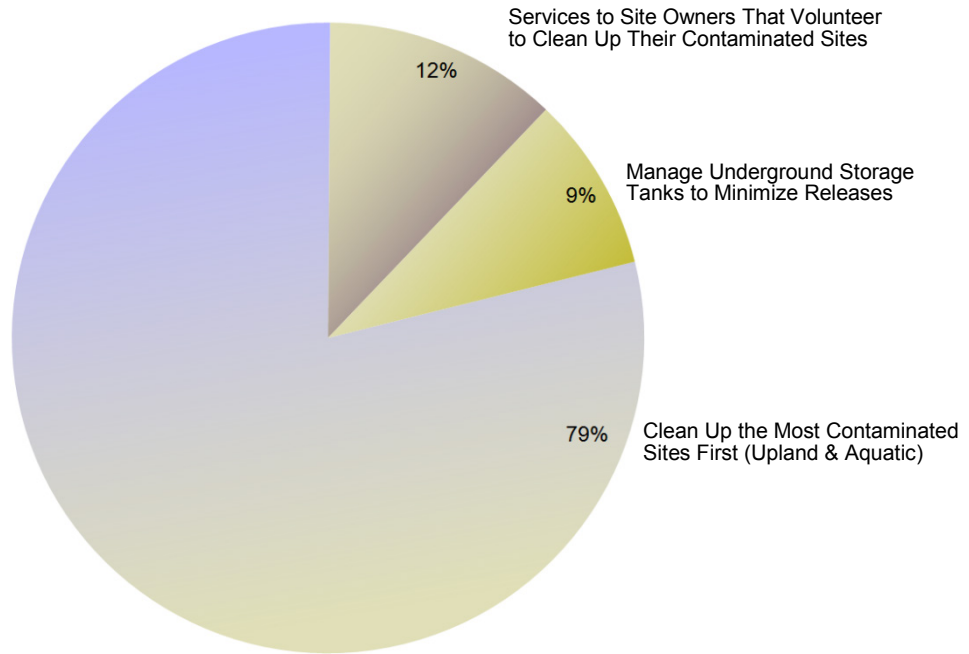
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Toxics Cleanup Program

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Toxics Cleanup Program 2013-15 Biennium Budget By Activities

Operating Budget = \$52.4 Million; FTEs = 184.9



Activities	Dollars	FTEs
Clean Up the Most Contaminated Sites First (Upland & Aquatic) (A005)	\$41,544,737	132.7
Services to Site Owners that Volunteer to Clean Up Their Contaminated Sites (A057)	6,061,322	28.0
Manage Underground Storage Tanks to Minimize Releases (A023)	4,838,737	24.2
Toxics Cleanup Operating Budget Total	\$52,444,796	184.9

Toxics Cleanup Program

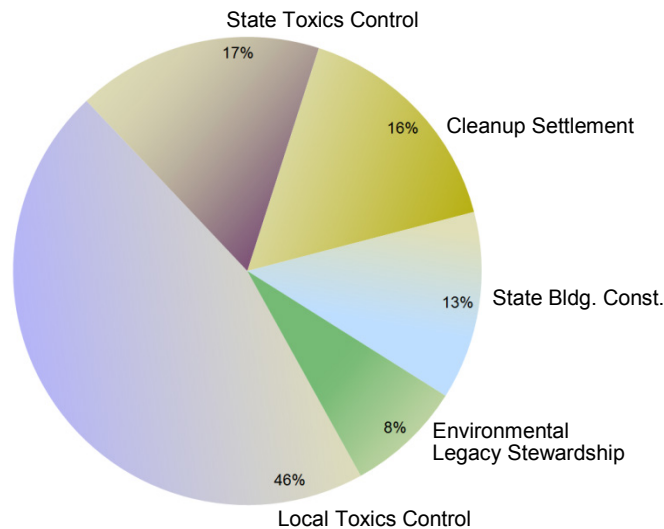
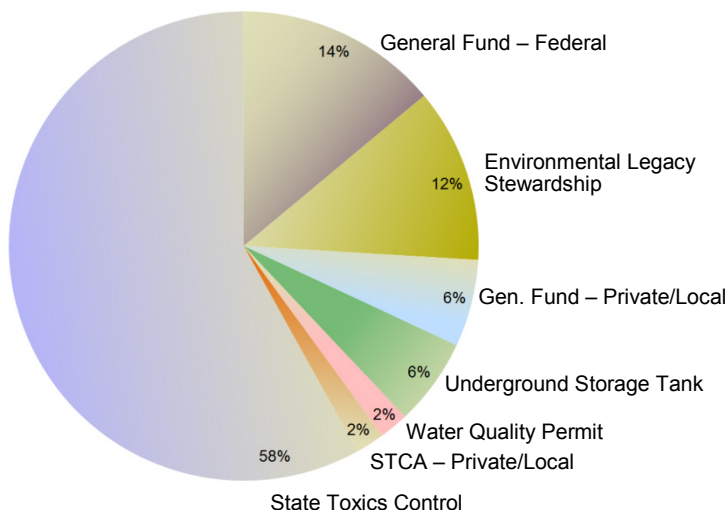
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Toxics Cleanup Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$52.4 Million

FTEs = 184.9

Capital Budget = \$236.0 Million



Air Pollution Control (0.19%) not shown in operating budget pie above (too small for display).

Operating Fund Sources	Amount	Uses
State Toxics Control (173)	\$30,492,309	Clean up toxic sites, investigate and rank new toxic sites, defense site cleanup, technical assistance, site information management, and natural resource damage assessment.
General Fund – Federal (001)	7,109,657	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)	6,523,367	Clean up toxic sites, investigate and rank new toxic sites, defense site cleanup, technical assistance, site information management, and natural resource damage assessment. Technical assistance, oversight, and administration of the Remedial Action Grant Program.
General Fund – Private/Local (001)	3,003,317	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.
Underground Storage Tank (182)	2,977,574	Pollution prevention, inspection, and permitting activities related to underground storage tanks.
Water Quality Permit (176)	1,264,686	Sediment source control.
State Toxics Control – Private/Local (173)	974,596	Activities related to the cleanup of leaking underground storage tanks (LUST). Prepayment agreements and recovered LUST.
Air Pollution Control (216)	99,290	Conduct air quality gas vapor and spill technology inspections in conjunction with underground storage tank inspections at gas stations.
Operating Budget Total	\$52,444,796	

Toxics Cleanup Program

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Capital Fund Sources	Amount	Uses
Local Toxics Control (174)	\$110,520,676	Technical assistance, oversight, and administration of the Local Toxics Control Account Remedial Action Grant Program.
State Toxics Control (173)	39,429,762	Investigate and clean up toxic sites. Includes re-appropriations for Puget Sound Aquatic Cleanup and Safe Soils Remediation and new funding for eastern Washington orphaned and abandoned cleanup sites.
Cleanup Settlement (15H)	37,100,510	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)	30,321,000	Investigate and clean up toxic sites. This consists of re-appropriations for the following initiatives: Swift Creek Natural Asbestos Cleanup, Upper Columbia River Black Sand Beach Cleanup, and Skykomish Cleanup.
Environmental Legacy Stewardship (19G)	18,600,900	Investigate and clean up toxic sites. Includes new appropriations for Puget Sound Initiative cleanup and the Eastern Washington Clean Sites Initiative for cleaning up orphaned and abandoned sites.
Capital Budget Total	\$235,972,848	
Toxics Cleanup Operating & Capital Budget Total	\$288,417,644	



Ecology's John Cleary collects air emissions samples from a compost facility's biofilter as part of a statewide W2R study. The samples are analyzed for odor and toxic chemicals in an effort to identify the primary onsite sources of composting odors and determine if toxic chemicals are a concern. The goal of the study is to establish emissions criteria to advance regulatory oversight for odor control.

Program Mission

The mission of the Waste 2 Resources Program is to prevent wastes and toxics, use wastes as resources when possible in ways that protect 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, *Solid and Hazardous Waste State Plan (Beyond Waste)*. Local governments are required to develop local plans that align with the state plan and address their needs for managing local solid and hazardous wastes. Facilities, waste hauling, recycling and prevention programs, and funding for those programs must be included in plans approved by Ecology. Support for implementing those plans and programs are provided through local fund

sources such as tipping fees and Coordinated Prevention Grants through Ecology. Ecology provides technical assistance to local governments for their plan development and implementation. The private sector provides much of the waste and recycling hauling services in the state, and owns and operates many of the waste handling and disposal facilities.

As Washington's population grows, so does the amount of waste it produces. Over time, the character of the waste stream has changed along with the way we manage the waste. There is increasing demand to recover and reuse materials for a higher use than disposal. And 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 (Beyond Waste)*. Preventing waste in the first place is the smartest, cheapest, and healthiest approach.

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 both while they are actively used and for a number of years 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 local jurisdictional health departments (JHDs) that are responsible for permitting and compliance in the state, and to facility owners and operators who implement these regulations. Ecology provides technical 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 the 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 them interpret our regulations.

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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 even better environmental protection.

The need to reduce potential environmental threats from toxic components in electronic products and mercury lamps has helped produce two recent take-back laws in Washington. Ecology developed and oversees the E-Cycle Washington Program. Since the program began in 2009, it has resulted in keeping about 200 million pounds of electronics containing toxic substances out of landfills. As directed by the 2010 Legislature, Ecology is currently developing a similar take-back program for mercury lamps.

In addition to keeping toxic products out of landfills, Ecology's investment in prevention strategies is the focus of our reducing toxic threats priority initiative, and a fundamental principle of the *State Solid and Hazardous Waste Plan (Beyond Waste)*. This initiative builds on and coordinates work already going on across Ecology. It is aimed at fostering development of prevention approaches to avoid exposure to toxic chemicals and future costs that come when toxic chemicals find their way into the environment.

Two focus areas have been identified: (1) preventing use of toxic chemicals in consumer products; and (2) preventing toxics from entering Puget Sound. Ecology is implementing the Children's Safe Products Act, passed by the Legislature in 2008. Ecology is also developing Chemical Action Plans for persistent bioaccumulative toxins (PBTs).

Right now, we dispose of many wastes 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 are done in a way that protects the environment as they 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. Expanding the types of materials

collected for recycling helps reduce the amount of waste going to landfills. Recycling also reduces the need for raw materials, when those 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. The majority of these organic materials—food waste, yard waste, compostable paper, clean wood, and textiles—are now 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 promotes economic vitality in growing industries, and protects the environment.

Ecology oversees the state biosolids program, develops the standards, and permits 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's biosolids program is supported by fees paid by wastewater treatment plants. We enforce the requirements for proper handling, quality standards for biosolids 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.

Major industries in the state, such as pulp and paper, aluminum smelting, and oil refining, have the potential to be major polluters of the environment. Ecology provides a single point of contact for improved environmental permitting, compliance, and technical assistance to ensure their activities minimize negative air, land, and water impacts.

Authorizing Laws

- *RCW 49.70 Worker and Community Right-to-Know Act*
- *RCW 70.93, Waste Reduction, Recycling and Model Litter Control Act*
- *RCW 70.94, Washington Clean Air Act*

- *RCW 70.95, Solid Waste Management Reduction and Recycle*
- *RCW 70.95C, Waste Reduction*
- *RCW 70.95D, Solid Waste Incinerator*
- *RCW 70.95F, Labeling of Plastics*
- *RCW 70.95G, Packages Containing Metals*
- *RCW 70.95I, Used Oil Recycling*
- *RCW 70.95J, Municipal Sewage Sludge – Biosolids*
- *RCW 70.95K, Biomedical Waste*
- *RCW 70.95M, Mercury*
- *RCW 70.95N, Electronic Product Recycling*
- *RCW 70.105, Hazardous Waste Management*
- *RCW 70.105D, Hazardous Waste Clean Up—Model Toxics Control Act*
- *RCW 70.132, Beverage Containers*
- *RCW 70.138, Incinerator Ash Residue*
- *RCW 70.240, Children’s Safe Products Act*
- *RCW 70.270, Replacement of lead wheel weights*
- *RCW 70.275, Mercury-containing lights – proper disposal*
- *RCW 70.280, Bisphenol A – Restrictions on sale*
- *RCW 70.295, Stormwater pollution-coal tar*
- *RCW 90.48, Water Pollution Control Act*
- *RCW 90.52, Pollution Disclosure Act*

Constituents/Interested Parties

- *Federal, state, and local governments.*
- *Environmental organizations.*
- *Businesses.*
- *Citizens.*
- *G-certificated haulers.*
- *Recyclers.*

Issues

The Waste Reduction, Recycling and Litter Control Account Reductions for the 2013-15 Biennium

The 2011 Legislature reduced \$7 million in the Waste Reduction, Recycling, and Litter Control Account (WRRLCA) funding in the 2011-13 biennium. The 2013 Legislature diverted \$10 million in WRRLCA revenue each biennium to the State Parks Renewal and Stewardship Account for maintenance of state parks in the 2013-15 and

2015-17 biennia. Because of this reduction, some specific activities are still suspended.

Preventing and Cleaning Up Litter with Reduced Funding

Because of the continued reduction in funding in the 2013-15 biennium, Ecology is prioritizing litter pickup efforts through Ecology Youth Corps (EYC) and partnerships with the Washington State Department of Corrections (DOC), Department of Natural Resources (DNR), and local governments. This is done through the Community Litter Cleanup Program. Reductions taken to other Ecology funding will mean fewer crews on county roads and public lands, and fewer miles covered for litter pickup. Expected results will be dirtier and potentially more dangerous roads.

Other specific litter related activities are either still suspended or have received 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.
- Washington State Patrol's emphasis on secured load requirements is suspended.
- The litter hotline—where citizens could report observed littering—is no longer in service, resulting in less education and outreach to the public.
- Funding reductions to the Community Litter Cleanup Program continue, resulting in increased litter on county roads.
- Funding for litter pickup through interagency agreements with Washington State Parks and the Washington Department of Fish and Wildlife is suspended. The result is increased litter on public areas, state lands, and recreational areas; and increased illegal dumping.

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 WRRLCA fund reductions, some specific activities are still suspended:

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- The School Awards Program is suspended, resulting in fewer incentives for exceptional waste reduction and recycling efforts in schools.
- Staff for the 1-800-RECYCLE hotline was greatly reduced.
- There is no funding for a statewide waste characterization study.

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 Solid and Hazardous Waste Plan (Beyond Waste)* goal of closed-loop recycling and reuse of organic materials, those materials are being diverted from disposal to other management options. Some of the management options have associated concerns.

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. Unfortunately, the infrastructure to support the increased collection is not adequate. The result is an overburdened compost industry with odor problems and excess product supply.

To address these issues, Ecology is providing technical assistance to jurisdictional health departments and compost facility owners to alleviate some of the problems. We revised rules in 2013, WAC 173.350.220, Composting Facilities, to address feedstock, materials management, odor issues, and conditions for exempt compost facilities to improve organics management. Ecology is also working with local governments in their planning process to encourage them to evaluate the presence of adequate facility infrastructure to handle organic materials before they implement the collection programs.

Anaerobic digestion is also a proven technology that converts organic matter to biogas in the absence of oxygen, with nutrient rich fiber and liquid as by-products. As part of the rule revision

process last year, a new section, WAC 173.350.250, was developed to address anaerobic digesters.

Reducing and Recycling Materials from Construction

In addition to providing support to local government on curb-side recycling programs, Ecology is also focusing our 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 that C&D debris collected for recycling is sent to the appropriate facility and recycled, and not disposed.

Reducing and Recycling Plastics

Ecology will work with stakeholders to promote plastic products recycling. As of 2011, plastics made up 12.3 percent of the waste stream, up from 9.9 percent in 1992. Plastic bags make up 5.4 percent of the total plastics disposed.

Updating the State Solid and Hazardous Waste Plan (Beyond Waste)

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 safe waste management and prevention in the state. Washington citizens, businesses, and governments have made big advancements in our waste management practices over the years. During the 2013-15 biennium, the Waste 2 Resources Program and the Hazardous Waste and Toxics Reduction Program will work with our stakeholders to update the plan. Goals are to continue to improve current practices, address issues of concern, and advance waste and toxics prevention according to the law.

Revising the Solid Waste Handling Standards

In 2009, Ecology began a process to update *Chapter 173-350 WAC, Solid Waste Handling Standards*. In 2010, then Governor Gregoire issued an Executive Order that temporarily suspended non-

critical rule development. Ecology determined that portions of the rule were critical and proceeded with rule revisions for the composting and anaerobic digesters. Those were completed in early 2013.

Ecology is now restarting the rule revision process for the remainder of the rule. We expect it to be completed in the next three years. There will be extensive stakeholder involvement in the rule revision process.

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

Ecology engineers, hydrogeologists, and facility specialists are funded from the Model Toxics Control Account (MTCA). 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, and permits and regulatory interpretation has increased. Ecology is also providing increased technical assistance for MTCA cleanups at landfills.

Reducing Toxic Threats Strategy

Toxic chemicals in some consumer products have been found to be a source of pollution in our environment and potentially harmful to humans. Over time, reducing toxic chemicals in products will lower the risks to people and the environment. Several strategies are required to make significant progress toward achieving this goal:

- Identifying chemicals of concern in consumer products and promoting safer alternatives to identified chemicals.
- Promoting green chemistry.
- Promoting environmentally preferred purchasing.

The Legislature has taken action to reduce potential harm from toxics in products through:

- E-Cycle and mercury lamps recycling.
- Children's Safe Products Act (CSPA).
- Laws limiting certain toxic in packaging.

Identifying Chemicals of Concern

Ecology will identify and gather data on chemicals of concern and their presence in consumer products. Working with stakeholders, we will develop a more comprehensive system for establishing chemical priorities.

Eliminating PBTs

PBTs are persistent, bioaccumulative, and toxic chemicals, and are also known as the “worst of the worst.” Ecology will complete the PCB Chemical Action Plan (CAP) with recommendations on reducing unintended production of PCBs and managing existing PCBs. We will begin developing a CAP for perfluorinated compounds widely used in anti-stain applications. The PBT rule will be revised and updated, potentially adding chemicals to the list. Working with stakeholders, we will evaluate whether or not the CAP model is appropriate to identify options for priority chemicals that are not PBTs (e.g. they are not persistent or not bioaccumulative, but Ecology has still identified them as priorities).

Keeping Mercury Lamps Out of Landfills

In 2010, the Washington State 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. Producers of mercury-containing lights were to fund Ecology's administration and enforcement costs. Guidelines and rules were developed to implement this program. A lawsuit concerned with funding the program was filed against the rule and has delayed implementation. The industry is proposing legislation for the 2014 Legislative Session to eliminate the state contracted program and allow for producer funding options to include using an “ecofee.” If the Legislature approves the changes, the lawsuit will no longer be necessary, and the program can be implemented.

Implementing the Children's Safe Product Act

Ecology adopted rules to carry out the state's groundbreaking Children's Safe Products Act (CSPA), passed by the Legislature in 2008. The rule is designed to collect information that will help government and the public better understand the presence of chemicals in children's products. It requires manufacturers of children's products to report if their products contain certain chemicals. A list of 66 chemicals of high concern for children was developed. Beginning in August 2012, manufacturers of children's products that contain these chemicals began reporting that use to Ecology. Retailers who only sell, but do not make

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or import children's products, are not subject to the rule.

Ecology will analyze data reported to identify any needed next steps to protect children. Ecology will begin enforcing the CSPA and seek permanent funding to enforce these laws through product testing.

Ensure a State Voice in Reform of Federal Toxics Law (Toxics Substances Control Act)

Ecology continues to lead the core states in responding to proposed reform legislation for the *Toxics Substances Control Act*, supporting federal efforts to regulate and reduce the use of toxic chemicals.

Preventing Toxics from Entering Puget Sound

The U.S. Environmental Protection Agency (EPA) awarded the National Estuary Program (NEP) Lead Organization Cooperative Agreement for Toxics and Nutrients Prevention, Reduction, and Control to Ecology in February 2011. This was one of seven NEP Lead Organization Assistance Agreements that the EPA awarded to management conference partners to support Puget Sound recovery. The goal of the NEP Toxics and Nutrients grant is to improve both human and environmental health in the Puget Sound ecosystem by preventing, reducing, and controlling toxics and nutrients from entering Puget Sound fresh and marine waters. Ecology plans to implement projects in line with a strategic framework.

Ecology's Waste 2 Resources, Hazardous Waste and Toxics Reduction, Environmental Assessment, and Water Quality programs have worked with various partners at the federal, tribal, state, and local levels and non-governmental organizations, academia, and businesses, to develop an implementation strategy to effectively and strategically allocate Puget Sound NEP toxics and nutrients money over the next few years. Now in the fourth year of funding, Toxics and Nutrients NEP work is closely aligned with the 2012 Action Agenda for protection and restoration of Puget Sound. Given the emphasis on following priorities in the Action Agenda, new NEP projects in round four address:

- Increasing compliance assurance through inspection, technical assistance, and

enforcement programs for high-priority businesses and at construction sites.

- Ways to implement and strengthen authorities and programs to prevent toxic chemicals from entering Puget Sound.
- Continued scientific investigation of the releases and biological impacts of chemicals entering Puget Sound.

Industrial Redevelopment

Ecology's Industrial Section 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 to build a coal export terminal.

As the environmental review process for the proposed coal port progresses, Ecology's Industrial Section is working with the landowner, Northwest Alloys (Alcoa), and Millennium to investigate and clean up residual contamination at the site. Our goal is to ensure the investigation and cleanup are thorough, that we involve the community in cleanup decisions, and the property is ready for whatever its future use may be.

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.

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- Ensures an environmentally compliant biosolids program.

Expected Results

- Solid waste generation per capita decreases, 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; and less waste for disposal.

Performance Measures

- Tons of solid waste generated annually in Washington.
- Tons of materials reused or recycled annually.
- Tons of electronics with toxic chemicals collected for recycling.
- Pounds of solid waste generated per dollar (state gross domestic product).
- Dollar value of recyclables disposed.
- 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 pick-up. Litter prevention and pick-up helps to 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

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

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

Ecology protects public health and promotes resource recovery through administration of two capital grant programs.

- Coordinated Prevention Grants (CPGs) support local government activities to protect groundwater, recycling, and reuse programs; hazardous substance use reduction; and moderate risk waste collection (hazardous waste generated from households and small businesses). CPGs help implement local solid and hazardous waste plans. New initiatives focus on reusing organic materials, reducing building construction waste, and reducing toxicity in products.
- Public Participation Grants (PPGs) provide funding for interest groups to inform citizens of local cleanups and for waste reduction efforts.

Expected Results

- Contaminated site agreements through PPGs educate communities affected by contaminated site cleanups, and allow those affected to have a voice in cleanup investigation and remediation. Successful contaminated site projects will help ensure cleanup investigations have support and input from affected residents.
- Waste management projects through PPGs educate Washington residents on solid waste reduction and reducing toxic threats. Successful waste management projects will inform participants on environmental issues, propose solutions, and begin a process of behavioral change.
- Technical assistance on landfill regulations and moderate risk waste is provided through more than 500 Coordination Prevention Grant (CPG) agreements with local governments.
- Moderate risk waste is collected each biennium for proper recycling or disposal at moderate risk waste collection facilities. These facilities are funded through CPG funds provided to local jurisdictional health departments. CPG funds are managed to ensure that more than 800 solid waste facilities statewide comply with regulatory standards.

Performance Measures

- Tons of solid waste generated annually in Washington.
- Tons of materials reused or recycled annually.
- Pounds of household and small quantity generator hazardous wastes recycled or properly disposed.

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- Pounds of solid waste generated per dollar (state gross domestic product).
- Dollar value of recyclables 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, and timely issuance of environmental permits.
- Current permits will ensure industries are meeting new state and federal requirements in a timely way.

Performance Measures

- Percent of industrial section permits that meet timeliness goals.

Reduce Persistent Bioaccumulative Toxins 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 developed, and the Legislature funded in the 2001-03 biennium, implementation of 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, and lead. Ecology has implemented programs to reduce uses of mercury and lead, and we continue to support programs to reduce releases of PAHs (polycyclic aromatic hydrocarbons).

Ecology continues to support the Department of Health and local health departments in eliminating sources of lead in homes. Ecology is currently developing a chemical action plan for PCBs. Following the PCB plan, Ecology will work with stakeholders to update the rule, if needed, and develop a schedule for subsequent chemical action plans.

Expected Results

- Public health and environmental impacts associated with PBTs and other toxic substances are minimized through chemical action plans and implementation of plan recommendations. Strategies are developed and implemented to reduce and eliminate these harmful chemicals.
- Ecology has completed chemical action plans for mercury, PBDEs (chemical flame retardants), lead, and polycyclic aromatic hydrocarbons (PAHs, combustion by-products).

Performance Measures

- Pounds of mercury collected and/or captured.
- Number of children tested for lead in blood.
- Percent of tested children with elevated lead blood levels.
- Tons of electronics with toxic chemicals collected for recycling.
- Pounds of household and small quantity generator hazardous wastes recycled or properly disposed.

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 that 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

- Tons of solid waste generated annually in Washington.
- Tons of solid waste disposed annually by Washington residents and businesses.
- Pounds of household and small quantity generator hazardous wastes recycled or properly disposed.
- Dollar value of recyclables disposed.

Reduce Toxic Chemicals in Products and Promote Safer Alternatives

Toxic chemicals in some consumer products have been found to be a source of pollution in our environment and potentially harmful to humans. Reducing toxic chemicals in products over time will lower the risks to people and the environment.

Several strategies are required to make significant progress toward achieving this goal:

- Identifying chemicals of concern in consumer products and promoting safer alternatives to identified chemicals.
- Promoting green chemistry.
- Promoting environmentally preferred purchasing.

Expected Results

Exposure to toxic chemicals will be reduced over time. This is accomplished through:

- Sampling children's products and enforcing reporting requirements and standards of the CSPA.
- Enforcing limits in BPA, lead wheel weights, coal tar sealants, BPDE, and copper brake pads.
- Testing for metals and enforcing limits in packaging.

Ecology will also develop alternative assessment guidelines and a Green Chemistry Center to provide

businesses with tools and resources to reformulate chemical products with less toxic materials.

Performance Measures

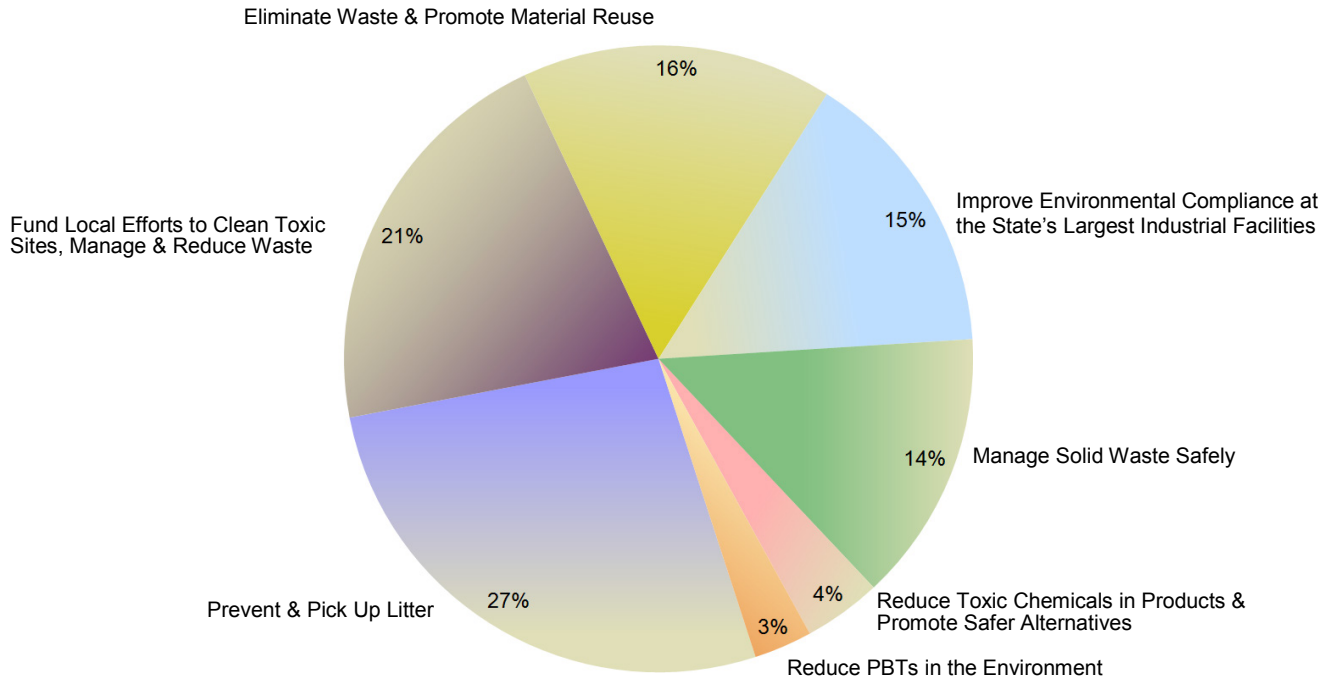
- Tons of electronics with toxic chemicals collected for recycling.

Waste 2 Resources Program

Laurie Davies, Program Manager, 360.407.6103

Waste 2 Resources Program 2013-15 Biennium Budget By Activities

Operating Budget = \$29.6 Million; FTEs = 119.0



Activities	Dollars	FTEs
Prevent & Pick Up Litter (A010)	\$7,896,326	26.6
Fund Local Efforts to Clean Up Toxic Sites & Manage or Reduce Waste (A013)	6,194,080	14.5
Eliminate Waste & Promote Material Reuse (A009)	4,758,608	28.6
Improve Environmental Compliance at the State's Largest Industrial Facilities (A028)	4,344,364	18.3
Manage Solid Waste Safely (A064)	4,138,613	20.1
Reduce Toxic Chemicals in Products and Promote Safer Alternatives (A065)	1,306,301	8.1
Reduce Persistent Bioaccumulative Toxins (PBTs) in the Environment (A050)	968,630	2.8
Waste 2 Resources Operating Budget Total	\$29,606,922	119.0

Waste 2 Resources Program

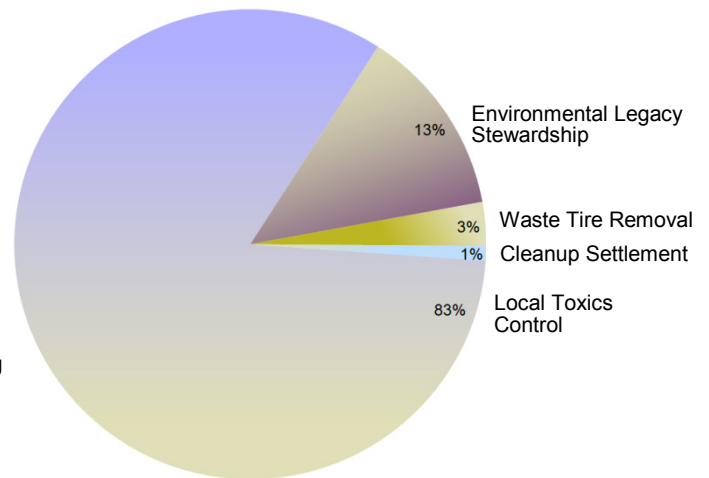
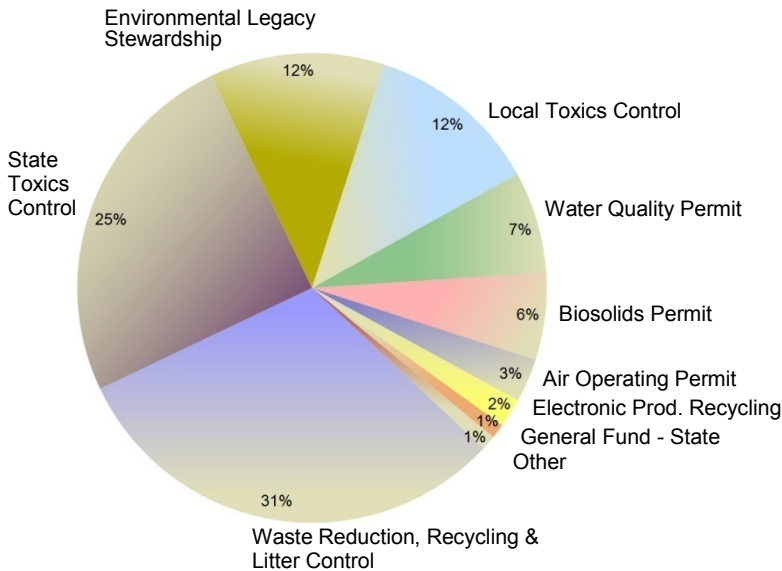
Laurie Davies, Program Manager, 360.407.6103

Waste 2 Resources Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$29.6 Million

FTEs = 119.0

Capital Budget = \$36.7 Million



Other = Product Stewardship Programs (0.64%), General Fund – Federal (0.43%), and General Fund – Private/Local (0.17%).

Operating Fund Sources	Amount	Uses
Waste Reduction, Recycling & Litter Control (044)	\$9,120,335	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)	7,445,437	Provide engineering and hydrogeologic support to local health departments; regulatory compliance assistance; industrial dangerous waste and cleanup activities; prevent and reduce toxic threats.
Environmental Legacy Stewardship (19G)	3,463,242	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)	3,448,483	Technical assistance; grants are provided to local governments for local solid waste planning and oversight of solid waste facilities; public participation grants.
Water Quality Permit (176)	2,169,112	Industrial water quality permitting, inspections, and sediment source control.
Biosolids Permit (199)	1,675,504	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)	1,054,174	Industrial air quality permitting, inspections, and enforcement.
Electronic Products Recycling (11J)	655,480	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)	206,392	Water and air quality permit enforcement actions.

Waste 2 Resources Program

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Product Stewardship Programs (16T)	190,199	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 – Federal (001)	128,564	National Estuary Program – PBDE Product Ban Enforcement, Roofing, and Landscaper Certification projects.
General Fund – Private/Local (001)	50,000	Appropriation authority for potential projects with local communities.
Operating Budget Total	\$29,606,922	

Capital Fund Sources	Amount	Uses
Local Toxics Control (174)	\$30,627,500	Funding grants to local governments for contaminated site cleanups, solid waste reduction and recycling programs, and provide enforcement for local solid waste facilities.
Environmental Legacy Stewardship (19G)	4,649,100	Lilyblad site cleanup and funding grants to the City of Port Angeles to avert a landfill bluff failure.
Waste Tire Removal (08R)	1,238,129	Statewide waste tire pile cleanup and prevention.
Cleanup Settlement (15H)	185,000	Re-appropriations from a settlement for the Lilyblad site cleanup.
Capital Budget Total	\$36,699,729	

Waste 2 Resources Operating & Capital Budget Total	\$66,306,651
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Water Quality Program

Don Seeberger, (Acting) Program Manager, 360.407.6405



Water Quality Program staff (left to right) Sarah Davenport-Smith, Rachel McCrea, and Anne Dettelbach inspect a stormwater catch basin to ensure it is functioning properly.

Program Mission

The mission of the Water Quality Program is to protect and restore Washington's waters.

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 such as 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 Improvement Reports to address those pollutants. The Water Quality Improvement Plan (Total Maximum Daily Load) 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*
- *RCW 70.105D, Model Toxics Control Act*
- *RCW 70.146, Water Pollution Control Facilities Financing Act*
- *RCW 76.09, Forest Practices Act*
- *RCW 90.42, Water Resources Management Act*
- *RCW 90.46, Reclaimed Water Use*
- *RCW 90.48, Water Pollution Control Act*
- *RCW 90.50A, Water Pollution Control Facilities Federal Capitalization Grants*
- *RCW 90.54, Water Resources Act of 1971*
- *RCW 90.64, Dairy Nutrient Management Act*
- *RCW 90.71, Puget Sound Water Quality Protection*

Constituents/Interested Parties

- *Citizens and special interest groups.*
- *Local governments, cities, counties.*
- *Businesses and industries.*
- *Environmental organizations.*

Water Quality Program

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- *State and federal governments/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 marine waterbodies.
- Work with communities to clean up nonpoint source pollution.

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 400 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 and to identify waterbodies that fail to meet those standards. We do this by reviewing thousands of water quality data samples and publishing an integrated water quality assessment report. This report lists the waterbodies that do not meet standards. Ecology then works with local interests to prepare water quality improvement reports to reduce pollution, establish conditions in discharge permits and nonpoint source management plans, and monitor the effectiveness of the improvement report.

Expected Results

Water quality improvement reports are in place to protect public health and the environment.

- 1,500 contaminated waterbody segments are managed on 650 waterbodies (Washington's legal commitments specified in a memorandum of agreement prompted by a lawsuit).

- 50 water improvement reports and associated technical reports are submitted each year to the U.S. Environmental Protection Agency (EPA).
- Local communities get help implementing water quality improvement reports.
- An updated list of marine waterbodies failing to meet water quality standards is developed.

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. We currently provide training and assistance to communities and industries on stormwater manuals and the Western Washington Hydrology Model. Ecology works with local governments and other stakeholders to implement a municipal stormwater program and permitting system.

Expected Results

Reduced contamination of streams, rivers, estuaries, lakes, and groundwater due to stormwater runoff from roads and other impervious surfaces.

- Approximately 3,000 construction and industrial stormwater dischargers that require permits are managed.
- New permit applicants get a response within 60 days of application receipt.
- Approximately 120 municipal stormwater permits are managed.
- Permittees get web-based information and support for low-impact development, emerging treatment technologies, and permit technical assistance.

Performance Measures

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

- Construction stormwater facilities submitting monitoring reports.

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. The permit is followed by regular inspections and site visits. Technical assistance and follow-up on permit violations are also provided through various means.

Expected Results

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

Performance Measures

- Percent of active water quality discharge 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 enable them to build, upgrade, repair, or replace facilities to improve and protect water quality. This includes meeting the state's obligation to manage the Water Pollution Control Revolving Fund in perpetuity. Ecology also funds nonpoint source control projects such as

Water Quality Program

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watershed planning, stormwater management, freshwater aquatic weed management, education, and agricultural best management practices. Grants are targeted to nonpoint source problems and communities where needed wastewater facilities projects would be a financial hardship for taxpayers. Local governments use loans for both point and nonpoint source water pollution prevention and correction projects. Ecology coordinates grant and loan assistance with other state and federal funding agencies.

Expected Results

- Public funds dedicated to improving water quality are managed responsibly to protect public health and the environment.
- Approximately 600 existing grants and loans are effectively managed each year.
- Water quality is improved and protected by awarding approximately 90 new grants and loans with approximately 150 million dollars in combined funds each year, for projects that demonstrate clear benefits to water quality and the environment.
- Approximately 200 additional grants are awarded this biennium for capacity building and high priority stormwater construction projects, based on newly appropriated operating and capital funds.
- 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 and water quality outcomes are documented and illustrated through data generated from grants and loans.

Performance Measures

- Number of funded onsite sewage system repairs or replacements funded 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, encouraging community action, providing funding, and supporting local decision makers. We also coordinate with other stakeholders through the Washington State Nonpoint Workgroup, the Forest Practices Technical Assistance Group, and the Agricultural Technical Assistance Group.

Expected Results

Protection of surface and groundwater is improved through community implementation of the state's Water Quality Management Plan to Control Nonpoint Pollution and water quality improvement reports.

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

Performance Measures

- Number of funded onsite sewage system repairs or replacements funded in Puget Sound counties.

Water Quality Program

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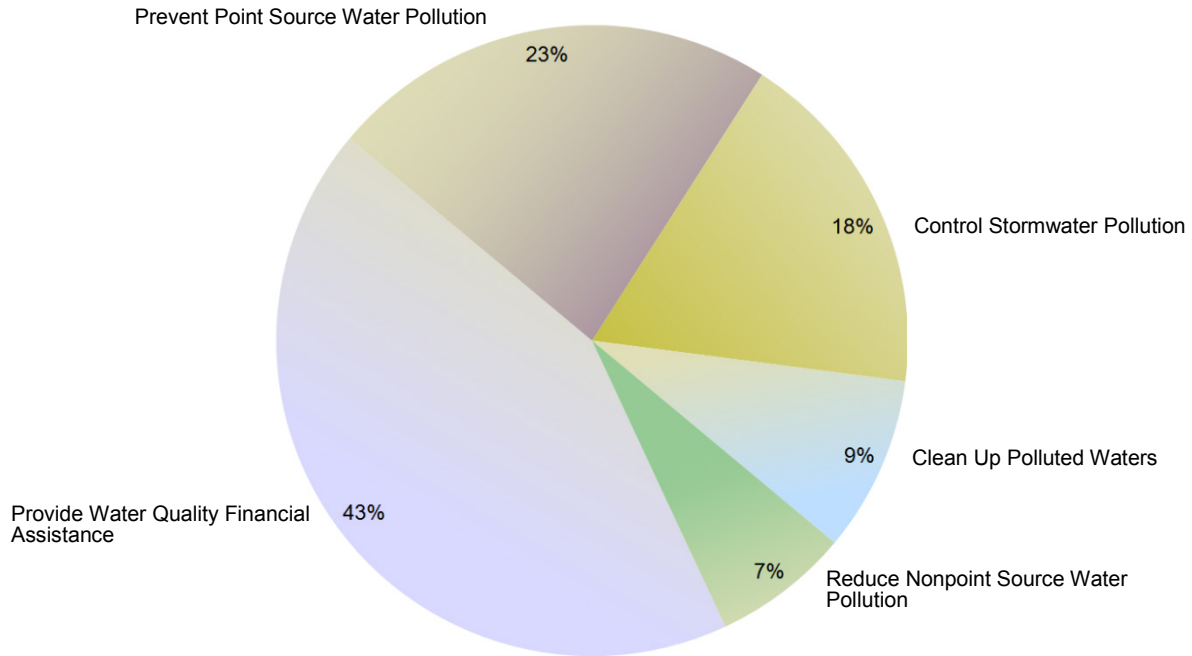
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Water Quality Program

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Water Quality Program 2013-15 Biennium Budget By Activities

Operating Budget = \$91.8 Million; FTEs = 255.1



Activities	Dollars	FTEs
Provide Water Quality Financial Assistance (A043)	\$39,901,011	49.2
Prevent Point Source Water Pollution (A032)	21,247,383	86.1
Control Stormwater Pollution (A008)	16,105,602	56.7
Clean Up Polluted Waters (A006)	7,857,480	33.1
Reduce Nonpoint Source Water Pollution (A049)	6,706,405	30.0
Water Quality Operating Budget Total	\$91,817,881	255.1

Water Quality Program

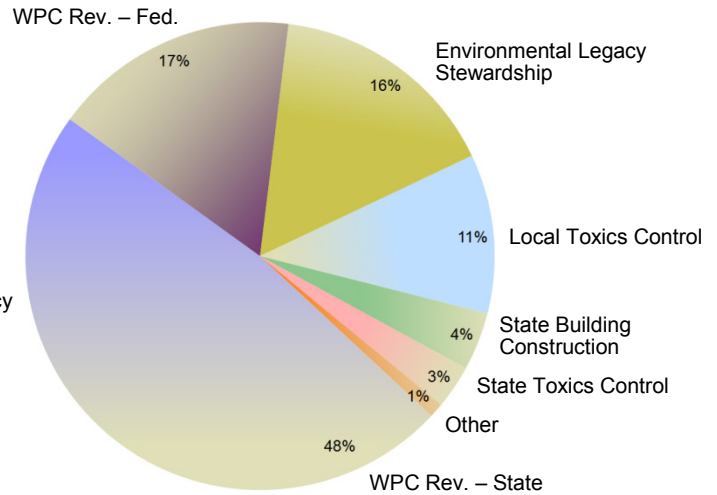
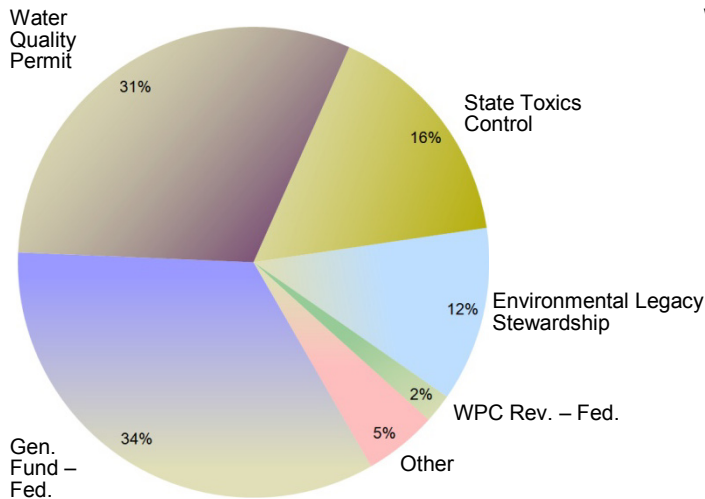
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Water Quality Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$91.8 Million

FTEs = 255.1

Capital Budget = \$475.4 Million



Other = Freshwater Aquatic Weeds (1.21%), Reclamation (1.13%), General Fund - Private/Local (1.03%), Water Pollution Control Revolving Administration (0.92%), Aquatic Algae Control (0.55%), General Fund - State (0.42%), and Water Pollution Control Revolving - State (0.37%).

Other = Water Pollution Control Revolving - Federal ARRA (0.57%), State & Local Improvements Revolving - Waste Disposal Facilities (Referendum 26) (0.15%), Water Quality Capital (0.05%), and State & Local Improvements Revolving - Waste Disposal Facilities (Referendum 39) (0.04%).

Operating Fund Sources	Amount	Uses
General Fund - Federal (001)	\$30,996,386	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)	28,217,364	Issue and manage federal and state wastewater discharge permits.
State Toxics Control (173)	14,744,652	Stormwater management; water quality standards; aquatic pesticides management; water quality financial assistance.
Environmental Legacy Stewardship (19G)	11,264,705	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.
Water Pollution Control Revolving - Federal (727)	1,420,486	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)	1,110,847	Grants to local governments to prevent, remove, or manage invasive freshwater aquatic weeds.

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Reclamation (027)	1,037,299	Funding provided to implement SSB 5881, which would increase the hydropower license fees to fully cover the costs of Ecology and the Department of Fish and Wildlife to license, re-license, and monitor the effects of hydroelectric projects on water, fish and wildlife.
General Fund – Private/Local (001)	944,829	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 Administration (564)	846,546	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.
Aquatic Algae Control (10A)	505,807	Grants to local governments to prevent, remove, or manage freshwater and saltwater aquatic blue-green algae.
General Fund – State (001)	385,815	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.
Water Pollution Control Revolving – State (727)	343,145	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.
Operating Budget Total	\$91,817,881	

Capital Fund Sources	Amount	Uses
Water Pollution Control Revolving – State (727)	\$229,275,760	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)	80,000,000	Federal funds for loans for constructing or replacing water pollution control facilities, nonpoint source control activities, and estuary management.
Environmental Legacy Stewardship (19G)	74,330,837	Funding for long-term competitive stormwater projects (statewide).
Local Toxics Control (174)	54,292,491	Grants for statewide stormwater projects to local governments for plan, design, and construct stormwater retrofit or low-impact development projects.
State Building Construction (057)	19,215,577	New appropriations and re-appropriations for the Centennial Clean Water Program, Puget Sound Stormwater projects, Non-Puget Sound Stormwater projects, and Reclaimed Water Projects.
State Toxics Control (173)	14,459,639	Grants for stormwater management implementation statewide. Grants/loans for water pollution control facilities, nonpoint source control, and water quality improvement planning and implementation/activities.
Water Pollution Control Revolving – Federal ARRA (727)	2,715,908	Federal stimulus funds for loans for constructing or replacing water pollution control facilities.
State & Local Improvements Revolving – Waste Disposal Facilities (Referendum 26) (051)	708,319	Re-appropriations for statewide stormwater projects to local governments for plan, design, and construct stormwater retrofit or low-impact development projects.
Water Quality Capital (11W)	233,000	Re-appropriation for Centennial Clean Water pollution control facilities, nonpoint source control, and water quality improvement planning and implementation/activities. Grant to Hood Canal Coordinating Council for onsite septic replacement loan program.

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State & Local Improvements Revolving – Waste Disposal Facilities (Referendum 39) (055)	170,880	Re-appropriations for statewide stormwater projects to local governments for plan, design, and construct stormwater retrofit or low-impact development projects.
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Capital Budget Total **\$475,402,411**

**Water Quality
Operating & Capital
Budget Total** **\$567,220,292**

Water Quality Program

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At Camp Kwoneesum Dam, Jerald LaVassar (left) of Ecology's Dam Safety Office conducts a standard dam safety inspection with the facility manager.

Program Mission

The mission of the Water Resources Program is to support sustainable water resources management to meet the present and future water 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

- *RCW 18.104, Water Well Construction Act (1971)*
- *RCW 43.21A, Department of Ecology (1970)*
- *RCW 43.27A, Water Resources (1967)*
- *RCW 43.83B, Water Supply Facilities (1972)*
- *RCW 43.99E, Water Supply Facilities – 1980 Bond Issue (Referendum 38) (1979)*
- *RCW 86.16.035, Department of Ecology Control of Dams and Obstructions (1935)*
- *RCW 90.03, Water Code (1917)*
- *RCW 90.08, Stream Patrolmen (1925)*
- *RCW 90.14, Water Rights Claims Registration and Relinquishment (1967)*
- *RCW 90.16, Appropriation of Water for Public and Industrial Purposes (1869)*
- *RCW 90.22, Minimum Water Flows and Levels (1969)*
- *RCW 90.24, Regulation of Outflow of Lakes (1939)*
- *RCW 90.28, Miscellaneous Rights and Duties (1927)*
- *RCW 90.36, Artesian Wells (1890)*
- *RCW 90.38, Yakima River Basin Water Rights (Trust Water) (1989)*
- *RCW 90.40, Water Rights of United States (1905)*
- *RCW 90.42, Water Resource Management (Trust Water) (1991)*

Water Resources Program

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- *RCW 90.44, Regulation of Public Groundwaters (1945)*
- *RCW 90.46, Reclaimed Water Use (1992)*
- *RCW 90.54, Water Resources Act of 1971*
- *RCW 90.66, Family Farm Water Act (1977)*
- *RCW 90.80, Water Conservancy Boards (1997)*
- *RCW 90.82, Watershed Planning (1997)*
- *RCW 90.86, Joint Legislative Committee on Water Supply During Drought (2005)*
- *RCW 90.90, Columbia River Basin Water Supply (2006)*
- *RCW 90.92, 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, 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 management of water supplies.

The 2013-15 enacted budget includes a proviso directing the Water Resources Program to make at least 500 water right decisions in fiscal year 2014 or lose \$500,000 of General Fund-State appropriations in fiscal year 2015. The current pending application backlog was 6326 applications (as of July 2013), which is down from 7,018 applications in 2011. In the two year period from July 1, 2011, to July 1, 2013, Ecology made 1,593 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.

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 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 2013-15 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:

- Purchase of water rights.
- Creation of water banks.
- Building storage.
- Developing aquifer recharge projects.

Ecology focus is 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 capital budget adopted by the Legislature provided over \$131 million in funding to implement the Yakima River Basin Integrated Water Resource Management Plan (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 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 2013, the Office of Columbia River had secured approximately 335,000 acre-feet of additional water supply for instream and out-of-stream uses. To tackle future water management challenges, Ecology will be following the model of collaboration with local partners that is working in the Dungeness, Skagit, and Columbia River basins. 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 should drought conditions manifest as there are no reserve funds included in the agency’s 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.

Water Resources Program

Tom Loranger, Program Manager, 360.407.6672

- 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

Ecology supports water rights adjudication. Adjudication reduces water right conflicts and supports sound water management by increasing certainty regarding validity and extent of water rights. It is a judicial determination of water rights and claims, including federal, tribal, and non-tribal claims. Current focus is on completing the Yakima River Basin surface water adjudication and pre-adjudication work in the Spokane and Colville watersheds.

Expected Results

- Work with tribes on water settlements, increased water rights certainty, and reduced conflict.
- Major uncertainty regarding the validity and extent of surface water rights in the Yakima Basin is removed.
- Water rights documents (certificates, claims, permits, etc.) in the Spokane Basin will be reviewed to prepare for anticipated adjudication proceedings with Idaho.

Performance Measures

- Number of tribal water right settlement processes initiated.
- Number of claims, rights, and/or permits reviewed for the Spokane adjudication.

Assess, Set, and Enhance Instream Flows

Ecology evaluates and sets instream flows that are fundamental to water resources management. Instream flows are used to determine how much water needs to remain in streams to meet environmental needs, how much can be allocated, and when to regulate junior water users based on flow levels. Ecology acquires water and uses other management techniques to restore and protect flows, while also meeting out-of-stream needs.

Expected Results

- Water availability is determined and water is sustained for current and future needs.
- Increased setting and enhancing of instream flows in critical water basins to benefit people, fish, farming, and the environment.
- The instream flows are set (Walla Walla, Cowlitz, Grays-Elochoman, and Spokane) working with local watershed groups and critical basins not engaged in watershed planning.

Performance Measures

- Volume of water saved for instream flow in acre feet.
- Number of instream flow rules adopted.

Ensure Dam Safety

Ecology protects life, property, and the environment by overseeing the safety of Washington's dams. It includes inspecting the structural integrity, flood, and earthquake safety of existing state dams not managed by the federal government; approving and inspecting new dam construction and repairs; and taking compliance and emergency actions.

Expected Results

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

Performance Measures

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

Manage Water Rights

Ecology allocates surface and groundwater to meet the many needs for water. We make decisions on applications for new water rights and on applications for changes and transfers of existing water rights. Water right decisions assess many factors, including determining whether water is available and whether existing rights would be impaired. Ecology is responsible for managing an existing water rights portfolio of over 51,000 certificates, 3,000 permits, and 166,000 claims.

Expected Results

- Water needs are met and existing water users and the environment are protected.

- Improved allocation of new water rights and changes to existing rights.
- New municipal water right provisions are implemented with the Department of Health.
- Timely and sound decisions are made on applications for new water rights and changes to existing rights to (re)allocate water.

Performance Measures

- Number of total water right decisions completed.

Prepare and Respond to Drought

Ecology provides services to reduce the impact of droughts and to prepare for future droughts and climate change. When droughts are declared, services include providing water via 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.
- Loss prevention efforts.

Performance Measures

- No measures are associated with this activity until a state drought is declared by the Governor.

Promote Compliance with Water Laws

Ecology helps ensure 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 and compliance with the state's water laws so legal water users and applicants for water rights are not impaired, water use remains sustainable, and the environment is protected.

- 80 percent of water is metered and reported in 16 critical water basins.
- Water right holders receive compliance information, assistance, and strategic enforcement action.
- Water use of streams with flows set is regulated during low flow periods.

Performance Measures

- Percent of water use that is metered in 16 critical basins.
- Number of compliance actions for water management.

Provide Water Resources Data and Information

Ecology protects state water resources through collection, management, and sharing of data and information that is critical to modern water management. Reliable data is essential to local watershed groups, conservancy boards, businesses, local governments, nonprofit groups, the Legislature, other agencies, and the media. It supports daily agency operations, including making water allocation decisions; setting and achieving stream flows; identifying the location and characteristics of wells, dams, and water diversions; supporting compliance actions; metering; tracking progress; communicating with constituents; and serving other water resource functions.

Expected Results

Sound water management is supported through improved agreement and more informed water resources decisions based on increasing timely and accurate data and improved public access to information.

- Data and information systems are developed and maintained by increasing the numbers of external users (watershed groups, conservancy boards, businesses, etc.).
- Improved collection, preservation, and availability of data, including access online, and information for water allocation, dam safety, well construction, instream flows, and communication.

Performance Measures

- Percent of water rights mapping completed statewide.

Water Resources Program

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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. Work is accomplished in partnership with delegated counties delivering technical assistance to homeowners, well drillers, tribes, and local governments.

Expected Results

- The public's safety, environment, and property are protected.
- Well drillers get licensing and training services.
- Well drilling is regulated.

Performance Measures

- Percent of water supply wells inspected in delegated counties.

Support Water Use Efficiency

Ecology provides agricultural, commercial/industrial, and nonprofit water users with services that deliver water savings. These include information, planning, and technical, engineering, and financial assistance. Support also is provided for water reuse projects and to the Department of Health for municipal water conservation.

Expected Results

- Increase water, energy, and cost savings to protect the environment, increase business competitiveness, and reduce pressure on water supplies and waste treatment facilities.
- Agricultural, commercial, industrial, and nonprofit water users get technical support.
- Department of Health water conservation and reclaimed water efforts get support.

Performance Measures

- Amount of funding provided to projects that improve water use efficiency.

Support Watershed-Based Water Supply and Resource Stewardship

Ecology supports watershed-based management of water for people, farms, and fish. We provide technical support, staff support, scientific expertise, and financial assistance to help local groups design and implement integrated watershed management and locally-tailored water supply solutions. Work in

this activity focuses on improving long-term reliability and availability of water for in-stream and out-of-stream needs per locally developed watershed plans and activities.

Expected Results

Water supply solutions are developed and implemented in water-short areas of the state to provide water for people, farms, and fish. Targeted technical and financial assistance is provided for plan implementation and updates where community/watershed-based groups are active partners in identifying in-stream and out-of-stream water availability solutions and projects.

Performance Measures

- Number of watersheds in the implementation of watershed planning.

Water Resources Program

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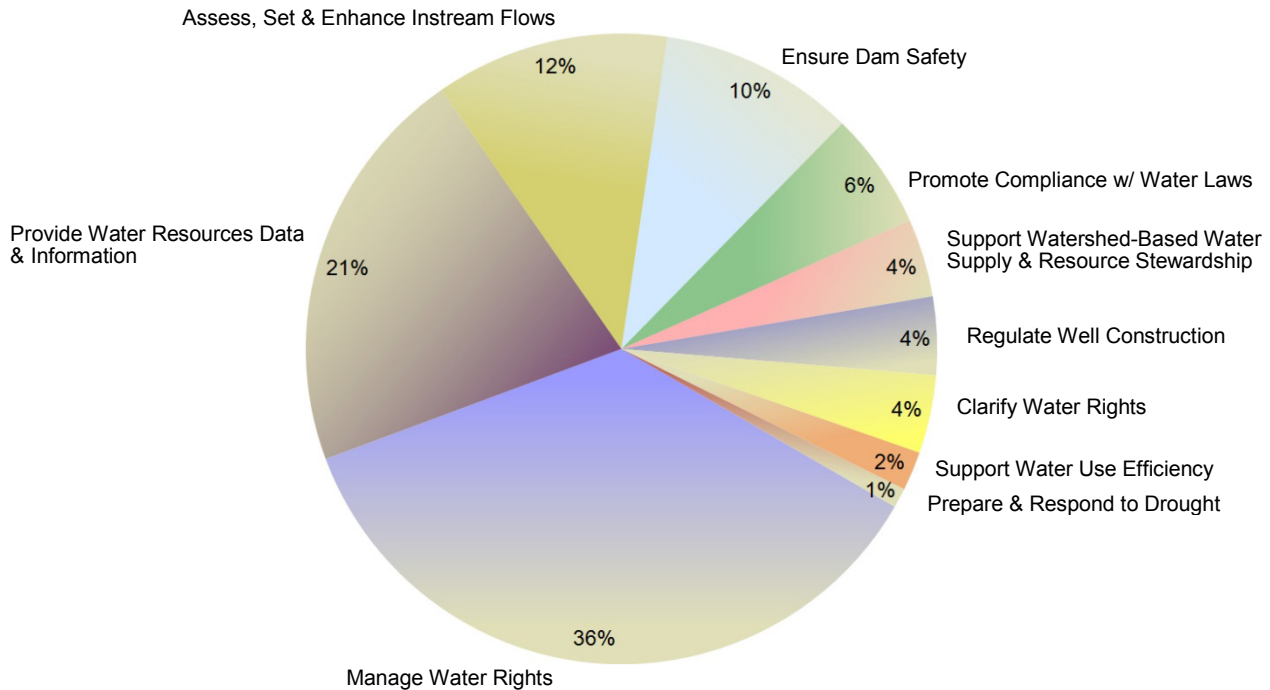
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Water Resources Program

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Water Resources Program 2013-15 Biennium Budget By Activities

Operating Budget = \$37.9 Million; FTEs = 141.0



Activities	Dollars	FTEs
Manage Water Rights (A024)	\$13,460,549	51.5
Provide Water Resources Data & Information (A044)	8,064,726	33.0
Assess, Set & Enhance Instream Flows (A003)	4,741,368	14.1
Ensure Dam Safety (A011)	3,641,140	11.3
Promote Compliance with Water Laws (A035)	2,386,540	11.4
Support Watershed-Based Water Supply & Resource Stewardship (A067)	1,619,531	5.8
Regulate Well Construction (A053)	1,551,548	6.5
Clarify Water Rights (A001)	1,549,887	5.9
Support Water Use Efficiency (A061)	660,309	1.5
Prepare & Respond to Drought (A029)	244,000	0.0
Water Resources Operating Budget Total	\$37,919,598	141.0

Water Resources Program

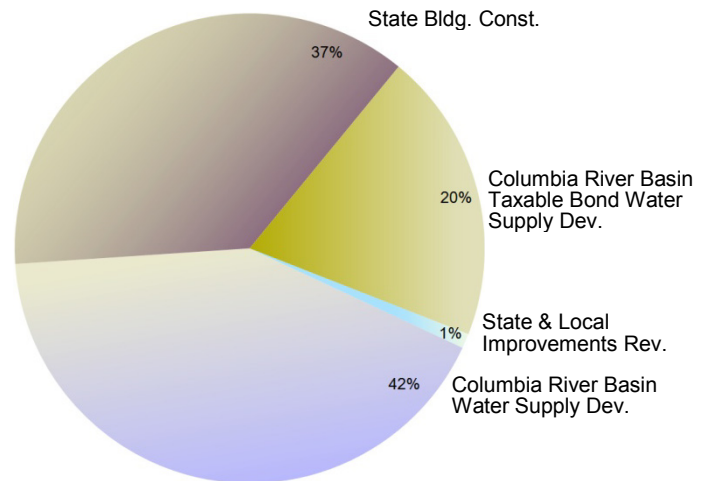
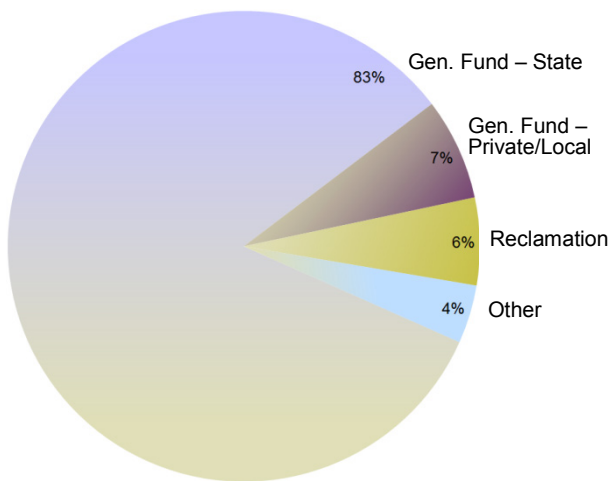
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Water Resources Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$37.9 Million

FTEs = 141.0

Capital Budget = \$155.3 Million



Other = Water Supply Facilities – Referendum 38 (1.04%), General Fund – Federal (1.02%), Basic Data (0.82%), State Drought Preparedness (0.54%), Water Rights Processing (0.35%), Water Rights Tracking System (0.11%), State Emergency Water Projects Revolving (0.11%).

Operating Fund Sources	Amount	Uses
General Fund – State (001)	\$31,459,831	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.
General Fund – Private/Local (001)	2,549,533	Instream flow projects, water acquisition, and cost reimbursement contracts for water rights processing.
Reclamation (027)	2,399,736	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.
Water Supply Facilities – Referendum 38 (072)	395,772	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)	387,913	Dam safety scanning project and guidelines, Yakima River Enhancement liaison, Spokane Valley Rathdrum Prairie Aquifer Study.

Water Resources Program

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Basic Data (116)	310,000	Pass through to the U.S. Geological Survey for stream gauging data collection and studies.
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.
Water Rights Processing (16V)	131,233	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.
Water Rights Tracking System (10G)	41,580	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.
Operating Budget Total	\$37,919,598	

Capital Fund Sources	Amount	Uses
Columbia River Basin Water Supply Development (10P)	\$65,455,000	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)	58,506,971	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)	30,545,000	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 & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	807,000	Grants/loans for agricultural water supply facilities. Grants for on-farm water use efficiency improvements, water conveyance improvements, and storage studies.
Capital Budget Total	\$155,313,971	

Water Resources Operating & Capital Budget Total	\$193,233,569	
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Agency Administration Program

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Records Management staff (from left) Paul Rosscup, Jamey Taylor, and Linda Anderson respond to a public disclosure request.

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

- *RCW 41.06, State Civil Service Law*

- *RCW 41.80, State Collective Bargaining Law.*
- *RCW 43.21A, Department of Ecology. In 1970, this law created the Department of Ecology to consolidate water, air, solid waste, and other environmental management, protection and development programs authorized by the Legislature.*
- *RCW 43.21M, Integrated Climate Change Response Strategy*
- *RCW 70.235, Limiting Greenhouse Gas Emissions*
- *RCW 80.80, 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 continues working closely with other natural resource agencies to pursue co-location opportunities. Our goal is to site offices where we can better serve our customers, while saving money by sharing space and investing in partnerships with other agencies that do work related to Ecology's.

The facilities group within Ecology is in the process of developing a facilities management tool that will allow cost and space modeling strategies to be examined for future facility planning needs. This tool will provide a more comprehensive cost benefit analysis of existing space use, as well as planning for future facility space needs. Ecology is working on three collaborative issues:

- The state's current six-year facilities plan identifies the need to move the Central Regional Office in Yakima. Ecology is working with the Office of Financial Management to complete a pre-design process to relocate this office to a site more conducive for Ecology operations.

Agency Administration Program

- Ecology is working with the Department of Enterprise Services to create a new shared facility for Ecology and the Department of Fish and Wildlife in Clark County.
- Ecology is working with the Department of Enterprise Services to consolidate vehicle fleet resources, data, and management responsibilities.

Records Management

Ecology is implementing lifecycle records management so records in all media types are managed from their creation to disposition. We have reworked Ecology records retention schedules to line up with today's business needs and set us up for future initiatives. This effort includes ongoing training for every person at Ecology; creating a consistent framework for organizing records; simplifying guidance for employees; cleaning up records that no longer need to be kept; minimizing storage and handling; and streamlining searches. We are also training all staff in public disclosure requirements, how it is different from records management and litigation discovery, and revising processes to be more efficient and diligent in responding to the more than 18,000 Public Records Act requests we get each year.

Human Resources Management

Ecology will continue to carry out its strategic plan for developing and managing its workforce for optimal performance and achieving Ecology and program goals by:

- Expanding the Ecology Employment Center website to provide managers, supervisors, and employees with additional information, guidance, and instruction about key employment activities and processes for workforce and position planning; making employment decisions; employee retention; succession management; and career planning.
- Expanding our interagency and inter-governmental partnerships for recruiting, selecting and hiring highly qualified candidates, with a special emphasis on increasing the diversity of our workforce and meeting our affirmative action goals.
- Developing and implementing an employment branding campaign to improve Ecology's competitiveness in the relevant job markets to

address increased turnover in key positions in the agency.

- Updating our leadership development program, including revised supervisory and management training, to meet the challenges of a changing employment environment with the recovering economy.

Enterprise Time, Leave and Attendance System

The Fiscal Office will continue working with the Department of Enterprise Services, the Office of Financial Management, and the Department of Transportation to develop a new statewide system for time, leave and attendance. The goal is to acquire and implement a system that will work for all state agencies. This project will improve the efficiency, consistency, and timeliness of time tracking by incorporating business rules into an automated solution.

Information Technology Services

Ecology continues to leverage technology to improve public access to information and services and create efficiencies in internal operations to reduce overall operating costs. Examples include:

- Modernizing our contracts and grants payable systems with an off-the-shelf technology solution. This will allow potential grant recipients to apply for grants online and provide a mechanism for tracking funding activities and related outcomes.
- Modernizing our billing and revenue tracking system with an off-the-shelf technology solution to allow electronic payments to meet evolving business needs.
- Ecology's voicemail and phone system is being replaced with Consolidated Technology Services shared services for Aura voicemail and Voice over Internet Protocol. This will modernize Ecology's voice and phone features and reduce overall operating costs for telecommunications.
- We are upgrading the wireless infrastructure from a guest network to an agency production network to support mobility.

Business Process Streamlining

- Ecology is focusing on two high priority process streamlining efforts in response to the State Auditor's Office report on streamlining business regulations and legislative direction to allow for electronic submittal of documents, forms, and fees.

- Streamlining business regulations: Ecology has developed a formal process for reviewing all of its regulations, including establishing benchmarks. Every two years, beginning in 2013, we will review all regulations to determine which ones need to be prioritized for rule-making. The rule review criteria include need, clarity, consistency, process streamlining, regulatory burden reduction, compliance and technical changes, sunset provisions, and possible legislative changes.
- Electronic submittal of documents, forms and fees: Ecology has developed an inventory of documents, reports, and fees that we currently require our customers to submit on paper. Based on the inventory, we will be prioritizing the process for conversion to electronic submittal through developing actions plans. Ecology is also identifying any documents, forms, and fees that are exempt from electronic submittal either because of legal requirements or because the technical nature of the documents made it necessary for Ecology to have the documents in paper format.

Communication and Education

Ecology's Communications and Education (C&E) provides support and strategic direction to Ecology leadership and environmental programs. Our communication managers work directly with environmental programs and regional offices to help deliver consistent and relevant information and messages. Our environmental education staff work in partnership with local governments, community groups, schools, and universities to help citizens gain skills and knowledge on how they can protect the environment.

C&E manages Ecology's external website and continually strives to meet our customers' and the general public's needs. The Internet is the primary way Ecology communicates with stakeholders, and it is increasingly the venue through which our customers conduct business with us.

Social media offers opportunities to reach and communicate with new audiences. C&E manages a variety of social media tools, including Facebook, Twitter, and Flickr, as well as our blog, ECOconnect.

Governor Inslee's Results Washington initiative provides new opportunities for C&E to help the public understand the critical work we do and how

it helps protect our land, air and water. Ecology's work relates to all five of the Governor's strategic goals. With nearly 70 percent of Ecology's budget going to communities and local governments, we help create and sustain family-wage jobs.

Ecology has numerous education, outreach and public involvement specialists throughout the regions and programs. C&E is dedicated to working in partnership with these specialists to communicate our work, and be accountable and transparent to the public, policy leaders, news media, and communities throughout the state.

Ecology's C&E provides round-the-clock communication and outreach support for oil and hazardous chemical spills. This includes being available 24/7 to provide timely information to the media and the public and, when they're established, to staff multi-jurisdiction incident response teams.

Climate Policy

Washington State is particularly vulnerable to a warming 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.

State law requires reduced emissions of greenhouse gases (GHGs), as well as 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 targets will require additional action. The 2013 Climate Legislative and Executive Workgroup created by the Legislature will recommend actions and policies to help the state meet its GHG reduction targets.

Most of the policy work that supports the Governor and workgroup continues to be done by staff (one person) of the Climate Policy Group in Ecology's Administration Program. Ecology's Climate Policy Group continues to:

- Oversee work implementing adaptation/response for climate change and ocean acidification.
- Coordinate state agencies' climate leadership and related activities (such as adaptation

Agency Administration Program

coordination/collaboration with federal, regional, state, tribal and local governments, universities, and others).

Ecology's Air Quality Program is implementing current policies and tracking progress through inventory and mandatory GHG reporting. The Air Quality Program will also administer the state agencies' GHG quantification.

Activities, Results & Performance Measures

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

Climate Policy Group

The Climate Policy Group was formed to implement a strategic priority for Ecology and the state. The group provides leadership, policy support, and coordination on state and federal climate change legislation, policies, regulations, and programs. It works closely with Ecology's Air Quality Program and other environmental programs, Washington's Energy Office, other state agencies, other states and Canadian provinces, stakeholder groups, and the public.

Communication and Education

Ecology carries out state and federally mandated rule-making, policy development, enforcement actions, toxic site cleanup, and other work that demands substantial public information and public involvement.

Ecology is committed to being transparent, open, and accountable to the public, policy leaders, news media, and the communities we serve. The Communication and Education Office provides needed support to Ecology leadership and our environmental programs to accomplish this.

The public relies on rapidly changing communication technologies to gather, understand, and share information. This requires public agencies to constantly improve delivery of needed information to our customers. The Communication and Education Office helps Ecology respond to this need. The office coordinates Ecology's use of the Internet and other technologies, with a focus on understanding our customers, what they need, and how to make information easily accessible to them at all times.

Communication and Education also leads Ecology's participation in education partnerships

with local governments, community groups, schools, and universities to help Washington residents make informed choices about using and protecting Washington's waters and air, reducing toxic threats, and reducing risks related to climate change.

Communication and Education provides round-the-clock communication and outreach support for oil and hazardous chemical spills. This includes being available 24/7 to provide timely information to the media and the public and, when they're established, to staff multi-jurisdiction incident response teams.

Governmental Relations

The Governmental Relations Office provides leadership, policy support, and coordination for federal and state legislative issues, as well as issues that affect local governments, tribes, and British Columbia. This office includes the Rules and Accountability Section, which provides rule development assistance and coordination, along with economic analysis, including Small Business Economic Impact Statements and cost/benefit studies. They also coordinate strategic planning, performance measurement, environmental indicators, and customer surveys. This office is responsible for leading the agency's Lean process improvement work.

Human Resources

The Human Resources Office provides a full scope of human resource management and consulting services, including recruitment, labor relations, classification and compensation, performance management, training and development, employee safety and wellness, layoffs, personnel records management, and personnel action processing.

Human Resources plays a key role in ensuring Ecology complies with federal and state employment laws, civil service rules, and agency policy. Human Resources also manages implementation and administration of collective bargaining agreements, including bargaining, contract compliance, handling grievances, and arbitration.

Human Resources develops and manages Ecology's Affirmative Action Plan and ensures equal employment opportunity, and sponsors and coordinates activities that encourage diversity. This includes helping create a supportive work

environment that reflects the diversity of the communities we serve.

Regional and Field Offices

Although these offices are budgeted in Agency Administration, their work is mostly connected with environmental priorities.

Each of Ecology's four regional offices (Lacey, Yakima, Spokane, and Bellevue) and field offices (Bellingham and Vancouver) has executive management representatives and provides core administrative support to regional office staff. This support includes reception, mail, records management, complaint tracking, regional fleet management, and State Environmental Policy Act (SEPA) functions. The Regional Directors in these offices help local communities and provide cross-program coordination and management of large, multiple-program environmental reviews and permitting projects.

Executive, Financial, Administrative, and Information Technology Services

Ecology leadership comes from the Executive Office.

Financial Services provides centralized financial support in accounting, budget, contracts, payroll, fiscal notes, audits, purchasing, and inventory.

Administrative Services maintains Ecology's central records, facilities, and vehicles. They respond to public records requests, provide mail services, and manage extensive library resources at headquarters and in the regions in the form of books, periodicals, and research.

Information Technology Services includes desktop and network services, application development, and data planning. They guide information technology policy and strategic direction for the agency.

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

Expected Results

- Ecology managers, the Governor, State Auditor, Office of Financial Management, and the Legislature have confidence in Ecology and our financial information, and can use it to make crucial decisions affecting the environment.

- The public is informed about the work Ecology does, is educated about its role in environmental protection, and understands the policies we are developing and the opportunities available to influence our decisions.
- Washington's environmental laws and rules are improved through Ecology's relationships with legislators, local governments, businesses, Native American tribes, and environmental and citizen groups.
- Ecology managers and supervisors have the highest-quality communication, performance management, hiring, and leadership skills.
- Ecology's work environment reflects the diversity of the communities we serve.
- Ecology staff get reliable, secure, and high quality desktop support and network services.
- Customers have easy access to Ecology information.
- Facilities and vehicles are well-maintained, safe, and efficient.
- Requestors of public records are provided responsive records in a timely manner.
- Adopted federal legislation reflects Washington's priorities (e.g., transition to a clean energy future, a level playing field for Washington businesses, recognition of our unique and clean energy portfolio).
- An integrated climate change strategy is available to better enable state and local agencies, public and private businesses, non-governmental organizations, and individuals to prepare for, address, and adapt to the impacts of climate change.

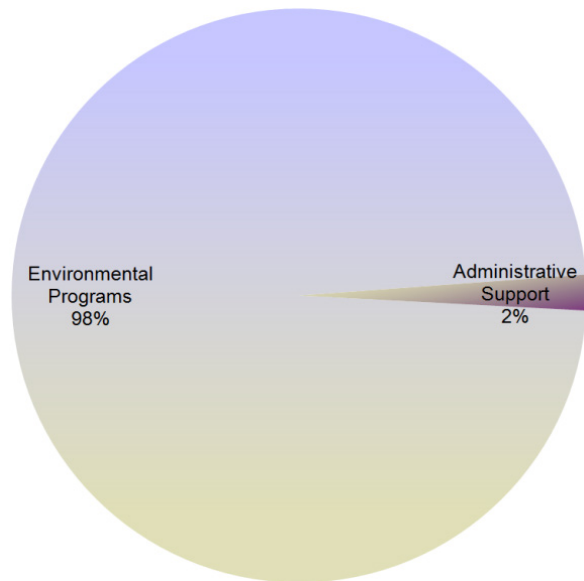
Performance Measures

- Number of agency audit findings.
- Percent of Ecology-administered accounts with a positive cash balance.
- Metric tons of Ecology greenhouse gas emissions.
- Number of pages printed and copied.
- Gallons of fuel used in Ecology vehicles and equipment.
- Percent of employees who are accident-free.
- Diversity goal percentage for the total agency.
- Percent of employees meeting the discrimination and sexual harassment training requirements.
- Percent of vacancies filled within 45 days.

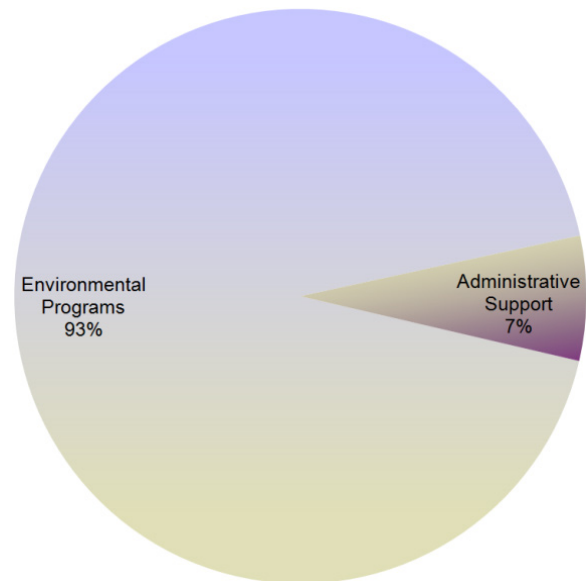
Agency Administration Program

Administration as a Percentage of Ecology's 2013-15 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

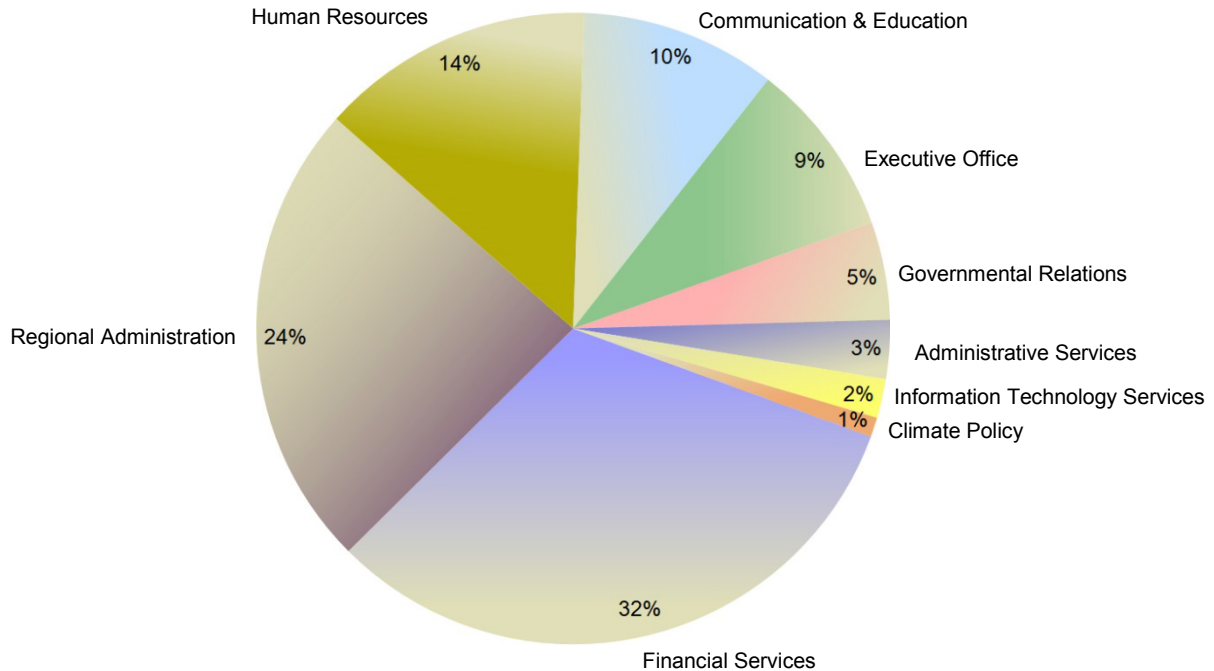
Program A – includes Ecology central business services:

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

Agency Administration Program

Administration Program 2013-15 Biennium Operating Budget By Activities

Operating Budget = \$32.0 Million; FTEs = 151.5



Activities	Dollars	FTEs
Financial Services	\$10,144,670	52.9
Regional Administration	7,808,643	43.2
Human Resources	4,669,252	20.3
Communication & Education	3,258,360	13.5
Executive Office	2,830,147	8.3
Governmental Relations	1,682,617	6.0
Administrative Services	824,042	4.2
Information Technology Services	549,313	2.1
Climate Policy	269,804	1.0
Agency Administration Operating Budget Total	\$32,036,848	151.5

Agency Administration Program

Administration Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$32.0 Million

FTEs = 151.5

Capital Budget = \$1.3 Million

Operating Fund Sources	Amount
State Toxics Control (173)	\$10,870,023
General Fund – State (001)	5,072,454
General Fund – Federal (001)	4,366,515
Water Quality Permit (176)	3,908,413
Environmental Legacy Stewardship (19G)	2,022,814
Radioactive Mixed Waste (20R)	1,175,403
Waste Reduction, Recycling & Litter Control (044)	601,665
Hazardous Waste Assistance (207)	556,056
Oil Spill Prevention (217)	515,027
Underground Storage Tank (182)	369,426
Air Pollution Control (216)	344,272
Local Toxics Control (174)	325,517
General Fund – Private/Local (001)	324,532
Reclamation (027)	297,965
Air Operating Permit (219)	284,342
Water Pollution Control Revolving Administration (564)	174,454
Biosolids Permit (199)	172,496
Flood Control Assistance (02P)	163,946
Worker & Community Right-to-Know (163)	156,720
Water Pollution Control Revolving – Federal (727)	84,514
Electronic Products Recycling (11J)	65,520
Freshwater Aquatic Weeds (222)	52,202
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	30,228
Site Closure (125)	30,139
Product Stewardship Programs (16T)	19,801
Wood Stove Education & Enforcement (160)	19,765
Water Pollution Control Revolving – State (727)	12,855
Aquatic Algae Control (10A)	7,193
Water Rights Tracking System (10G)	4,420
State Toxics Control – Private/Local (173)	4,404
Water Rights Processing (16V)	3,767
Operating Budget Total	\$32,036,848

Capital Fund Sources	Amount
Cleanup Settlement (15H)	\$301,312
State Building Construction (057)	284,492
Local Toxics Control (174)	280,493
Environmental Legacy Stewardship (19G)	219,163
Columbia River Basin Water Supply Development (10P)	115,438
State Toxics Control (173)	70,874
Waste Tire Removal (08R)	24,871
General Fund – Federal (001)	16,745
Water Pollution Control Revolving – Federal ARRA (727)	4,092
Capital Budget Total	\$1,317,480

Agency Administration

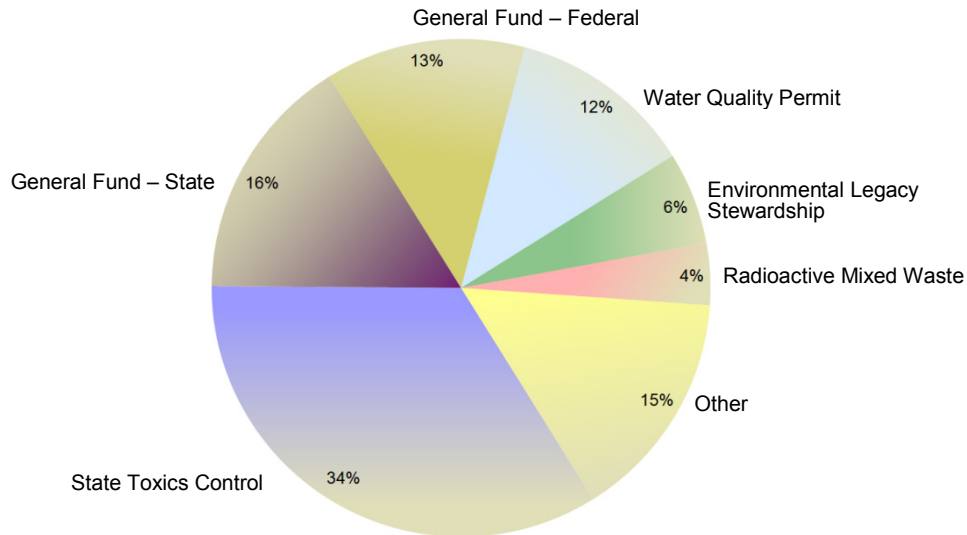
Operating & Capital Budget Total \$33,354,328

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

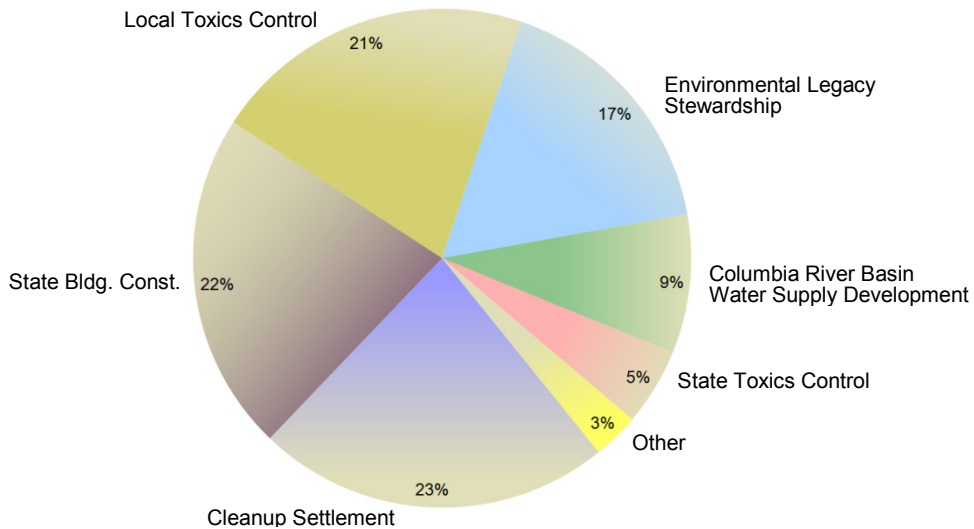
Agency Administration Program 2013-15 Biennium Budget By Fund Source

Operating Budget = \$32.0 Million



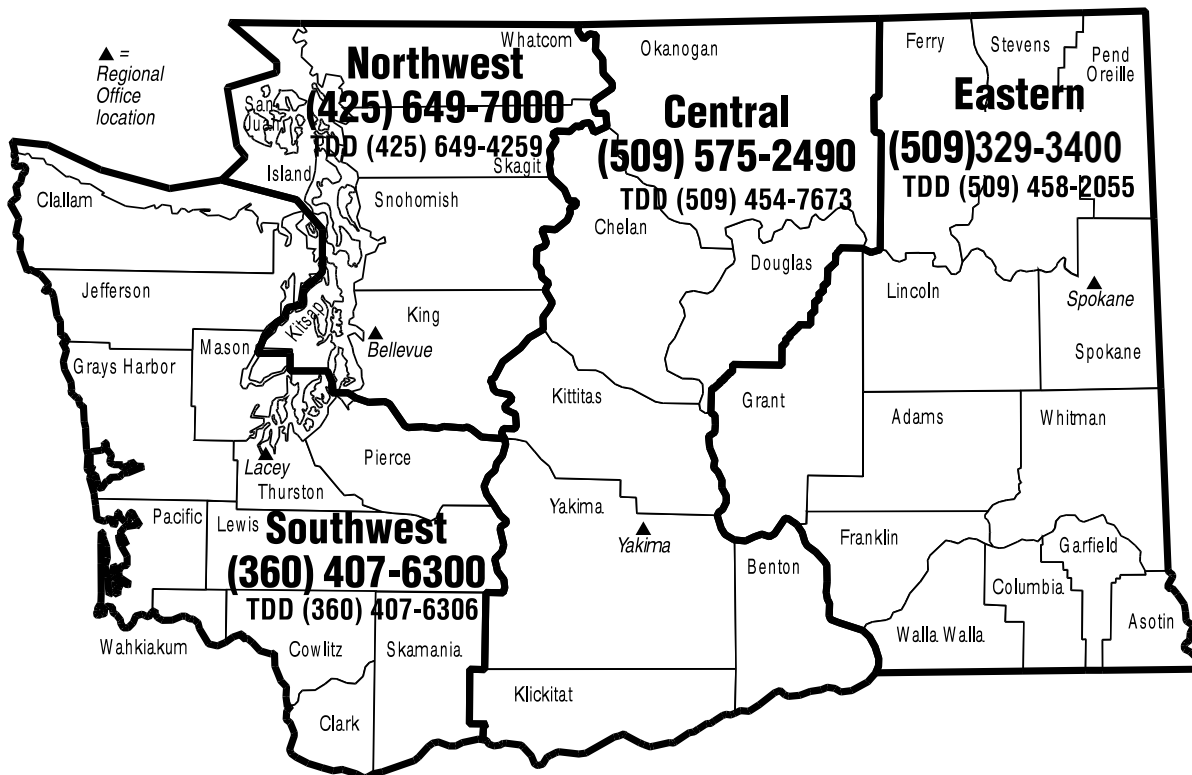
Other = Waste Reduction, Recycling & Litter Control (1.88%), Hazardous Waste Assistance (1.74%), Oil Spill Prevention (1.61%), Underground Storage Tank (1.15%), Air Pollution Control (1.07%), Local Toxics Control (1.02%), General Fund – Private/Local (1.01%), Reclamation (0.93%), Air Operating Permit (0.89%), Water Pollution Control Revolving Administration (0.54%), Biosolids Permit (0.54%), Flood Control Assistance (0.51%), Worker & Community Right-to-Know (0.49%), Water Pollution Control Revolving – Federal (0.26%), Electronic Products Recycling (0.20%), Freshwater Aquatic Weeds (0.16%), State & Local Improvements Revolving - Water Supply Facilities (Referendum 38) (0.09%), Site Closure (0.09%), Product Stewardship Programs (0.06%), Wood Stove Education & Enforcement (0.06%), Water Pollution Control Revolving – State (0.04%), Aquatic Algae Control (0.02%), Water Rights Tracking System (0.01%), State Toxics Control – Private/Local (0.01%), and Water Rights Processing (0.01%).

Capital Budget = \$1.3 Million



Other = Waste Tire Removal (1.89%), General Fund – Federal (1.27%), and Water Pollution Control Revolving – Federal ARRA (0.31%).

Contact Information



Ecology Headquarters & Regional Offices

Headquarters

300 Desmond Drive SE PO Box 47600
 Lacey, WA Olympia, WA 98504-7600
 360.407.6000

Northwest Regional Office

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

Central Regional Office

15 West Yakima Avenue, Suite 200
 Yakima, WA 98902-3452
 509.575.2490

Southwest Regional Office

300 Desmond Drive SE PO Box 47775
 Lacey, WA Olympia, WA 98504-7775
 360.407.6300

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

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

Wenatchee Water-Related Services

303 South Mission Street, Suite 200
Wenatchee, WA 98801-6142
509.575.2490

Ecology's Data – Where does it come from?

Ecology's Data – Where does it come from?

This publication relies on financial data for tables and graphs. Data is based on the initial 2013-15 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).

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

¹ Note: The structure of the agency's administrative overhead budget was changed for 2013-15, as approved by the Office of Financial Management (OFM) and Legislative Evaluation and Accountability Program (LEAP) Committee. This resulted in a shift of funds from the overhead portion of the administration program to the overhead portions of the environmental programs.

Capital^{2, 3, 4}

Capital funds by account and program are based on enacted biennial budget appropriations and OFM approved allotments. They include new appropriations and reappropriations. They do not include unallotted 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: Federal capital amounts shown for the Water Pollution Control Revolving Account are what the allotment will be after corrections to the match have been made. The amounts shown for the account and for the Water Quality Program are therefore \$75.8 million higher than current allotments.

³ Note: Remedial action grants projects and their \$136.7 million of capital funding were moved from the Waste 2 Resources Program to the Toxics Cleanup Program for 2013-15.

⁴ Note: \$119 million in Model Toxics Control Act (MTCA) appropriations by the Legislature were made based on an assumed burn rate (spending rate) in the capital budget and are not allotted. Therefore, they are not captured in these total.

Program Level

Operating

Operating funds by activity are based upon activity inventory funding amounts 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. It includes new appropriations and reappropriations. It does not include unallotted funds.

Ecology's Data – Where does it come from?

2013-15 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.

Program	Purpose/Grants	2013-15 Allotment
Shorelands & Environmental Assistance	NEP Watershed Grants EPA	8,670,053
Water Quality	Stormwater Grants ELSA	8,633,000
Shorelands & Environmental Assistance	WCC Crews Salaries	8,348,160
Water Quality	NEP Toxics and Nutrients Grants EPA	8,214,859
Shorelands & Environmental Assistance	SMP grants	6,800,000
Air Quality	Core grant to local air authorities EPA and STCA	6,347,472
Water Quality	Nonpoint source grants EPA 319	5,220,249
Waste 2 Resources	Public Participation Grants ELSA	3,528,584
Shorelands & Environmental Assistance	Watershed Planning grants	1,900,000
Waste 2 Resources	Community Litter Cleanup Program	1,824,067
Spill Prevention, Preparedness & Response	Environmental restoration projects Coastal Protection Account	1,556,000
Water Quality	Freshwater Aquatic Weed Grants	728,486
Air Quality	PM 2.5 grant to local air authorities	465,575
Water Quality	Aquatic Algae Grants	436,790
Hazardous Waste & Toxics Reduction	Pollution Prevention Incentives grants EPA	371,586
Shorelands & Environmental Assistance	Flood Control Assistance emergency grants	370,000
Air Quality	Woodstove education & enforcement grants to local air authorities	300,300
Water Quality	Lower Columbia Estuary Partnership STCA	300,000
Total		\$64,015,181

Ecology Administered Accounts

Ecology Administered Accounts

The Department of Ecology uses 51 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, some accounts have been created while others have been abolished.

- Created: Seven new accounts are the result of legislation enacting environmental regulations (19G, 19K, 20B, 20C, 20R, 564, and 565).
- Abolished: Three accounts were abolished in the 2012 legislation (023 – Special Grass Seed Burning Research, 194 – Environmental Excellence, and 258 – Metals Mining).

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

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

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

Ecology Administered Accounts

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

Fund Manager: Air Quality Program. Contact Paige Boulé 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 Paige Boulé 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 Account (Fund #10A) (RCW 43.21A.667)

Fund Manager: Water Quality Program. Contact Vince Chavez 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.

Ecology Administered Accounts

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, providing technical assistance and supporting overhead expenses that are directly related to these activities.

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 \$880.46 plus an additional fee for each residential equivalent. The fee for each residential equivalent ranges from \$0.075 to \$0.315, depending on the type and size. New biosolids facilities also pay a one-time review fee of \$2,641.38.

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).

Ecology Administered Accounts

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

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Kitty Hjelm 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.

Ecology Administered Accounts

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.

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 \$38,200 in tier-1 (Preliminary rates for CY 2014).

Ecology Administered Accounts

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

Fund Manager: Toxics Cleanup Program. Contact Angie Wirkkala 360.407.7219

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: \$4,000,000 per biennium transfer from State General Fund as required by RCW 86.26.007. For the 2013-15 biennium, the enacted budget transfers \$2,000,000 back to the State General Fund.

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

Fund Manager: Water Quality Program. Contact Vince Chavez 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.

Ecology Administered Accounts

Hazardous Waste Assistance Account (Fund #207) (RCW 70.95E.080)

Fund Manager: Hazardous Waste and Toxics Reduction Program. Contact Donna Allen 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: Waste 2 Resources Program. Contact My-Hanh Mai 360.407.6996

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. In addition, funds are granted to local governments through the Coordinated Prevention Grant (CPG), and non-profits through Public Participation Grant (PPG). Remedial Action Grants (RAG) are provided to cleanup hazardous sites throughout Washington State. RAG categories include oversight remedial action grants, site hazard assessment grants, integrated planning grants, safe-drinking-water action grants, and area-wide groundwater remedial action grants. CPG funds local government projects to prevent or minimize environmental contamination to comply with state solid waste laws and rules. The two types of grants are planning and implementation grants for solid and hazardous waste management plans and programs and solid waste enforcement grants. Two types of PPG are available including hazardous-substance-release-site grants and waste management priorities implementation grants. PPG pays the costs of technical experts to help citizens understand environmental problems and the cleanup process so they can make informed comments and be involved in the decision making process.

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.

Ecology Administered Accounts

Marine Resources Stewardship Trust Account (Fund #16P) (RCW 43.372.070)

Fund Manager: Shorelands and Environmental Assistance Program. Contact Jessica S. Moore 360.407.6224

Purpose: Used for marine management planning, marine spatial planning, research, monitoring, implementation of the marine management plan, and for the restoration or enhancement of marine habitat or resources.

Authorized Use: Through July 1, 2016, funds in this account are authorized to be used only for conducting ecosystem and mapping activities in marine waters on Washington's Pacific Coast; developing a marine management plan for the state's coastal waters (per RCW 43.153.020); and coordination under the West Coastal Governor's Alliance on Ocean Health. Expenditures from the account on projects and activities related to the state's coastal waters must be made to the maximum extent possible with the recommendations of the Washington Coastal Marine Advisory Council (per RCW 43.143.020).

Revenue Source: Grants, donations, gifts, investment income.

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

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Kitty Hjelm 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 petroleum 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 Kitty Hjelm 360.407.7454

Purpose: To provide funds for responding to and cleaning up oil spills when state response costs are expected to exceed \$50,000.

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 petroleum 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.)

Ecology Administered Accounts

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 Implicit Price Deflator. (This account retains interest.)

Ecology Administered Accounts

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 agricultural users for water supply facilities.

Authorized Use: Provides grants and loans to applicants for water supply facilities for agricultural use alone or in combination with fishery, recreational, or other beneficial uses of water to assist those entities in improving their efficiency of water use beyond current levels.

Revenue Source: The Legislature authorized \$75 million of general obligation bonds for loans for water supply facilities. The 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. The last two state drought declarations were in 2001 and 2005. 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. Revenues also include payments of principle and interest on loans.

Ecology Administered Accounts

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: 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 State Toxics Control Account (STCA) 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 primary source of revenue for the STCA. 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 STCA. 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 the Environmental Legacy Stewardship Account. In addition to funds from the Hazardous Substance Tax, the STCA also accrues revenue through Cost Recovery, the process by which Ecology recovers expenditures or obtains reimbursements for its cost of providing cleanup oversight and approval for the cleanup of contamination at properties under a decree or order. Another method is cost recovery for technical assistance and the Voluntary Cleanup Program (VCP), the action where Ecology collects costs from persons who request review of a planned or completed cleanup to determine whether or not there should be any further action taken. 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 storage 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.

Ecology Administered Accounts

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

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact Kitty Hjelm 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 statutory 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 and remove litter and develop public education programs concerning the litter problem. Also, to recover and recycle waste materials 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 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 program 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 70.95.521)

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

Purpose: To use the funds for implementing measures that prevent future accumulations of unauthorized waste tire piles and for cleanup 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; tracking current projects; and enforcement of waste tire disposal regulations.

Revenue Source: A portion of the \$1 per tire fee that is collected when new replacement tires are purchased. This fee is collected from consumers making new tire purchases.

Ecology Administered Accounts

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 so the source of future funding for Fund 11W is unclear. For the 2013-15 biennium, the Water Quality Capital Account funds only Centennial Clean Water capital re-appropriations.

Ecology Administered Accounts

Water Quality Permit Account (Fund #176) (RCW 90.48.465)

Fund Manager: Water Quality Program. Contact Vince Chavez 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: \$110-150,400 for industries; \$1.58-\$2.16(per residential equivalent) for municipalities; and \$83-\$45,729 for general permits (FY 2013). Fees are subject to I-601 requirements and they 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.

Ecology Administered Accounts

Wood Stove Education & Enforcement Account (Fund #160) (RCW 70.94.483)

Fund Manager: Air Quality Program. Contact Paige Boulé 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.)