Washington Department of Ecology

Budget & Program Overview

2009-2011

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Cover photo: Ecology employees Marissa Jones and David Mora swap out a conductivity/temperature/depth (CTD) profiler from a mooring in Willapa Bay.

Washington Department of Ecology

Budget & Program Overview

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A Message from the Director

Welcome to the seventh 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 2009-11.

Investments in protecting and cleaning up Washington's environment play a major role in securing Washington's quality of life for families and in strengthening our enviable position in the competitive global economy. *Forbes*, the national business and financial news publisher, ranks Washington among the very best states on two national scorecards: the quality of the environment and the business climate.

Maintaining our place in the global economy and in the forefront of a "greener" future will be difficult. Our environment is still under pressure from rapid growth, climate change, growing demands on water supplies, and toxic substances used in industrial processes and many consumer products. And, as we begin this two-year budget cycle, it's important to acknowledge that widespread economic problems—and significant reductions to our budget—impact our ability to do our work.

But with these challenges comes immense opportunity to make a real difference. We remain committed to advancing our top priorities:

- Responding aggressively to the challenges of climate change and global warming.
- Protecting and restoring Puget Sound and Hood Canal.
- Successfully managing our water to ensure availability for fish, farms, and people.
- Reducing toxic threats, with a special concern for infants and children.
- Cleaning up Hanford and protecting the Columbia River.

To accomplish this, we have placed a renewed emphasis on building and maintaining cooperative, collaborative relationships with our partners and stakeholders—tribes, state and local governments, businesses, and communities. We know that trust, built on active engagement, productive relationships, and keeping our promises, is the key to success.

In spite of the tough economic challenges the state faces, I believe the future presents enormous opportunities for positive change. We at Ecology remain committed to protecting the environment, human health, and Washington's quality of life—and helping each Washington resident to do the same—as we work collaboratively and constructively with you to shape the future.

Ted Sturdevant
Director

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2009-11 Introduction – Agency Budget

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

Our Mission

The mission of the Department of Ecology is to protect, preserve, and enhance Washington's environment, and promote the wise management of our air, land, and water for the benefit of current and future generations.

Our Goals

- Prevent pollution.
- Clean up pollution.
- Support sustainable communities and natural resources.

Our Values

- Environmental stewardship.
- Environmental justice.
- Environmental education.
- Community spirit.
- Professional conduct and expertise.
- Accountability.
- Our employees.

Our Code of Conduct

- Treat our customers as partners and collaborators who are equally committed to a healthy, prosperous Washington.
- Perform our work in a helpful, friendly, and positive manner.
- Communicate clearly, accurately, and in a timely manner.
- Listen carefully and engage in open, respectful, and professional dialogue.
- Solve problems, consider different perspectives, and find new and creative ways to accomplish our work.
- Build and maintain cooperative relationships.
- Remain objective at all times and ensure that professional judgment, rather than personal opinion, influences our work.

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.

Ecology's 2009-11 budget underscores the extent and complexity of our work, the economic and environmental opportunities currently facing Washington State, and the difficult choices we've made to deal with our nation's and state's severe economic problems.

In 2009-11, we have 52 fewer staff, $31 million less in our operating budget, and $133 million less in our capital budget than in the previous biennium. In spite of the downturn, we will continue to pass through 62% of our total budget to local communities and focus 91% of our total budget on environmental work. Less than nine percent is for administration (four percent) and direct support services (five percent).

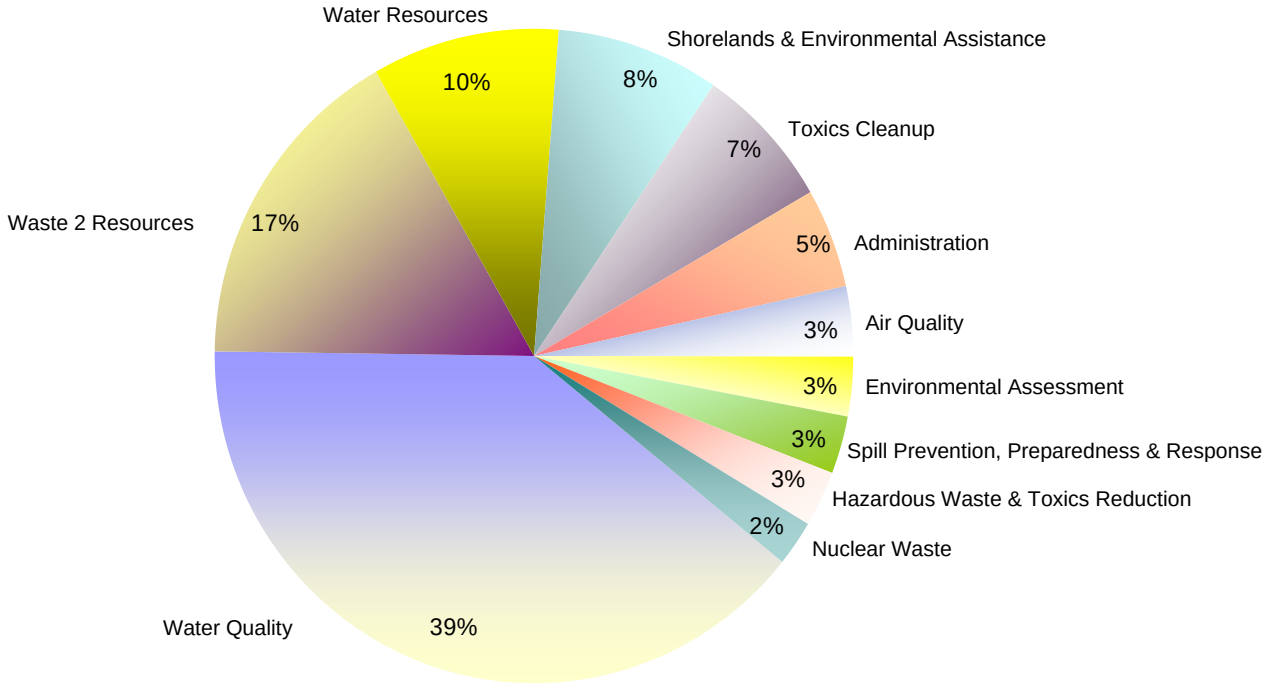
This book provides an overview of Ecology's 2009-11 biennial budget—where the money comes from, how it will be used, and what we want to see happen as a result of our work. The book starts with a broad, agencywide view, and continues with profiles of individual programs.

Each program's profile includes the context for its work and descriptions of the activities funded in the 2009-11 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 fund accounts is in the back of the book.

Ecology 2009-11 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.

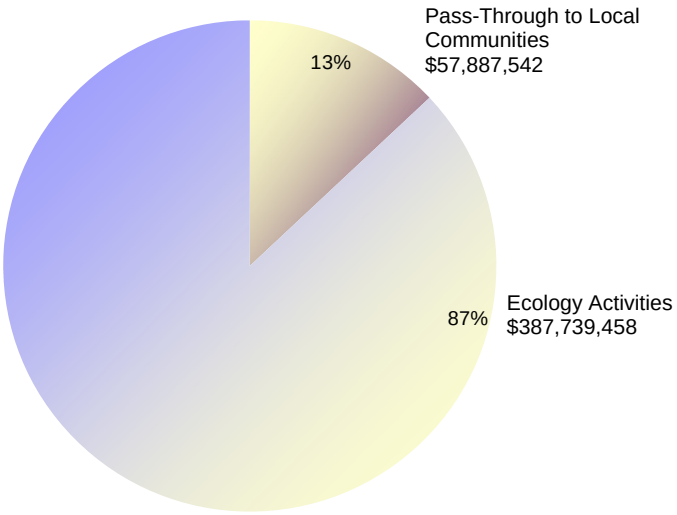


Programs	FTEs	Operating	Capital	Operating + Capital
Water Quality	245.4	$70,643,706	$336,664,157	$407,307,863
Waste 2 Resources	98.1	29,569,137	141,375,322	170,944,459
Water Resources	156.5	38,181,089	59,854,000	98,035,089
Shorelands & Environmental Assistance	156.6	67,063,649	18,341,592	85,405,241
Toxics Cleanup	170.0	50,706,829	23,326,627	74,033,456
Administration Program	219.6	49,909,641	863,753	50,773,394
Air Quality	101.1	32,153,676	3,649,626	35,803,302
Environmental Assessment	129.9	30,382,037	0	30,382,037
Spill Prevention, Preparedness & Response	70.2	29,482,150	0	29,482,150
Hazardous Waste & Toxics Reduction	124.2	28,075,459	451,001	28,526,460
Nuclear Waste	76.5	19,459,627	3,841,944	23,301,571
Total	**1,548.1**	**$445,627,000**	**$588,368,022**	**$1,033,995,022**

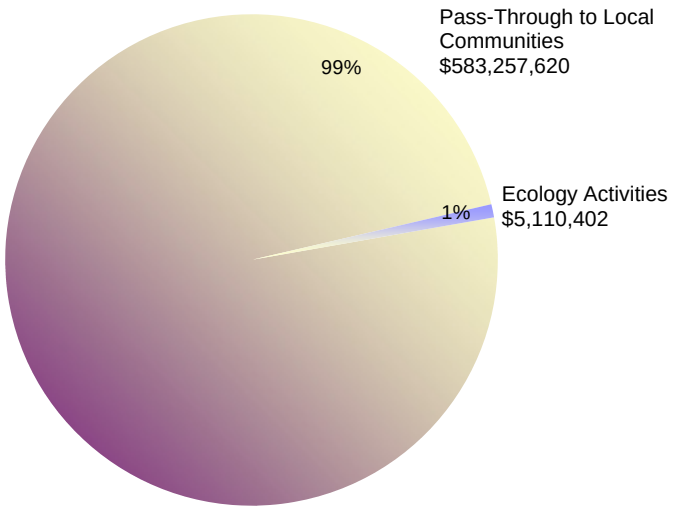
Ecology 2009-11 Biennium Budget
Pass-Through Funding

Most of the money Ecology manages in its capital budget is "passed-through" to local governments and communities to do environmental work. This money is awarded as grants or loans for things such as watershed planning, building water pollution control facilities, cleaning up publicly-owned contaminated sites, and supporting community awareness and involvement in hazardous waste management and pollution prevention.

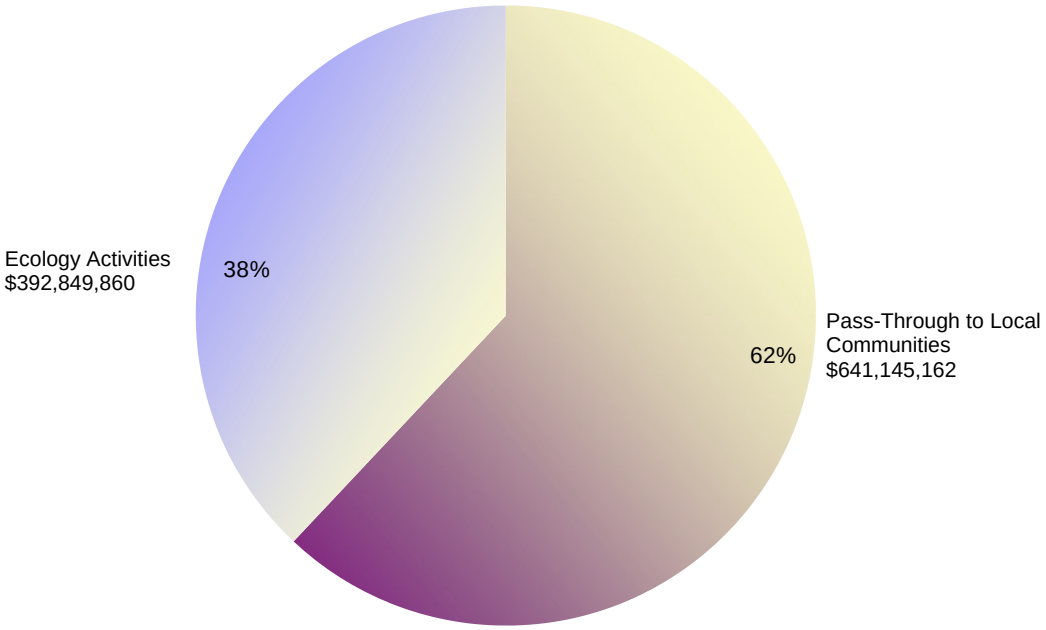
Operating Budget = $445.6 Million



Capital Budget = $588.4 Million



Combined Operating + Capital Budget = $1,034.0 Million

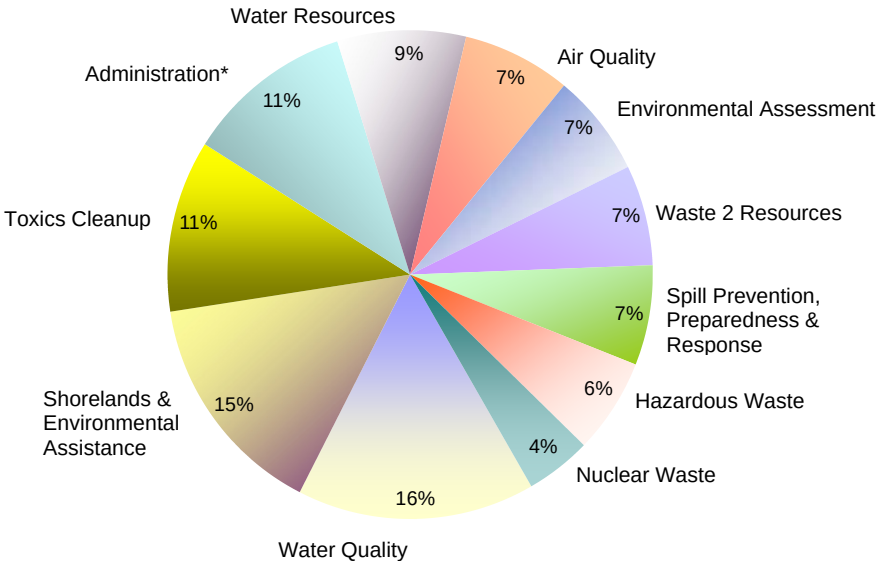


Ecology 2009-11 Biennium Operating Budget

Operating Budget = $445.6 Million

By Program

Programs	Operating
Water Quality	$70,643,706
Shorelands & Environmental Assistance	67,063,649
Toxics Cleanup	50,706,829
Administration*	49,909,641
Water Resources	38,181,089
Air Quality	32,153,676
Environmental Assessment	30,382,037
Waste 2 Resources	29,569,137
Spill Prevention, Preparedness & Response	29,482,150
Hazardous Waste & Toxics Reduction	28,075,459
Nuclear Waste	19,459,627
Total	**$445,627,000**



**Note: The operating budget includes administration of both operating and capital funded activities and is 9% of the total budget. See page 96 for more detail.*

By Fund Source

General Funds	Amount	%
General Fund – State (001)	$118,356,000	26.6
General Fund – Federal (001)	82,452,000	18.5
General Fund – Private/Local (001)	16,668,000	3.7
Dedicated Accounts	**Amount**	**%**
State Toxics Control (173)	$101,705,000	22.8
Water Quality Permit (176)	37,433,000	8.4
Local Toxics Control (174)	24,730,000	5.5
Waste Reduction, Recycling & Litter Control (044)	14,554,000	3.3
Oil Spill Prevention (217)	10,688,000	2.4
Oil Spill Response (223)	7,078,000	1.6
Hazardous Waste Assistance (207)	5,930,000	1.3
Reclamation (027)	3,679,000	0.8
Underground Storage Tank (182)	3,298,000	0.7
Air Operating Permit (219)	2,783,000	0.6
Air Pollution Control (216)	2,030,000	0.5
Flood Control Assistance (02P)	1,965,000	0.4
Water Pollution Control Revolving – Federal (727)	1,940,000	0.4
Freshwater Aquatic Weeds (222)	1,699,000	0.4
Worker & Community Right to Know (163)	1,670,000	0.4
Coastal Protection (408)	1,556,000	0.3
Biosolids Permit (199)	1,413,000	0.3
Site Closure (125)	706,000	0.2
Wood Stove Education & Enforcement (160)	612,000	0.1
Freshwater Aquatic Algae Control (10A)	509,000	0.1
Water Pollution Control Revolving – State (727)	465,000	0.1
Electronic Products Recycling (11J)	445,000	0.1
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	426,000	0.1
State Toxics Control – Private/Local (173)	383,000	0.1
Basic Data (116)	310,000	0.1
Water Rights Tracking System (10G)	116,000	<0.1
Special Grass Seed Burning Research (023)	14,000	<0.1
Metals Mining (258)	14,000	<0.1
State Emergency Water Projects Revolving (032)**	0	0.0
State Drought Preparedness (05W)*	0	0.0
Water Quality (139)***	0	0.0
Total	**$445,627,000**	**100.0**

***Note: Account fund balances transferred to GF-S.*

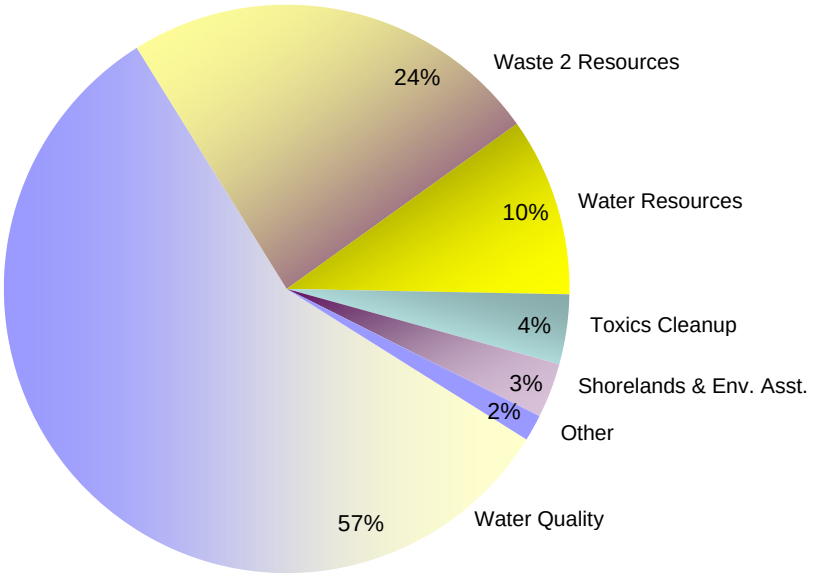
****Note: Estimated 09-11 fund balance & revenue from tobacco taxes historically distributed to Water Quality Account transferred to GF-S.*

Ecology 2009-11 Biennium Capital Budget

Capital Budget = $588.4 Million

By Program

Programs	Capital
Water Quality	$336,664,157
Waste 2 Resources	141,375,322
Water Resources	59,854,000
Toxics Cleanup	23,326,627
Shorelands & Environmental Assistance	18,341,592
Nuclear Waste	3,841,944
Air Quality	3,649,626
Administration Program	863,753
Hazardous Waste & Toxics Reduction	451,001
Environmental Assessment	0
Spill Prevention, Preparedness & Response	0
Total	**$588,368,022**



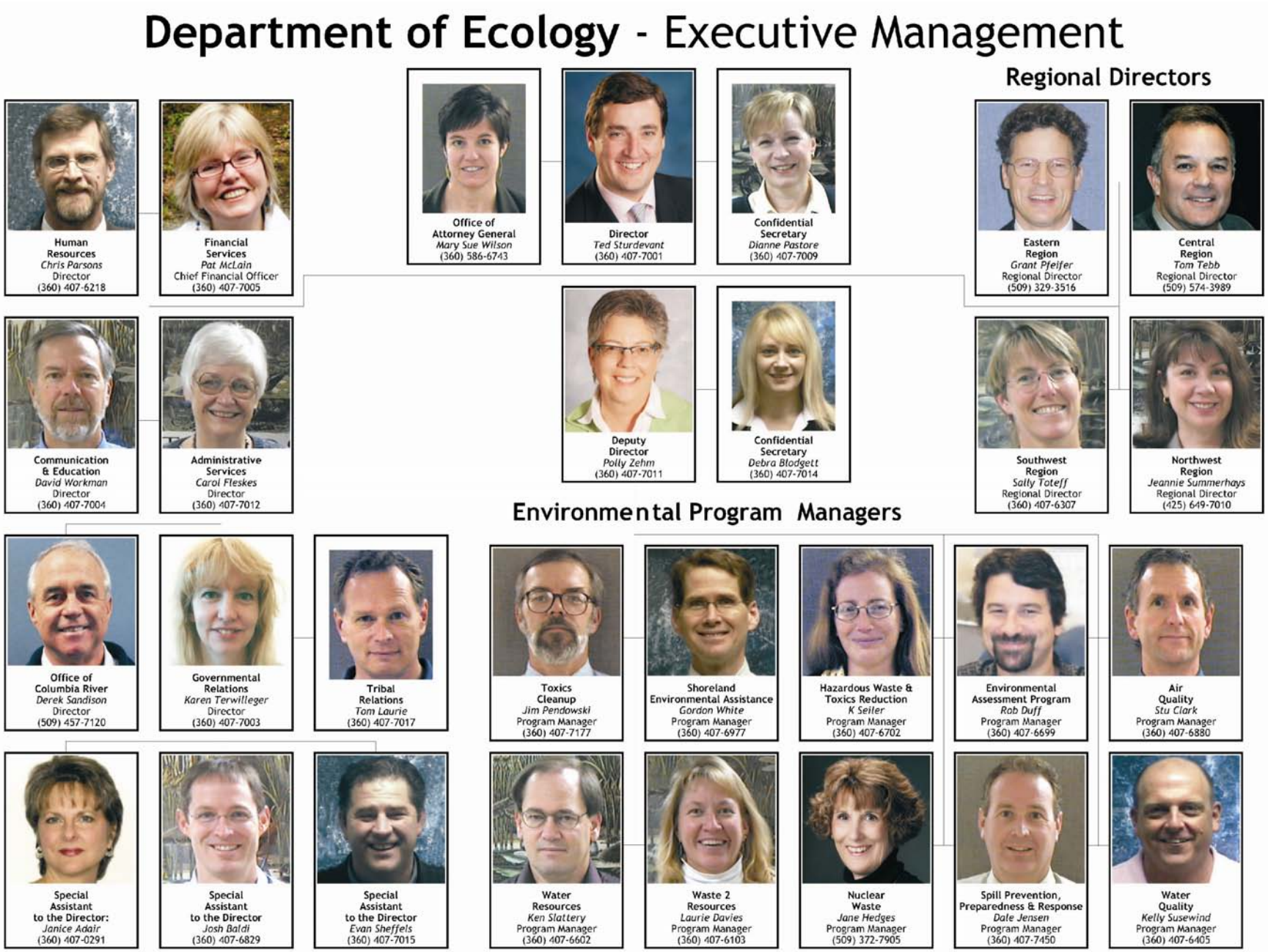
Other = Nuclear Waste (0.65%), Air Quality (0.62%), Administration (0.15%), and Hazardous Waste (0.08%).

By Fund Source

Accounts	Amount	%
State Building Construction (057)*	$272,384,373	46.3
Water Pollution Control Revolving – State (727)	118,677,145	20.2
Water Pollution Control Revolving – Federal (727)	76,589,584	13.0
Water Pollution Control Revolving – Federal ARRA (727)	65,300,000	11.1
Columbia River Basin Water Supply Development (10P)	25,167,694	4.3
Water Quality Capital (11W)	6,190,359	1.1
State Toxics Control (173)	4,693,988	0.8
General Fund – Federal ARRA	4,036,244	0.7
Site Closure (125)	3,900,000	0.7
Waste Tire Removal (08R)	3,450,000	0.6
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	3,444,000	0.6
Cleanup Settlement (15H)	2,684,432	0.5
Waste Disposal Facilities (Ref. 26) (051)	707,337	0.1
General Fund – Federal	535,000	0.1
State Drought Preparedness (05W)	438,000	0.1
Waste Disposal Facilities (Ref. 39) (055)	169,866	<0.1
Total	**$588,368,022**	**100.0**

**Note: Ecology administers the local toxics control account (LTCA), fund 174, and had approximately $113 million in capital appropriations for 2007-09. In the 2009-11 biennial enacted budget, all capital re-appropriations and proposed new appropriations normally administered by the agency from the LTCA were switched to the state building construction account as part of transferring $73.06 million of LTCA dollars to the state general fund.*

Department of Ecology - Executive Management



Ecology's Air Quality Program smoke management specialist, Jay Carmony, takes humidity and wind speed observations as he monitors the plume of a U.S. Forest Service prescribed burn near Naches, September 2009.

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

Overall air quality in Washington has greatly 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.

However, the U.S. Environmental Protection Agency (EPA) adopted tougher air standards for fine particles in 2006. A large area in Pierce County has violated the new federal requirements, and several other communities around the state are at risk of violating the standard also. In addition, EPA plans to tighten its ozone standard. If that happens, the greater Puget Sound, Vancouver, and Spokane areas could violate the new protective level for ozone.

Meeting federal standards is very important. It reduces the health impacts of air pollution and prevents the risk of financial and economic sanctions and impacts on the state and local communities. But 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 several times a year, exposing citizens to significant health risks. Air pollution causes lung disease, worsens existing heart and lung disease, 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.

Extremely fine particles in smoke and engine exhaust are the primary air pollution health concern in Washington. 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 ambient air standards for these chemicals. Studies are increasingly showing they pose significant risks to human health and the environment. The sources of most concern are the toxic particles and chemicals emitted from vehicles, diesel engines, and burning wood and other vegetation.

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

Constituents/Interested Parties

- *Motorists, transportation agencies, and motor vehicle related businesses.*

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

Issues

Mitigating 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 estimates that fine particle pollution alone contributes to nearly 1,100 premature deaths and more than $190 million each year in health and societal costs of diseases in Washington. Sharing this health and health care cost information with policymakers and the public is an important first step in Ecology's efforts to identify and implement new strategies to combat air pollution.

Responding to Violations of Federal Standards

In addition to its recent tightening of the fine particle standard, EPA is using the latest health information to make other air quality standards even more protective. Ecology expects EPA will introduce new, tougher air quality standards for several pollutants, including lead, nitrogen dioxide, and ozone, in the near future. As those standards are toughened, we will need new air pollution prevention and control policies, tools, and approaches in Washington to meet these cleaner air levels and limit public exposure to toxic air pollution. Developing federally required clean air plans for new areas that violate standards will significantly increase technical analysis, planning, and strategy development work for Ecology.

Reducing Diesel Soot

Ecology has determined that soot from diesel engines is the greatest toxic health threat from air pollution in Washington. Through fiscal year 2009, we have completed efforts to install emission control equipment on existing diesel school buses, and will soon complete retrofits for other publicly-owned diesel fleets. More than 7,400 engines have been retrofitted. Work must shift to address the legacy fleet of private sector engines, especially in areas where lots of these large engines work in close proximity, such as at ports and distribution centers. We are encouraging adoption of anti-idling programs to reduce toxic vehicle exhaust around schools, hospitals, daycare centers, and other places where people can be severely impacted. Depending on the age and type of equipment, retrofits result in 30-100 percent reduction in particle emissions. To date, retrofits have resulted in reductions of more than 25 tons of toxic diesel soot each year, with significant health care and economic savings in Washington. We need ongoing, strengthened efforts to reduce public exposure to and health risks from toxic diesel soot.

Smoke

Ecology has determined that fine particle pollution from smoke is the second greatest toxic threat from air pollution in Washington. The largest source of this pollution is using wood for heating. During winter months, stagnant weather conditions and smoke from wood heating devices contribute to serious air quality problems, and pollution from these sources is a major factor in violations of the federal fine particle standard. Ecology and local air quality agencies are taking steps to reduce this pollution by offering incentives to people in some of the most affected areas to trade out older, more polluting wood stoves with newer, cleaner models.

Burning household trash (illegal in Washington), yard waste, and debris from land clearing, agricultural and forest activities also creates significant amounts of air pollution that harms citizen health. Washington's clean air law restricts what burning is allowed and where. In January 2007, state law banned burning within all urban growth areas of the state.

The trend toward tighter restrictions on burning creates conflict between the pressure or desire to burn and the demand for clean air. The 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 practice in some communities. There is also increasing pressure to burn biomass

for energy, including burning wood and other organic wastes, 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 necessary burning.

Visibility and Regional Haze

Citizens complain when air pollution affects their view 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 has reinstated its regional haze program and has completed an evaluation of pollution sources that will be a critical part of the overall plan to achieve and maintain the federally-required visibility goals. The visibility plan containing industrial source controls and other strategies is expected to be submitted to EPA for approval in early 2010.

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's Air Quality Program 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. Statute also requires the Air Quality Program 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 emission reductions across Washington.

The Air Quality Program provides expertise on emissions from vehicles and motor fuels. Emissions from the transportation sector are the largest single source of greenhouse gases in Washington. Staff in the program 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 are also working to develop recommendations for the Governor regarding adopting a low-carbon fuel standard for Washington (Executive Order 09-05). And staff will implement any changes required by federal clean car regulations for greenhouse gas emissions.

The program will work with the TransAlta coal-fired power station to negotiate an agreed order to achieve significant greenhouse gas emission reductions at that facility, and will implement any new federal climate regulations for major industrial source permittees.

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. We use three primary activities to collect this data: (1) air quality monitoring (assessing trends, focused compliance, and assessing control strategies, health effects, and environmental damage); (2) emission inventory development (quantifying pollution released by sources of air pollution); and (3) 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 air quality data are gathered, maintained, and evaluated over time to ensure informed policy decisions.

- The federally-required monitoring network review and monitoring site modifications are conducted to meet state and federal air quality needs.
- Adequate data are available to policy makers.
- Improved emissions data and modeling tools are used to predict air quality levels, impacts, and trends.

Performance Measure

- 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 standards trigger costly regulatory actions against businesses and consumers, result in economic constraints, and create 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, Ecology continuously measures air pollution levels and trends, develops and implements area-specific cleanup plans, designs and implements strategies to prevent violations, and develops and implements action plans in natural events such as wildfires and windblown dust.

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 right now. In light of this new research, Ecology is adjusting its focus to assure the air in Washington is both safe to breathe and meets federal standards. We will work to reduce ambient air pollutant concentrations to levels that ensure air in Washington communities is healthy to breathe, 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 analyzed and evaluated 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—Yakima and Clark Counties for fine particles; other communities for ozone.

Performance Measures

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

Reduce Air Pollution from Industrial and Commercial Sources

Ecology issues permits to new and existing industrial and commercial facilities that emit significant levels of air pollution. Permit programs are mandated either by federal or state clean air laws and are designed to be self-supporting through fees. 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 air quality, the environment, and public health are protected.

Ecology develops and modifies industrial source regulations to incorporate federal and state law changes, simplify and streamline permit requirements, and ensure public health protection. We conduct compliance inspections, resolve complaints, and develop technical and policy direction on emerging industrial permit issues.

Expected Results

Air pollution from industrial and commercial sources is managed 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 timeframes for permits.
- Ecology and local air pollution control agencies retain delegation and local control of federal permit programs.

Performance Measure

- Average Notice of Construction permit processing time (days).

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 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 implements a vehicle emission check program of nearly two million cars and trucks; promotes transportation alternatives and cleaner motor vehicles and fuels through voluntary, regulatory, and incentive programs; and retrofits school buses and other diesel engines with better emission controls.

Expected Results

Air pollution emissions from motor vehicles are reduced.

- Pollution from approximately two million cars is reduced by operating an Emission Check Program in three maintenance areas in the state.
- Diesel school bus and public fleet engine retrofits are completed and appropriate private sector engines are retrofitted with air pollution controls.
- Federal Diesel Emission Reduction Act (DERA) and American Recovery and Reinvestment Act (ARRA) funds are managed to reduce highest risk toxic diesel emissions.
- Strategies to reduce engine idling in high exposure areas (near schools and around truck stops) continue being 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—mostly in central and eastern Washington—and affects public health and quality of life. To address these continuing problems, Ecology issues conditioned permits for agricultural, land clearing, fire training, and other outdoor burning, where required by law. We also produce daily burn forecasts; respond to and resolve complaints related to smoke; provide technical assistance to manage and prevent outdoor burning impacts; design and deliver woodstove education programs. And, through technical assistance, research, and demonstration projects, we promote development and use of practical alternatives to burning.

Our goal by 2010 is to achieve air quality levels in Ecology's eastern and central Washington jurisdictions that experts agree is sufficient to protect human health.

Expected Results

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.
- Woodstove emissions are reduced through creating and implementing a proper burning outreach campaign, effective burning curtailments, change-out of uncertified woodstoves, 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

No ambient standards, and few emission limits, have been established for the hundreds of toxic chemicals (totaling millions of pounds) emitted into the air each year in Washington. Emerging ambient assessments and toxics risk models indicate the level and extent of airborne toxics pose significant health and environmental risks, including cancer, other serious health effects, and death. Ecology has identified 11 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; and 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.

- Diesel soot emissions are reduced 20 percent by 2010 using a 2005 baseline.
- Federal Diesel Emission Reduction Act and Recovery Act funds are used to reduce diesel emissions near ports and other toxic hot spots.
- Woodstove replacements target high-use stoves in high-risk communities.
- Emission inventories and understanding of ambient concentrations and sources of priority toxics are improved.
- Appropriate strategies to reduce emissions of priority toxics are evaluated and started. Strategies to reduce diesel emissions and engine idling in high exposure areas (near schools, ports freight distribution centers and truck stops) continue to be developed and implemented.

Performance Measures

- Number of diesel engines (school buses and public and private sector equipment) retrofitted with pollution control equipment.
- Tons of diesel soot emissions produced statewide.
- Tons of diesel soot emissions produced in counties contiguous to Puget Sound.

Climate Change Mitigation and Adaptation

State law requires reductions in emissions of greenhouse gases, as well as efforts to prepare for and respond to climate changes that are already underway. To better understand the volume and sources of greenhouse gas emissions in the state, the Air Quality Program conducts a biennial emissions inventory and will adopt a rule and systems to begin mandatory greenhouse gas reporting.

Expected Results

To understand the volume and sources of greenhouse gas emissions in the state and develop recommendations for specific strategies to reduce greenhouse gas emissions.

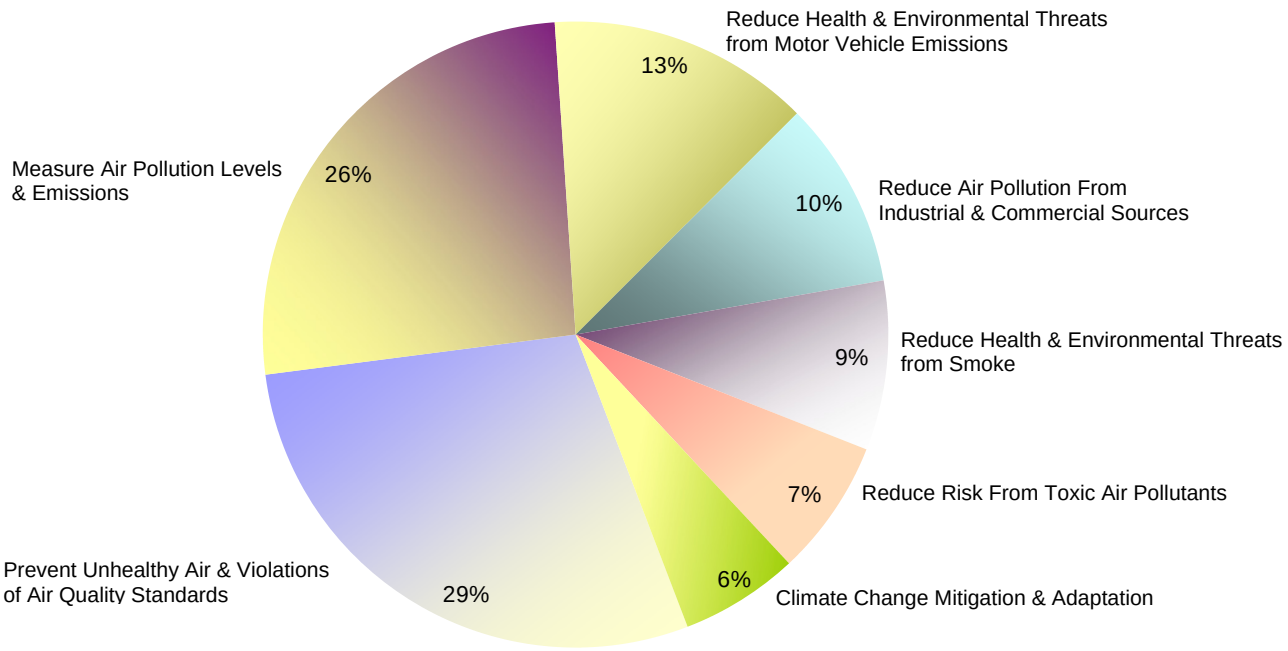
- A statewide greenhouse gas emission inventory is completed, and operation of a greenhouse gas reporting program is underway.
- An emission reduction order with TransAlta that reduces its emissions by at least 50 percent is signed.
- Recommendations are made to the Governor about a Washington Low-Carbon Fuel Standard.

Performance Measure

- Tons of green house gas emissions produced statewide.

Air Quality Program 2009-11 Biennium Budget By Activities

Operating Budget = $32.2 Million; FTEs = 101.1



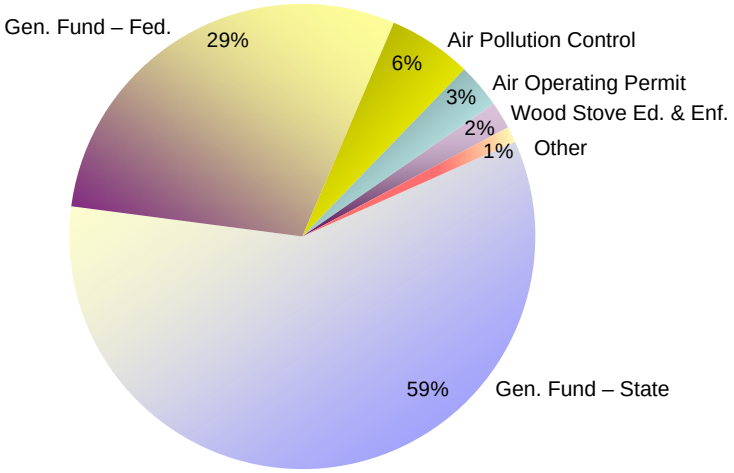
Activities	Dollars	FTEs
Prevent Unhealthy Air & Violations of Air Quality Standards	$9,255,157	13.3
Measure Air Pollution Levels & Emissions	8,353,732	23.2
Reduce Health & Environmental Threats from Motor Vehicle Emissions	4,369,087	20.0
Reduce Air Pollution from Industrial & Commercial Sources	3,122,734	17.8
Reduce Health & Environmental Threats from Smoke	2,813,061	15.5
Reduce Risk from Toxic Air Pollutants	2,272,558	7.8
Climate Change Mitigation & Adaptation	1,967,347	3.5
Air Quality Operating Budget Total	**$32,153,676**	**101.1**

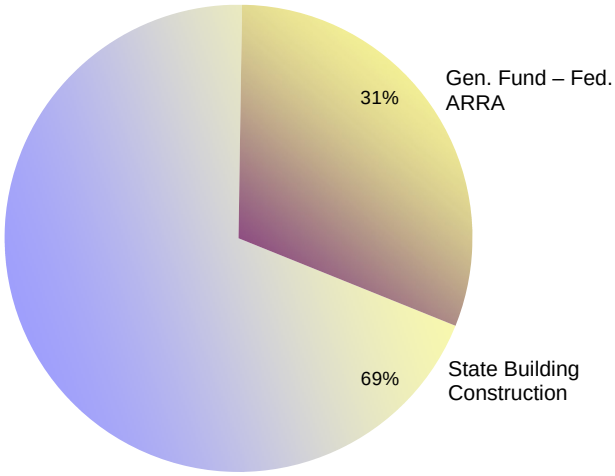
Air Quality Program 2009-11 Biennium Budget
By Fund Source

Operating Budget = $32.2 Million

FTEs = 101.1

Capital Budget = $3.6 Million





Other = General Fund – Private/Local (1.02), and Special Grass Seed Burning Research (0.04%).

Operating Fund Sources	Amount	Uses
General Fund – State	$18,904,077	Ambient air monitoring, grants to local air authorities, new source permitting, modeling & meteorology, emission inventory, vehicle emission testing, outdoor & agricultural burning permitting, woodstove education, climate change.
General Fund – Federal	9,468,838	State & local air authority grants for ambient air monitoring, emission inventory, modeling, meteorology, & other air quality activities.
Air Pollution Control	1,852,886	Minor source & new source permitting, agricultural burning permitting, agricultural burning alternatives research, greenhouse gas reporting.
Air Operating Permit	989,266	Permitting of major air pollution sources, small business technical assistance.
Wood Stove Education & Enforcement	595,300	Enforcement of & education regarding proper woodstove use, grants to local air authorities.
General Fund – Private/Local	329,309	Implement activities associated with a regional haze program, ambient air monitoring, telemetry system.
Special Grass Seed Burning Research	14,000	Research on alternatives to grass seed burning.
Operating Budget Total	**$32,153,676**	
Capital Fund Sources		
State Building Construction	$2,522,964	New appropriations & re-appropriations for reducing health risks from toxic woodstove emissions.
General Fund – Federal ARRA	1,126,662	Federal American Reinvestment & Recovery Act stimulus funding for reducing diesel emissions.
Capital Budget Total	**$3,649,626**	
Air Quality Operating & Capital Budget Total	**$35,803,302**	

Ecology's Jessica Archer climbs a navigation marker in Willapa Bay to service oceanographic instruments and download water quality data.

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 non-point 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, we identify violations of water and sediment quality criteria and assess 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) requires Ecology to develop nearly 1,500 water quality improvement plans by 2013. At current funding levels, meeting this goal while keeping up with newly discovered listings will be a challenge.

Marine Waters – Linking Models with Monitoring

For our 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. We are using 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). Whidbey Basin is the next priority area where similar work is needed.

Stream Gauging

Watersheds across the state are requesting our help to initiate and maintain stream flow gauging. 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

With 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. Because of federal grant shortfalls, only about 75 percent of at-risk beaches are currently monitored.

New Emerging Toxic Threats

Toxic chemicals are widespread in the environment, but analyses are costly, and we 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 (like flame retardants, phthalates, new pesticides, and pharmaceuticals).

Monitoring for Success

In addition to targeting known sites and specific problem areas, we are 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 carefully designed statistically reliable monitoring programs to help us measure progress toward our broad environmental goals—like the restoration of 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

In the 2008 session, the Legislature provided 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. During fiscal year 2009, Ecology began developing a data management system to house the status and trends data. Ecology will complete the data management system during fiscal year 2010, and will also collect physical, chemical, and biological data in the Puget Sound Salmon Recovery Region.

Ecology's efforts will shift to the Washington Coastal and Lower Columbia River Salmon Recovery Regions in fiscal year 2011.

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 working to develop a proposal for a program to fill this gap.

Urban Bay Sediment Monitoring

This newly funded program will provide baseline status and trends for toxics reduction efforts in Elliot and Commencement 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.

Biological Assessment

Most of our 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. We need to develop and better incorporate biological measures into our core monitoring programs.

Monitoring Coordination and Data Sharing

There are multiple organizations mandated or chartered to coordinate monitoring and data sharing. These include the Forum on Monitoring Watershed Health and Salmon Recovery, the Puget Sound Partnership, Puget Sound Monitoring Consortium, and 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.

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. Under a memorandum of agreement with the EPA, Ecology must develop nearly 1,500 TMDLs by 2013. Study results are published in scientific reports used for regulatory decision making, policy development, and environmental health protection.

Expected Results

Scientific studies are conducted to assess pollution sources and environmental health.

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

Performance Measure

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

Ensure Environmental Laboratories Provide Quality Data

Ecology accredits environmental laboratories that submit data to 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 the Ecology and the Department of Health have the demonstrated ability to provide accurate and defensible data.

- Over 480 environmental laboratories in 29 states and three provinces, including 92 drinking water laboratories, are evaluated and accredited.
- Performance testing analyses for major permitted wastewater discharge laboratories are evaluated.
- Regulated laboratories maintain successful, quality programs.
- Environmental and public health decisions are based on accurate and defensible scientific data.

Performance Measure

- 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 data Ecology uses, our staff provide guidance and training on developing quality assurance project plans, review project proposals, and consult on sampling design requirements and interpretation of results. This quality assurance function is required by the 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 Measure

- 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 provided to clients for making environmental decisions.

Performance Measures

- Percent of acceptable performance testing analyses completed by Ecology's 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 Web site.

Expected Results

Trends, conditions, and changes in water quality of major freshwater rivers, Puget Sound, and the largest coastal estuaries are tracked.

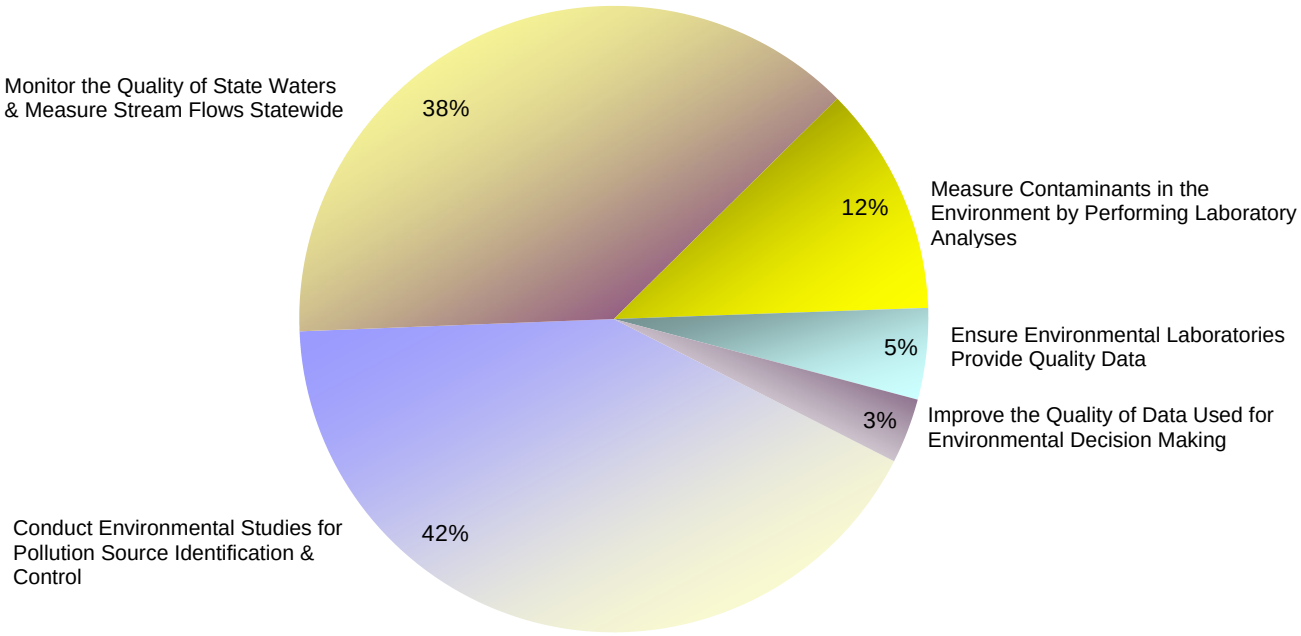
- Monthly samples from approximately 82 freshwater and 35 marine water sites are collected.
- Stream flows at approximately 140 sites statewide (62 near real-time) are measured and reported.
- Real-time stream flow data is provided via the Web.
- Ecology staff and the public are alerted to emerging water quality problems.
- The effectiveness of water cleanup activities is tracked and assessed.

Performance Measures

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

Environmental Assessment Program 2009-11 Biennium Budget By Activities

Operating Budget = $30.4 Million; FTEs = 129.9

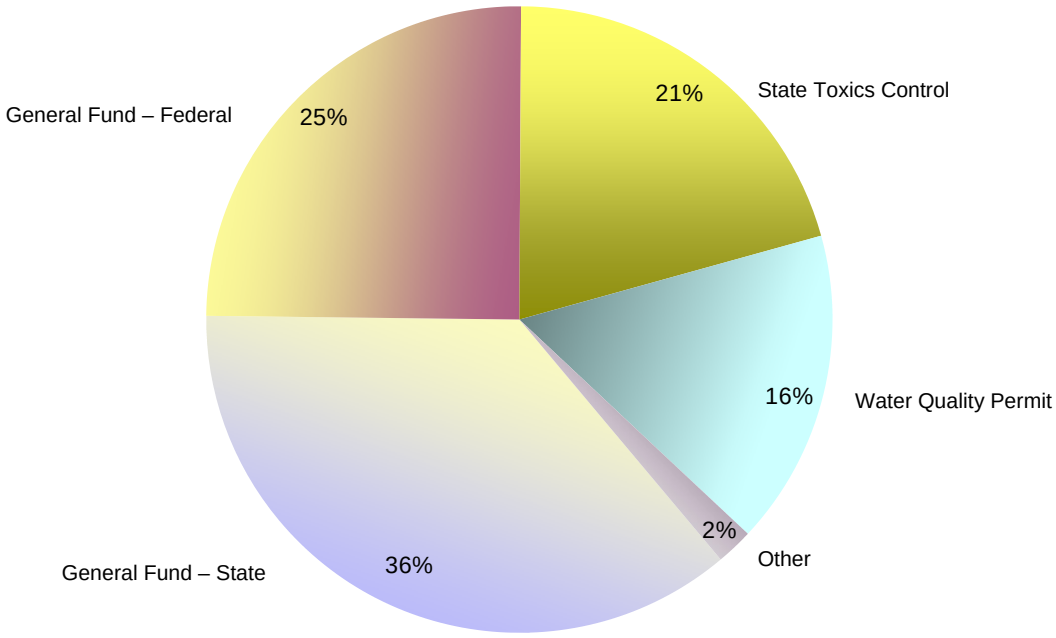


Activities	Dollars	FTEs
Conduct Environmental Studies for Pollution Source Identification & Control	$12,722,802	47.3
Monitor the Quality of State Waters & Measure Stream Flows Statewide	11,604,593	43.6
Measure Contaminants in the Environment by Performing Laboratory Analyses	3,603,520	28.6
Ensure Environmental Laboratories Provide Quality Data	1,430,950	6.0
Improve the Quality of Data Used for Environmental Decision Making	1,020,172	4.4
Environmental Assessment Operating Budget Total	**$30,382,037**	**129.9**

Environmental Assessment Program 2009-11 Biennium Budget By Fund Source

Operating Budget = $30.4 Million **No Capital Budget**

FTEs = 129.9



Other = General Fund – Private/Local (1.08%) and Freshwater Aquatic Weeds (0.78%).

Operating Fund Sources	Amount	Uses
General Fund – State	$11,029,343	Water quality monitoring, marine sediment monitoring, streamflow monitoring, groundwater investigations, technical assistance, water cleanup studies, laboratory accreditation, quality assurance.
General Fund – Federal	7,574,369	Water quality monitoring, marine sediment monitoring, groundwater investigations, water cleanup studies, effectiveness monitoring.
State Toxics Control	6,268,371	Water quality monitoring, toxics monitoring, marine sediment monitoring, groundwater investigations, water cleanup studies.
Water Quality Permit	4,944,743	Water cleanup studies, groundwater investigations, technical assistance, compliance monitoring.
General Fund – Private/Local	328,670	Water quality monitoring, marine sediment monitoring, laboratory analytical work.
Freshwater Aquatic Weeds	236,541	Technical assistance, monitoring.
Operating Budget Total	**$30,382,037**	
Environmental Assessment Operating & Capital Budget Total	**$30,382,037**	

Compliance inspector Daylin Davidson confirms whether a Puget Sound area business is properly handling its dangerous waste. When dangerous waste is mismanaged it can contaminate soil and contribute to toxic stormwater runoff.

Program Mission

The mission of the Hazardous Waste and Toxics Reduction (HWTR) Program is to foster sustainability, prevent pollution, and promote safe waste management.

Environmental Threats

There are risks in using, storing, and disposing of hazardous chemicals. Some toxic chemicals pose an immediate health threat (cleaning products or yard chemicals), while 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 toxins (PBTs), and heavy metals.

When hazardous substances are no longer usable, they become hazardous wastes. When mismanaged, they get into water and soil where they can create hazards to human health and the environment. They may cause costly new toxic cleanup sites. Over 4,000 facilities and businesses produce 112 million pounds of hazardous waste each year in Washington (2008 data). Thousands of smaller, less-regulated businesses, along with millions of Washington households, create more hazardous waste. Reducing toxic threats is one of Ecology's priority initiatives.

Safe hazardous waste management is essential to protecting human health and the environment. But, avoiding the use of toxic chemicals in the first place is the smartest, cheapest, and healthiest approach. The risk from toxic chemicals is not only from leaking drums at an industrial site. Each of us affects the environment, others, and our own health when we buy and use products that contain toxic chemicals. We find hazardous chemicals in our air, water, soil, and in our bodies—in part because they are ingredients found in the products we use in our homes, yards, and offices.

Reducing the use of toxic chemicals and ensuring safe management of hazardous waste are our two highest priorities. We recognize the current economic challenges for us all. Many businesses have had to cut positions that focused on environmental issues and need help more than ever. While our program has had to cut several positions and streamline efforts on several projects, our focus remains on providing information that will help the public make informed choices about use of toxic chemicals.

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

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

Issues

State Waste Reduction Plan

In 2009, Ecology updated the 2004 *Beyond Waste Plan*—our state waste reduction plan. The plan envisions by 2035, we can transition to a society where wastes are viewed as inefficient and where most wastes and toxic substances have been eliminated. Ecology staff, local government officials, and many others agree that reducing the use of toxic substances and generation of wastes should be our focus. The goal is to transition from managing wastes, to eliminating the use of hazardous chemicals, while protecting the environment, human health, and the state's economic interests. The strategies to reduce chemical use and waste generation will also help improve the health of Puget Sound by 2020.

The HWTR Program focuses on three of the five *Beyond Waste Plan* initiatives:

- Eliminating industrial wastes through partnerships with industry sectors.
- Reducing hazardous wastes from small businesses and households.
- Tracking progress toward the *Beyond Waste* vision through performance measures and improved data tracking.

The 2009 plan update strengthened our focus on product stewardship and prevention, because their importance has increased over the last five years. The update now includes a section that more clearly defines the role of local governments. The plan is more closely aligned with Ecology's priorities on mitigating climate change, protecting Washington waters, and reducing toxic threats—because *Beyond Waste* is about more than just waste.

Reducing Risk through Business Visits

Face-to-face visits result in compliance rates of 90 percent or higher. Studies show that compliance rates drop after three years of no contact. Poor compliance equals higher risk to the environment from hazardous substances. Since 2008, the chance of finding a significant hazardous waste violation during an inspection is at an all-time high. Local government regulates smaller businesses to assure appropriate hazardous waste disposal, while Ecology regulates larger businesses.

Ecology funds and oversees a local source control program, where local government inspectors conduct technical assistance visits to small businesses, respond to issues covered by local ordinances, or refer them to Ecology for investigation or action as appropriate. The local source control program has conducted over 3,300 site visits since April 2008. Nearly half of those visits identified hazardous waste, stormwater, wastewater, and spill concerns. Ecology's ability to inspect larger businesses is more constrained, with resources to inspect businesses once every seven years on average.

Chemical Action Plans

Ecology is working with businesses and other entities to reduce and ultimately eliminate generation of harmful PBTs and metals of concern. Ecology implements this chemical-by-chemical approach through developing and implementing Chemical Action Plans (CAPs). The state's Mercury CAP has resulted in over 14,000 pounds of mercury collected or kept out of the environment, through work with dental offices, schools, auto recyclers, hospitals and others. Mercury was removed from key products such as batteries, laboratory mercury, auto switches, utility switches, thermometers, thermostats, and fluorescent bulbs. CAPs have also been completed to reduce lead and flame-retardants in products and the environment.

Chemicals Policy Reform

While a chemical-by-chemical approach is important, Ecology also participates in a national chemicals policy reform that works to promote safer chemicals. There is increasing concern about toxic chemicals in consumer products at the state level. People have a right to expect that products sold are safe and will not adversely affect human

health or the environment. The effect of toxic chemical exposure to human health, the environment, taxpayers, and the economy is enormous—and largely avoidable through pollution prevention.

To reduce toxic threats, we need to identify safer alternatives for the most hazardous chemicals. This will help businesses, government, and citizens make better choices on what to use and buy. Ecology is working to (1) develop an approved methodology that will help to assess "safer alternatives" to help businesses reduce the amount of toxic chemicals they use; (2) identify less toxic products for state purchases; and (3) provide information so citizens can make informed choices related to consumer products.

A number of Ecology projects to support reducing toxic threats are underway, including:

- The Interstate Chemicals Clearinghouse (IC2) is designed to facilitate states' collaboration on chemical data and information sharing, and conduct safer chemical alternative assessments.
- A multi-state effort to reform federal chemical management law (the 1976 Toxic Substances Control Act), including developing states principles on national chemicals policy reform, maintain states' rights to manage chemicals of concern, and seek federal grant funding to build states' chemical capacity.
- Green chemistry programs that help create safer chemicals and products through research and development, and curriculum development for K-12 and higher education.
- The Toxics in Packaging Clearinghouse, which focuses on regulating toxic metals in packaging. Ecology is working with other states to monitor compliance of these substances to ensure they do not end up in consumer products packaging.

Reducing Business Wastes through Technical Assistance

Waste is inefficient and means lost profit. If industries were better able to design their processes and products to not pollute right from the start, there would be fewer regulatory hurdles and less hazardous waste for government to regulate. Fewer costs for industry, less government regulation, improved worker safety, and a better environment is a winning combination.

The good news is that hundreds of businesses in Washington have saved money and increased their competitive advantage through reducing their use of toxic chemicals. In the last ten years, Ecology has teamed with 30 Washington businesses to re-design production processes, resulting in 30 million dollars of potential cost savings, reduction of toxic waste by over 200,000 pounds, and decreased water usage of 200 million gallons.

Over the past 17 years, businesses that track their waste generation through pollution prevention planning have reduced their waste by more than 50 percent. We still have much to do to reduce hazardous substances that are incorporated into products and to reduce the costs and risks associated with the remaining generated waste.

Permitting and Corrective Action

Ecology issues permits to specially designed hazardous waste treatment, storage, and disposal (TSD) facilities. Permit renewals for the state's three commercial TSD facilities are currently underway. Ecology also oversees closure and needed corrective action at these facilities.

TSD facilities, mostly located near Puget Sound, are contaminated and require some form of cleanup. Cleanups are proceeding at 34 priority sites because of their significance as designated by the EPA. Ecology expects to have these 34 cleanups finished or in maintenance mode by 2020.

Human exposures are under control at 92 percent, while contaminated groundwater is under control at 77 percent of our facilities. This exceeds EPA's national goals for 2011 of 65 and 55 percent, respectively. While expensive, most cleanup costs are recoverable from property owners. Once clean, these properties provide opportunities for habitat restoration, economic development, and public recreation.

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; and 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. According to federal and state Community Right-to-Know laws, Ecology also responds to public inquiries about toxic chemicals and provides a Web site for this purpose

Expected Results

Hazardous waste and chemical data (type, location, volume, etc.) is readily available to emergency responders, local governments, citizens, and decision makers.

- "Chemicals in Washington" on-line report is developed and distributed annually.
- Over 1,000 information requests from citizens and businesses made and responded to by the Toxic Free Tips hotline and e-mail.
- "Shoptalk" newsletter transitions to electronic distribution with a list-serve population of 5,000 by 2012.
- 30 business publications are created or updated annually, posted to the Web, and available for electronic distribution.
- 4,000 hazardous waste reports from businesses are collected and analyzed yearly.

Performance Measure

- Number of visits to toxics-related Web sites.

Increase Compliance and Act on Environmental Threats from Hazardous Waste

Ecology conducts yearly formal compliance enforcement inspections at large and medium quantity generators and hazardous waste management facilities to ensure compliance with state and federal regulations. A credible, formal enforcement capability is essential to preserving the effectiveness of technical assistance and informal enforcement efforts. While staff do formal enforcement infrequently, repeated refusal or inability of a facility to correct violations and come into compliance with the regulations will escalate to formal enforcement actions.

Expected Results

Facility compliance in managing hazardous wastes is improved to protect public health and the environment.

- 320 compliance inspections are conducted annually (including 15 TSD facilities and 70 large quantity hazardous waste generators).
- Up to 180 complaints regarding hazardous wastes or substances are responded to.
- More facilities, including treatment, storage, and disposal facilities, achieve and stay in compliance with regulatory requirements.

Performance Measures

- Number of significant environmental threats* resolved.
- Chance of finding a significant environmental threat during a compliance inspection.

**Note: Significant environmental threats include major hazardous waste violations (hazardous materials spills, illegal disposal, failure to designate hazardous waste, and poor container management), as well as stormwater violations per RCW 90.48.*

Increase Safe Hazardous Waste Management through Technical Assistance

Ecology provides education and technical assistance to thousands of businesses on safe hazardous waste management. Even though formal enforcement work is essential to maintaining compliance with hazardous waste regulations, workshops and technical assistance visits can also help bring facilities into regulatory compliance using much fewer resources. Safe management of hazardous waste protects the public and the environment, and allows the state to avoid significant cleanup costs.

Expected Results

Hazardous waste is safely managed, the public is protected, and businesses comply with state hazardous waste laws.

- 400 toxics-related technical assistance visits are conducted each year, helping businesses determine how to safely manage their hazardous wastes and reduce the use of toxic chemicals.
- Up to 2,000 businesses per year get visits from local government staff to explain hazardous waste requirements.

Performance Measures

- Number of toxics-related technical assistance visits.
- Number of local source control technical assistance visits.

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

Facilities that treat, store, or dispose of dangerous wastes must obtain a permit to ensure their design, construction, maintenance, and operating procedures protect public health and the environment.

Washington currently has 15 active facilities that are either in "interim status" or have a final permit. These facilities are required to have closure plans 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 working on 27 high-priority corrective action cleanup sites right now.

Expected Results

Facilities that treat, store, or dispose of hazardous wastes are constructed and operated properly to prevent soil, water, or air contamination.

- Protective permits for facilities that treat, store, or dispose of hazardous wastes are issued in a timely manner.
- Six percent annual increase in the overall cleanup at 39 selected TSD facilities. Proper financial assurance requirements are in place at used oil processors and recyclers to fund potential future cleanups at abandoned facilities.

Performance Measure

- 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 the reduction of hazardous waste generation and the use of toxic substances and requires certain businesses to prepare plans for voluntary reduction. Ecology staff provide assistance through innovative programs for source and waste generation reduction, including more than 275 technical assistance visits per year.

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 toxics in products and the initial generation of hazardous waste minimizes disposal costs, reduces the need for cleanup, minimizes public exposure, and saves money.

Expected Results

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

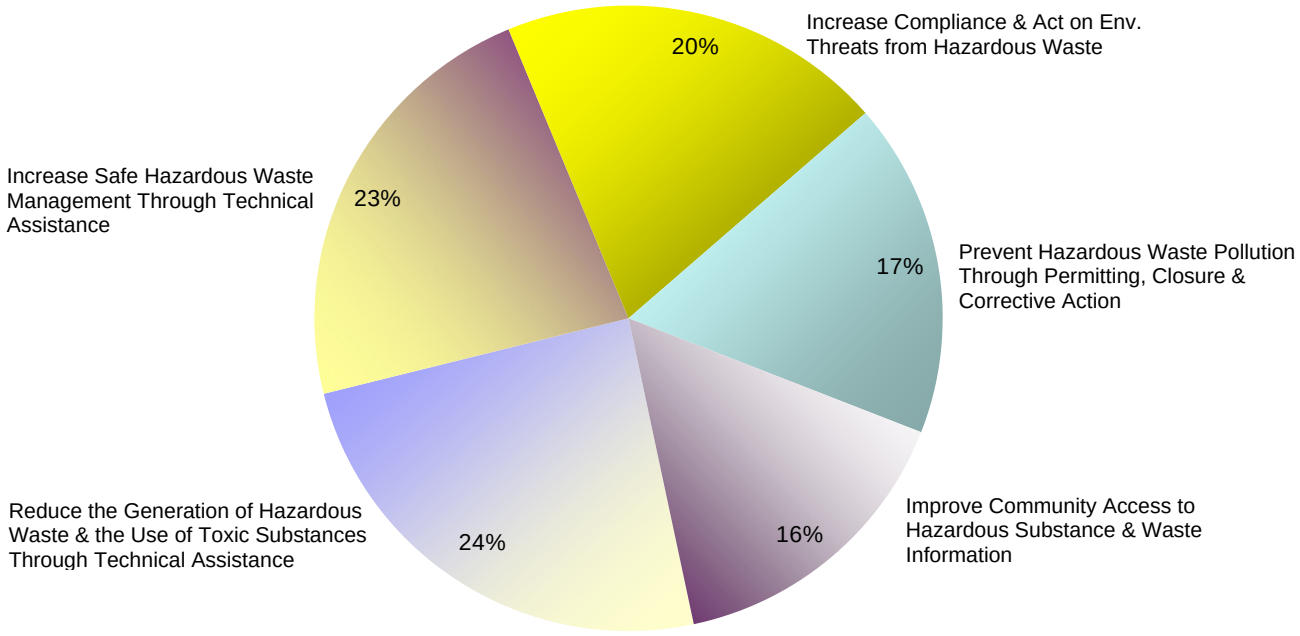
- Reduce hazardous waste generation by two percent each year.
- Establish a statewide toxics-use reduction goal with annual targets.
- Work with up to 500 businesses to reduce energy and toxics metal use.
- Provide assistance to 40 state agencies to reduce energy use three percent per year (in support of new greenhouse gas law).
- Provide support for implementing the Safe Children's Product Act and Lead Chemical Action Plan, and the polycyclic aromatic hydrocarbons (PAH) CAP development.
- Develop a clear system for pollution prevention planners to report their use of toxic chemicals.
- Track the number of pollution prevention suggestions implemented by clients.

Performance Measures

- Annual pounds of hazardous waste generated (in millions).
- Pounds of mercury collected and/or captured.
- Annual pounds of hazardous materials reduced.

Hazardous Waste & Toxics Reduction Program 2009-11 Biennium Budget By Activities

Operating Budget = $28.1 Million; FTEs = 124.2



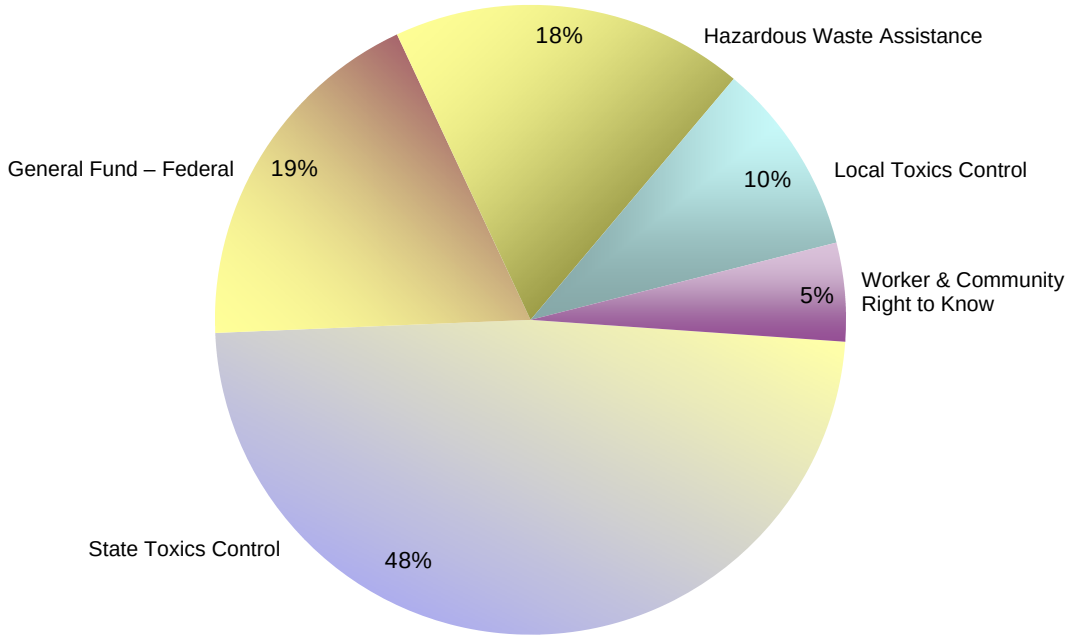
Activities	Dollars	FTEs
Reduce the Generation of Hazardous Waste & the Use of Toxic Substances Through Technical Assistance	$6,864,517	29.2
Increase Safe Hazardous Waste Management Through Technical Assistance	6,356,532	22.5
Increase Compliance & Act on Environmental Threats from Hazardous Waste	5,571,708	26.2
Prevent Hazardous Waste Pollution Through Permitting, Closure & Corrective Action	4,864,721	19.9
Improve Community Access to Hazardous Substance & Waste Information	4,417,981	26.5
Hazardous Waste & Toxics Reduction Operating Budget Total	**$28,075,459**	**124.2**

Hazardous Waste & Toxics Reduction Program 2009-11 Biennium Budget By Fund Source

Operating Budget = $28.1 Million
Pie shown below is operating budget ONLY.

Capital Budget = $0.5 Million
Funded entirely by State Toxics Control Account.

FTEs = 124.2



General Fund – Private/Local (0.17%) not shown in operating budget pie above (too small for display).

Operating Fund Sources	Amount	Uses
State Toxics Control	$13,517,122	Promote pollution prevention & safe waste management, primarily through technical assistance to businesses, inspections of large quantity generators of hazardous waste & permitted treatment, storage & disposal facilities, & hazardous waste clean ups. Conduct criminal investigations & enforcement actions.
General Fund – Federal	5,243,075	Grant funds received from EPA to implement federal Resource Conservation & Recovery Act (RCRA) & pollution prevention innovations.
Hazardous Waste Assistance	5,072,254	Provide technical assistance to hazardous waste generators & hazardous substance users. Identify safer chemical alternatives for toxic or hazardous chemicals to help businesses, governments & citizens make better choices on what to use & buy.
Local Toxics Control	2,779,844	Review & analyze waste-derived fertilizers as part of the fertilizer registration process. Fund & train local government specialists to provide assistance in waste management & reduction & source control in Puget Sound counties.
Worker & Community Right- to-Know	1,416,373	Compile information on hazardous substance use & make this information available to citizens & other public entities.
General Fund – Private/Local	46,791	Promote pollution prevention & safe waste management, primarily through technical assistance to businesses.
Operating Budget Total	**$28,075,459**	

Capital Fund Sources		
State Toxics Control	$451,001	Remove switches containing mercury from motor vehicles to avoid contamination of the environment when the vehicles are scrapped.
Capital Budget Total	**$451,001**	
Haz. Waste & Toxics Reduction Operating & Capital Budget Total	**$28,526,460**	

Ecology's Noe'l Smith-Jackson (left) collecting confirmatory soil samples at a Hanford cleanup site with Toni Welch-Koelling, a sampling subcontractor to Washington Closure Hanford.

Program Mission

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

Environmental Threats

The Hanford site covers 560 square miles located 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 after removal of 2,100 tons of disintegrating nuclear fuel rods stored in the remaining water-filled concrete basin at the "K-Reactor" near the Columbia River.
- Providing groundwater 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.
- Operating and closing 50 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), which operates the Hanford site, the U.S. Environmental Protection Agency (EPA), and the Department of Ecology signed a comprehensive cleanup and compliance agreement on May 15, 1989. The Hanford Federal Facility Agreement and Consent Order, or Tri-Party Agreement (TPA), directs the Hanford site cleanup and reflects a concerted goal of achieving, in an aggressive manner, full regulatory compliance and remediation with enforceable milestones.

Up 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.

Authorizing laws for the program include:

- *Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund)*
- *Hazardous and Solid Waste Amendments Act*
- *RCW 70.105, Hazardous Waste Management Act*
- *RCW 70.105D, Model Toxics Control Act*
- *RCW 70.94, Clean Air Act*
- *RCW 90.48, Clean Water Act*
- *Resource Conservation and Recovery Act (RCRA)*
- *Toxic Substances Control Act*

Constituents/Interested Parties

- *Congress, USDOE, EPA, the Defense Nuclear Facility Safety Board, and U.S. Fish and Wildlife Service.*
- *Environmental Council of States, National Governors Association, Western Governors' Association, USDOE's State and Tribal Government Working Group, and the Oregon Office of Energy.*
- *Tribes: As the state's lead for natural resource damage assessments at the Hanford site, Ecology works with the Yakama, Umatilla, and Nez Perce Indian nations.*
- *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 cleanup of the Hanford site 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 tentative settlement of the lawsuit on August 10, 2009. The final settlement will not be in place until early 2010. The proposed settlement requires further actions, including a 45-day public involvement process, amending milestones in the Hanford TPA, and completing an Environmental Impact Statement by USDOE that includes limitations and exemptions on off-site waste importation at Hanford. Until the settlement is finalized, the state will remain prepared to resume and proceed with litigation.

Tank Waste Cleanup

The cleanup of 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.

Construction of a tank waste treatment facility by USDOE is approximately 45 percent complete. However, the construction schedule has been repeatedly delayed and a new enforceable schedule is included in the lawsuit settlement.

Continuing and Accelerating 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 at Hanford received nearly two billion dollars in American Recovery and Reinvestment Act (ARRA) funding. Those funds are being 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.

Protecting the Columbia River

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

Ecology, EPA, and the USDOE added new TPA milestones that provide the schedule for groundwater and soil cleanups along the Columbia River.

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 the wastes and materials generated on-site, 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 proposed tentative settlement of the tank waste lawsuit would extend this waste importation ban 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.
- Millions of 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 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.

- Complete 30 percent of the 324 Building removal and remediation actions.
- Complete 45 percent of the decontamination and decommissioning effort at the Plutonium Finishing Plant.
- Complete 70 percent of the interim safe storage of the N Reactor 105-N/109-N Building.

Performance Measure

- Decontaminate and decommission the plutonium finishing plant on Hanford on schedule by 2016 (percent complete).

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.

Expected Results
56 million gallons of high-level radioactive mixed waste from Hanford's interim storage tanks is retrieved and treated.

- Continue construction of the Hanford Waste Treatment Plant at a rate that supports approved milestones.
- Start conceptual planning and design of an interim storage facility for immobilized high-level waste.

Performance Measure

- Percent of the Hanford Tank Waste Treatment Facility 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 Disposal 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 of.

- One single-shell tank is emptied and waste stored safely.
- A permit is issued for the double shell tank farms by March 2010.
- A closure plan is issued for the single shell tank farms by March 2010.

Performance Measure

- 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.

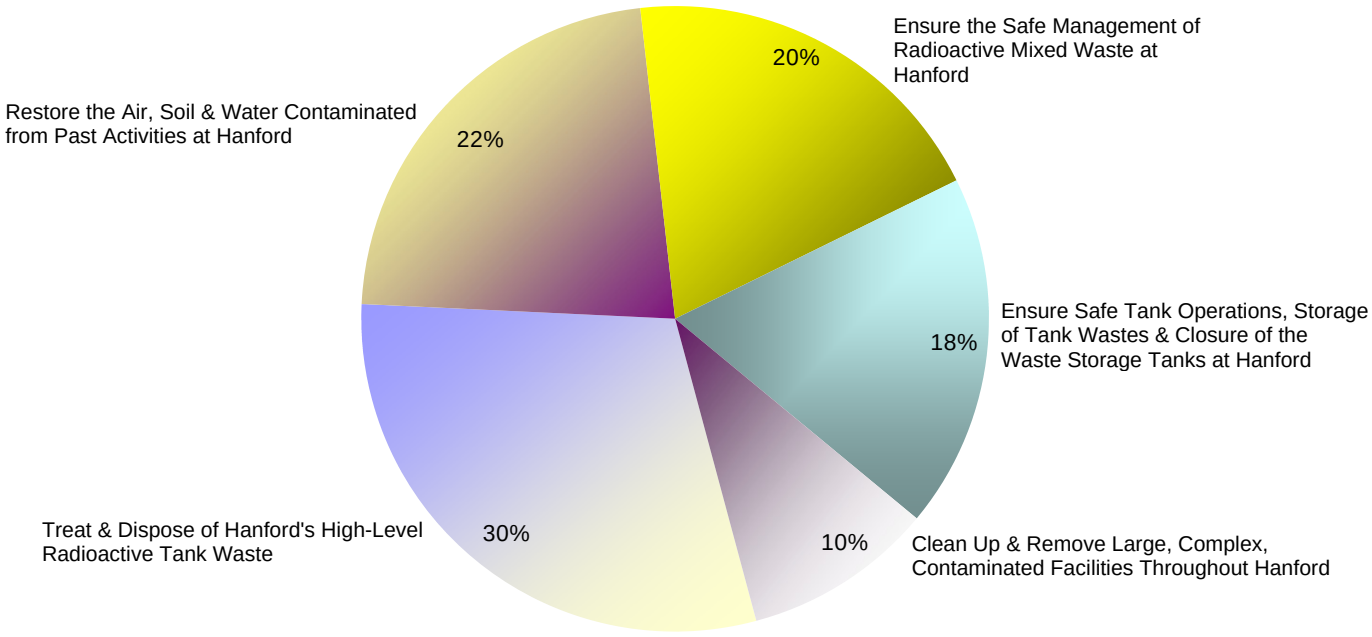
- Tri-Party (EPA, USDOE, and Ecology) negotiations to establish schedules for the remainder of waste retrieval, treatment and disposal are completed.
- 10,700 cubic meters (cumulative) of contact-handled retrievably stored waste are retrieved from the low-level burial grounds at Hanford by September 30, 2010.
- U.S. Ecology commercial low-level radioactive waste site Model Toxics Control Act investigation is completed.
- Draft cleanup action plan is completed.

Performance Measure

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

Nuclear Waste Program 2009-11 Biennium Budget By Activities

Operating Budget = $19.5 Million; FTEs = 76.5



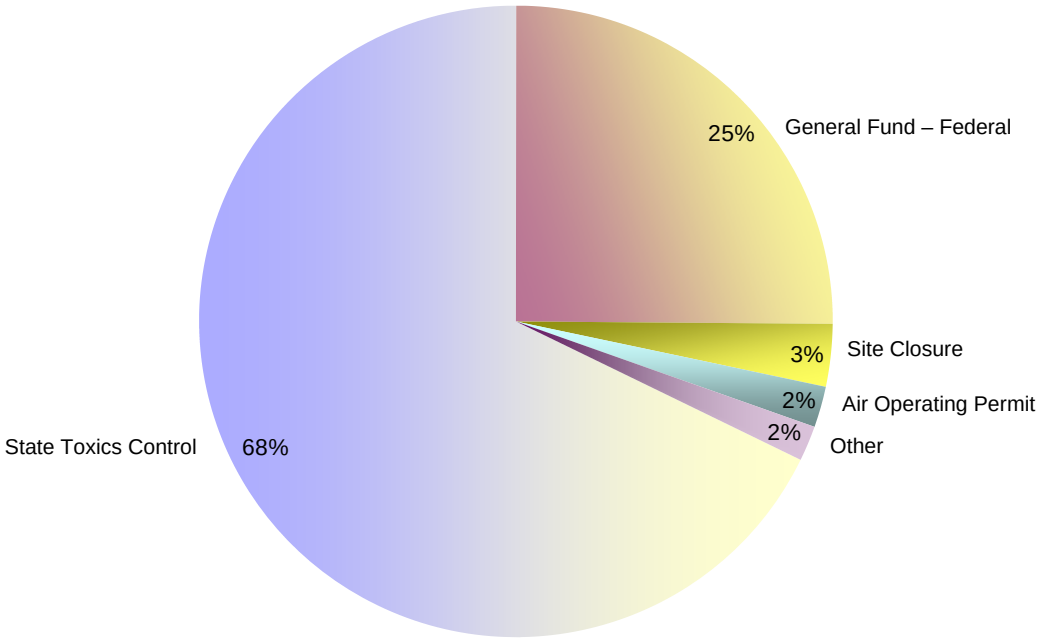
Activities	Dollars	FTEs
Treat & Dispose of Hanford's High-Level Radioactive Tank Waste	$5,822,596	23.9
Restore the Air, Soil & Water Contaminated from Past Activities at Hanford	4,372,828	14.9
Ensure the Safe Management of Radioactive Mixed Waste at Hanford	3,789,145	14.2
Ensure Safe Tank Operations, Storage of Tank Wastes & Closure of the Waste Storage Tanks at Hanford	3,566,161	14.8
Clean Up & Remove Large, Complex, Contaminated Facilities Throughout Hanford	1,908,897	8.7
Nuclear Waste Operating Budget Total	**$19,459,627**	**76.5**

Nuclear Waste Program 2009-11 Biennium Budget
By Fund Source

Operating Budget = $19.5 Million
Pie shown below is operating budget ONLY.

Capital Budget = $3.8 Million
Funded entirely by Site Closure Account.

FTEs = 76.5



Other = General Fund – Private/Local (0.84%), Water Quality Permit (0.52%), and General Fund – State (0.45%).

Operating Fund Sources	Amount	Uses
State Toxics Control	$13,195,020	Oversee management of hazardous & radioactive mixed wastes on Hanford & other mixed waste facilities, early treatment of Hanford wastes, provide regulatory assistance to the USDOE and EPA & implement the provisions of the Hanford Federal Facility Agreement & Consent Order & the Hazardous Waste Management Act.
General Fund – Federal	4,880,446	Oversee removal of radiological & chemical contaminants at Hanford, provide regulatory assistance to USDOE & EPA & implement the provisions of the Hanford Federal Facility Agreement & Consent Order.
Site Closure	617,755	Disposal permit issuance & Northwest Interstate Compact low-level radioactive waste management policy oversight for commercial low-level radioactive waste disposal within the state (Hanford site).
Air Operating Permit	413,409	Conduct permitting & compliance assurance activities for air emissions sources on the Hanford site.
General Fund – Private/Local	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	100,948	Activities needed to maintain safe facilities for treating wastewater discharges at the Hanford site.

General Fund – State	88,195	Regulation of air pollutants at new or modified Hanford facilities subject to the clean air act.
Operating Budget Total	**$19,459,627**	
Capital Fund Sources		
Site Closure	$3,841,944	Investigation, closure, & decommissioning of the Hanford low-level radioactive waste disposal facility.
Capital Budget Total	**$3,841,944**	
Nuclear Waste Operating & Capital Budget Total	**$23,301,571**	

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A Washington Conservation Corps crew (clad in yellow rain gear) led by Troy Warnick (white hat) frantically fill and stack sandbags in an effort to prevent flooding in the Nisqually Valley. Crewmembers from left to right include Jason Smith, Ben Amidon, Wade Arnold, Courtney Irby, and Ana Hansa-Ogren (with shovel).

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 43.143, Ocean Resource Management Act*
- *RCW 43.21C, State Environmental Policy Act (SEPA)*
- *RCW 43.220, Washington Conservation Corps (WCC)*
- *RCW 43.42, Office of Regulatory Assistance*
- *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 our most important tool to protect and restore 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 2014.

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 2009, the Legislature provided an additional three million dollars for pass-through grants to govern-

ments and a half-million dollars for Ecology staffing. To date, over half of the updates are 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. Our state has lost more than a third of its wetlands.

To stop this loss, laws require mitigation to replace lost wetlands and their functions. However, mitigation only works part of the time. Ecology organized the new *Environmental Mitigation That Works* initiative to improve the success of wetland mitigation.

This biennium, we will focus on three key areas: (1) improving the way we do mitigation, (2) providing alternatives for more ecologically significant mitigation, and (3) training practitioners and local governments on how to use the new approaches and policies.

Our priorities are:

- A compliance program to make sure the mitigation we approve is successful.
- Provide guidance and training on the wetland banking rule and reduce the time needed to certify a wetland bank.
- Support alternative mitigation approaches, such as in-lieu fees and advance mitigation, and provide templates, guidance, and training on these approaches.
- Assist the Puget Sound Partnership in developing a Puget Sound In-Lieu Fee Program.
- Provide technical training to communities.
- Test a new tool for selecting the best mitigation sites using a watershed approach.

Watershed Planning and Implementation

The Watershed Planning Act provides a framework for state, local, and tribal governments to create watershed plans that address local water needs, reduce water pollution, and protect fish habitat. Ecology manages grants to help locals move their watershed plans through each phase—from planning to implementation—to ensure plans and priority action items are carried out and to get a return on the state's water planning investments.

Out of 62 Water Resource Inventory Areas (WRIAs) statewide:

- 28 Watershed Planning Units representing 35 WRIAs have approved plans.
- 22 planning units are receiving Phase 4 implementation funds in 2009-11.
- Two planning units in the plan development stage are receiving funds in 2009-11 and should finish their plans in two to three years.
- A plan for one WRIA has been approved by the planning unit, and county board adoption is pending.
- The rest of the state's WRIAs don't have planning units or had planning units (six) that elected to stop the Watershed Planning Act process.

We are focusing our limited resources on those watershed planning units ready to implement their plans. We are working with 2009-11 grant recipients to make sure funded projects achieve their intended results. We also provide technical assistance to watershed groups that have recommended instream flows for adequate water for farms, fish, people, and the environment.

In the Puget Sound region, we help watershed planning groups integrate watershed, salmon recovery, and other environmental plans to support Puget Sound recovery efforts. In the Upper and Mid Columbia River regions, watershed planning outcomes are being linked to the goals and objectives of the Columbia River Basin Water Management Program. In the Lower Columbia River, watershed planning and salmon recovery planning efforts are being well coordinated. For more information, see http://www.ecy.wa.gov/biblio/0806027.html.

Protecting Puget Sound Habitat

Habitat protection is a priority for Puget Sound restoration. One-third of the 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, we must become more effective in protecting our shorelines and upland habitats. In this 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. We will improve the effectiveness of wetland mitigation, and we will provide trainings and work in partnerships to promote appropriate development.

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 are threatened 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.

Understanding and preparing for climate change is a strategic priority for Ecology. We are supporting local community planning for sea-level rise and flood protection. We will share technical guidance and provide financial help for local government planning through the Flood Control Assistance Account Program grants and Shoreline Master Program grants to support hazard assessments and prepare for sea-level rise. We will respond to Executive Order 09-05 by working with our local government partners to examine challenges and opportunities to prepare and adapt to sea-level rise.

Protecting Coastal Beaches in Southwest Washington (Benson Beach)

Shoreline erosion threatens the stability of many areas along the southwest Washington coast. Despite this problem, dredged sand is routinely dumped offshore.

Ecology received 1.7 million dollars in capital funding this biennium to place up to one million cubic yards of clean, dredged sand from the lower Columbia River onto the near-shore area of Benson Beach—just north of the Columbia River and the North Jetty. This will help offset chronic shoreline erosion in the area, shore up the North Jetty, and supply sand to the Long Beach Peninsula. At the same time, it will prevent the loss of valuable sand to deepwater disposal. The requested state funding will leverage1.8 million dollars in federal funding.

Ocean and Coastal Health

Washington has two coasts with distinct issues, resources, communities, and needs: the outer coast and Puget Sound. While Puget Sound tends to have greater problems with water pollution, stormwater runoff, and toxic sediments, our outer coast is not immune from troubling forces. On the outer coast, these forces include aquatic invasive species, toxic algal blooms that routinely close shellfish harvesting and threaten human health and wildlife, and shoreline erosion that threatens infrastructure and property.

Ecology will work with other agencies and stakeholders to improve coastal and ocean resource management, mostly on Washington's outer coast through the State Ocean Caucus, Ocean Policy Advisory Group, and other regional and international partnerships. Through all of these partnerships, we will focus on:

- Improving basic research, monitoring, and education on our ocean resources.
- Advancing erosion and sediment management.
- Supporting development of sustainable coastal communities.
- Understanding potential impacts of new proposed ocean uses and developing appropriate strategies to manage these activities.
- Coordinating implementation of other recommendations in Washington's Ocean Action Plan.

Protecting Floodplain Resources

Ecology helps local governments and citizens with awareness and planning for flood hazards to improve public safety and prevent damages to property and public infrastructure. We also take part in floodplain management activities that protect the natural and beneficial 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 the National Flood Insurance Program, and the state of Washington has adopted those standards. In recent months, the National Marine Fishers Service issued a biological opinion, and found that existing minimum standards have an adverse impact on endangered salmon and killer whales in the Puget Sound region. We will be working with FEMA and the affected local governments to help communities adjust their

floodplain management regulations to assure compliance with this opinion.

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 minimizing flooding and property damage. Local governments develop and manage local Shoreline Master Programs, and Ecology provides support and oversight 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, and issuing notices of correction, orders, and penalties.

Expected Results

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

- Local governments get technical and financial assistance to update their shoreline master plans.
- Permits approved by local government are consistent with their shoreline master plans.

Performance Measures

- Number of communities (cities & counties) that have submitted updated shoreline master plans.

Protect Water Quality by Reviewing 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

- The 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 frameworks for wetlands protection. Local governments write wetland protection and mitigation rules into local Shoreline Master Programs and critical area ordinances. Ecology provides support to local government 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.
- Percent completion of the wetland banking rule.
- Number of completed watershed characterizations.
- Percent of wetland banking certification documents reviewed within 30 days of receipt; except for mitigation bank instruments, which will be reviewed within 90 days.

Provide Technical and Financial Assistance for Local Watershed Planning and Implementation
In 1998, the Watershed Planning Act set a framework for state, local, and tribal governments to create watershed plans that address water needs, reduce water pollution, and protect aquatic habitat. Ecology is involved in three ways:

- Supplying technical assistance to local groups during planning and implementation.
- Providing financial assistance to local groups.
- Adopting county-approved watershed actions into state rules and agency activities.

Expected Results
Future in-stream and out-of-stream needs are managed consistent with adopted watershed plans.

- Local planning groups get technical and financial assistance for plan implementation and updates.
- Local, state, and tribal organizations and stakeholders participate in solving water issues.

Performance Measures

- Number of Watershed Planning Units in Phase 4 – Plan Implementation.

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 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 Coastal Zone Management Act sets up estuarine reserves that are jointly managed by state and federal governments. The Padilla Bay National Estuarine Research Reserve is one of 27 national reserves established to protect estuaries for research and education through:

- Operating the Breazeale Interpretive Center and research facility.
- Providing classes for teachers, students, and adults on Puget Sound ecology, watersheds, wetlands and coastal management.
- Presenting technical and professional trainings and workshops.
- Conducting scientific research.

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.

Expected Results

The Padilla Bay Reserve is managed and maintained in a cost-efficient and effective way to provide public education, training, and scientific research and monitoring.

- Students, teachers, professionals, and researchers participate in education and training programs.
- Coastal ecosystem research is carried out and shared with government and academic organizations.
- Coastal and land-use managers and planners are trained to carry out environmental policies and rules in western Washington.
- Volunteers and professionals carry out Puget Sound restoration activities, including derelict gear removal, marine debris collection, and habitat enhancements.

Performance Measures

- Number of teachers, students, adults, and professionals 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 conservation 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 Measure
- Acres of habitat restored by the Washington Conservation Corps.

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 from Ecology's transportation team made within agreed upon timeframes for WSDOT's applications, permits, National Environmental Policy Act/SEPA documents, or other environmental documents.

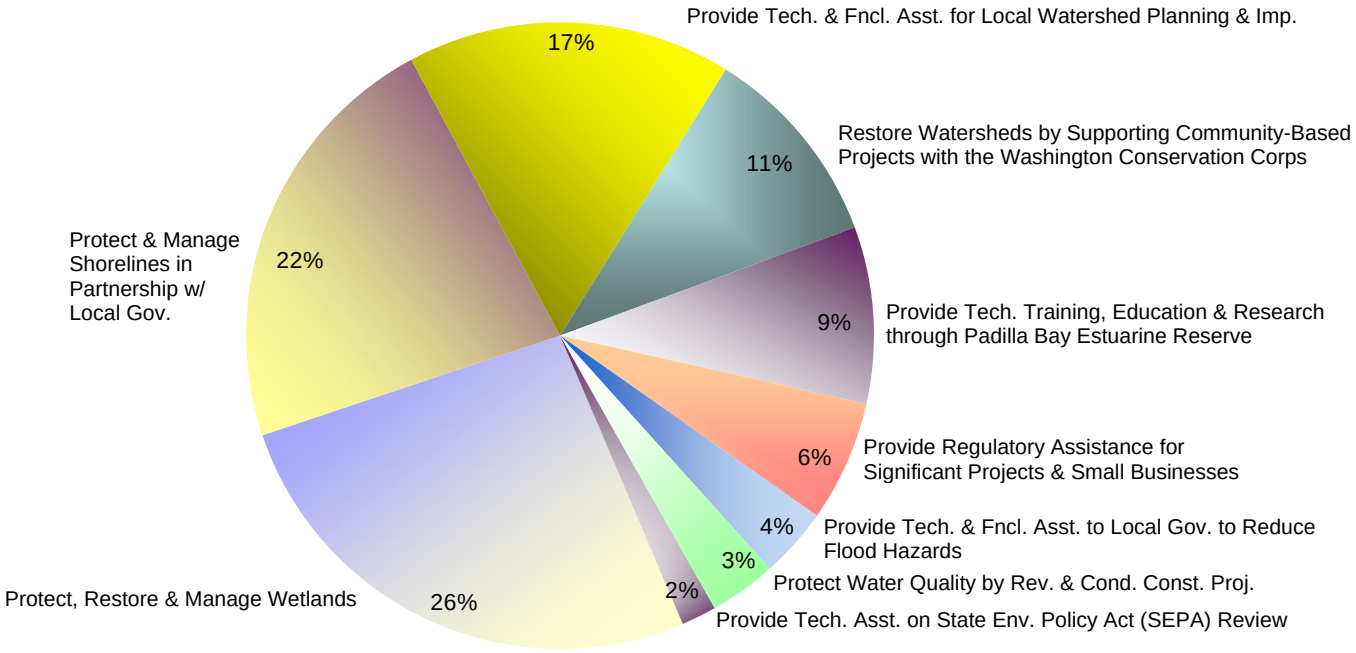
Provide Regulatory Assistance for Significant Projects and Small Businesses
A contract between Ecology and the Governor's Office of Regulatory Assistance (ORA) is set up to support permit assistance services. ORA provides funding and Ecology provides staff and direct services to businesses and the public through:
- Operating a service center for call-in and walk-in permit information.
- Developing and maintaining an on-line permit assistance resource center.
- Offering regional case managers for more complex and complicated projects.

Expected Results
People and businesses who contact the Office of Regulatory Assistance receive permit information.
- Helpful information is available to applicants on environmental permits such as Web-based tools, directories, fact sheets, guidance, and other materials.

Performance Measure
- Number of applicants and customers provided permit assistance information by the Office of Regulatory Assistance Service Center.

Shorelands & Environmental Assistance Program 2009-11 Biennium Budget By Activities

Operating Budget = $67.1 Million; FTEs = 156.6



Provide Streamlined Project Permitting for Transportation Projects (0.20%) not shown in operating budget pie above (too small for display).

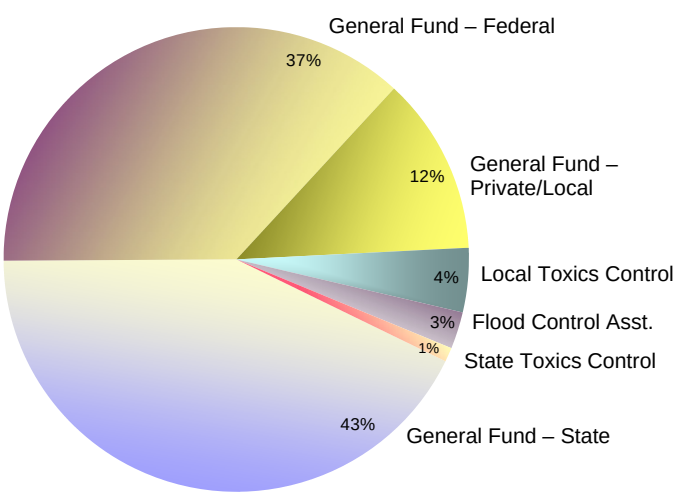
Activities	Dollars	FTEs
Protect, Restore & Manage Wetlands	$17,559,523	26.7
Protect & Manage Shorelines in Partnership with Local Governments	14,927,833	35.4
Provide Technical & Financial Assistance for Local Watershed Planning & Implementation	11,182,851	12.3
Restore Watersheds by Supporting Community-Based Projects with the Washington Conservation Corps	7,054,104	35.4
Provide Technical Training, Education & Research through Padilla Bay Estuarine Reserve	6,106,012	17.8
Provide Regulatory Assistance for Significant Projects & Small Businesses	4,179,175	3.8
Provide Technical & Financial Assistance to Local Governments to Reduce Flood Hazards	2,408,919	7.4
Protect Water Quality by Reviewing & Conditioning Construction Projects	2,310,831	11.5
Provide Technical Assistance on State Environmental Policy Act (SEPA) Review	1,209,701	5.7
Provide Streamlined Project Permitting for Transportation Projects	124,700	0.7
Shorelands & Environmental Assistance Operating Budget Total	**$67,063,649**	**156.6**

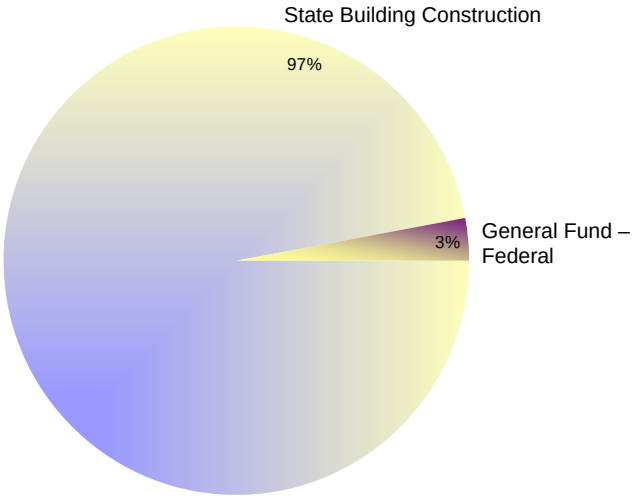
Shorelands & Environmental Assistance Program 2009-11 Biennium Budget By Fund Source

Operating Budget = $67.1 Million

Capital Budget = $18.3 Million

FTEs = 156.6





Operating Fund Sources	Amount	Uses
General Fund – State	$28,631,166	Shoreline management planning, implementation, enforcement, and technical assistance & planning grants to local governments. Wetlands Protection & Puget Sound Agenda implementation requirements. Match for federal Coastal Zone Management & 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 & environmental mitigation. Wetland technical assistance.
General Fund – Federal	24,768,136	Primary grant – National Oceanic and Atmospheric Administration Coastal Zone Management. Shoreline planning, implementation, enforcement, water quality certifications, & technical/financial assistance to local governments. U.S. EPA grants for wetlands & 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.
General Fund – Private/Local	8,285,462	Coastal Erosion. Permit & project reviews. Padilla Bay. Washington Conservation Corps.
Local Toxics Control	3,000,000	Updating local master shoreline programs. Funding & staff provided to speed up completion of Puget Sound Shoreline Master Program updates.
Flood Control Assistance	1,718,355	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.

State Toxics Control	660,530	Water quality certifications. Dredging. Updating local master shoreline programs.
Operating Budget Total	**$67,063,649**	
Capital Fund Sources		
State Building Construction	$17,806,592	Horseshoe Bend Levy Repair, King Co. Fire Protection District Flood Control, Flood Damage & Drought Grants.
General Fund – Federal	535,000	Brazeale Interpretive Center, Padilla Bay Boat Shed.
Capital Budget Total	**$18,341,592**	
Shorelands & Env. Assistance Operating & Capital Budget Total	**$85,405,241**	

Southwest regional office spill responder Ron Holcomb assesses various containers of oil, paint, and other hazardous materials that were deposited in a log jam following the December 2007 Chehalis River flood.

Program Mission

The mission of the Spill Prevention, Preparedness and Response Program (Spills Program) is to protect Washington's environment, public health, and safety through a comprehensive spill prevention, preparedness, and response program. The program focuses on prevention of oil spills to Washington waters and land, as well as planning for an effective response to oil and hazardous substance spills whenever 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. Accidents, equipment failure, and human error can all lead to 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 in the late 1980s and early 1990s sparked public concern and resulted in state and federal legislation to protect the environment and human health from such spills.

Specific Washington laws include:

- *RCW 70.105, Hazardous Waste Management Act*
- *RCW 70.105D, Model Toxics Control Act*
- *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*
- *RCW Chapter 82.23B, Oil Spill Response Tax*

Constituents/Interested Parties

Ecology works closely with people interested in environmental protection, emergency response organizations, the oil industry, oil handling facilities, maritime shipping companies and other transportation industries, and other users of Washington's waters. These include:

- *Federal, state, local, and tribal governments, including the U.S. Coast Guard, U.S. Environmental Protection Agency, U.S. Corps of Engineers, and local emergency management agencies.*
- *The governments of Canada, British Columbia, Oregon, and Idaho.*
- *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.*
- *The Puget Sound Partnership, environmental organizations, the general public, and the Citizen's Committee on Pipeline Safety.*

Issues

Obtain Sustainable Funding for Program Operations

The five-cent-per-barrel tax on imported oil provides 60 percent of the operating budget for Spills Program work. A portion of this tax (four cents) goes to spill prevention and preparedness and has remained unchanged since the early 1990s.

There are several problems with this funding mechanism:

- This tax is based on the volume of oil coming into the state. This volume has not kept pace with increased costs and inflation.
- The tax structure allows for large periodic, unpredictable tax credits, which can seriously deplete the Oil Spill Prevention Account (OSPA).
- The tax allows industry to shift untaxed oil to internal state consumption; and then exporting and receiving a tax credit for oil shipped to Oregon, California, and British Columbia. The tax is not imposed on oil imported from Canada via pipeline.

As a result of expenditures exceeding revenues, the budget shortfall in the OSPA required the 2009 Legislature to transfer 6.5 million dollars into the account and cut eight funded positions from Ecology's program and four funded positions from other state programs.

Based on state revenue forecasts, this problem will continue to persist into the future unless additional funding is identified. If we cannot establish a new funding mechanism, Ecology will need to cut an additional 17 funded positions from the program. Such a cut would nearly eliminate the state's spill prevention and preparedness efforts. Ecology's goal is to develop a long-term, viable funding solution during the 2009-2010 session.

Expand the Scope of Our Work in Marine Safety

Federal preemption under the Supremacy Clause of the U.S. Constitution limits state authority to conduct certain spill prevention activities in the marine transportation field. Washington has pressed the boundary of federal preemption and had two oil spill prevention authority-related cases decided by the U.S. Supreme Court. Ecology is pursuing a number of strategies to accomplish high-priority oil spill prevention initiatives in the maritime field, while keeping clearly within the state's Constitutional authority. Initiatives include:

- Expanding our cooperative partnership with the U.S. Coast Guard consistent with the memorandum of agreement and the strategic work plan signed by the Governor and Admiral in June of 2007.
- Seeking delegated authority from the U.S. Coast Guard for qualified and experienced state personnel to conduct key prevention activities.
- Working with the federal delegation to request federal oil spill legislation to improve maritime safety while preserving state authority.

Emergency Response Tug for the Strait of Juan de Fuca

The 2009 Legislature provided for one year of funding (in fiscal year 2010) for the Neah Bay emergency response tug. Ecology led the contract process and is overseeing the tug operation through June 30, 2010.

The Legislature also passed Senate Bill 5344 requiring the maritime shipping industry to permanently station an emergency response towing vessel year-round at Neah Bay to prevent potential maritime casualties and resulting oil spills. The uniquely rich and vulnerable biological, marine, and cultural resources of the state and several irregularities of local waters contribute to the need for the tug. Irregularities include periodic severe storms with high seas, strong current, and obscuring fog.

Ecology has had ten years of experience managing the tug, and it remains a proven and invaluable essential prevention and response asset. The maritime industry is required to provide an emergency response towing vessel at Neah Bay beginning on July 1, 2010. The legislation also requires:

> *"Participants to the negotiations shall provide interim progress reports to the appropriate committees of the legislature by October 31, 2009, and again by December 1, 2009, the latter date coinciding with the deadline for contingency plans for covered vessels operating in the Strait of Juan de Fuca to provide for the emergency response system required by RCW 88.46.130."*

Once the addendum to the contingency plans for covered vessels is approved, industry will be able to finalize any necessary contracts and meet the July 1, 2010 deadline. Ecology will retain the ability to directly contract with the towing vessel company in the event that a vessel that does not pay into the industry funded tug needs assistance.

Expand Oil Spill Prevention Initiatives

We will document the need for and seek stakeholder support for the following initiatives:

- Delegated authority from the U.S. Coast Guard to conduct vessel and facility inspections to provide a stronger approach for preventing spills in Washington waters.
- Review the feasibility of implementing a program to prevent dumping of oily wastewater into state and international waters by providing for bilge water and oil reception facilities in Puget Sound ports and marinas.
- Continue to strengthen efforts to engage non-regulated entities and facilities, such as hydroelectric dams, railroads, and small to mid-sized commercial fishing boats to prevent and prepare for spills.
- Increase inspections and educational visits to marinas and boat yards that are considered oil transfer facilities.

Enhance Oil Spill Readiness

The public and elected officials expect the government and private sectors to carry out a well coordinated, rapid, and aggressive response when significant incidents and spills occur. To do this, all organizations must be prepared to come to the incident quickly, arrive on scene with sufficient resources, and adhere to agreed upon roles and policies. Any unnecessary delays can place public health, safety, and the environment at additional risk.

The Spills Program will work with the broader response community to begin delivering customer focused, well-coordinated, rapid, and aggressive response services to manage incidents and spills beginning in 2011. This means immediate notifications are completed, resources are rapidly dispatched, initial over-response is expected, and work in the incident command post will focus entirely on the event and implementing agreed-upon roles and policies. This initiative will take the existing response system to a new level of competence and effectiveness.

The program will encourage the response community to begin responding to the full potential spill volume and impact that an incident (such as a grounded oil tanker or leaking oil tank) could have. Implementing this critical action will require the program to refocus some staff on this issue. It may also require additional future legislative appropriations for equipment and contractors.

Other oil spill preparedness efforts that will contribute to this system include:

- Systematic verification of response equipment availability and contractor readiness. Over the next six years, Ecology will work to verify, inspect, or deploy all industry-owned response equipment in the state.
- Conduct drills during real incidents where a casualty has occurred, but a large spill may or may not be imminent. This initiative will expand and test the effectiveness of the program's Incident Management Assist Team (IMAT), and strengthen the use of Unified Command organizations by multiple agencies.
- Improve the state's ability to use helicopters and fixed-wing aircraft to detect and track oil spills, and to direct on-water spill recovery operations. Continued refinement is necessary because there are limitations to the effectiveness of current technology during night operations, fog, and major storms.
- Improve on-water recovery rates by ensuring aggressive response with 24-hour on-water recovery capability.
- Expand the number of locations where equipment is staged throughout the state.

Strengthen Delivery of Public Education, Outreach and Technical Assistance Services

Ecology, along with our other local, state, federal and multi-state jurisdictions partners, is committed to expanding and maximizing outreach and education efforts. To help us improve public education and technical assistance, we will:

- Expand efforts to disseminate the technical findings from in-depth casualty and oil spill investigations to applicable industries.
- Expand field visits to ports and marinas statewide, and increase participation in the Clean Marina Program.
- Reinstitute a spill prevention campaign to include the commercial fishing fleet's preparation for seasonal departure to Alaskan fishing grounds.
- Improve use of the program's Web site and social networking sites to provide information

during spill incidents to interested stakeholders and the public.
- Develop and maintain Web site for volunteer registration and management (pending additional funding).

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. Our core incident response activities include:

- Delivering 24-hour-a-day, statewide response services from six field offices. This activity includes maintaining two responders with proper training and field equipment on pager from each of the field offices at all times. The program also has two maritime experts available on pagers and a public information officer on call. All members of the program's management team are available for consultation on a 24-hour basis. Sustaining these operations requires a high level of funding, good communications, and effective policies and procedures to ensure consistent quality and service delivery.
- The program maintains access to a small network of aerial observation platforms. Included in this informal network are U.S. Coast Guard helicopters, Washington State Patrol fixed-wing planes, King County Sheriff's office helicopters, and the ability to contract with private service providers.
- Program responders work closely with local governments, tribes, and other public entities that have spill response and safety equipment "caches" to enhance the rapid initial containment of oil spills. This system is intended as a first response capability to contain oil until a private contractor and state response personnel are able to travel to the scene of the pollution incident.
- Build partnerships with local government, industry and the public to provide rapid reporting of releases and provide rapid, independent verification of the spill incident. For example, it is common for citizens to report floating algae blooms as oil spills. Ecology trains local emergency first responders on how to verify whether the citizen's pollution report is truly a recoverable spill.
- Coordinate with local, state, and federal law enforcement agencies for methamphetamine drug lab cleanup.
- Initiate compliance actions when there are violations related to oil and hazardous material spills.

Review Tug Escort Standards for Loaded Tankers

The 2003 Legislature directed Ecology to complete "an evaluation of tug escort requirements for laden tankers to determine if the current escort system requirements… should be modified." A detailed technical report was completed in December 2004. Ecology hopes to obtain funding or federal direction from the U.S. Coast Guard to complete additional work on "human factors" that can help optimize the effectiveness of tug escort system.

Health of Puget Sound and Other State Waters

As the Spills Program looks forward, we will be working with the Puget Sound Partnership to meet the goal of a healthy Puget Sound by 2020 through a state-of-the-art spill program. The program is also striving to approach the legislative zero-oil-spill goal, and to ensure a well coordinated, rapid, and aggressive response to all spills. Some of the items outlined below are critical to achieving these goals.

The following items are not new to us, but as we observed events following the November 7, 2007, *Cosco Busan* oil spill in San Francisco, the need for action has become more prominent. We will continue working to make progress on the following, some of which may require additional funding or new statutory authority:

- Volunteer Management Program – Ecology hopes to implement a program with full coordination and management of a volunteer network throughout the state to use during a major spill.
- Bird and Marine Mammal Rescue and Rehabilitation – Our current capability to rescue and rehabilitate oiled wildlife is very limited. We need an expanded collaborative partnership between industries, state, federal government,

and animal care networks to fund a fully effective wildlife rescue and rehabilitation program.
- Vessels of Opportunity – Ecology conducted a study in 2005 of the feasibility of using commercial fishing and other vessels to augment oil spill response capabilities during major incidents. We will make recommendations to stakeholders on how to implement a well-organized comprehensive program. Alaska has similar programs and, to a lesser extent, so does California.
- State Pilotage Programs – Washington currently has a Pilotage Commission responsible for overseeing state pilots in Puget Sound, the Strait of Juan de Fuca, and Grays Harbor. The Columbia River is regulated by the Oregon Board of Maritime Pilots. A legislative or regulatory change is needed to allow for Washington State membership on the Oregon pilotage commission.

Activities, Results & Performance Measures

Prepare for Aggressive Response to Oil and Hazardous Material Incidents

Large commercial vessels and oil handling facilities operators are required to maintain state-approved oil spill contingency plans to ensure they can rapidly and effectively respond to major oil spills. State planning standards ensure equipment and response personnel are strategically staged throughout the state. This work is 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, and 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 damages from spills are minimized.

- Compliance with the industry sponsored Neah Bay response tug is documented in approved vessel contingency plans.
- Two 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.

Performance Measure

- Percent of industry-owned and privately-owned response equipment inspected, deployed, and/or verified.

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.
- Dispatching the Neah Bay rescue 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, the Neah Bay emergency response vessel, 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 (1) boarding and inspecting targeted high-priority vessels and facility operations; and (2) 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 spills to surface water 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 each 100 million gallons of oil transferred.
- Percent of regulated marine oil transfer operations inspected.

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 five 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.
- Approximately 3,800 annual spill reports are managed.

Performance Measure

- Percent of reported incidents that receive field responses by Spills staff.

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.

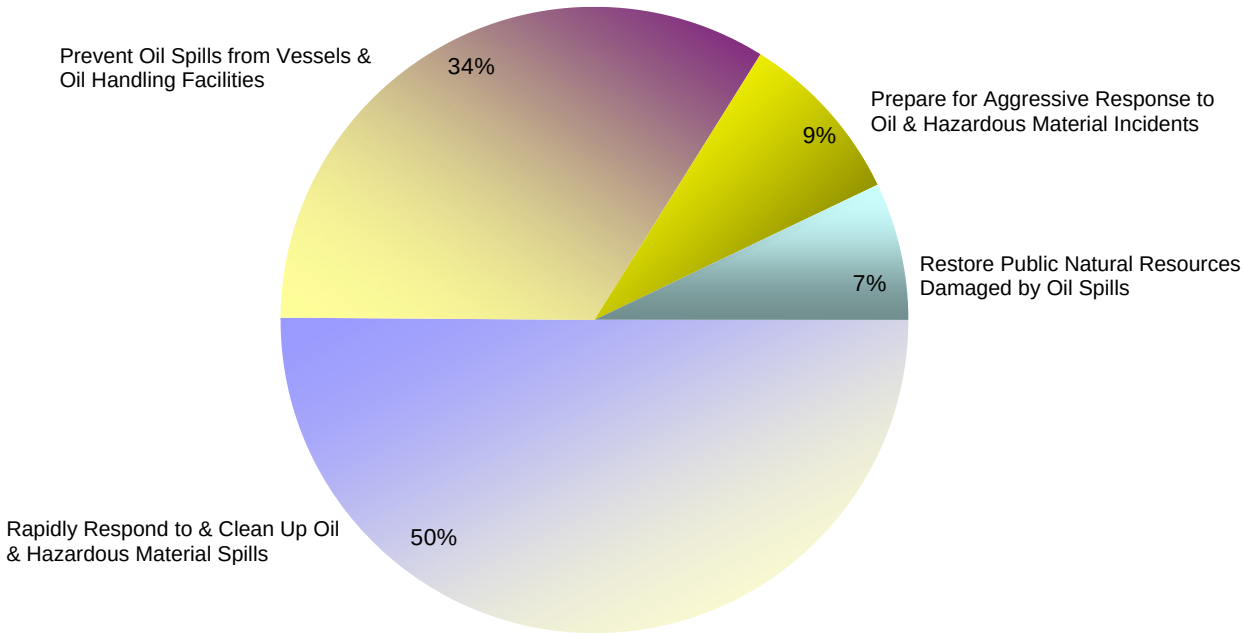
- Natural Resource Damage Assessment is done on 100 percent of oil spills where 25 or more gallons reach surface waters.
- Priority wildlife habitat is restored and protected using Natural Resource Damage funds.

Performance Measure

- Percent of completed restoration projects that meet plan specifications.

Spill Prevention, Preparedness & Response Program 2009-11 Biennium Budget By Activities

Operating Budget = $29.5 Million; FTEs = 70.2

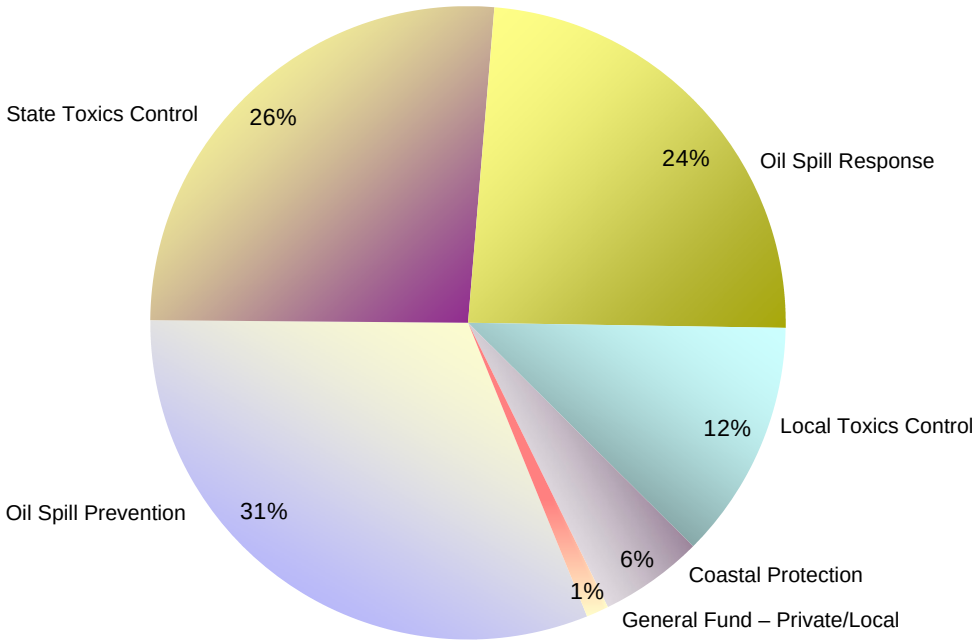


Activities	Dollars	FTEs
Rapidly Respond to & Clean Up Oil & Hazardous Material Spills	$14,776,684	32.7
Prevent Oil Spills from Vessels & Oil Handling Facilities	9,952,270	23.5
Prepare for Aggressive Response to Oil & Hazardous Material Incidents	2,658,026	11.8
Restore Public Natural Resources Damaged by Oil Spills	2,095,170	2.2
Spill Prevention, Preparedness & Response Operating Budget Total	**$29,482,150**	**70.2**

Spill Prevention, Preparedness & Response Program 2009-11 Biennium Budget By Fund Source

Operating Budget = $29.5 Million **No Capital Budget**

FTEs = 70.2



Operating Fund Sources	Amount	Uses
Oil Spill Prevention	$9,211,596	Oil spill prevention, preparedness, & response work.
State Toxics Control	7,721,906	Hazardous material & oil spill response work including drug lab clean up.
Oil Spill Response	7,054,778	Oil spill cleanup where state response costs are expected to exceed $50,000.
Local Toxics Control	3,600,000	One-time funding for the Neah Bay standby rescue tug for FY 2010.
Coastal Protection	1,556,000	Restoration of natural resources damaged by oil spills & non-personnel related oil projects, research, & studies.
General Fund – Private/Local	337,870	British Columbia & Pacific States oil spill task force.
Operating Budget Total	**$29,482,150**	
Spill Prev., Prep. & Resp. Operating & Capital Budget Total	**$29,482,150**	

Dredging in the Duwamish River with the West Seattle Bridge in the background.

Program Mission

The mission of the Toxics Cleanup Program is to remove and keep contaminants out of the environment.

Environmental Threats

Ecology has identified nearly 11,300 toxics-contaminated sites since the mid-1980s. Over 5,500 of these sites resulted from underground storage tanks leaking contents into the environment and contaminating the soil or groundwater. Of the 11,270 contaminated sites, 56 percent have been reported cleaned up or require no further cleanup action and 26 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.*
- *Owners of contaminated sites.*
- *Water purveyors.*
- *Citizens interested in, living near, or affected by contaminated sites.*
- *Tank owners and operators.*
- *Homes and businesses affected by leaking underground storage tanks.*
- *Underground storage tank service providers.*

Issues

Puget Sound Cleanups

We have focused efforts on ranking and prioritizing Puget Sound sites waiting to be cleaned up, taken on-the-ground actions to speed cleanups, and are bringing stronger restoration plans into cleanup efforts. The Toxics Cleanup Program defines Puget Sound sites as those sites within one-half mile of the Sound.

Ecology is using a combination of strategies to rank and prioritize, including a focus on "aquatic pairs." These are contaminated sites on or in the Sound that are at risk of recontamination from an upland source. These pairs have been prioritized and evaluated for risk.

We are coordinating with the Water Quality Program on upland source control, and with the Department of Natural Resources on contaminated aquatic site cleanup and source control to restore natural resources, including geoducks and other shellfish, and habitat. We are working with the Puget Sound Partnership to integrate our priority measures into their Action Agenda. We are also looking at our priority structure for publicly-funded cleanups in the Puget Sound area to ensure funding goes to those activities that support the Action Agenda.

Managing Capital

The challenge for the Toxics Cleanup Program this biennium is maintaining site cleanup momentum. The funding for local government cleanup grants has dropped significantly—to nearly one-third of the 2007-09 biennium level. In the same way, funding for orphaned, abandoned, Puget Sound, and area-wide contaminated sites has also dropped significantly.

The overall reduction to the capital budget has limited the capacity of the program to take on additional cleanup work. We are closely managing capital funding re-appropriations to maximize the use of all fund sources to ensure cleanups already begun last biennium can continue into the next biennium.

Voluntary Cleanup Program Use Continues to Grow

The Voluntary Cleanup Program helps site owners voluntarily clean up their contaminated sites. Even though the economy has slowed, the number of voluntary cleanups continues to hold steady. This program provides property owners an opportunity to engage with Ecology in cleaning up their contaminated site. Completing cleanup of contaminated sites not only provides protection for human health and the environment, it also makes it easier for property owners during property transactions.

Real estate disclosure laws have contributed to the increase in property owners that want to participate in voluntarily cleaning up their site. The interest in the Voluntary Cleanup Program continues to create a workload challenge for the Toxics Cleanup Program. We have stepped up by actively working to adapt to the continued and growing number of sites shifting to voluntary cleanups.

Overall, voluntary cleanups are being reported and cleaned up at a significantly faster rate than non-voluntary sites. Voluntary cleanups are generally less complex sites, and can involve multiple properties.

Rule Revisions are Underway

Every five years, we review the MTCA cleanup rule to make sure cleanup standards stay current with changes in science. We also use this opportunity to review the entire rule. We are well into the process of stakeholder engagement and dialogue. This feedback will be useful as we look at state priorities and agency resources, and work on the rule. The time frame for updating the rule will depend to some extent on the comments we receive. Typically, the rule revision process takes 18 months to two years. We are eight months into the formal rule revision process.

In addition to updating the MTCA rule, we are also making broad revisions to the Underground Storage Tank rule, and providing more harmonization between the MTCA rule and the Sediment Management Standards. In the near future, we intend to look at the Remedial Action Grant rule for some limited revisions.

Implementing the Asarco Bankruptcy Settlement

Large areas of western Washington are contaminated with low-to-moderate levels of arsenic and lead from the Asarco smelters in the Everett and Tacoma areas. The state of Washington has cleanups at three Asarco-owned sites—the two smelters and the B&L Woodwaste site. Contamination from the smelters has also included homes in the smelter area. The state is paying for cleanups at these homes and for some of the cleanup costs at these three sites. Asarco has also paid for some site cleanup costs.

Asarco filed for Chapter 11 bankruptcy, the largest environmental bankruptcy ever filed in the U.S. Washington has been able to reach settlements for some cleanup costs and for some natural resource damage costs.

In this next biennium, the Toxics Cleanup Program will continue working with daycares and schools in western Washington. If the Asarco settlement is released to the State, Ecology is proposing cleanup work associated with the operations of the Asarco smelters in Tacoma and Everett, along with mining operations in northwest and eastern Washington.

In the Tacoma Smelter Plume area, we are identifying the next "high" zone (100 ppm arsenic) and developing a sampling sequence for daycares and schools, homes, parks, and camps. Broad education campaigns will continue for soil safety measures, as well as specific soil safety action plans for individual schools and daycares.

In the Everett area, sampling and cleanups will continue in the residential areas. Sampling will begin and be completed in the next biennium in the mining areas.

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 the state of Washington, and spans a length of approximately 133 miles. Metals such as zinc, cadmium, lead, copper, and mercury are present in the Upper Columbia River and Lake Roosevelt sediments and beaches at elevated concentrations. Studies also show metals such as mercury and arsenic at elevated levels in fish. 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 them to comply. In 2006, EPA and Teck Cominco entered into a settlement contract in which Teck Cominco agreed to complete a remedial investigation and feasibility study. Ecology and 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 liability at the Upper Columbia River site. The trial is set for October 2010. Teck smelter-generated hazardous substances continue to be present and transported, 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.

Also, in 2010, an interim action will be taken to remove slag from a beach area on the Upper Columbia River known as Black Sand Beach. The slag is an industrial byproduct from a metals smelting facility operated by Teck Metals Ltd. (formerly Teck Cominco) in Trail, British Columbia. Approximately 5,000 cubic yards of slag will be removed and transported for recycling and reuse to Teck's Trail smelter facility. Teck has agreed to remove and recycle the slag to avoid continued erosion and movement of the material into the river. The investigation to determine the extent and location of contamination will continue throughout the Upper Columbia River region.

Activities, Results & Performance Measures

Clean Up the Most Contaminated Sites First (Upland and Aquatic)

Ecology protects public health and natural resources by cleaning up and managing contaminated upland sites and contaminated sediments in the aquatic environment. Resources are first focused on cleaning up contaminated sites that pose the greatest risk to public health and the environment. These include sites where contamination threatens drinking water, exists in a large quantity, is very toxic, may affect a waterbody or the environmental health of sediments, or may affect people that are living, working, or recreating near the site. Contamination may be in the soil, sediments, underground water, air, drinking water, or surface water. Ecology also manages multi-agency upland

and sediment cleanup projects. Cleaning up these sites protects public health, safeguards the environment, and promotes local economic development by making land available for new industries and other beneficial uses.

Expected Results
The number of highly contaminated sites cleaned up increases by three percent each year.
- Public and environmental health is protected.
- 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.
- Number of Puget Sound contaminated sites where cleanup has begun (cumulative).
- Percent of the Tacoma Smelter Plume service area schools with completed soil safety plans and/or cleaned up.
- Percent of childcare facilities in the Tacoma Smelter Plume service area requiring action that have soil safety plans completed.
- Percent of eastern Washington schools cleaned up.
- Estimated sediment acreage evaluated with cleanup actions in process.
- Estimated sediment acreage evaluated with cleanup actions completed.
- Estimated sediment acreage evaluated for interim/emergency actions completed.

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

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

Performance Measure
- Average number of underground storage tank inspections completed per inspector.

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 the agency; independent with some agency assistance or review; or with agency oversight under a signed legal agreement (an agreed order or consent decree). They may be done through consultations, prepayment agreements, prospective purchaser agreements, and brownfields redevelopment. The Voluntary Cleanup Program minimizes the need for public funding used for such cleanup and promotes local economic development through new industries and other beneficial uses of cleaned properties.

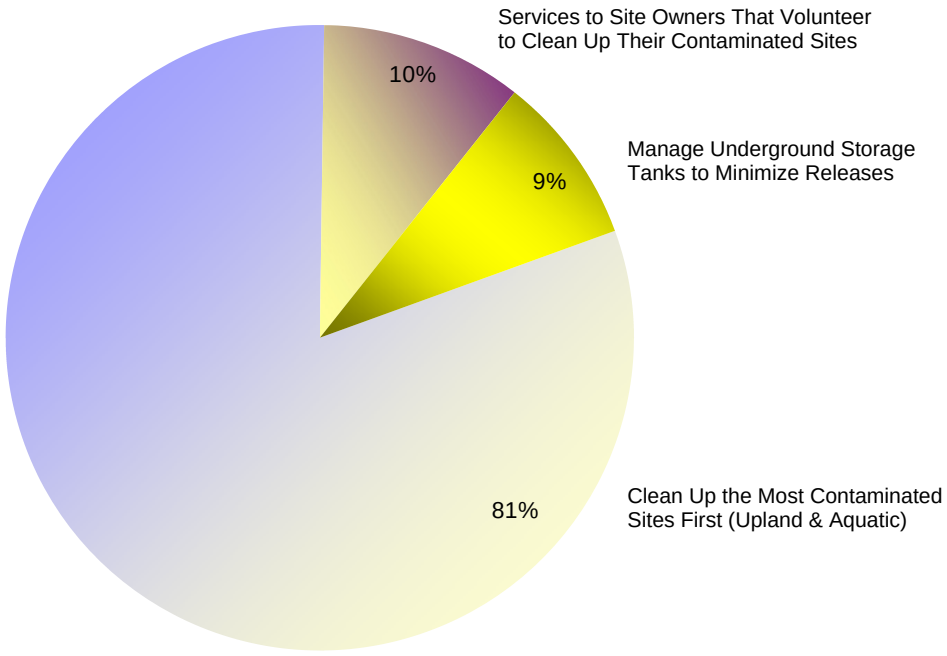
Expected Results
Three percent increase in the number of contaminated sites that are voluntarily cleaned up by site owners and prospective buyers using private funding.
- Public and environmental health is protected.
- Cleaned sites are ready for redevelopment and job creation.
- Increased number of sites with cleanup actions in progress.
- Decreased response time from the agency 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 the Voluntary Cleanup Program applicants who receive an assessment of their plan or report within 90 days.
- Average number of days to provide an assessment of a plan or report received from a Voluntary Cleanup Program applicant.

Toxics Cleanup Program 2009-11 Biennium Budget
By Activities

Operating Budget = $50.7 Million; FTEs = 170.0



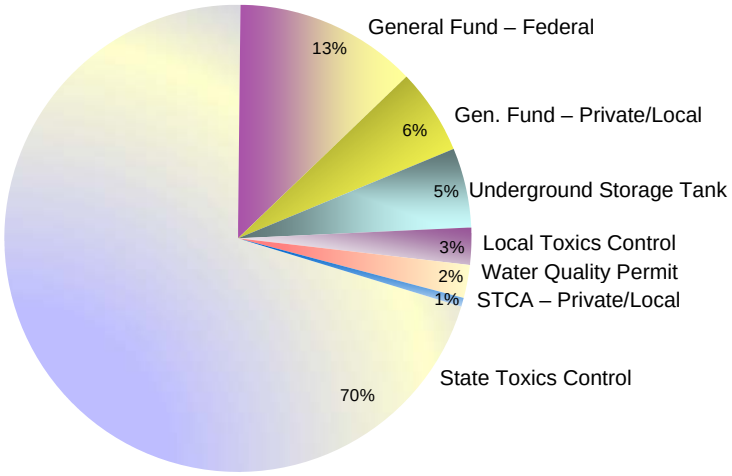
Activities	Dollars	FTEs
Clean Up the Most Contaminated Sites First (Upland & Aquatic)	$40,958,324	124.0
Services to Site Owners that Volunteer to Clean Up Their Contaminated Sites	5,287,500	23.5
Manage Underground Storage Tanks to Minimize Releases	4,461,005	22.5
Toxics Cleanup Operating Budget Total	**$50,706,829**	**170.0**

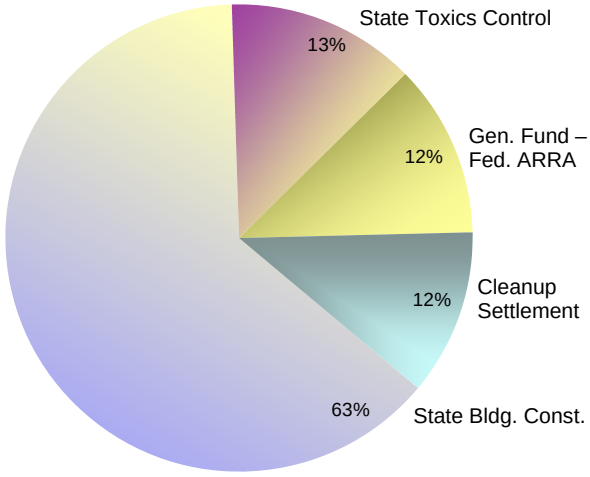
Toxics Cleanup Program 2009-11 Biennium Budget By Fund Source

Operating Budget = $50.7 Million

FTEs = 170.0

Capital Budget = $23.3 Million





Operating Fund Sources	Amount	Uses
State Toxics Control	35,727,326	Clean up toxic sites, investigate and rank new toxic sites, prepayment cleanup, defense site cleanup, technical assistance, site information management, Community Right-to-Know public information compilation and dissemination, and natural resource damage assessment.
General Fund – Federal	6,413,380	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.
General Fund – Private/Local	3,000,000	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	2,793,547	Pollution prevention, inspection, and permitting activities related to underground storage tanks.
Local Toxics Control	1,300,520	Technical assistance, oversight, and administration of the Local Toxics Control Account Remedial Action Grant Program.
Water Quality Permit	1,161,367	Sediment source control.
State Toxics Control – Private/Local	310,689	Activities related to the cleanup of leaking underground storage tanks.
Operating Budget Total	**$50,706,829**	
Capital Fund Sources		
State Building Construction	14,778,842	Investigate and clean up toxic sites. This consists of new appropriations and re-appropriations for the following initiatives: Swift Creek Natural Asbestos Cleanup, Upper Columbia River Black Sand Beach Cleanup, Orphaned and Abandoned Cleanup, Safe Soils Remediation, Skykomish Cleanup, Puget Sound Toxic Cleanups.

State Toxics Control	3,055,916	Investigate and clean up toxic sites. Includes re-appropriations for Puget Sound Aquatic Cleanup and Safe Soils Remediation.
General Fund – Federal ARRA	2,807,437	Federal American Reinvestment and Recovery Act funding for cleaning up leaking underground storage tanks.
Cleanup Settlement	2,684,432	Skykomish Cleanup Project, and Orphaned and Abandoned Cleanup Initiative.
Capital Budget Total	**$23,326,627**	
Toxics Cleanup Operating & Capital Budget Total	**$74,033,456**	

Gary Bleeker (left) and Canming Xiao (right) discuss operations at the Kittitas County Compost Facility with Patti Johnson (center), Kittitas County Solid Waste Director. The facility was built using Coordinated Prevention Grant funds to provide a recycling alternative to burning or landfilling yardwaste.

Program Mission

The mission of the Waste 2 Resources Program is to eliminate wastes and toxics whenever we can and use the remaining wastes as resources. This will contribute to environmental, social, and economic vitality.

Environmental Threats

As Washington's population grows, so does the amount of waste it produces. What people don't recycle, compost, or reuse, they throw away. In the past, some of the largest toxic waste cleanup sites in Washington were former solid waste landfills that failed to contain the hazardous materials people had dumped there. Ecology works to minimize contamination to the state's groundwater, surface water, and air that result from improper waste disposal.

Despite success in recycling, composting, reusing, and reducing wastes, our reliance on raw material use is increasing every year. Growing consumption of earth resources threatens the environment's natural ability to regenerate oxygen, such as the functions provided by forests. In addition, certain materials used in new consumer products have limited availability. Because wasted materials have significant impacts on climate, human health, the environment, and the economy, Ecology is leading the transition to more sustainable systems by implementing our *Beyond Waste Plan*. We are investing in a closed-loop materials management cycle where today's waste becomes tomorrow's "raw material" feedstock.

Reducing the threats caused by historical and ongoing releases of toxic chemicals is the rationale behind many of Ecology's successful regulatory programs. But we are finding that cleaning up or managing these releases is not enough. These approaches are expensive and usually leave some level of contamination behind. New research is increasingly finding that very low levels of some types of toxic chemicals can cause serious harm.

Reducing toxic threats by preventing the releases in the first place is the smartest, cheapest, and healthiest approach. Increasing Ecology's investment in prevention strategies is the focus of our reducing toxic threats priority initiative and is a fundamental principle of the *Beyond Waste Plan*.

This initiative, building on work already being done across the agency, is aimed at fostering the development of prevention approaches to avoid exposures to toxic chemicals and future costs that come when toxic chemicals find their way into the environment. Two focus areas have been identified: preventing use of toxic chemicals in consumer products and preventing toxics from entering Puget Sound.

As we move toward the goals of the *Beyond Waste Plan*, 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 provides technical hydrogeologic and engineering assistance to local health jurisdictions lacking this technical expertise. This assistance includes reviews of landfill cover design and operation issues, like landfill liners, leachate collection systems, and groundwater sampling. This protects ground and surface water and the air.

Ecology staff review all permits issued by the local health jurisdiction. In the future, as there are fewer disposal facilities in operation, we will see an increase in technical assistance provided to local health jurisdictions to ensure proper management of wastes at other facilities, like transfer stations, recycling facilities, moderate risk waste collection facilities, and compost facilities.

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 make sure their activities minimize air, land, and water impacts.

Authorizing Laws

- *RCW 49.70 Worker and Community Right-to-Know Act*
- *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 70.93, 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 90.48, Water Pollution Control Act*
- *RCW 90.52, Pollution Disclosure Act*

Constituents/Interested Parties

- *Federal, state, and local governments.*
- *Environmental organizations.*
- *Businesses.*
- *Citizens.*

Issues

New Program Name – Waste 2 Resources Program

For years, the Solid Waste and Financial Assistance Program name has not accurately reflected the varied work and mission of the program. A new name was needed after the rollout of the *Beyond Waste Plan* and incorporation of the Industrial Section. Waste 2 Resources was chosen because:

- "Waste 2 Resources" implies the program covers everything from managing solid wastes to developing new resources. It includes our financial assistance, technical assistance, and regulatory resources.
- The name reflects our *Beyond Waste* initiative, including Green Building, Organics, and Moderate Risk Waste, which encourages using recycled and reused materials previously viewed as wastes. At the same time, we focus on turning those wastes into resources such as energy conservation, organic nutrients in lieu of fertilizers, and green energy, through new technologies.
- To derive resources from wastes, it is best these waste materials be toxics-free and PBT-free. This reflects the work of our Reducing Toxic Threats Section.
- Unlike the old program name, we believe Waste 2 Resources also reflects work the Industrial Section does through the Footprint Project and numerous mills that take used cardboard, hog fuel, and commingled recyclables.

Moving Beyond Waste

Over the years, Washington's government, businesses, and citizens have put considerable effort into making positive changes in waste management practices. Yet problems remain. We still throw away millions of dollars worth of recyclables every year. Toxic substances remain prevalent in our environment.

Preventing waste and the use of toxic substances is the smartest, cheapest, and healthiest approach to waste management. The state's solid and hazardous waste management plan, *Beyond Waste*, calls for eliminating most wastes and toxic substance in 30 years. Reducing wastes and toxics will lessen environmental and health risks and lead to economic, environmental, and social vitality. The purpose of the plan is to set direction for waste management in Washington State. It also helps address other problems, including mitigating climate change and protecting Washington waters.

A key area of focus for moving beyond waste is producer responsibility and encouraging the design and use of less wasteful and less toxic products and

services. Promoting state and local government's purchase of environmentally preferred products will help increase market demand for less harmful products.

The first five years of the plan saw many achievements. The plan was updated in 2009, and we are now working on the next five years, including many of the issues listed below.

Preventing and Recycling Waste

Key to the *Beyond Waste* vision is waste prevention and diversion from landfill disposal (or recycling). These are essential strategies for reducing greenhouse gas emissions and conserving energy. Products that enter the waste stream have energy impacts and associated greenhouse gas emissions at each stage of the life cycle—extraction, manufacturing, and disposal.

Conserving resources through recycling is key to a sustainable economy and environment. The recycling rate in Washington State is at the highest level ever. At the same time, total waste generation, particularly waste disposal, is also at an all time high. When products and materials are thrown away, they have lost their value within the economy. Most products become waste within six weeks of purchase. Ecology is working to improve recycling and reuse of materials in those products to a higher and better use than disposal.

Decomposing waste in a landfill produces methane, a greenhouse gas more potent than carbon dioxide. Waste prevention and recycling reduce the amount of waste sent to landfills, lowering the greenhouse gases emitted during decomposition. Also, when transporting waste to a landfill, greenhouse gases are emitted through the combustion of fossil fuels. Implementing actions of the *Beyond Waste Plan* will help reduce those greenhouse gases impacting climate change. *Beyond Waste* is now part of the state climate change implementation strategy.

As part of the waste prevention and reduction strategy, the *Beyond Waste Plan's* organic initiative reduces impacts on climate change through carbon storage and reduced methane emissions. Carbon storage increases when woody materials are recycled into new products rather than burned. Composting is an effective method of adding organic materials to soil, which increases carbon storage in the ground. In this way, compost becomes a beneficial product for soil improvement. Rather than landfilling organics, where they decay without oxygen and release methane (a powerful greenhouse gas), it is better to turn organic materials into useful products like compost, mulch, or biofuels.

Anaerobic digestion is also a proven technology that meets the goal of closed-loop recycling and reuse of organic materials. Anaerobic digestion converts organic matter to biogas in the absence of oxygen, with nutrient rich fiber and liquid as by-products.

Another key area for waste prevention and recycling is the *Beyond Waste Plan*'s green building initiative. The long-term goal of the green building initiative is for sustainable building to become standard building practice in Washington. Green buildings create healthier and more durable commercial buildings and homes, which saves significant amounts of energy and water, uses less toxic products, encourages salvage and reuse of building materials, and dramatically reduces construction and demolition waste.

Green buildings are more energy-efficient than conventional buildings, which helps mitigate climate change. According to the U.S. Green Building Council, buildings account for 72 percent of electricity use and 39 percent of energy use, and are responsible for 38 percent of carbon dioxide emissions in the U.S. each year.

Through these varied efforts of *Beyond Waste*, Washington's measured diversion efforts for 2007 reduced greenhouse gas emissions by about three million tons or over 1,000 pounds per person in Washington State. This is similar to removing 2.5 million passenger cars from the roadway each year—over half of the passenger cars in Washington.

The 7.3 million tons of material diverted from disposal in Washington in 2007 saved over 133 trillion BTUs of energy. This is equal to about half of all energy used in homes in the state annually or one million gallons of gasoline.

Reducing Toxic Threats

Persistent bioaccumulative toxics (PBTs) are toxic chemicals that build up in the food chain and last a long time. Because so many PBTs exist in the

environment and products, a significant amount of waste management and cleanup work is still necessary.

To avoid management costs in the future, we will need to increasingly invest in strategies that can successfully prevent these problems from occurring in the first place. Ecology completed a PBT rule in January 2007 that lays out a path to reduce health impacts of PBTs on our citizens. Ecology is working with other states and local governments to implement programs that can effectively reduce threats posed by PBTs in products and the environment.

With resources at a premium, it will be increasingly important to keep expenses low and to build on positive results achieved by others. Ecology is working with several other states to develop ways to share data, influence federal policy reform, and establish a more standardized approach to identifying safer alternatives for toxic chemicals still being used.

In the face of these challenges, our efforts to reduce toxic threats focus on five key policy areas:

- Protecting the most vulnerable human and environmental populations, especially children.
- Expanding producer responsibility to improve product safety.
- Strengthening our ability to gather data on the presence of chemicals in products and the environment.
- Continuing to implement the PBT strategy.
- Expanding incentives and regulations to spur development of safer alternatives to toxic chemicals and reduce their use.

Funding Local Solid Waste Management Programs

Along with the state, local governments are experiencing budget restrictions and staffing reductions in all aspects of their programs, including solid waste management. This is making it difficult to continue some existing programs and especially difficult to take on new programs, many of which would help move the state forward to the *Beyond Waste* goals.

The *Beyond Waste Plan* focuses on preventing generation of solid and hazardous wastes. Local governments are currently dependent on tip fees tied to the amount of disposed waste (the more waste, the more money) to fund many of their solid waste programs. Funding is used for everything from infrastructure development to waste reduction and recycling programs.

We need to find alternate funding mechanisms to fund the solid waste system, including prevention programs that will help move local programs beyond waste. Ecology, along with the State Solid Waste Advisory Committee, is evaluating options for solid waste management financing for both current and future needs.

Ecology currently provides state grant funds through the Coordinated Prevention Grant (CPG) Program to help local governments manage a broad range of solid waste management programs. Funds for the 2009-11 biennium were reduced from what is normally used by the local governments for their programs. Funds were also moved from the Local Toxics Account to the State Building Construction Account, requiring the sale of bonds. This requires closer tracking of funds spent on a quarterly basis. Detailed spending plans are now required from the recipients, resulting in additional work for them, as well as Ecology. Additional administrative work takes staff time away from actual project implementation.

Because of the uncertainty of funding for the full two-year grant cycle, which continues into the 2011-13 biennium, local governments are concerned about the possible loss of funding and may not pursue some of their programs. With reduced resources at the local level, some counties are having difficulty obtaining funds for their required 25 percent match and cannot pursue the grant funding needed for their programs.

Preventing and Cleaning Up Litter

Litter Prevention campaigns in the past have resulted in people throwing out less litter. However, over six million pounds of litter are still picked up each year in Washington by Ecology's Youth Corps, other state agencies, and local governments through Community Litter Cleanup contracts.

Reduced funding for the 2009-11 biennium has resulted in suspension of the prevention campaign. Reduced funds will also mean fewer crews on the roads and fewer miles covered for litter pickup. Expected results will be dirtier and potentially more dangerous roads.

Activities, Results & Performance Measures

Eliminate Waste and Promote Material Reuse

Solid waste prevention and reusing materials that would otherwise be sent to landfills are important to protecting the environment and human health. Ecology's goal through its *Beyond Waste Plan* is to eliminate wastes whenever we can and use the remaining wastes as resources. This will contribute to economic, social, and environmental vitality.

Ecology will focus its efforts on green building, including reusing construction and demolition debris, assisting local recycling programs, reusing organic materials, and promoting environmentally preferred purchasing. Waste reduction and material reuse conserves resources and saves money in both the public and private sector.

Expected Results

Waste will be eliminated and the remaining waste will be used as resources whenever possible.

- Technical assistance is provided to local governments that operate recycling programs.
- Barriers to construction material reuse are identified.
- Regulations are developed to promote reuse of organic materials.
- State and local governments are provided advice on how to promote environmentally preferred purchasing.

Performance Measures

- Millions of tons of solid waste generated annually in Washington.
- Millions of tons of materials reused or recycled annually.
- Percent market share of green building projects in Washington.
- Tons of organics recycled and diverted from landfills.
- Tons of electronics with toxic chemicals collected for recycling.
- Pounds of solid waste generated per dollar (State GDP, gross domestic product).
- Dollar value of recyclables disposed.

Manage Solid Waste Safely

Solid waste prevention and recycling and reusing wastes that can't be prevented are Ecology goals. But, we know that eliminating solid waste entirely is not realistic. In addition, the need remains for disposal facilities for cleanup-type wastes, such as asbestos, petroleum contaminated soils, and other contaminated materials.

Solid waste facilities are managed by local health jurisdictions. Ecology provides technical assistance and oversight to local health departments to ensure solid waste handling and disposal facilities are in compliance with environmental requirements. Proper solid waste handling and disposal practices will minimize toxics contamination to the state's groundwater, surface water, and air.

Expected Results

Disposed solid waste will be managed in environmentally compliant facilities.

- Decreased amount of wastes disposed of at waste disposal facilities.
- Technical assistance is provided to jurisdictional health departments to ensure facility compliance with environmental regulations.

Performance Measures

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

Prevent and Pick Up Litter

Litter control efforts include a litter prevention campaign, Ecology Youth Corps litter pick-up crews, Community Litter Cleanup contracts, and coordination with other state and local efforts to maximize litter pick-up. Litter prevention and pick-up helps keep Washington green, supports tourism, and provides employment opportunities to youth.

Expected Results

Litter prevention and pick-up results in cleaner roads and employs youth.

- 4,750 tons of litter is picked up with local partners.
- 450 youth are employed in litter pick-up.

- 25,000 litter hotline calls are responded to.
- Litter citations by the State Patrol are decreased by five percent.
- Litter survey is suspended.
- $2.6 million in grants is provided to local governments to clean up litter and illegal dumps.
- Litter is picked up on over 55,000 miles of roads.

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 three capital grant programs. Coordinated Prevention Grants support local government activities related to landfill regulation to protect groundwater; recycling and reuse programs; hazardous substance use reduction; and moderate risk waste collection (hazardous waste generated from households and small businesses). New initiatives focus on reuse of organic materials, reducing building construction waste, and reducing toxicity in products.

Remedial Action Grants provide funding to local governments to clean up property contaminated by hazardous substances, which protects human health and environmental resources, such as groundwater. Restored properties can then be redeveloped.

Public Participation Grants provide funding for interest groups to inform citizens of local cleanups and for waste reduction efforts.

Expected Results

Over 139 million dollars in capital funding grants to local governments and non-profits is provided and managed through Coordination Prevention Grants, Remedial Action Grants, and Public Participation Grants, leveraging over 60 million dollars in local government resources.

- Technical assistance on landfill regulations and moderate risk waste is provided through more than 500 agreements with local governments and non-profits.
- Over 30 million pounds of moderate risk waste is collected each biennium for proper recycling or disposal at moderate risk waste collection facilities funded through Coordinated Prevention Grants.
- Grant funds provided to local jurisdictional health departments are managed to ensure that approximately 700 solid waste facilities statewide comply with regulatory standards.
- Funding for toxic sites and drinking water system cleanup is provided and managed.
- Citizens have access and information related to cleanup of contaminated sites.

Performance Measures

- Millions of pounds of household and small quantity generator hazardous wastes that are recycled or properly disposed.
- Millions of tons of solid waste generated annually in Washington.
- Millions of tons of materials reused or recycled annually.
- Tons of organics recycled and diverted from landfills.
- Pounds of solid waste generated per dollar (State GDP, gross domestic product).
- Dollar value of recyclables disposed.

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 have an improved compliance rate with environmental standards through one-stop environmental permitting, compliance, and technical assistance.

- Assurance that at least 90 percent of permits are up to date at all times.
- Plant permits comply with federal standards to drive emissions down over time.

Performance Measure

- Percent of industrial section permits that meet timeliness goals.

Reduce Persistent Bioaccumulative Toxics in the Environment

Persistent, bio-accumulative toxics (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 will coordinate agency-wide efforts, engage other key organizations and interest groups, and provide for public education and information on reducing PBTs in the environment.

Expected Results

Public health and environmental impacts associated with PBTs and other toxic substances are minimized. Strategies are developed and implemented to reduce and eliminate these harmful chemicals.

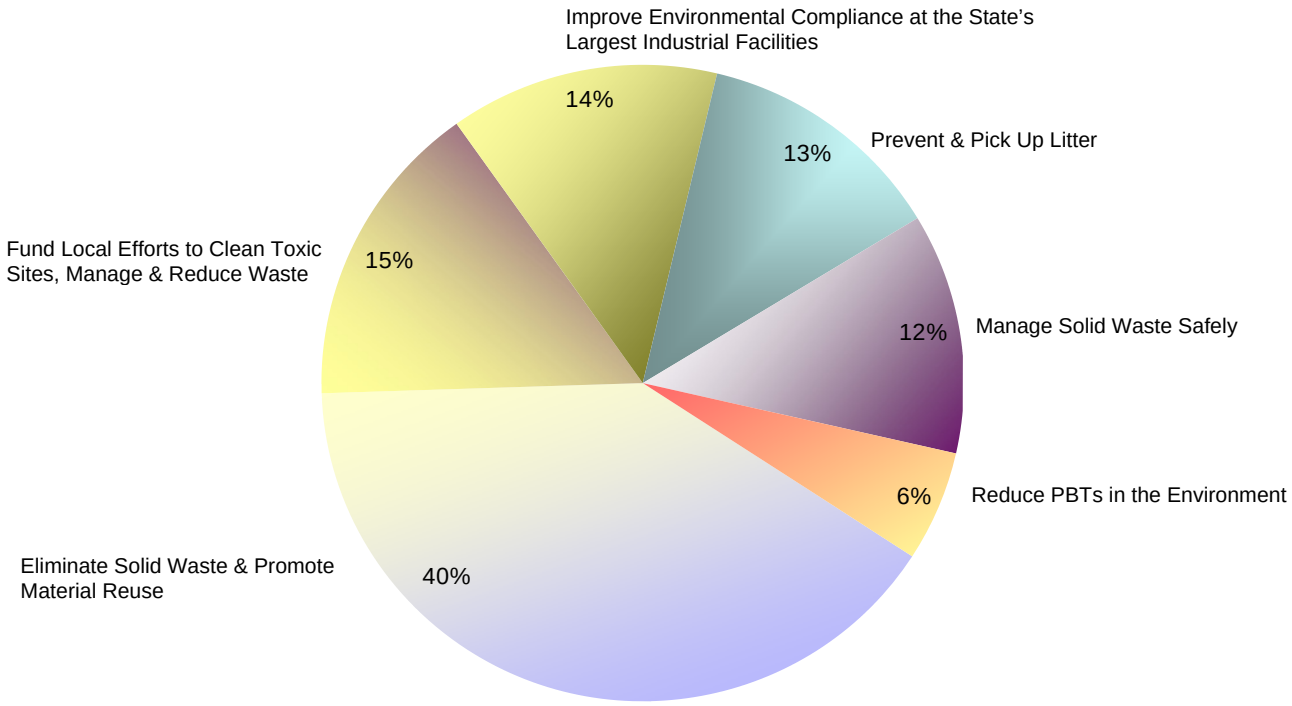
- Implement the lead Chemical Action Plan (CAP).
- Data collection for a chemical action plan for poly-aromatic hydrocarbons.
- Collect 36 million pounds of covered electronics through the E-Cycle program.
- Complete rule, develop a list of chemicals of high concern for children's products, and develop a reporting mechanism for manufactures.
- Reduced generation and use of toxic materials by citizens and industries by focusing on moderate risk waste (hazardous waste generated from households and small businesses).

Performance Measures

- Pounds of mercury collected and/or captured.
- Tons of electronics with toxic chemicals collected for recycling.
- Millions of pounds of household and small quantity generator hazardous wastes recycled or properly disposed.
- Number of children tested for lead in blood.
- Percent of tested children with elevated lead blood levels.
- Percent market share of green building projects in Washington State.

Waste 2 Resources Program 2009-11 Biennium Budget By Activities

Operating Budget = $29.6 Million; FTEs = 98.1



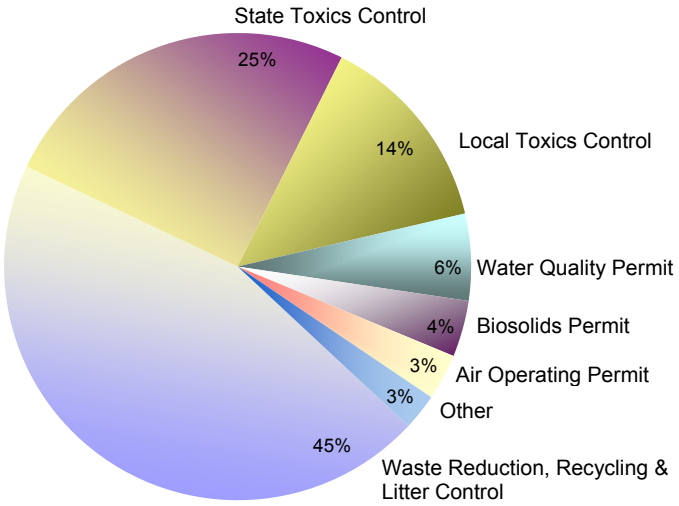
Activities	Dollars	FTEs
Eliminate Solid Waste & Promote Material Reuse	$11,922,587	31.6
Fund Local Efforts to Clean Toxic Sites, Manage & Reduce Waste	4,633,328	16.6
Improve Environmental Compliance at the State's Largest Industrial Facilities	4,010,451	15.9
Prevent & Pick Up Litter	3,728,480	7.4
Manage Solid Waste Safely	3,613,199	18.8
Reduce Persistent Bioaccumulative Toxins (PBTs) in the Environment	1,661,092	7.8
Waste 2 Resources Operating Budget Total	**$29,569,137**	**98.1**

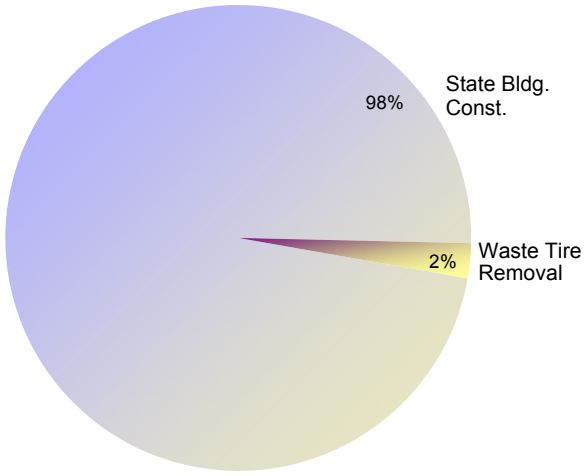
Waste 2 Resources Program 2009-11 Biennium Budget By Fund Source

Operating Budget = $29.6 Million

FTEs = 98.1

Capital Budget = $141.4 Million





Other = Electronic Products Recycling (1.27%), General Fund – State (0.70%), General Fund – Federal (0.40%), and General Fund – Private/Local (0.17%).

Operating Fund Sources	Amount	Uses
Waste Reduction, Recycling & Litter Control	13,323,886	Supports the Ecology Youth Corps & other efforts to clean up litter, litter prevention campaign, & litter survey (50%); recycle hotline, technical assistance in waste reduction, pollution prevention initiatives, & recycling (30%); litter grants to local governments (20%).
State Toxics Control	7,471,747	Provide technical assistance to local health departments, pollution prevention initiatives, regulatory reform, industrial dangerous waste & cleanup activities; public participation grants.
Local Toxics Control	4,149,264	Technical assistance & grants are provided to local governments for local solid waste planning & oversight of solid waste facilities; public participation grants.
Water Quality Permit	1,767,269	Industrial water quality permitting, inspections, & sediment source control.
Biosolids Permit	1,160,908	Administer permit applications, review related plans & documents, monitor, evaluate, conduct inspections, oversee performance of delegated program elements, provide technical assistance, & support overhead expenses that are directly related to these activities.
Air Operating Permit	945,558	Industrial air quality permitting, inspections, & enforcement.
Electronic Products Recycling	376,127	Administer manufacturer registration fee collections, as well as monitor, evaluate, & implement the regulations adopted for the EPR program in rule.
General Fund – State	206,392	Water quality permit enforcement actions & industrial new source review.
General Fund – Federal	117,986	Footprint project.

General Fund – Private/Local	50,000	Energy Facility Site Evaluation Council (EFSEC) activities & additional appropriation authority for potential projects with local communities.
Operating Budget Total	**$29,569,137**	
Capital Fund Sources		
State Building Construction*	137,952,572	New appropriations & capital re-appropriations funding grants to local governments for contaminated site cleanups & waste prevention.
Waste Tire Pile Removal	3,422,750	Statewide waste tire pile cleanup & prevention.
Capital Budget Total	**$141,375,322**	
Waste 2 Resources Operating & Capital Budget Total	**$170,944,459**	

**Note: The Waste 2 Resources Program (W2R) administers the local toxics control account (LTCA) and had approximately $100 million in capital appropriations for 2007-09. In the 2009-11 enacted budget, all capital re-appropriations and proposed new appropriations normally administered by the W2R Program from the LTCA were switched to the state building construction account.*

Ecology employee Sinang Lee educates the public on how to protect Washington's waters at a Woodland Park Zoo event.

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, chief among them being 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. In addition, the large impervious surfaces in urban areas increase the quantity of peak flows of 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 Project (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 & special interest groups.*
- *Local governments, cities, counties.*
- *Businesses & industries.*
- *Environmental organizations.*
- *State & federal governments/agencies.*
- *Tribes & 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 marine waters and update the list of polluted marine waterbodies.
- Work with communities to clean up nonpoint source pollution.
- Determine if and where human-related nitrogen sources need to be reduced to protect dissolved oxygen levels in south Puget Sound.

Nonpoint Source Water Pollution

Nonpoint pollution is Washington's most serious pollution problem, and the most difficult one to solve. This is because it comes from diffused sources, is generated by every kind of land use, and has no specific regulatory tool—like a permit—designed 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:

- Develop a manual of best management practices that are known to keep water clean.
- 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 distribute more than 200 million dollars in water quality grants and loans this biennium to protect public health and the environment. Ecology will:

- Provide financial assistance quickly to 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.
- Effectively manage the 65.4 million dollars received by the state from the Federal American Reinvestment and Recovery Act of 2009 (for water pollution control projects) to the highest priority projects that were ready to proceed to construction.

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. 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 U.S. EPA.
- Number of polluted waters where Ecology is directly involved in implementing cleanup projects (annual measure).

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.

- 3,000 construction and industrial stormwater dischargers that require permits are managed.
- New permit applicants get a response within 60 days of application receipt.
- 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

- Mean 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.
- Percent of industrial stormwater facilities submitting discharge monitoring reports as required by permit.
- Number of construction stormwater inspections per year.
- Percent of construction stormwater facilities submitting discharge monitoring reports as required by permit.

Prevent Point Source Water Pollution

Ecology protects Washington's water by regulating point source discharges of pollutants to surface and ground waters. This is done with a wastewater permit program for sewage treatment plants and an industrial discharge program for other industries.

A permit is a rigorous set of limits, monitoring requirements, or management practices, usually specific to a discharge, designed to ensure a facility can meet treatment standards and water quality limits. The permit is followed by regular inspections and site visits. Technical assistance and follow-up on permit violations also are provided through various means.

Expected Results

Fewer wastewater discharges and lower toxicity through administering the permit program for 2,000 permit holders.

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

Performance Measure

- Percent of active water quality discharge permits (national pollutant discharge elimination system permits) that are up to date.

Provide Water Quality Financial Assistance

Ecology provides grants, low-interest loans, and technical assistance to local governments, state agencies, and tribes to enable them to build, upgrade, repair, or replace facilities to improve and protect water quality. This includes meeting the state's obligation to manage the Water Pollution Control Revolving fund in perpetuity.

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

Expected Results

Public funds dedicated to improving water quality are managed responsibly to protect public health and the environment.

- Water quality is improved by awarding about 75 million dollars in water quality grants and loans per year to local communities.
- About 60 new grants and loans are awarded each year for projects under existing and ongoing financial assistance programs that demonstrate clear benefits for the environment.
- Additional grants are awarded each year for stormwater projects, based on newly appropriated funds.
- Approximately 350 existing grants and loans are managed each year.
- Local governments get support through implementing revised grant and loan program rules that address updated water quality needs, the State Revolving Fund loan program perpetuity; balanced funding allocations, and design-build alternative contracting options.
- Environmental benefits are documented and illustrated through data generated from grants and loans.

Performance Measure

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

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.

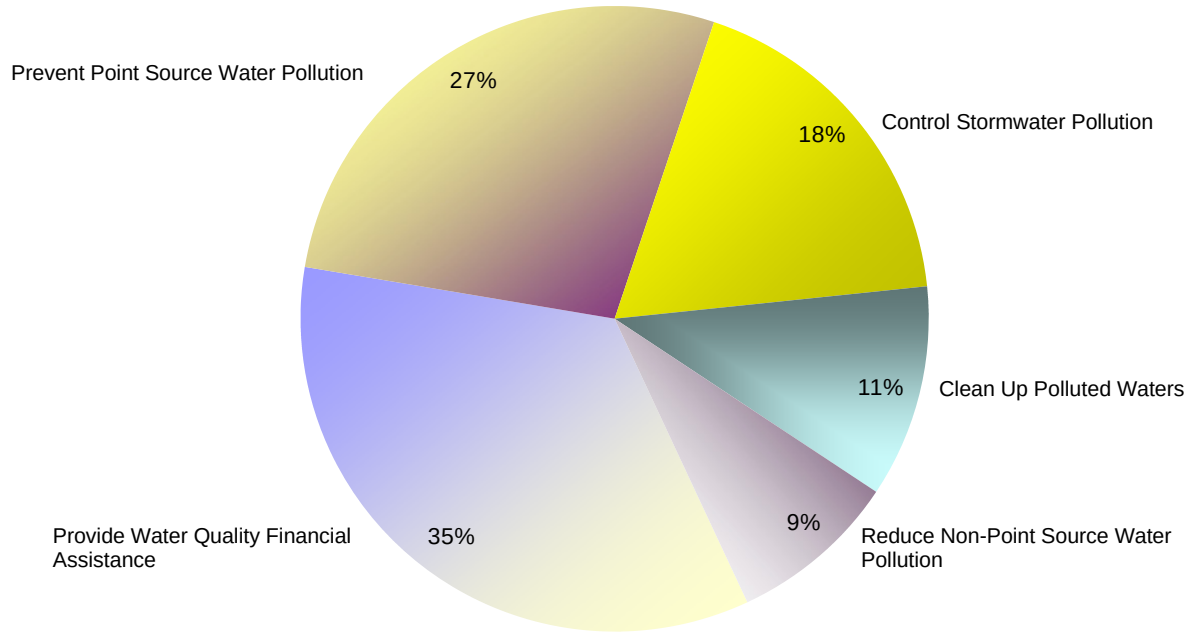
- Local communities and groups get help from Ecology to implement water quality improvement reports and other strategies to clean up polluted waters.
- The Department of Natural Resources and the forestry industry get help to manage 12 million acres of state-owned and privately-owned forests.
- The Department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

Performance Measure

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

Water Quality Program 2009-11 Biennium Budget By Activities

Operating Budget = $70.6 Million; FTEs = 245.4

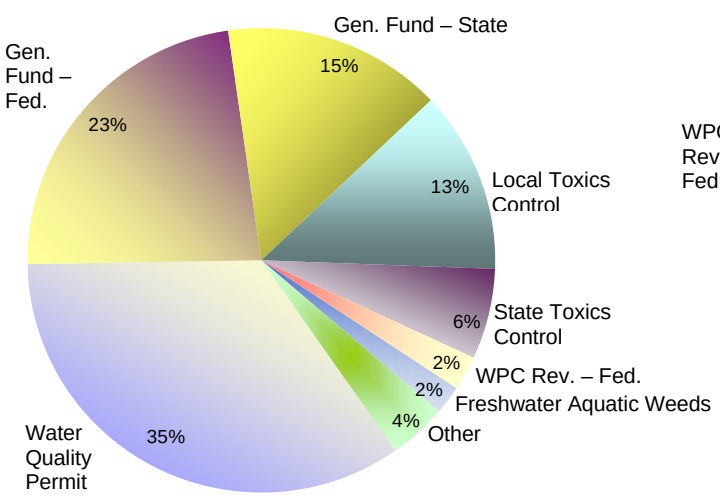


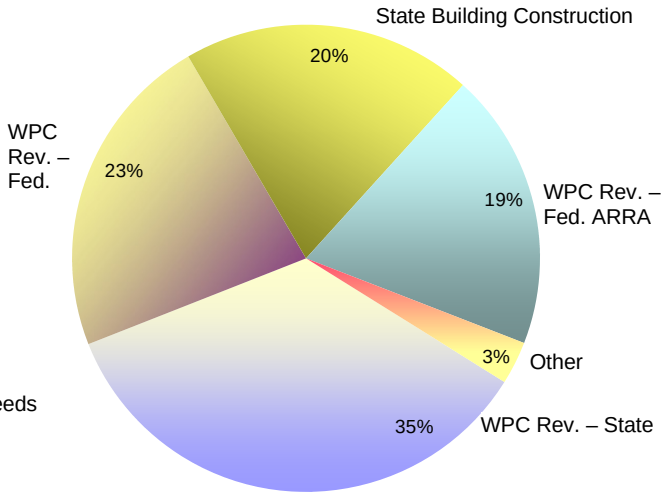
Activities	Dollars	FTEs
Provide Water Quality Financial Assistance	$24,440,753	36.0
Prevent Point Source Water Pollution	19,408,368	93.6
Control Stormwater Pollution	12,868,981	57.4
Clean Up Polluted Waters	7,763,249	36.3
Reduce Non-Point Source Water Pollution	6,162,355	22.1
Water Quality Operating Budget Total	**$70,643,706**	**245.4**

Water Quality Program 2009-11 Biennium Budget
By Fund Source

Operating Budget = $70.6 Million **Capital Budget = $336.7 Million**

FTEs = 245.4





Other = Reclamation (1.41%), General Fund – Private/Local (1.27%), Freshwater Aquatic Algae Control (0.70%), Water Pollution Control Revolving – State (0.56%),and Metals Mining (0.02%).

Other = Water Quality (1.83%), State Toxics Control (0.35%), Waste Disposal Facilities (Referendum 26) (0.21%), and Waste Disposal Facilities (Referendum 39) (0.05%).

Operating Fund Sources	Amount	Uses
Water Quality Permit	24,344,020	Issue & manage federal & state wastewater discharge permits.
General Fund – Federal	16,224,505	Numerous U.S. Environmental Protection Agency grants for point & nonpoint source control; water cleanup plans; management of water quality grants & loans to local governments; & groundwater protection.
General Fund – State	10,739,832	Enforcement of permit requirements; Puget Sound Plan activities such as nonpoint source watershed management; forest practices compliance; water clean-up plans; data management, & aquatic plant management. This funding is also utilized as state match needed to secure federal funding.
Local Toxics Control	8,998,524	Grant & loan management to local governments for municipal stormwater programs, including but not limited to, implementation of Phase II municipal stormwater permits; stormwater source control for toxics in association with contaminated sediment sites & shellfish protection districts where stormwater is a significant contributor.
State Toxics Control	4,451,857	Stormwater management; water quality standards; support to the Lower Columbia River Estuary Management Program; aquatic pesticides management.
Water Pollution Control Revolving – Federal	1,681,102	Administer a loan program for constructing or replacing water pollution control facilities. Activities include portfolio management & technical assistance to local governments for point, nonpoint, & estuary projects.
Freshwater Aquatic Weeds	1,403,476	Grants to local governments to prevent, remove, or manage invasive freshwater aquatic weeds.

Reclamation	993,165	Funding provided to implement SSB 5881, which would increase the hydropower license fees to fully cover the costs of Ecology & the Department of Fish & Wildlife to license, re-license, & monitor the effects of hydroelectric projects on water, fish & wildlife.
General Fund – Private/ Local	897,730	Provide technical expertise to local government water quality projects such as King County's Brightwater Wastewater Treatment Plant & the City of Seatac's Third Runway Project.
Freshwater Aquatic Algae Control	497,359	Grants to local governments to prevent, remove, or manage freshwater aquatic blue-green algae.
Water Pollution Control Revolving – State	398,136	Administer a loan program for constructing or replacing water pollution control facilities. Activities include portfolio management & technical assistance to local governments for point, nonpoint, & estuary projects.
Metals Mining	14,000	Inspections required by Metals Mining Act.
Operating Budget Total	**$70,643,706**	
Capital Fund Sources		
Water Pollution Control Revolving – State	118,677,145	State funds for loans for constructing or replacing water pollution control facilities, nonpoint-source control activities, & estuary management.
Water Pollution Control Revolving – Federal	76,589,584	Federal funds for loans for constructing or replacing water pollution control facilities, nonpoint-source control activities, & estuary management.
State Building Construction	68,062,220	New appropriations & re-appropriations for the Centennial Clean Water Program, Puget Sound Stormwater projects, Non-Puget Sound Stormwater projects, & Reclaimed Water Projects.
Water Pollution Control Revolving – Federal ARRA	65,109,574	Federal stimulus funds for loans for constructing or replacing water pollution control facilities.
Water Quality Capital	6,170,359	Re-appropriation for Centennial Clean Water pollution control facilities, nonpoint-source control, & water quality improvement planning & implementation/activities. Grant to Hood Canal Coordinating Council for on-site septic replacement loan program.
State Toxics Control	1,178,072	Grants for stormwater management implementation outside of Puget Sound. Grants/loans for water pollution control facilities, nonpoint-source control, & water quality improvement planning & implementation/activities.
Waste Disposal Facilities (Referendum 26)	707,337	Stormwater retrofit & low impact development projects.
Waste Disposal Facilities (Referendum 39)	169,866	Stormwater retrofit & low impact development projects.
Capital Budget Total	**$336,664,157**	
Water Quality Operating & Capital Budget Total	**$407,307,863**	

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Noel Philip and Kasey Ignac measure the water level in a well for an aquifer mapping study in Western Whatcom County.

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. However, water availability can no longer be taken for granted. Washington increasingly lacks water where and when it is needed for communities and the environment. Increased demand for water is due mainly to population and economic growth. At the same time, stream flows need to be restored to save fish from extinction.

There is increased awareness of water needs and availability. Many factors have combined to build the awareness:

- Threat of extinction to once abundant fish stocks and federal Endangered Species Act requirements.
- Frequent droughts resulting in dry streams, withered crops, dead fish, wildfire hazards, and reduced hydropower production.
- Record low stream flows and declining aquifer and groundwater levels in some areas of the state.
- Lack of water for further allocation without impairing senior water rights, instream flows, or depleting aquifers in many areas of the state.
- Legal uncertainty related to the validity and extent of water rights and claims, including federal and Indian rights and claims.
- Lack of adopted instream flow levels for many rivers and streams.
- Inadequate information on water availability, stream flows, and groundwater.
- A growing concern over the long-term effects of climate change on the water supply.

Authorizing Laws

- *RCW 18.104, Water Well Construction Act (1971)*
- *RCW 43.83B, Water Supply Facilities (1972)*
- *RCW 43.99E, Water Supply Facilities – 1980 Bond Issue (Referendum 38)*
- *RCW 90.03, Water Code (1917)*
- *RCW 90.14, Water Right Claims Registration and Relinquishment (1967)*
- *RCW 90.22, Minimum Water Flows and Levels (1969)*
- *RCW 90.38 and 90.42, Trust Water Rights Program (1989 and 1991)*
- *RCW 90.44, Regulation of Public Ground Waters (1945)*
- *RCW 90.54, Water Resources Act of 1971*
- *RCW 90.80, Water Conservancy Boards (1997)*
- *RCW 90.82, Watershed Planning (1997)*
- *RCW 90.90, Columbia River Basin Water Supply (2006)*

Constituents/Interested Parties

- *Agricultural groups, environmental organization; local watershed planning & 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

Improving Water Management Capacity

Several factors are leading us to improve water management:

- Increasing water demand.
- Frequent droughts.
- Better understanding and acceptance of water availability problems.
- Concern for how climate change could impact water supplies and the environment.

Ecology is working with stakeholders and the Legislature to update water management policies and provide additional funding to address the increased demand and competition for water. These actions have resulted in some progress, but have also highlighted the gap between current water management capacity and other challenges:

- Setting instream flow requirements while providing for future water use, implementing local water management plans, and taking other actions to get water back into streams. An intensive effort is ongoing with local interests to set instream flows on streams and rivers.
- Implementing local watershed plans designed to meet water needs and protect water resources sustainability. We are working with local watershed planning units to help them successfully finish local planning. We are providing funding for plan implementation, including actions ranging from storage projects to compliance.
- Processing water rights change applications. We are focusing on change applications to help facilitate the sale, transfer, and changes in water use to better use existing water supplies.
- Finding innovative water supply solutions. As traditional water supplies become increasingly scarce, and acquiring new water rights is increasingly 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 and expanding the stream gauging network; responding to local watershed requests for compliance service; and taking actions on water law violations.
- 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. We are also continuing water rights settlement discussions with a number of tribes including specific settlement negotiations with two tribes.
- 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 the 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.
- Number of decisions issued by the court(s) 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 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.
- Four instream flows are set (Walla Walla, Wenatchee, Lewis, and Salmon-Washougal) 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.
- Acre-feet of additional water availability in eastern Washington (Columbia Basin).

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 to existing water rights to reallocate water. 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 Measure
- Number of 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, and loss prevention efforts.

Performance Measure

- 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 of, 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 on streams with flows set is regulated during low flow periods.

Performance Measures

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

Provide Water Resources Data and Information

Ecology protects state water resources through collection, management, and sharing of data and information which 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 increasingly timely and accurate data and improved public access to information.

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

Performance Measure

- Percent of water rights mapping completed statewide.

Regulate Well Construction

Ecology protects consumers, well drillers, and the environment by licensing and regulating well drillers, investigating complaints, approving variances from construction standards, and providing continuing education to well drillers. 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 Measure

- Percent of water supply wells inspected in delegated counties.

Support Local Watershed Management of Water Resources

Ecology works with other agencies, local watershed planning groups, and tribes to address water quantity issues under the Watershed Management Act. It includes providing technical support and studies for local watershed planning groups to

develop and adopt local plans to serve as a basis for sound water management.

Expected Results

Sound local watershed management plans are developed, adopted, and implemented with enough information and agreement to support sound water use and actions.

- Local watershed planning groups receive technical support.

Performance Measure

- Percent of Watershed Planning Units in Phase 4 – Plan Implementation.

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 re-use projects and to the Department of Health for municipal water conservation.

Expected Results

Increased water, energy, and cost savings to protect the environment, increase business competitiveness, and reduce pressure on water supplies and waste treatment facilities.

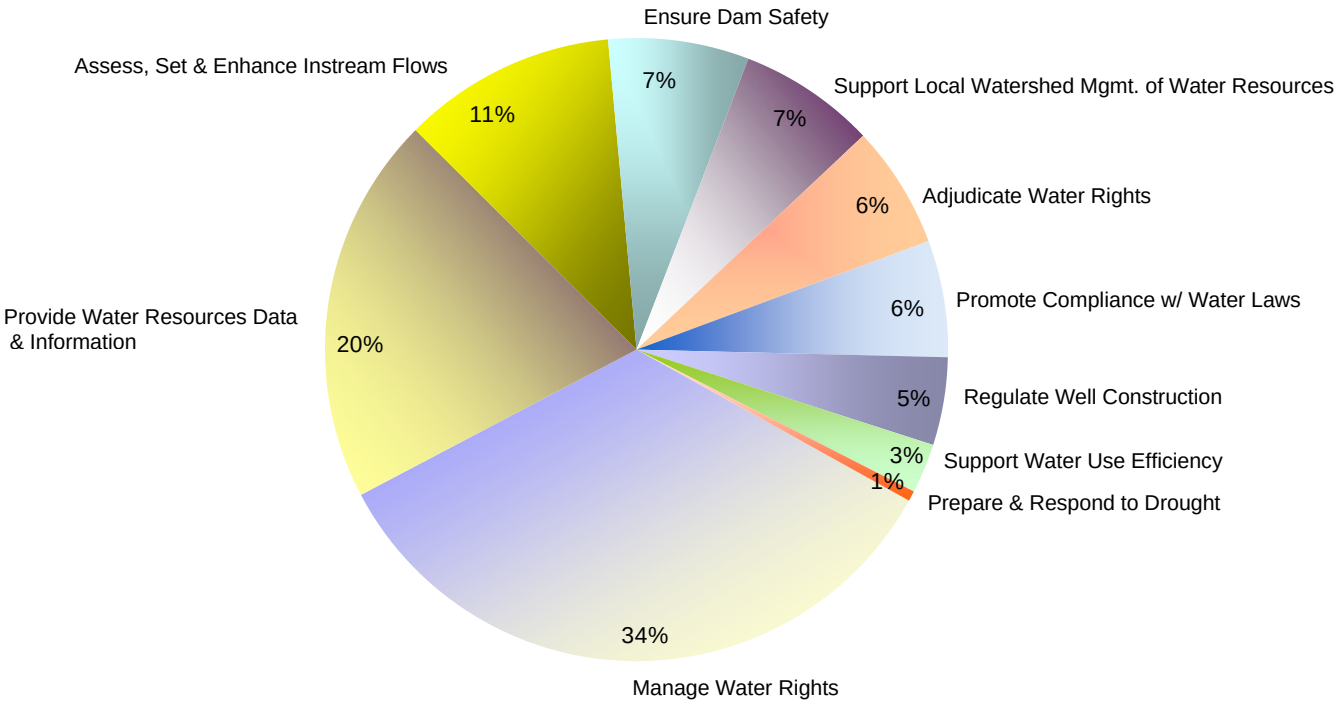
- Agricultural, commercial, industrial, and non-profit water users get technical support.
- Department of Health water conservation and reclaimed water efforts get support.

Performance Measure

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

Water Resources Program 2009-11 Biennium Budget
By Activities

Operating Budget = $38.2 Million; FTEs = 156.5



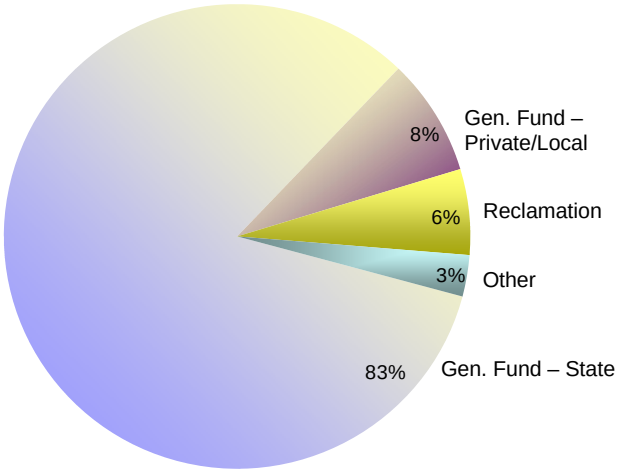
Activities	Dollars	FTEs
Manage Water Rights	$13,066,897	48.0
Provide Water Resources Data & Information	7,698,232	29.3
Assess, Set & Enhance Instream Flows	4,236,486	19.0
Ensure Dam Safety	2,789,914	12.9
Support Local Watershed Management of Water Resources	2,716,086	9.1
Adjudicate Water Rights	2,436,090	12.7
Promote Compliance with Water Laws	2,312,924	13.1
Regulate Well Construction	1,738,505	8.4
Support Water Use Efficiency	985,955	4.0
Prepare & Respond to Drought	200,000	0.0
Water Resources Operating Budget Total	**$38,181,089**	**156.5**

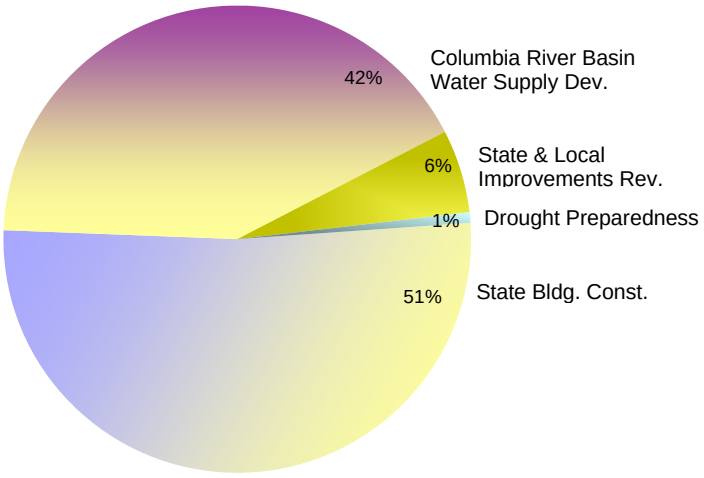
Water Resources Program 2009-11 Biennium Budget
By Fund Source

Operating Budget = $38.2 Million

Capital Budget = $59.9 Million

FTEs = 156.5





Other = Water Supply Facilities – Referendum 38 (0.93%), Basic Data (0.81%), General Fund – Federal (0.44%), and Water Rights Tracking System (0.26%).

Water Quality Capital (0.03%) not shown in capital budget pie above (too small for display).

Operating Fund Sources	Amount	Uses
General Fund – State	$31,847,059	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 water/surface water technical study by the U.S. Geological Survey.
General Fund – Private/Local	3,122,184	Instream flow projects, water acquisition, & cost reimbursement contracts for water rights processing.
Reclamation	2,282,025	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 & contract with the U.S. Geological Survey for stream gauging data collection & studies.
Water Supply Facilities – Referendum 38	355,134	Staff support for grants & loans for the improvement and/or construction of agricultural water supply facilities. Technical assistance to irrigation districts. Operation & maintenance of Zosel Dam (Lake Osoyoos in Okanogan County).
Basic Data	310,000	Pass through to the U.S. Geological Survey for stream gauging data collection & studies.

General Fund – Federal	167,159	Dam safety scanning project & guidelines, Yakima River Enhancement liaison, Spokane Valley Rathdrum Prairie Aquifer Study.
Water Rights Tracking System	97,528	Continued development, implementation, & management of a water rights tracking system, including a mapping system & database. Enhancements increase public access to water right data.
Operating Budget Total	**$38,181,089**	
Capital Fund Sources		
State Building Construction	30,952,000	New appropriations & 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 & implementation, Sunnyside Valley Irrigation District conservation projects, & the Yakima River Basin Water Storage Feasibility Study.
Columbia River Basin Water Supply Development	25,000,000	Capital re-appropriations support grants for feasibility studies & construction of storage & water conservation projects, along with purchase or leases of water rights.
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38)	3,444,000	Grants/loans for agricultural water supply facilities. Grants for on-farm water use efficiency improvements, water conveyance improvements, & storage studies.
State Drought Preparedness	438,000	Grants/loans for drought related agricultural & municipal water supply facilities projects. Purchase & lease of water rights to improve stream flows in fish critical streams.
Water Quality Capital	20,000	Grants for implementation of Comprehensive Irrigation District Management Plans.
Capital Budget Total	**$59,854,000**	
Water Resources Operating & Capital Budget Total	**$98,035,089**	

Agency Administration Program

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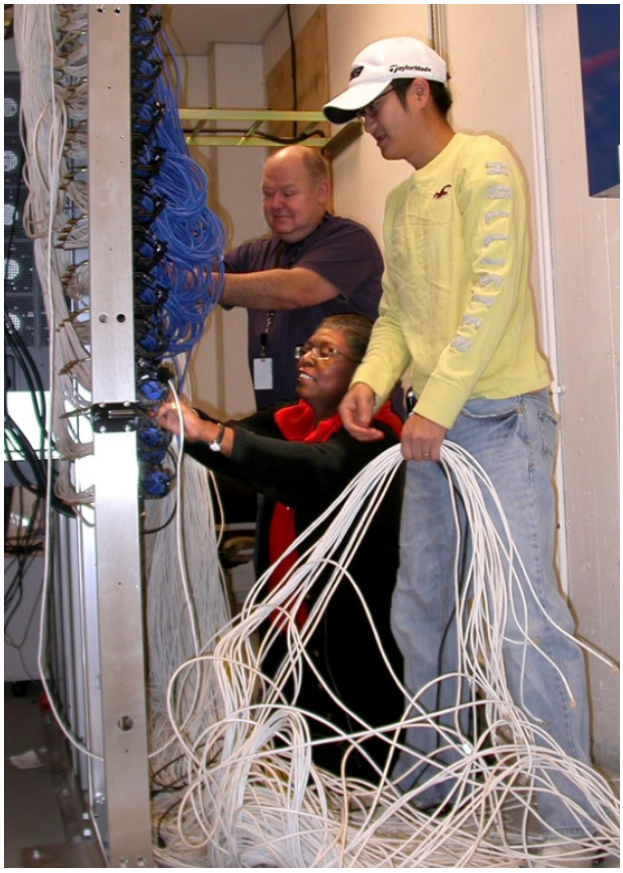


Ecology employees (from left) David Hovik, Gwen Campbell, and Shawn Lee work together on a network infrastructure upgrade project replacing cables in a communication closet at Lacey headquarters.

Program Mission

The mission of the Agency Administration Program is to direct and sustain the agency's effort to accomplish its mission: to protect, preserve, and enhance Washington's environment, and promote the wise management of the people's air, land, and water for the benefit of 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 services.
- Providing high-quality information technology services.
- Providing safe and secure workplaces.
- Developing policies and programs that help the state achieve its greenhouse gas limits and prepare for and respond to climate changes.

Authorizing Laws

- *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's Lacey facility was built in 1993, and houses Ecology's headquarters, Southwest Regional Office, State Conservation Commission, Environmental Protection Agency Washington Operations Office, State Printer, and a private sector cafeteria vendor. Since 1993, the structural integrity of the 32,000 square-foot stucco wall on the east side of the building has deteriorated due to water infiltration. The damaging corrosion occurs both on the structural steel framing members and on infill metal studs in the exterior wall. The wall has

been sealed many times over the years, but the damage is progressive and will continue until corrected.

To address this problem, the 2008 Legislature authorized Ecology to use Certificates of Participation (COPs) to finance rebuilding the east wall. In May 2009, Ecology negotiated a settlement with the original contractor to do the repair work. As a result, the total cost of the project has been reduced from the original estimate of $11 million to a final project cost of $7.4 million. The rebuild is currently underway and is expected to be completed in December 2009.

We also need to replace our Northwest Regional Office in Bellevue with a more efficient and sustainable facility that will meet our long-term business needs. We have outgrown the facility, and it cannot be remodeled to accommodate more staff. The current building is also prone to flooding during heavy rains, which affects agency operations and indoor air quality.

Information Management and Communication

Ecology has a strategic plan for improving our data management and making information more available to citizens, stakeholders, and staff. We are focused on the following issues:

- Improved Internet applications that will allow customers to do more on-line business with Ecology.
- Improved Internet use to engage the public in commenting on and shaping policy proposals, and to streamline paperwork and reports for those we regulate.
- Improved availability and accessibility of information, so citizens can evaluate the state of their environment and consider ways to make a meaningful contribution toward protecting and improving it.
- Improved integration of data to provide a more complete view of environmental conditions and threats.
- Information and educational resources that are easier for people, businesses, and communities to access and understand. These resources are developed to help people reduce their contributions to global climate change and to prepare for the changes that cannot be avoided, and to protect Washington's waters, including Puget Sound.

Human Resource Management

Ecology will expand its strategic plan for developing and managing its workforce for optimal performance and achieving agency and program goals by:

- Expanding our interagency and inter-governmental partnerships for recruiting highly qualified, diverse candidates.
- Assessing our selection and hiring process and developing new methods to streamline the process and further improve the quality and diversity of the candidate pools.
- Developing a comprehensive workforce development and succession management model to encourage retention and ensure Ecology has well-trained and knowledgeable employees who are prepared for higher levels of responsibility.
- Providing a new system of training and consulting for managers and supervisors on effective human resource management, accountability, and leadership.

Long-term Financial Stability

Since the economic downturn began in 2008, Ecology's Operating Budget has been reduced by $31 million and 52 staff positions. In addition, $186 million has been transferred from dedicated environmental accounts to the state General Fund. And, Ecology has $133 million less in the capital budget to pass through to local communities than last biennium.

Many of Ecology's dedicated environmental accounts were impacted by the economic downturn as well. Oil prices dropped from $147 per barrel in May 2008 to $70 per barrel in November 2008. This resulted in a $90 million drop in projected revenue from May to November 2008. The Oil Spill Prevention Account, also dependant on oil revenues, had a projected $8.5 million shortfall for 2009-11. Reductions to expenditures and a one-time transfer from the state General Fund shored up the account, while a long-term revenue fix can be implemented.

The Water Quality Permit Fee Account saw a loss of $3.1 million in revenue as a result of the downturn in construction. A fiscal growth factor increase to the fee this biennium will offset the immediate loss of revenue, but a long-term restructuring of the fee is necessary to sustain it fairly and equitably.

Some of these reductions have been offset, in part, by $72 million in federal stimulus funding. The American Recovery and Reinvestment Act of 2009 (Recovery Act) is on course to stimulate economic growth and protect human health and the environment. Green jobs can help pull our citizens and communities out of this downturn and ensure the long-term strength of our economy and our environment.

Climate Change

Climate change poses a significant threat to Washington's economy, but also offers the state enormous new economic and job creation opportunities. These new opportunities will require the Washington to act quickly to reduce its greenhouse gas (GHG) emissions and lead the transformation to a new low-carbon economy.

State law requires reductions in emissions of greenhouse gases, as well as efforts to prepare for and respond to climate changes that are already underway. Ecology developed an initial comprehensive plan focusing on the emissions reductions required by 2020.

To reach our emissions reduction goal, the state will need to adopt and implement a wide range of actions and strategies to reduce emissions in all sectors of Washington's economy. Also, Ecology will need to continue working with national and regional partners to design a comprehensive greenhouse gas reduction program. And we will continue our work with transportation, forestry, industry, and other sectors to identify reduction strategies, benchmarks, and offset protocols.

To help citizens, businesses, and local governments cope with existing and projected climate changes, Ecology will need to work in concert with other designated agencies to develop an integrated climate change response strategy. In addition, Ecology will need to help the agencies lead by example in reducing their GHG emissions. Ecology will also evaluate potential impacts of sea-level rise and changes in water supplies.

Activities & Results

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. The focus of the Climate Policy Group for 2009-11 will be:

- Continue implementing legislative requirements enacted in recent years.
- Work with Washington's congressional delegation and the federal government to help design a national program that reflects state priorities.
- Continue working with six other western states and four Canadian provinces in the Western Climate Initiative to develop a regional emissions reduction program design.
- Work collaboratively with industries to develop emission reduction actions and strategies to make sure 2020 reduction limits are met.
- Develop selected industry benchmarks and fully examine how they can be used in a national or regional greenhouse gas reduction program.
- Develop options for reducing carbon emissions from the transportation sector (e.g., analyze low-carbon fuel standards and alternative fuels, including electricity for plug-in vehicles).
- Work with other designated agencies to develop an integrated climate change response strategy and address rising sea levels and risks to water supplies caused by climate change.
- Work with all state agencies to estimate GHG from their vehicles, buildings, and operations and develop and implement emission reduction strategies.

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

The office 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 Unit, which provides rule development assistance and coordination, along with economic analysis, including Small Business Economic Impact Statements and cost/benefit studies.

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. The Human Resources Office also manages implementation and administration of collective bargaining agreements, including bargaining, contract compliance, handling grievances, and arbitration.

The office develops and manages Ecology's Affirmative Action Plan and ensures equal employment opportunity, as well as 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

Each of Ecology's four regional offices (Lacey, Yakima, Spokane, and Bellevue) and field offices (Bellingham, Richland, Vancouver, and Wenatchee) 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.

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

Executive, Financial, and Administrative Services

Ecology leadership comes from the executive office.

Financial Services provides centralized financial support in accounting, budget, contracts, purchasing, and inventory. This office also manages and coordinates strategic planning for Ecology, coordinates performances measurement, and develops environmental indicators.

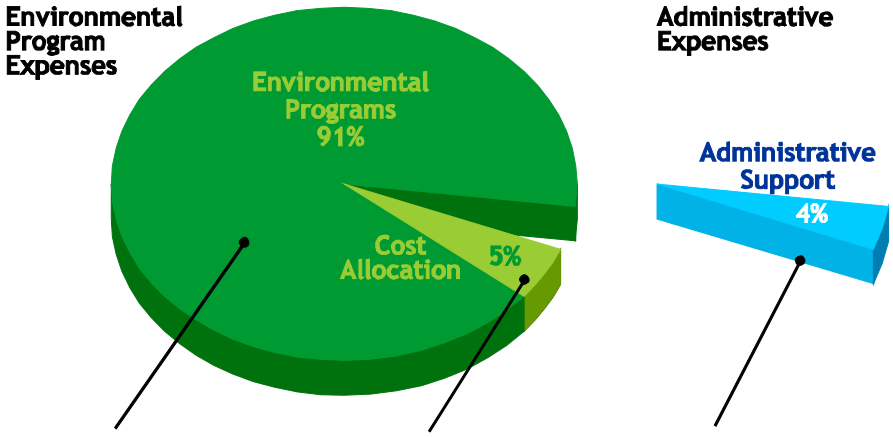
The Administrative Services Office includes information management (desktop and network services, application development, and data administration), and facility and vehicle management and security. This office maintains Ecology's central records, responds to public-records requests, provides mail services, and manages extensive library resources at headquarters and in regions in the form of books, periodicals, and research.

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.
- In December 2010, a comprehensive progress report will be submitted to the Governor and the Legislature that will detail the action taken by the various sectors of the economy—including state and local governments—and the results of the actions in achieving the emission reduction limits, the clean jobs goal, fuel expenditures reduction, and vehicle miles traveled benchmarks.

Administration as a percentage of Ecology's 2009-11 operating and capital budget



Environmental Programs include:

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

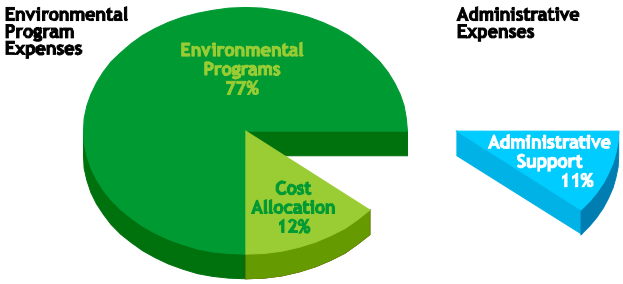
Cost Allocation provides direct services, equipment and facilities for environmental programs. Examples are:

- Attorney Services
- Shared Facilities & Maintenance
- Fleet Usage
- Mailing
- Use of Central Service Agencies (DOP, State Auditor, GA, DIS, etc.)
- Supplies
- Telecommunications Usage
- Agency Financial Systems
- Core Training
- PCs, Software & Printer Services
- Internet & Intranet
- Data Center
- Geographic Information System
- Remote Access
- Network Connectivity
- Program Economic Analysis

Program A Includes Ecology Central Business Services:

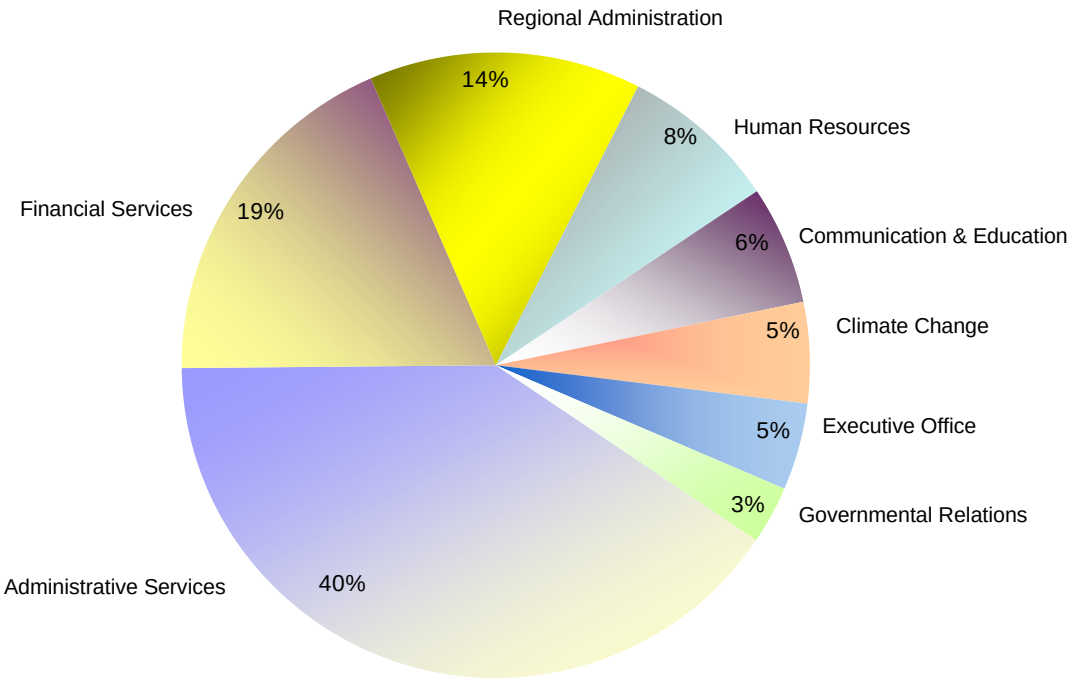
- Administrative Services (Network, Desktop, Applications, Records, Library, Facilities, Transportation)
- Communications & Education (earning public trust)
- Executive (Director, Special Assistants, Support Staff to them)
- Financial Services (Budget, Fiscal & Purchasing, Performance & Recognition)
- Governmental Relations (including Tribal Relations, support for Rule-Making)
- Human Resources
- Regional Directors, Support

Administration as a percentage of Ecology's 2009-11 operating budget



Administration Program 2009-11 Biennium Operating Budget By Activities

Operating Budget = $49.9 Million; FTEs = 219.6



Activities	Dollars	FTEs
Administrative Services	$20,168,620	83.0
Financial Services	9,296,815	48.0
Regional Administration	6,988,567	36.3
Human Resources	4,052,468	19.0
Communication & Education	3,066,843	13.0
Climate Change	2,600,591	7.3
Executive Office	2,247,725	7.0
Governmental Relations	1,488,012	6.0
Agency Administration Operating Budget Total	**$49,909,641**	**219.6**

Administration Program 2009-11 Biennium Budget
By Fund Source (FTEs = 219.6)

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

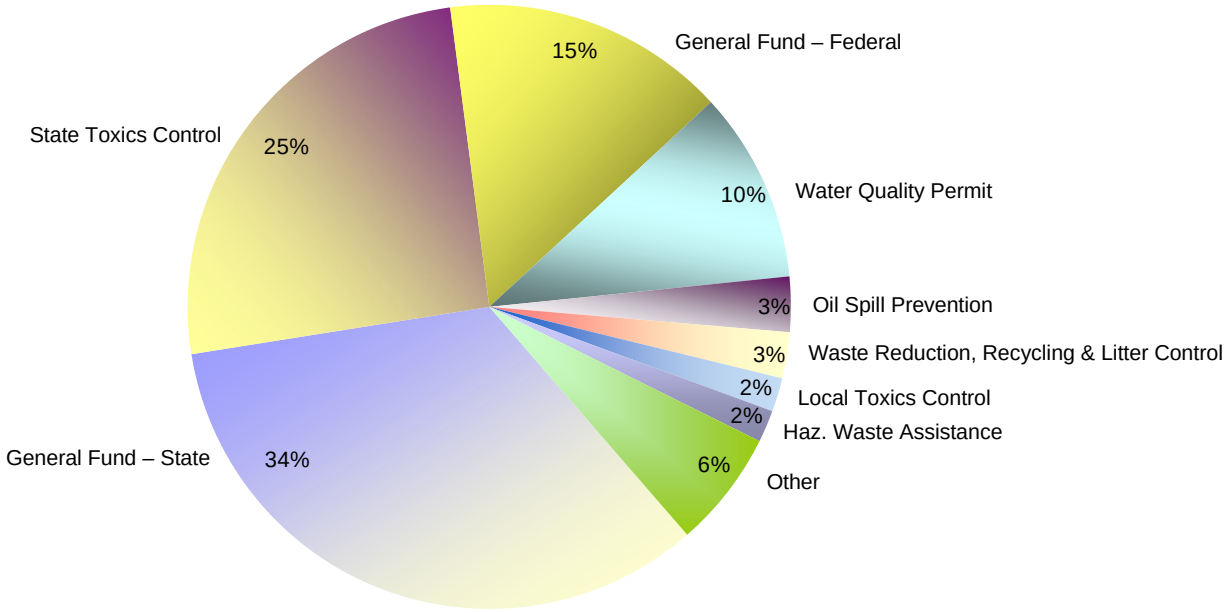
Operating Fund Sources	Amount
General Fund – State (001)	$16,909,936
State Toxics Control (173)	12,691,121
General Fund – Federal (001)	7,594,106
Water Quality Permit (176)	5,114,653
Oil Spill Prevention (217)	1,476,404
Waste Reduction, Recycling & Litter Control (044)	1,230,114
Local Toxics Control (174)	901,848
Hazardous Waste Assistance (207)	857,746
Underground Storage Tank (182)	504,453
Air Operating Permit (219)	434,767
Reclamation (027)	403,810
Water Pollution Control Revolving – Federal (727)	258,898
Worker & Community Right to Know (163)	253,627
Biosolids Permit (199)	252,092
Flood Control Assistance (02P)	246,645
Air Pollution Control (216)	177,114
General Fund – Private/Local (001)	106,130
Site Closure (125)	88,245
State Toxics Control – Private/Local (173)	72,311
State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (072)	70,866
Electronic Products Recycling (11J)	68,873
Water Pollution Control Revolving – State (727)	66,864
Freshwater Aquatic Weeds (222)	58,983
Oil Spill Response (223)	23,222
Water Rights Tracking System (10G)	18,472
Wood Stove Education & Enforcement (160)	16,700
Freshwater Aquatic Algae Control (10A)	11,641
Operating Budget Total	**$49,909,641**

Capital Fund Sources	Amount
State Building Construction	309,183
Water Pollution Control Revolving – Federal ARRA	190,426
Columbia River Basin Water Supply Development	167,694
General Fund – Federal ARRA	102,145
Site Closure	58,056
Waste Tire Removal	27,250
State Toxics Control	8,999
Capital Budget Total	**$863,753**

Operating & Capital Budget Total	**$50,773,394**

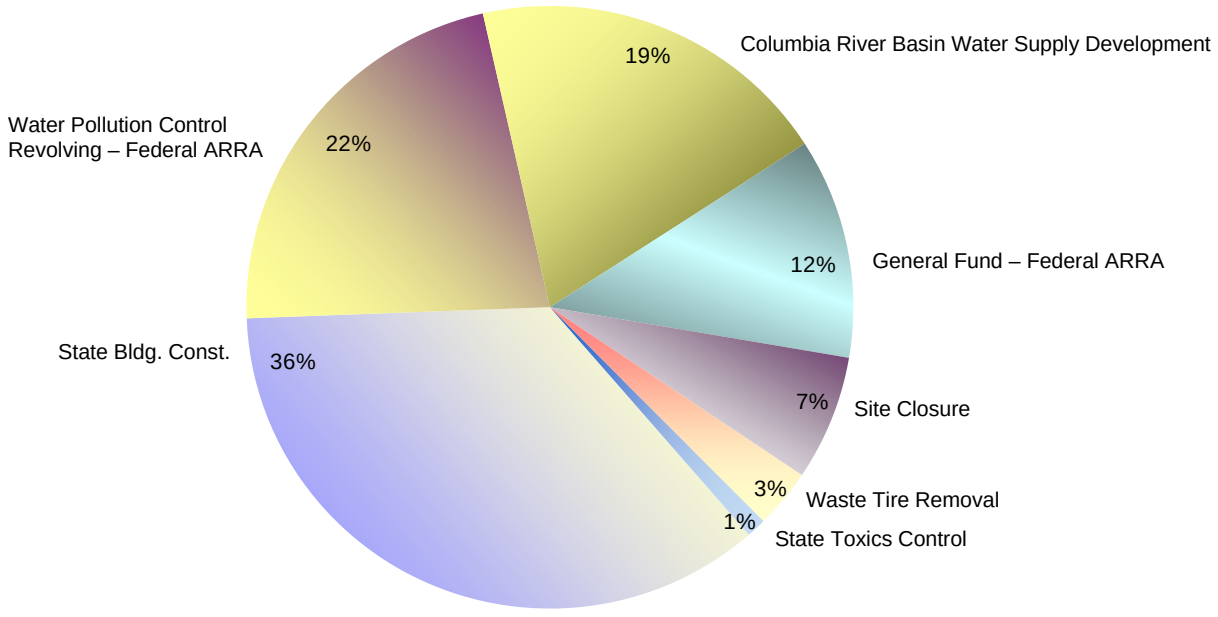
Agency Administration Program 2009-11 Biennium Budget By Fund Source

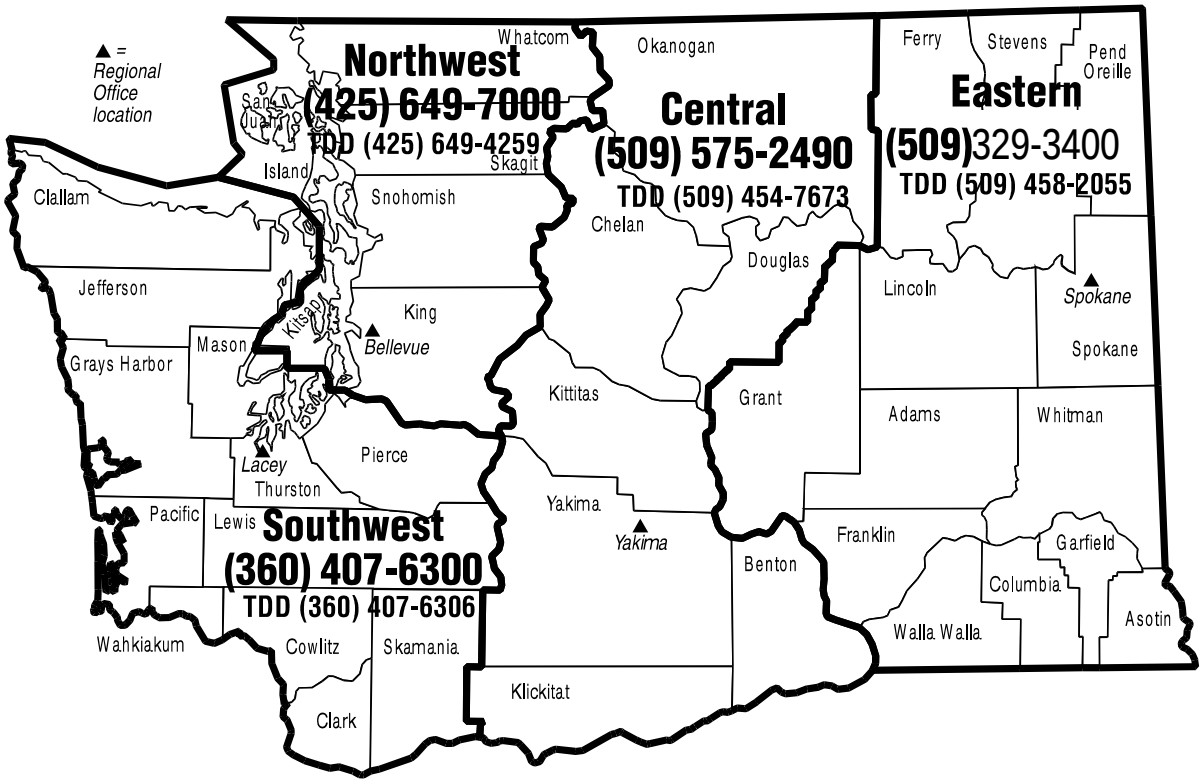
Operating Budget = $49.9 Million



Other = Underground Storage Tank (1.01%), Air Operating Permit (0.87%), Reclamation (0.81%), Water Pollution Control Revolving – Federal (0.52%), Worker & Community Right to Know (0.51%), Biosolids Permit (0.51%), Flood Control Assistance (0.49%), Air Pollution Control (0.35%), General Fund – Private/Local (0.21%), Site Closure (0.18%), State Toxics Control – Private/Local (0.14%), State & Local Improvements Revolving – Water Supply Facilities (Referendum 38) (0.14%), Electronic Products Recycling Non-Appropriated (0.14%), Water Pollution Control Revolving – State (0.13%), Freshwater Aquatic Weeds (0.12%), Oil Spill Response (0.05%), Water Rights Tracking System (0.04%), Wood Stove Education & Enforcement (0.03%), and Freshwater Aquatic Algae Control (0.02%).

Capital Budget = $0.9 Million





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360.407.6000

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425.649.7000

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Yakima, WA 98902-3452
509.575.2490

Southwest Regional Office
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Lacey, WA
360.407.6300

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Olympia, WA 98504-7775

Eastern Regional Office
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Spokane, WA 99205-1295
509.329.3400

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Bellingham, WA 98225-7028
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Manchester Laboratory
7411 Beach Drive East
Port Orchard, WA 98366-8204
360.871.8860

Manchester Quality Assurance Section
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PO Box 488
Manchester, WA 98353-0488
360.895.6145

Padilla Bay National Estuarine Research Reserve
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Mt. Vernon, WA 98273-9668
360.428.1558

Richland Field Office
3100 Port of Benton Boulevard
Richland, WA 99354-1670
509.372.7950

Twisp – Methow Valley Field Office
427 Methow Valley Hwy PO Box 276
Twisp, WA 98856 Twisp, WA 98856
509.997.1363

Vancouver Field Office
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Vancouver, WA 98661-4622
360.690.7171

Walla Walla Field Office
Walla Walla Community College
Water & Environmental Center
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Walla Walla, WA 99362
509.527-4546

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Ecology Administered Accounts

The Department of Ecology uses 38 accounts and is the administering agency for 36 of these. This section is an inventory of the accounts Ecology administers. Each account description includes the RCW authority, fund manager, account purpose, the authorized uses, and the 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.

Note that beginning in the 2009-11 biennium, the Water Quality Account (Fund #139), traditionally a dedicated account administered by Ecology for funding statewide water quality improvements, was absorbed into the State General Fund. In addition, Ecology has received federal American Recovery and Reinvestment Act (ARRA) funds for the biennium which are being passed through to the agency to manage via State General Fund-Federal Stimulus and the Water Pollution Control Revolving Account (Fund #727).

02P – Flood Control Assistance Account
023 – Special Grass Seed Burning Research Account
027 – Reclamation Account
032 – State Emergency Water Projects Revolving Account
044 – Waste Reduction, Recycling, and Litter Control Account
05W – State Drought Preparedness Account
051 – State and Local Improvements Revolving Account – Waste Disposal Facilities (Ref. 26)
055 – State and Local Improvements Revolving Account – Waste Disposal Facilities (Ref. 39)
07C – Vessel Response Account
072 – State and Local Improvements Revolving Account – Water Supply Facilities (Ref. 38)
08R – Waste Tire Removal Account
10A – Freshwater Aquatic Algae Control Account
10G – Water Rights Tracking System Account
10P – Columbia River Basin Water Supply Development Account
11J – Electronic Products Recycling Account
11W – Water Quality Capital Account
116 – Basic Data Account
125 – Site Closure Account
15H – Cleanup Settlement Account
160 – Wood Stove Education and Enforcement Account
173 – State Toxics Control Account
174 – Local Toxics Control Account
176 – Water Quality Permit Account
182 – Underground Storage Tank Account
194 – Environmental Excellence Account
199 – Biosolids Permit Account
207 – Hazardous Waste Assistance Account
216 – Air Pollution Control Account
217 – Oil Spill Prevention Account
219 – Air Operating Permit Account
222 – Freshwater Aquatic Weeds Account
223 – Oil Spill Response Account
258 – Metals Mining Account
408 – Coastal Protection Account
500 – Perpetual Surveillance and Maintenance Account
727 – Water Pollution Control Revolving Account

Fund decriptions in alphabetical order.

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 collected from large industrial air pollution sources. Annual fees are set based on emissions and complexity of source.

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 and small industrial sources (for example, dry cleaners, rock crushers, coffee roasters).
Authorized Use: To issue permits for agricultural burning and small industrial air pollution sources, and to fund agricultural burning alternatives research.

Revenue Source: Permit fees for burning (charged on a per-acre basis) and annual fees for small industrial air pollution sources.

Basic Data Account (Fund #116) (RCW 43.21A.067)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617 or David Burdick 360.407.6094

Purpose: To gather data on 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 data, groundwater, water quality data, or other hydrographic information. Ecology is required to contract the information requested with the U.S. Geological Survey.

Biosolids Permit Account (Fund #199) (RCW 79.95J.025)

Fund Manager: Waste 2 Resources Program. Contact Jessica S. Moore 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. This is an annual fee of 17 cents per residential equivalent. New biosolid facilities also pay a one-time review fee of $1,800.

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

Fund Manager: Toxics Cleanup Program. Contact Randy Newman 360.407.7219

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

Authorized Use: Expenditures may only be used to conduct remedial actions at the specific facility or to assess or address the injury to natural resources caused by the release of hazardous substances from that facility for which the moneys were deposited in the account.

Revenue Source: Receipts from settlements or court orders that resolve a person's liability or potential liability. (This account retains interest.).

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

Fund Manager: Spill, Prevention, Preparedness, and Response Program. Contact 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 Water Supply Development Account (Fund #10P) (RCW 90.90.010)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617 or David Burdick 360.407.6094

Purpose: To resolve water conflicts in the Columbia River through investment in storage, conservation, or access to water supplies.

Authorized Use: 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 have been authorized for grants to local jurisdictions for new storage and conservation projects. (This account retains interest.)

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

Fund Manager: Waste 2 Resources Program. Contact Jessica S. Moore 360.407.6996

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

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, and monitors 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. Depending on the market for the time period in question, manufacturers may move from one tier to another. It is a seven tier structure, and the fee ranges from $0 in tier-7 to $35,000 in tier-1.

Environmental Excellence Account (Fund #194) (RCW 43.21K.170)

Fund Manager: Waste 2 Resources Program. Contact Jessica S. Moore 360.407.6996

Purpose: To support innovative pollution reduction products.

Authorized Use: Dormant since fiscal year 2004.

Revenue Source: Fee and voluntary contributions for individually negotiated program agreement proposal.

Flood Control Assistance Account (Fund #02P) (RCW 86.26.007)

Fund Manager: Shorelands and Environmental Assistance Program. Contact Gordon Wiggerhaus 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 2009-11 biennium, the enacted budget changed the transfer to $2,000,000.

Freshwater Aquatic Algae Control 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 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 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.

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.

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 select businesses with the development and follow through of plans for reducing hazardous waste. Develop and distribute educational information on waste reduction to all businesses that 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 Jessica S. Moore 360.407.6996

Purpose: To provide technical assistance to local governments for local solid waste planning and oversight of solid waste facilities. In addition, funds are granted to local governments under the Remedial Action Grant, Performance Partnership, and the Coordinated Prevention Grant programs. Remedial Action Grants are provided to cleanup hazardous sites throughout Washington State. Remedial Action grant 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. Performance Partnership Grants (PPGs) pay 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. Two types of PPGs are available including hazardous-substance-release-site grants and waste management priorities implementation grants. Coordinated Prevention grants fund local government projects that prevent or minimize environmental contamination to comply with state solid and hazardous waste laws and rules. The two types of grants are planning and implementation grants for solid and hazardous waste management and solid waste enforcement grants.

Authorized Use: To fund several grant programs including the remedial action grant program, the coordinated prevention 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. 96 percent of the HST revenue is from petroleum products. 53 percent of the total HST revenue is deposited into the Local Toxics Control Account. The other 47 percent goes to the State Toxics Control Account. Approximately $118 million in revenue collections are estimated for deposit into the LTCA for the 09-11 biennium, a decrease of 13.4 percent from 07-09.

Metals Mining Account (Fund #258) (RCW 78.56.080)

Fund Manager: Water Quality Program. Contact Vince Chavez 360.407.7544

Purpose: To consider site-specific criteria in determining a preferred location of tailings facilities of metals mining and milling operations and incorporate the requirements of all known available and reasonable methods in order to maintain the highest possible standards to insure the purity of all waters of the state.

Authorized Use: To assess each active metals mining and milling operation and to cover the costs of required inspections.

Revenue Source: This fee is collected from active metals mining and millings operations. Fees are negotiated individually based on required workload. Fees are annual with a variable charge due to the number and type of inspections required by the Metals Mining Act.

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 waste. (This account retains interest.)

Reclamation Account (Fund #027) (RCW 89.16.020)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617 or David Burdick 360.407.6094

Purpose: To regulate well drilling construction and support stream gauging collection data.

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 close the Commercial Low Level Radioactive Waste Disposal site at Hanford.

Authorized Use: Funds have been used for an environmental impact study, a site investigation, design of a cover for filled trenches, and will be used for final closure activities.

Revenue Source: Users of the facility and site pay permit fees based on disposal volumes. Revenue also comes from repayment of a $13.8 million fund transfer from the Site Closure Account to the State General Fund which started in July 2008. Payment amounts are increased annually by the Implict Price Deflator. (This account retains interest.)

Special Grass Seed Burning Research Account (Fund #023) (RCW 70.94.656)

Fund Manager: Air Quality Program. Contact Paige Boulé 360.407.6646

Purpose: To reduce air pollution from the burning of grasses grown for seed.

Authorized Use: Funds are used for research on alternatives to grass seed field burning.

Revenue Source: Grass seed field burning permit fees are limited to exceptions so funds are on the decline. Grass seed field burning was banned in the mid-1990s.

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 repayments from loans awarded to local governments for construction of water pollution control facilities and projects that reduce pollution in all of 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 repayments from loans awarded to local governments for construction of water pollution control facilities and projects that reduce pollution in all of Washington's waterways.

State and 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 or David Burdick 360.407.6094

Purpose: To provide grants and loans to agriculturlal users for water supply facilities.

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

Revenue Source: The Legislature authorized $75 million of general obligation bonds for loans for water supply facilities. The revenue to this account is the 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 or David Burdick 360.407.6094

Purpose: To provide assistance for drought preparedness.

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

Revenue Source: Funds are only transferred 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.

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

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617 or David Burdick 360.407.6094

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 that are designed 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 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 deposited into this account.

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

Fund Manager: Toxics Cleanup Program. Contact Randy Newman 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 law.

Authorized Use: Funding is used primarily 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, 96 percent of it comes from petroleum products and the remaining 4 percent from pesticides, industrial chemicals, acids, and other hazardous substances. By statute 47 percent of the Hazardous Substance Tax is deposited in the STCA. The other 53 percent is deposited in the Local Toxics Control Account. Approximately $104.7 million in revenue collections are estimated for deposit into the STCA for 2009-11, down 13.4 percent from 2007-09. 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. The VCP contributes about $1.3 million of revenue to the STCA per biennium. Fines and penalties issued against persons or businesses which have not complied with environmental contamination and cleanup laws contribute about $320,000 of revenue per biennium. Fees collected from facilities that manage mixed waste account for about $14 million of revenue per biennium.

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

Fund Manager: Toxics Cleanup Program. Contact Randy Newman 360.407.7219

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

Authorized Use: To adopt and enforce rules establishing requirements for all underground storage tanks regulated under the Federal Resource Conservation and Recovery Act.

Revenue Source: Tank fees and fines for tank violations.

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

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

Purpose: To provide funds for emergency vessel towing to prevent vessel casualties and major oil spills.

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

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

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

Fund Manager: Waste 2 Resources Program. Contact Jessica S. Moore 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 pick-up (through Ecology Youth Corps, and contracts and grants with local and other state agencies), litter campaign, litter survey, administration of litter program, recycle hotline, technical assistance in waste reduction, recycling, and pollution prevention initiatives. The enacted 2009-11 budget transferred $4,000,000 from the litter collection portion of the program to the State General Fund.

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 Jessica S. Moore 360.407.6996

Purpose: To clean up unauthorized waste tire piles and implement measures that prevent future accumulations of unauthorized waste tire piles.

Authorized Use: To accomplish the following: administer and manage contracts to clean up unauthorized tire piles; establish and maintain a Web site to disseminate information about preventing tire piles and indicating the cleanup status of current projects; and enforcement of waste tire disposal.

Revenue Source: A $1 per tire fee is included in the cost of a new tire and is collected from consumers making tire purchases.

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 repayments from loans given out to local governments for construction of water pollution control facilities and projects that reduce pollution in all of the Washington's waterways. (This account retains interest.)

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 non-point 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 2009-11 biennium, the Water Quality Capital Account funds only capital re-appropriations and the State Building Construction Account funds new appropriations for the Centennial Clean Water grants program.

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 permitees; 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: $79-142,465 for industries; $1.18-$1.80 (per residential equivalent) for municipalities; and $100-$36,059 for general permits. Fees are subject to I-601 requirements and they are reviewed each biennium by stakeholders. Currently, Ecology has approval from the Legislature to go through formal rule-making to adjust fees each year using the fiscal growth factor through FY2011. From that point forward, the fee adjustments can be adjusted once a biennium.

Water Rights Tracking System Account (Fund #10G) (RCW 90.14.240)

Fund Manager: Water Resources Program. Contact Jim Skalski 360.407.6617 or David Burdick 360.407.6094

Purpose: To provide funds for improvements to the water rights information 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.

Wood Stove Education and 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.