

Department of Ecology Budget and Program Overview 2005-07



Two sisters, Wallula Junction | Photo Credit: John Marshall

Department of Ecology
300 Desmond Drive SE
Lacey, Washington 98503
(360) 407-6000



**Department of Ecology
Budget and Program
Overview 2005-07**

Department of Ecology
300 Desmond Drive SE
Lacey, Washington 98503
(360) 407-6000

The Department of Ecology is an equal opportunity agency and does not discriminate on the basis of race, creed, color, disability, age, religion, national origin, sex, martial status, disabled veteran's status, Vietnam Era veteran's status, or sexual orientation.

If you have special accommodation needs or require this document in alternative format, please contact *Teresa Reno* at (360) 407-7007 (voice) or 800-833-6388 (TDD).

This document is available on Ecology's web site "About the Department of Ecology" at:
<http://www.ecy.wa.gov>

Table of Contents

Department of Ecology	1
Agency Information	5
Air Quality Program	11
Environmental Assessment Program	19
Hazardous Waste and Toxics Reduction Program.....	25
Nuclear Waste Program	31
Shorelands and Environmental Assistance Program	37
Solid Waste and Financial Assistance Program	45
Spill Prevention, Preparedness, and Response Program	51
Toxics Cleanup Program.....	57
Water Quality Program	65
Water Resources Program	73
Agency Administration.....	81
Contact Information	86

This page left intentionally blank

Department of Ecology



Welcome to the fifth edition of the Department of Ecology *Overview Book*.

This Overview Book outlines the agency's core business functions and funding for state fiscal years 2005 - 2007, organized by ten environmental programs.

The challenge of all who work in government is administering programs and budgets that achieve our mission and goals. At the Department of Ecology, this means protecting both humans and the environment from pollution; restoring and preserving important ecosystems that sustain life; and finding ways to meet human needs without damaging environmental resources and functions.

Since the Department of Ecology was created in 1970, the agency has helped achieve far-reaching improvements for Washington's air, land, and water. Air quality is significantly better, toxic industrial discharges have been reduced, the generation of hazardous waste has been reduced by half in 20 years, landfills have been modernized, recycling has been widely embraced, large oil spills are much rarer, and thousands of contaminated sites have been cleaned up.

However, our state's natural environment is still under tremendous pressure – from urban sprawl, increasing demand on water supplies, and toxic substances used in industrial processes and many consumer products. These pressures threaten our state's public health, economic stability and quality of life.

In four years, I want to look back and see measurable progress in several critical areas. I have selected three major strategic priorities where focused energy and creative leadership by the agency can make real progress on protecting human health and the environment and improving our quality of life.

In addition, Governor Chris Gregoire has made it a top priority of state government to bring new focus and energy to restoring the health of Puget Sound and Hood Canal. The agency will play an

important part in achieving the goals of the Governor's Puget Sound Initiative. Our three strategic priorities present significant challenges, but they also offer tremendous opportunity to make a real difference in environmental and human health protection.

The first area is finding a better way to mitigate (replacing or restoring resources that are converted to other uses) the environmental impacts of projects. The current system doesn't work very well – for permit applicants, for the public or for the environment. The current system, with its case-by-case, piecemeal development of mitigation projects, lacks regulatory consistency and predictability and is frustrating to project proponents. Further, the current system fails to adequately offset the environmental effects of large and small projects alike.

We are working on an approach that is more efficient and predictable for permit applicants, and for the agency, in a way that also effectively and permanently restores and preserves high-value environmental resources within a watershed.

The second area is reducing toxic threats. Businesses have greatly reduced the amount of toxic chemicals they generate and dispose of in Washington, but toxic substances are still rapidly accumulating in our homes, offices, and the natural environment. The Department of Ecology is re-examining its existing efforts to reduce toxins that threaten human and environmental health. Our toxics strategy has four key components:

- Improve our understanding of toxic chemicals in sources and products that are a threat, and determine how best to phase them out.
- Get toxics out of the air we breathe.
- Get toxics out of our water and soil.
- Work with businesses to reduce the use and production of hazardous substances.

Our third priority is how we manage water. Our rivers, streams, lakes, and groundwater are very important and valuable resources. The competition for this resource is intensifying over time. At the same time, demand for instream uses, fish and wildlife habitat and recreation to name two, is also intensifying. Our current system of water management is unable to cope

with the escalating demand for water. Our water management priority has six components:

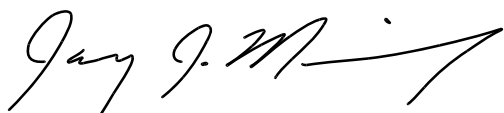
- Set and achieve instream flows.
- Support water storage facilities that increase supply for out-of-stream use and increase stream flows.
- Establish adequate funding and support for water infrastructure, including storage, efficiency, conservation, and water reclamation.
- Improve our ability to make sound water management decisions by identifying invalid water rights, quantifying ambiguous ones, and improving adjudication processes.
- Develop an approach to managing the Columbia River that makes water available for new uses and improves the river for fish and instream flows.
- Initiate pilot programs in two or more basins in which water users are provided flexibility, provided designated stream flows are met.

Ecology's ten environmental programs do their part to implement these three priorities, while they continue to vigorously implement their mandates. Whether it is cleaning up contaminated sites, managing solid or hazardous wastes, improving air and water quality, preventing or responding to oil spills, or protecting our state's shorelines, the agency is focused on its mission to protect, preserve and enhance Washington's environment.

The agency is also committed to making progress on streamlining permits, improving regulatory processes, and being more innovative and helpful in delivering services.

I invite you to read about Ecology's programs, including the laws we implement and uphold, the amount of money appropriated to the agency this biennium, and what we are doing to implement the agency's mission. Protecting human health, the environment and Washington's quality of life is what we are here to do.

Sincerely,

A handwritten signature in black ink, appearing to read "Jay J. Manning". The signature is fluid and cursive, with a long horizontal stroke at the end.

Jay J. Manning
Director

Department of Ecology ~ Working with you for a better Washington

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.

Goals

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

Values

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

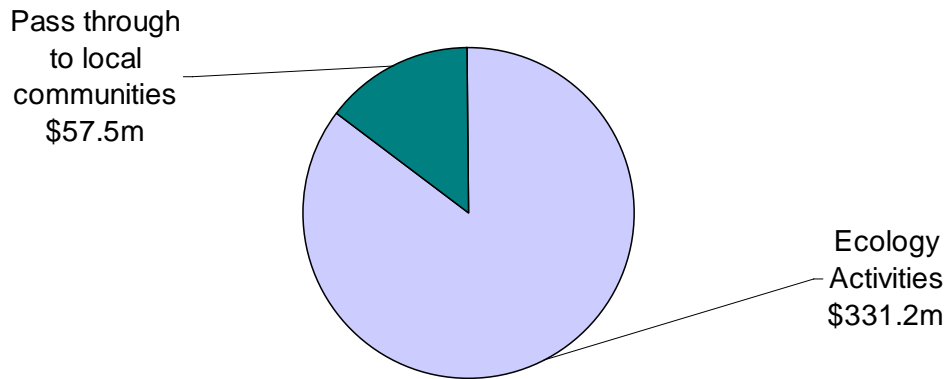
Code of Conduct – Department of Ecology employees:

- ♦ 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.

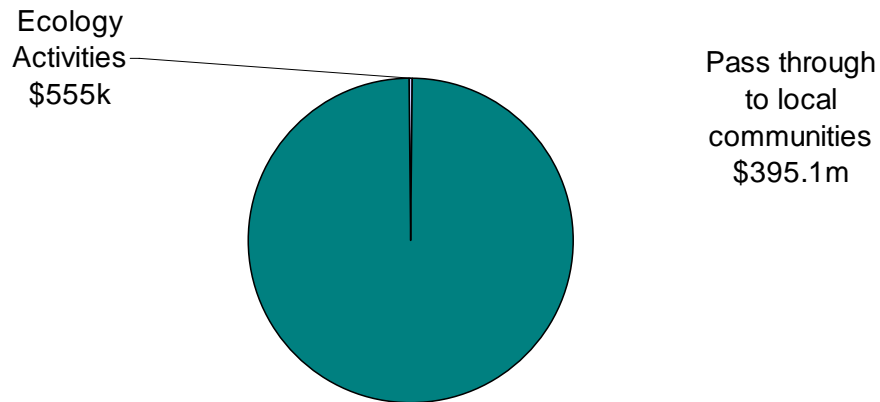
This page left intentionally blank

Ecology Pass-Through Funding to Local Governments and Communities

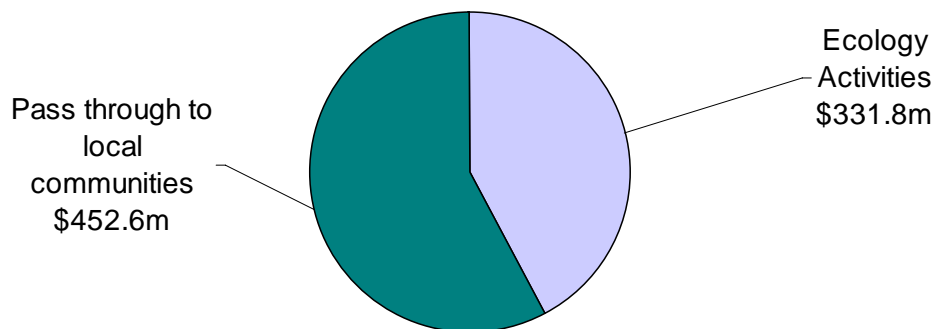
Operating Budget: \$388.7m



Capital Budget: \$395.6m



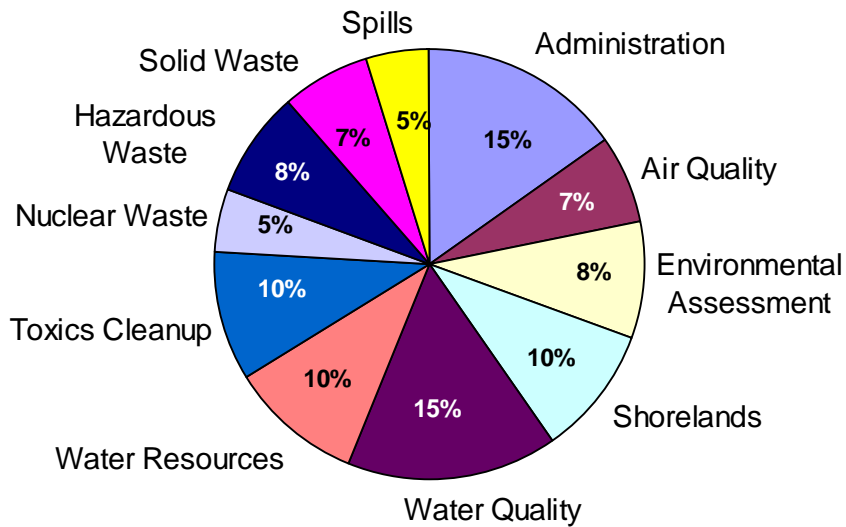
Combined Operating & Capital Budget \$784.4m



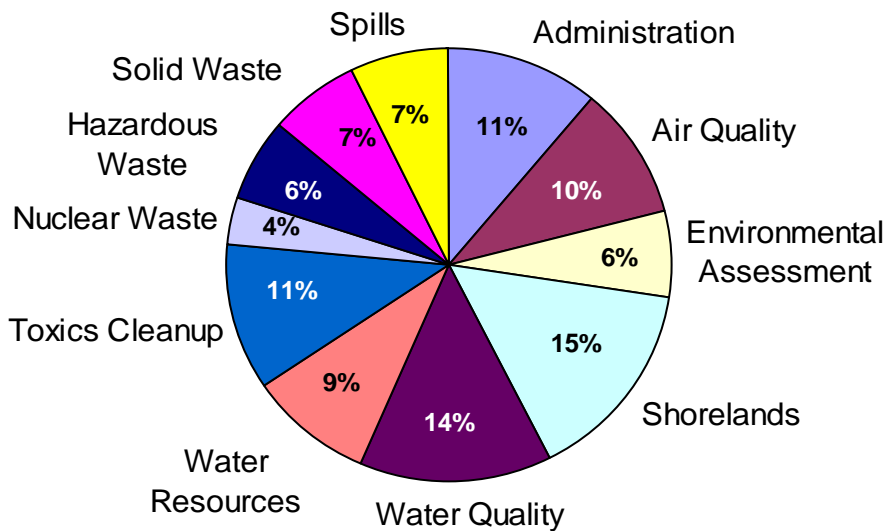
Ecology Operating Budget by Fund Source
Budget \$388,758,000

State	Amount	Percentage
General Fund - State Total	80,692,000	20.8%
Federal		
General Fund - Federal	73,911,000	19.0%
Dedicated Funds		
General Fund - Private/Local	13,287,000	3.4%
Grass Seed Burning Research	14,000	0.0%
Reclamation Revolving	2,646,000	0.7%
Flood Control Assistance	3,084,000	0.8%
Emergency Water Projects Revolving	1,456,000	0.4%
Waste Reduction/Litter Control	15,067,000	3.9%
State Drought Preparedness	221,000	0.1%
Referendum 38	384,000	0.1%
Vessel Response	2,876,000	0.7%
Freshwater Aquatic Algae Control	509,000	0.1%
Basic Data	310,000	0.1%
Site Closure	655,000	0.2%
Water Quality	28,021,000	7.2%
Wood Stove Education/Enforcement	357,000	0.1%
Worker/Community Right to Know	2,142,000	0.6%
State Toxics Control	78,169,000	20.1%
Toxics Control - Private/Local	379,000	0.1%
Local Toxics Control	5,258,000	1.4%
Water Quality Permit	31,909,000	8.2%
Underground Storage Tank	2,883,000	0.7%
Environmental Excellence	504,000	0.1%
Biosolids Permit	851,000	0.2%
Hazardous Waste Assistance	5,153,000	1.3%
Air Pollution Control	11,199,000	2.9%
Oil Spill Prevention	10,219,000	2.6%
Air Operating Permit	2,679,000	0.7%
Freshwater Aquatic Weeds	2,534,000	0.7%
Oil Spill Response	7,079,000	1.8%
Metals Mining	14,000	0.0%
State Agency Parking	113,000	0.0%
Coastal Protection	1,775,000	0.5%
Water Pollution Control Revolving	2,408,000	0.6%
Total	\$388,758,000	

Ecology Staffing Levels by Program Full-time Equivalent (FTEs)



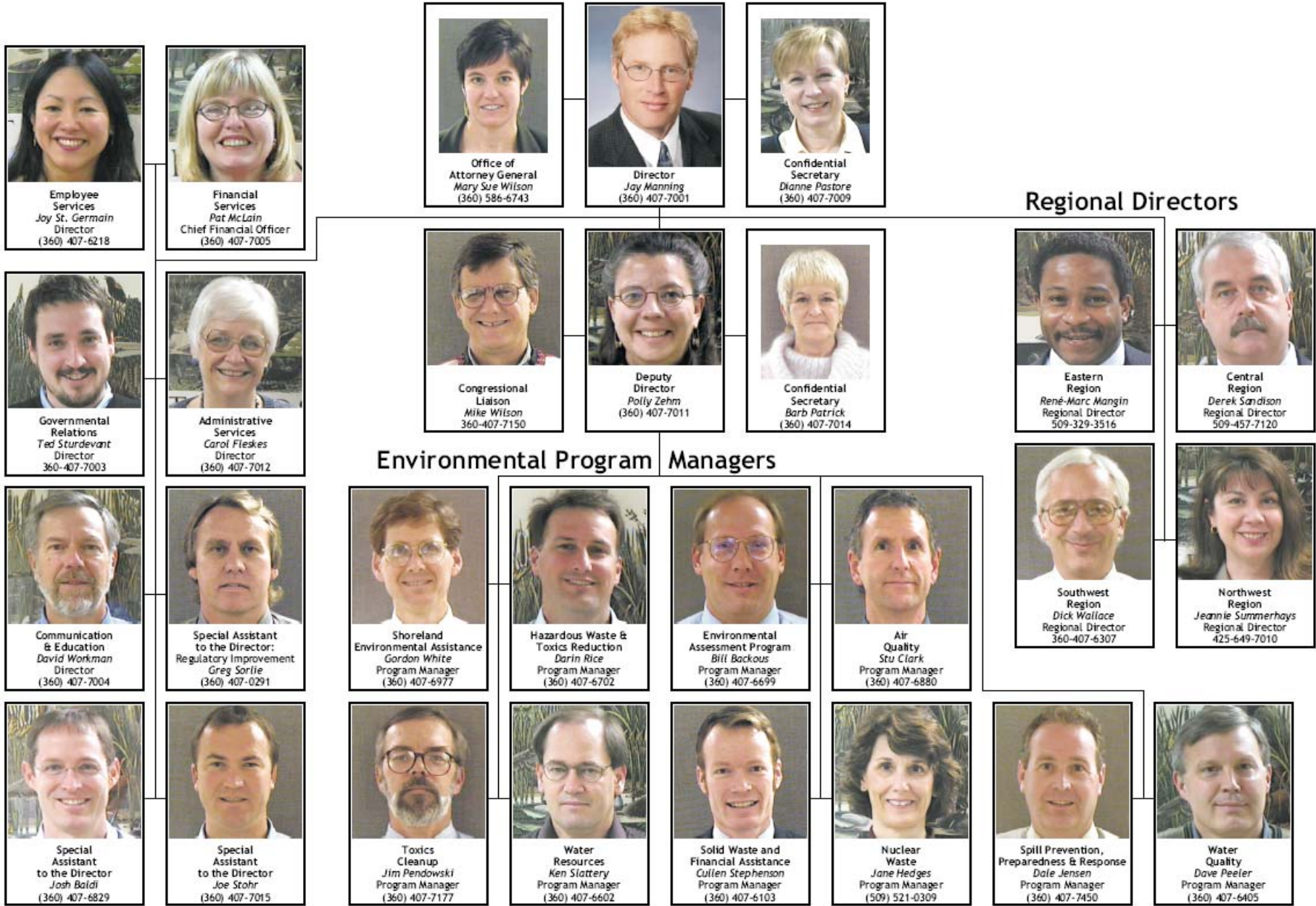
Ecology Funding by Program



Program Full-time Equivalents (FTEs) and Budgets

Program	FTEs	Budget
Air Quality	100.9	38,634,791
Environmental Assessment	125.6	25,089,198
Hazardous Waste and Toxics Reduction	119.2	23,552,879
Nuclear Waste	72.8	14,685,783
Shorelands and Environmental Assistance	146.8	58,289,885
Solid Waste and Financial Assistance	97.8	26,441,342
Spill Prevention, Preparedness, and Response	69.9	27,569,262
Toxics Cleanup	144.0	41,482,997
Water Quality	231.5	54,147,744
Water Resources	148.9	35,441,546
Administration	226.3	43,422,573
Total	1483.7	\$388,758,000

Department of Ecology - Executive Management



revised January 2006

This page intentionally left blank

Program Mission

Protect, preserve, and enhance the air quality of Washington to safeguard public health and the environment and support high quality of life for current and future generations.

Environmental Threats

Air quality concerns come in three forms: public health, environmental effects, and quality of life.

Air pollution causes lung disease, worsens existing respiratory and cardiopulmonary disease, increases chronic respiratory illness and the likelihood of contracting cancer, and decreases lung function in children – predisposing them to chronic obstructive pulmonary disease as adults. Air pollution can hasten death for people afflicted with such diseases. Hundreds of studies have found that short- and long-term exposures to air pollution at levels currently found in Washington increase emergency room visits, hospitalizations, and medication use; cause absences from school and work; and restrict activity for some people.

Air pollution also affects the environment and quality of life in other ways, including: damage to soils, water, crops, vegetation, manmade materials, property, animals, and wildlife; impaired visibility; and climate and weather. When air pollution creates noxious odors or irritating fumes, it can harm the economic value of homes and other types of real estate, as well as personal comfort and well-being.

Since the Washington State Legislature expanded statewide air quality protection in 1991, overall air quality in Washington has greatly improved. Washington citizens realize economic and health care savings of almost \$2 billion per year related to cleaner air. But even with current efforts to protect air quality, hundreds of people die each year from exposure to fine-particle pollution in Washington.

Over ten years ago, 13 areas of Washington were designated as violating national ambient, 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. Since then,

federal, state, and local efforts have returned all 13 of those areas to compliance with federal air quality standards. However, air quality in Washington continues to be a health concern. Since 2001, levels of ground-level ozone have been increasing around the state as growth overtakes current strategies to control air pollution. Monitoring studies show the potential for new violations of air quality standards in several areas, such as Colville and parts of the Columbia plateau. Although all areas of the state meet federal standards today, a number of areas are close to violation levels.

In addition to the six federal criteria pollutants, hundreds of other chemicals, known as toxic or hazardous air pollutants, enter the atmosphere from a wide variety of sources. These chemicals are not currently subject to health-based standards. However, studies are increasingly identifying them as significant health risks. Chief among these are the toxic particles and chemicals emitted from vehicles, diesel engines, and wood burning. These pollutants are not only emitted to the air and breathed by citizens, but also are deposited to the land and waters of the state, contributing to overall toxic pollution in the environment. Addressing sources of toxic air pollutants is part of a broad agency initiative to reduce toxic pollution throughout the state.

Authorizing Laws

- *Federal Clean Air Act*
- *Chapter 70.94 RCW, Clean Air Act*
- *Chapter 70.120 RCW, Motor Vehicle Emission Control*

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*

Major Activities and Results

Prevent Unhealthy Air and Violations of Air Quality Standards

Federal law establishes air quality standards for six air pollutants known as criteria pollutants. Violations of standards trigger costly regulatory actions, impose economic constraints, and create the potential for severe financial sanctions against the state if problem areas are not effectively cleaned up in a timely manner. To ensure standards and public health objectives are met, the agency continuously measures air pollution levels and trends. The agency develops and implements area-specific cleanup plans, designs and implements customized strategies to prevent violations of federal standards, and develops and implements natural event action plans to minimize health impacts. The agency works to ensure that wildfires, windblown dust, or other natural events do not place Washington in violation of federal standards.

As an ongoing part of assuring healthy air quality levels, the agency is conducting a statewide assessment of communities for fine particle pollution. This assessment will prioritize actions for those areas where air quality is a health concern and where there is potential or likelihood of violating air quality standards.

The agency's goals are to substantially reduce health impacts to the public and prevent violations of national ambient air quality standards. (Authorizing laws - Federal Clean Air Act, 70.94, and 70.120 RCW)

Result

Air quality standards in Washington State are met, public health problems associated with unsafe air are minimized, and federal sanctions are avoided.

- Disease rates and/or health costs attributable to air pollution are known and reported regularly.
- Measured air quality is at levels considered protective of public health.
- No violations of ambient air quality standards are measured.
- All areas of the state retain clean air status as classified and officially recognized by the Environmental Protection Agency.

Reduce Health and Environmental Threats from Motor Vehicle Emissions

Mobile sources such as cars, trucks, construction equipment, locomotives, and marine vessels are responsible for over 75% of Washington's air pollution. Regional growth continues to increase pollution from these sources. These emissions have been shown to adversely affect public health, substantially add to health care costs, and increase cancer and mortality rates. A recent agency study also indicates that emissions from vehicles are a major source of pollution in Puget Sound. Continued emission reductions from these sources are essential to prevent or reduce harmful health effects to citizens and to reasonably assure future attainment of federal air quality standards.



Motor vehicles are the major source of pollution in Puget Sound

In 2005, the state Legislature adopted ESHB 1397 to require cleaner vehicles, beginning with the 2009 model year. To protect public health and the environment from motor vehicle pollution, the agency also implements several pollution-reduction strategies: a cost-effective vehicle emission check program covering nearly two million cars and trucks; promotion of transportation alternatives and cleaner motor vehicles and fuels through voluntary, regulatory, and incentive programs; and the retrofitting school buses and publicly-owned fleets with diesel emission controls. (Authorizing laws - Federal Clean Air Act, 70.94, and 70.120 RCW)

Result

Motor vehicle emissions are minimized and managed, public health impacts from motor vehicle emissions are addressed, and federal sanctions for failure to meet standards are avoided.

- Develop rules to implement the Washington Clean Car program beginning with the 2009 model year.
- Reduce emissions from motor vehicles 40% by 2010.
- Reduce diesel soot emissions 50% by 2010.
- Equip 5,000 school buses with additional diesel emission controls by July 2007.
- Equip 1,000 publicly-owned vehicles and construction fleets with additional diesel emission controls by July 2007.
- Implement a cost-effective motor vehicle emission check program that substantially reduces air pollution from cars and trucks.
- Develop a comprehensive diesel emissions reduction initiative that combines voluntary and regulatory elements to significantly reduce cancer and other health risks.
- Partner with state, federal, and local agencies and the private sector to promote retrofit emission technology on fleets, transportation alternatives, the use of cleaner motor vehicles and fuels, and reduction of idling.

Reduce Risk from Toxic Air Pollutants

Hundreds of toxic chemicals (totaling millions of pounds) are emitted into the air each year in Washington. No ambient standards and few emission limits have been established for these compounds. Recent studies suggest that the most health-damaging air pollutants are those that are the products of combustion from engines and other types of burning. These toxic pollutants are breathed deeply into the lungs and may pass into the cardiovascular system. Soot from diesel engines and from indoor and outdoor burning are the top sources of toxic air pollutants in Washington. This soot is a composite of hundreds of toxic chemicals, including benzene, formaldehyde, 1-3 butadiene, and polyaromatic hydrocarbons (PAHs), to name a few.

Air toxics in Washington are responsible for increases in cancer rates, premature deaths, and heart attacks and disease. In addition, air toxics contribute to tens of thousands of hospitalizations and doctor visits, increased medication use, and hundreds of thousands of lost work/restricted activity days each year. The economic costs for Washington resulting from these health impacts are roughly estimated at hundreds of millions to billions of dollars annually.



School buses are being retrofitted across the state to reduce toxic diesel emissions

The agency's goal is to significantly reduce potential risk to the public of cancer and other serious health effects caused by airborne toxics. The agency is implementing programs to reduce harmful emissions from diesel engines and wood smoke, and from indoor and outdoor burning. The agency collects and prepares annual air toxics emission inventories; operates air toxics monitoring sites; and limits toxic emissions through permit conditions for industrial and commercial facilities. (Authorizing laws - Federal Clean Air Act and 70.94 RCW)

Result

The public health threat from toxic air pollutants is reduced. Diesel soot is the highest priority air toxic in Washington. Work listed here and under the motor vehicle emission activity related to diesel emissions directly supports addressing this health issue.

- Total tons of air toxics emitted to the air decreased 5% by July 2007.
- 50% reduction in emissions of priority toxics from base year 2000 levels by 2010.
- Reduce diesel soot emissions 50% by 2010.
- Equip 5,000 school buses and 1,000 local government diesel vehicles with new emission controls by July 2007.
- Equip 1,000 publicly-owned vehicles and construction fleets with additional diesel emission controls by July 2007.
- Improve emissions inventories and understanding of ambient concentrations and sources of priority toxics.
- Initiate appropriate strategies, assistance efforts, and incentive programs to reduce emissions of priority toxics.

Reduce Health and Environmental Threats from Smoke

Nagging regional smoke pollution plagues many areas, primarily in Central and Eastern Washington, and affects public health and quality of life. To address these continuing problems, the agency conditions permits for agricultural burning, land clearing burning, fire training burning, and other outdoor burning where required by law. The agency produces daily burn forecasts using local air quality, weather, and burning demand information; responds to and resolves complaints related to smoke; provides technical assistance to manage and prevent outdoor burning impacts; and designs and delivers community-tailored woodstove education programs. Through technical assistance, research and demonstration projects, the agency fosters development and use of practical alternatives to burning and improved smoke management. The agency's goal is to achieve air quality levels in Eastern and Central Washington by 2010 that experts agree is sufficient to protect human health. (Authorizing law - 70.94 RCW)

Result

Public health threats from smoke are managed and minimized.

- Reduce emissions from cereal grain stubble burning by at least 50% by June 2006, using a 1998 baseline.
- Develop a revised agricultural burning rule.
- Continue to improve and streamline the outdoor burning permit and smoke management systems.
- Audit local burn permit programs to ensure effective and efficient operation.
- Continue education and control strategies to reduce pollution from woodstoves.
- Foster development and use of practical alternatives and best management practices for burning and dust mitigation through research, technical assistance, and demonstration projects.

Reduce Air Pollution from Industrial and Commercial Sources

The agency 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 law and are designed to be self supporting through fees. 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. In addition to permit approvals, the agency provides technical assistance to businesses on permit application and processing guidance, interpretation of rules, pre-application assistance, and permit review.

The agency also develops and modifies industrial source regulations to incorporate federal and state law changes; simplifies and streamlines permit requirements, while ensuring public health protection; conducts compliance inspections and responds to and resolves complaints; and develops technical and policy direction on emerging industrial permit issues.

Consistent with the agency's overall goal to simplify and streamline permit processes and requirements through its regulatory improvement initiative, the Department of Ecology is pursuing innovative ways to improve permit processes. The agency is adopting general orders for less-complex business operations that do not require customized permits; publishing permit processes, instructions and approved permits on-line; pursuing e-permit processes (application, payment and compliance reporting over the Internet); and institutionalizing customer feedback mechanisms on permit processes. The agency hopes to make the permit process faster and more predictable for applicants. (Authorizing laws - Federal Clean Air Act and 70.94 RCW)



Air Monitoring equipment on top of a building in Kennewick



Reducing air pollution from industrial sources

Result

Air pollution from industrial and commercial sources are managed to protect public health and minimize costs and regulatory burdens.

- Reduce or prevent air emissions through permit conditions.
- Ensure 100% of permits meet timeliness targets.
- Improve turnaround time for permits.
- Provide certainty to the regulated community on the content, need and timeframes for permits.
- Retain delegation and local control of federal permit programs.

Measure Air Pollution Levels and Emissions

The agency needs sufficient, high quality information on the amount and sources of pollution and how it moves in the air to make reasoned air quality management decisions. The agency carries out three primary activities to collect needed data.

Air quality monitoring: The status of air quality is measured to provide data that allows assessment of trends, compliance, control strategies, health effects, and environmental damage.

Emission inventory development: Emission inventory is the quantification of the amount of pollution released by sources of air pollution.

Meteorological & modeling forecasts: Meteorological forecasting and dispersion modeling are essential to understanding the movement and concentration of air pollutants, the carrying capacity of airsheds, the interactions of pollutants, and the point of maximum impact of pollution. (Authorizing Laws - Federal Clean Air Act and 70.94 RCW)

Result

Accurate and comprehensive air quality data is gathered, maintained, and evaluated over time to ensure informed policy decisions can be made.

- Conduct annual network review and modifications to meet air quality needs.
- No person is exposed to air that violates federal quality standards.
- Air pollution is routinely measured where at least 85% of the population lives.
- Assure adequate data in both quantity and quality are available to policy makers.
- Actively participate in the regional consortium for air quality forecast modeling.
- Continually update and improve emissions data and modeling tools to predict air quality levels, impacts, and trends.
- Participate in region-wide, transboundary efforts to characterize air quality patterns.
- Provide support of ambient air monitoring sites in cooperation with partner agencies.

Major Issues

Healthier Air to Breathe

A growing number of U.S. and international health studies have linked some types of air pollution at levels much lower than previously believed to be safe to detrimental health effects. These studies demonstrate that the national ambient air quality standards, particularly for ground-level ozone (smog) and fine particles, are not fully protective of public health. Levels of ozone and particulate air pollution in Washington comply with the national standards but are at levels where detrimental health effects are observed and, therefore, some of the state's population is at risk. Many people, especially vulnerable populations such as children, the elderly, and certain health-compromised people, are more at risk of disease and death from air pollution than previously thought. High health care and economic costs can be reduced by continuing to reduce air pollution levels.

Growth Threatens Air Quality Gains

Even though all areas of Washington State are in compliance with federal air quality standards today, air pollution levels in a number of Washington communities are within 10 percent of federal standards for smog (also known as ozone), carbon monoxide, and fine particles. Since 2001, trends in ozone levels across the state have been

increasing. Population growth associated emissions, like trends in per capita car ownership and increasing vehicle size, are pushing emissions of air pollutants higher. It will take vigilance and the combined efforts of citizens, businesses, and governments to keep and sustain our air quality gains.

Reducing Diesel Soot

The agency has determined that soot from diesel engines is the greatest toxic health threat from air to Washington citizens. The Legislature has provided funding to the agency and the state's seven local air agencies to place emission controls on existing diesel school buses and other publicly-owned diesel fleets. The goals are to significantly reduce air pollution and public health risk to children and adults from emissions from school buses and other diesel equipment; to maximize cost effectiveness and efficiency in use of appropriated dollars; and to sustain or increase private sector employment. More than 3,000 school buses have been retrofitted to date, and the agency anticipates that 5,000 school buses and 1,000 diesel engines operated by local government will be retrofitted by the close of the 2005-07 biennium. These retrofits will result in a reduction of more than 60 tons of toxic air pollutants each year, with significant health care and economic savings in Washington.

Outdoor Burning

Burning of household trash, yard waste, and agricultural debris is a frequent occurrence in many areas of Washington. Our clean-air law governs where and what burning is allowed. The regulations implementing the law call for changes in burning practices and prohibitions in January 2007. The trend toward tighter restrictions on burning produces conflicts in situations where the pressure or desire to burn is strong. In fact, the pressure to burn is increasing on many fronts, such as the fluctuation in demand for burning to remove agricultural and horticultural debris. Intentional burning in forests is likely to increase as a part of restoring the health of forests, and back yard burning to reduce yard waste is a common practice in some rural communities. At the same time, pressure to reduce burning is also increasing. People don't like to be "smoked-out," and are demanding clean air. Wood smoke significantly impacts public health, and the Department of Ecology has determined that wood smoke poses the second greatest toxic air risk.

Fire safety professionals also have increasing concerns about fires getting out of control. The agency predicts that the pattern of frequent changes in burning programs will continue 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 their view of Mt. Rainier, the Olympics, or the Columbia Gorge are obstructed by air pollution. Federal law requires the state to eliminate human-caused visibility impairment in our national parks and wilderness areas by 2064. Businesses, governments, and citizens who have partially controlled air emissions to protect public health may have to further reduce emissions if they are found to contribute to the degradation of scenic views in these national landmark areas.



Clear visibility of scenic mountain

Because budget cuts have eliminated the state's work to reduce regional haze, future decisions related to visibility protection will be made by the U.S. Environmental Protection Agency. A federally imposed implementation plan to achieve and maintain visibility may not be in the state's best economic or pollution-management interests. Future state involvement in regulating regional haze may be desirable.

Responding to Climate Change

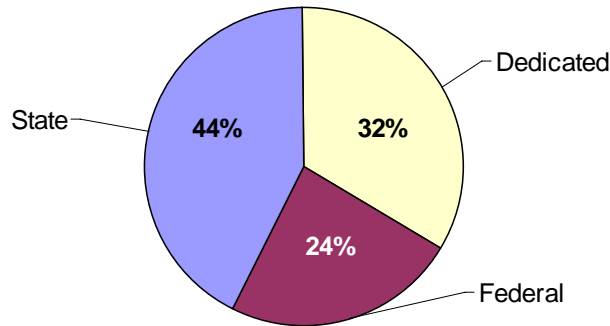
The agency is expecting to assist with design and implementation of a West Coast global warming and clean energy strategy. Potential areas for agency involvement include marine vessel and truck-stop idling reduction strategies, increasing fuel efficiency of the state vehicle fleet, and improving inventories of greenhouse gas emissions.

Air Quality Program Budget

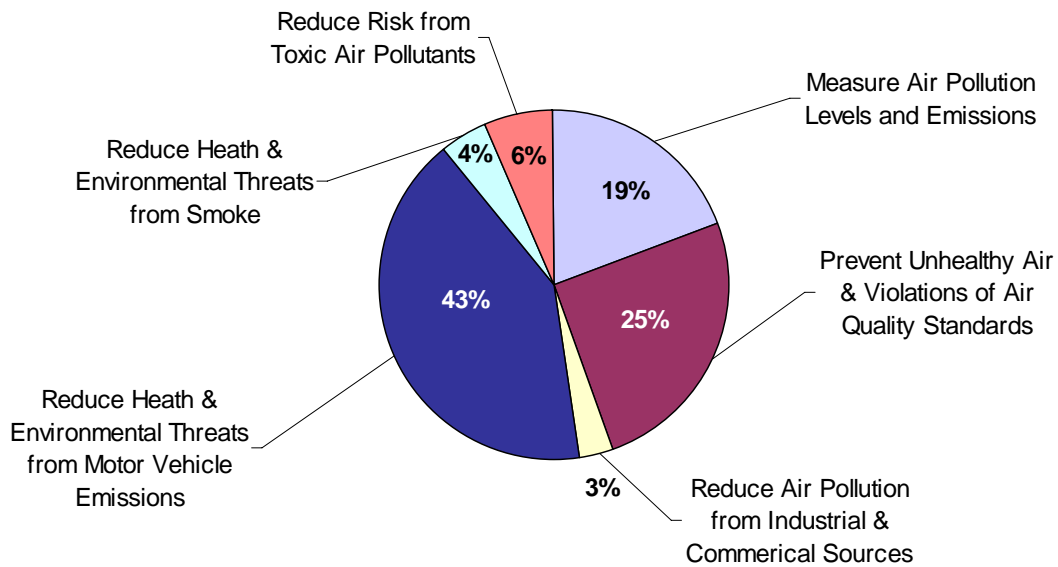
Budget = \$38.6 million; FTEs = 100.9

State	(\$) Amount	Sources	Uses
General Fund – State	17,135,845	Multiple; vehicle emissions inspections fee	Ambient air monitoring, grants to local air authorities, new source permits, modeling and meteorology, emission inventory, vehicle emission testing.
Federal			
General Fund – Federal	9,364,894	Federal grants	State and local air authority grants for ambient air monitoring, emission inventory, modeling, meteorology, and other air quality activities. Includes special project grants.
Dedicated Funds			
General Fund – Private Local	65,016	Agreements with private entities or other governments	Activities related to reducing air pollution.
Air Operating Permit	703,338	Permit Fees collected for air contaminant sources	Issuing permits to major air pollution sources, small business technical assistance.
Air Pollution Control	10,938,835	Air registration fees; burning permit fees; vehicle transfer fees	Registration program, agricultural burning permitting, burning alternatives research; school bus retrofit program
Woodstove Education & Enforcement	336,863	Fees on the retail sale of woodstoves and fireplaces	Enforcement and education on proper woodstove use, grants to local air authorities.
Environmental Excellence	76,000	Involved entity	Activity associated with the Environmental Excellence project.
Grass Seed Burning Research	14,000	Fees on open burning of grasses grown for seed	Research on alternatives to grass seed burning.
TOTAL	\$38,634,791		
Capital Budget Funding:			
Toxics New Appropriation	\$2,000,000	Hazardous substance tax	Diesel retrofit for public-owned local government vehicles

Air Quality Dollars by Fund Source



Air Quality Program Dollars by Activity



Activity	Dollars	FTEs
Measure Air Pollution Levels for Emissions	7,479,494	25.0
Prevent Unhealthy Air and Violations of Air Quality Standards	9,725,322	13.9
Reduce Air Pollution from Industrial and Commercial Sources	1,103,338	14.0
Reduce Health and Environmental Threats from Motor Vehicle Emissions	16,135,379	27.0
Reduce Health and Environmental Threats from Smoke	1,725,692	12.0
Reduce Risk from Toxic Air Pollutants	2,465,566	9.0
Total Air Quality Program	\$38,634,791	100.9

Program Mission

To measure and assess environmental conditions in Washington State.

Environmental Threats

Environmental threats include both point and nonpoint pollution sources and range from conventional pollutants, such as fecal coliform bacteria, nutrients, and temperature, to toxic contaminants and invasive aquatic weeds. Most monitoring and scientific investigation efforts focus on threats to water or sediment quality, while many directed environmental studies are conducted in support of clients in other Department of Ecology programs.

The focus of these activities is on objectively assessing existing environmental conditions. The agency frequently identifies threats or evaluates cumulative or combined effects stemming from the entire spectrum of environmental threats. Consequently, relevant and useful information is provided to the agency and other resource management agencies.

Authorizing Laws

- *Federal Clean Water Act*
- *Chapter 90.48 RCW, Water Pollution Control*
- *Chapter 90.71 RCW, Puget Sound Water Quality Protection*
- *Chapter 70.105D RCW, Model Toxics Control Act*
- *Chapter 43.21A RCW, Department of Ecology*
- *Chapter 70.119A.080 RCW, Public Water Systems – Penalties and Compliance*

Constituents/Interested Parties

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

Major Activities and Results

Improve Quality of Data Used for Environmental Decision Making

Sound environmental policy and regulatory decisions can only be made if accurate, reliable, and timely data are available to inform decisions. The agency goal is to ensure the reliability and integrity of data used by staff and others. A quality assurance officer provides guidance and training on developing Quality Assurance Project Plans, reviews project proposals, and consults on sampling design requirements and interpretation of results. This quality assurance function is required by the Environmental Protection Agency for entities, such as the Department of Ecology, that receive funding for work involving environmental data. In addition, the agency scientists, modelers, statisticians, chemists, and other specialists interpret technical data, review grantee monitoring plans, and supply information for crucial policy questions in support of agency mandates. Data collection supports all major state and federal environmental laws.

Result

- Environmental decisions are made based upon accurate, reliable, and timely data.
- Environmental Assessment Program monitoring plans are adequately designed to collect accurate scientific data.
 - Department of Ecology grantee monitoring plans are adequately designed to collect accurate scientific data.

Measure Contaminants in the Environment by Performing Laboratory Analyses

The Manchester Environmental Laboratory is a full-service environmental chemistry laboratory operated jointly by the U.S. Environmental Protection Agency and the Department of Ecology. The laboratory provides technical, analytical, and sampling support for chemistry and microbiology for multiple programs in the agency. The lab supports work conducted under mandates such as the Federal Clean Water Act, Water Pollution Control Act, Puget Sound Water Quality Protection Act, Model Toxics Control Act, and the Clean Air Act.

Result

Manchester Environmental Laboratory accurately measures and reports contaminant levels in submitted samples.

- Achieve 100% acceptable results of “blind” samples analyzed by the agency’s lab.

Ensure Environmental Laboratories Can Provide Quality Data

The agency is charged with the responsibility to certify laboratories that conduct tests or submit data to the agency. As a result, the Department of Ecology developed and manages an accreditation program to accredit environmental laboratories for analyses in all typical environmental matrices, now including drinking water.

The drinking water mission was transferred to Ecology under an April 2002 Memorandum of Agreement between the Department of Ecology and the Department of Health. Accreditation helps ensure that environmental laboratories have the demonstrated capability to provide accurate and defensible data. The agency's lab accreditation program is the primary source of lab performance monitoring for the 480 labs in the accreditation program. (Authorizing laws - 43.21A.445 and 70.119A.080 RCW)

Result

Environmental laboratories submitting data to the Department of Ecology and the Department of Health have the demonstrated capability to provide accurate and defensible data.

- Achieve 98% acceptable results of “blind” samples analyzed at accredited labs.



Conducting quality assurance of laboratory analysis at the agency’s environmental laboratory in Manchester

Conduct Environmental Studies for Pollution Source Identification and Control

The agency conducts pollution studies to address known or suspected problems at individual sites

or across regional areas. These studies support agency efforts under the Federal Clean Water Act, Water Pollution Control Act, and Model Toxics Control Act. The directed studies span the range from water quality sampling, such as for bacteria or dissolved oxygen, to more complex analyses for toxic chemicals, such as dioxins in fish tissues or pesticides in groundwater. Many of the studies are water cleanup studies, which calculate the "total maximum daily load" (TMDL) of a pollutant a water body can absorb without causing violations of water quality standards. Study results are published in scientific reports used for regulatory decision making, formulating policy, and protecting and enhancing environmental health.

Result

Timely, peer-reviewed scientific studies on pollution problems enable agency managers to make sound environmental decisions.

- Polluted stream segments, lakes and bays are evaluated in water cleanup reports.



Downloading data from a stream gage

Monitor and Assess the Quality of State Waters and Measure Stream Flows Statewide

The agency has established a statewide environmental monitoring network to assess the current status of state waters, identify threatened or impaired waters, and evaluate changes/trends in water quality over time. This network includes sampling stations in rivers, streams, and marine waters (Puget Sound and coastal estuaries).

A significant part of the network was developed under the direction of Chapter 90.71 RCW - Puget Sound Water Quality Protection, which ensured implementation of the Puget Sound Ambient Monitoring Program. The agency also measures and evaluates stream flows in salmon-critical basins and key watersheds statewide, and makes

near real-time information available to the public via the agency's Web site.

Result

The health of rivers, streams, lakes, and marine estuaries and sediments are assessed statewide.

- Using an efficient mix of monitoring designs and programs, the agency will reliably assess and report on the health of freshwater rivers and streams, lakes, marine and estuarine waters, and marine sediments statewide.
- The agency will reliably evaluate stream flows in salmon-critical basins and key watersheds statewide, compare actual flows to instream flow targets, and make near real-time stream flow data available to the public via the agency's Web site.

Major Issues

Stability of Environmental Monitoring Programs

Environmental monitoring is an important agency activity. In recent years, new requirements for watershed planning and salmon recovery have increased the demand for reliable water quality and stream flow data throughout the state. However, the stability of several of the agency's monitoring programs is in jeopardy. The cumulative effects of budget cuts and escalating costs for services necessary to carry out monitoring have necessitated reductions in some of the agency's core monitoring efforts.

Marine sediment monitoring, which had been particularly hard hit, received additional funding in the 05-07 biennium, however, funding for marine water column sampling remains inadequate. The problem of shrinking budgets has been exacerbated by increased costs for chartered marine flights, marine vessel rental, and contracted analytical services.



Stream gauge to monitor stream flow

The agency is also facing budget problems in

stream flow monitoring. Although a budget add was received for the 05-07 biennium to replace most of the "one-time" funding from external sources (Salmon Recovery Funding Board, National Fish & Wildlife Foundation) to install stream gauges in priority watersheds, funding was not provided to continue grants to local entities to assist in maintaining and operating the gauges.

During the 05-07 biennium, the agency must report its progress toward implementing priority activities in Washington's Comprehensive Monitoring Strategy, and also must submit to the Environmental Protection Agency a statewide strategy for meeting all Clean Water Act monitoring requirements. Both efforts are designed to help determine the funding and priorities for core monitoring programs. Investments in monitoring are important to assure accurate data and measures of program performance and accountability are available to support management actions and regulatory decisions.

Maintaining Investment in Water Cleanup Plans

Section 303d of the federal Clean Water Act requires the state to develop water cleanup plans (also known as TMDLs – Total Maximum Daily Loads) for water bodies that fail to meet water quality standards. As part of a lawsuit agreement, a Memorandum of Agreement with the Environmental Protection Agency requires the Department of Ecology to develop nearly 1,500 water cleanup plans by 2013.

In recent years, the agency has been successful in obtaining federal funds to develop water cleanup plans. However, budget pressures at both the state and federal levels threaten the agency's ability to maintain the water cleanup schedule. Federal budget reductions for the 05-07 Biennium reduced funding for these plans by more than \$170,000. In addition, the agency is faced with conducting a number of complicated marine TMDLs, which are expected to be considerably more costly than other TMDL efforts.

In the face of these budget cuts, the agency needs to continue seeking out avenues of support for this program. If the state is unable to meet the terms of the lawsuit agreement, it is possible the federal government may pull back millions of dollars of federal funds in order to implement its own water cleanup program. Under a federally-administered

program, the state would lose much control over permitting decisions involving point sources of pollution, which would pose hardships on municipalities and industries.

Monitoring Coordination and Integration

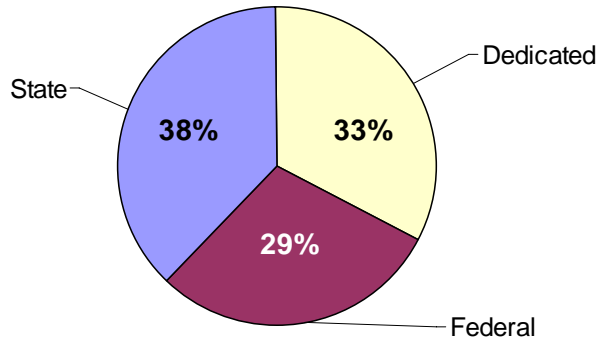
The agency's monitoring and environmental study efforts must be effectively coordinated at the state, regional, national, and local levels. Actions by the Washington State Legislature (SSB 5637, 2002) and the Governor's Office (Executive Order 04-03, 2004) have resulted in the development of a Statewide Comprehensive Monitoring Strategy (CMS) and the creation of the Governor's Monitoring Forum. The Forum, along with other entities such as the Puget Sound Ambient Monitoring Program and the Pacific Northwest Aquatic Monitoring Partnership, bring local, state, tribal, and federal agencies together to coordinate monitoring efforts, increase efficiency and effectiveness of individual monitoring programs, and identify and target the most important data gaps.

Environmental Assessment Program Budget

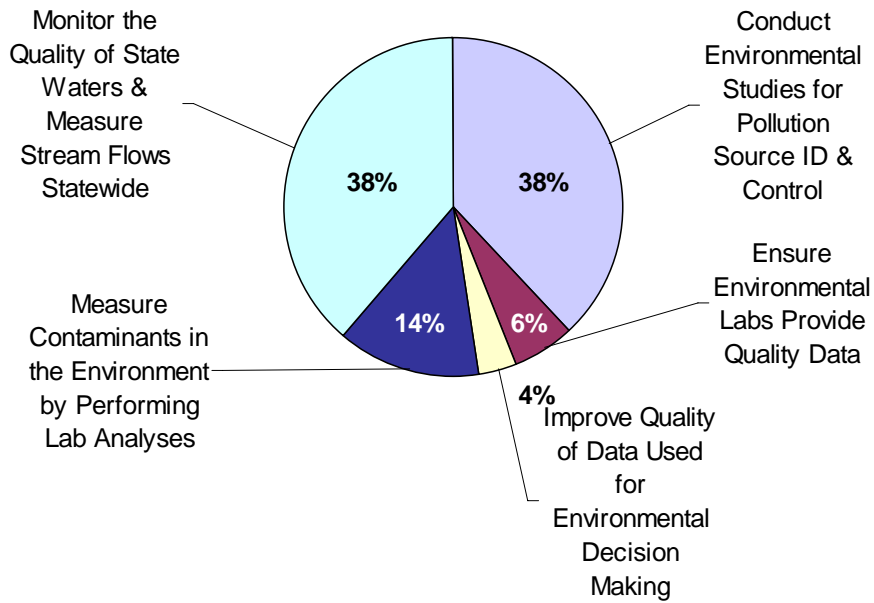
Budget = \$25 million; FTEs = 125.6

State	(\$) Amount	Sources	Uses
General Fund – State	9,562,110	Multiple	Water quality monitoring, marine sediment monitoring, streamflow monitoring, technical assistance, monitoring of nonpoint source controls, water cleanup studies, laboratory accreditation
Federal			
General Fund – Federal	7,270,571	Federal grants	Water quality monitoring, marine sediment monitoring, watershed cleanup studies, quality assurance
Dedicated Funds			
General Fund – Private/Local	304,072	Agreements with counties and cities	Water quality studies, laboratory analytical work
Water Quality Account	969,933	Excise taxes on cigarettes and other tobacco products, sales tax transfer, loan repayments, interest payments, and state general fund transfer	Streamflow monitoring
State Toxics Control	2,969,951	Hazardous substance tax, remedial actions, and penalties recovered	Marine sediment monitoring, groundwater investigations, water cleanup studies, toxics monitoring
Water Quality Permit	3,819,510	Fees on wastewater discharge permits	Groundwater investigations, water cleanup studies, watershed studies, compliance monitoring
Freshwater Aquatic Weeds	193,051	Fees on boat trailers	Technical assistance, monitoring
TOTAL	\$25,089,198		

Environmental Assessment Program Dollars by Fund Source



Environmental Assessment Program Dollars by Activity



Activity	Dollars	FTEs
Conduct Environmental Studies for Pollution Source Identification and Control	9,522,278	42.0
Ensure Environmental Laboratories Provide Quality Data	1,500,096	8.1
Improve Quality of Data Used for Environmental Decision Making	928,291	4.4
Measure Contaminants in the Environment by Performing Laboratory Analyses	3,416,462	29.8
Monitor the Quality of State Waters and Measure Stream Flows Statewide	9,722,071	41.3
Total Environmental Assessment Program	\$25,089,198	125.6

Hazardous Waste and Toxics Reduction Program

Contact: Darin Rice, Program Manager, (360) 407-6702

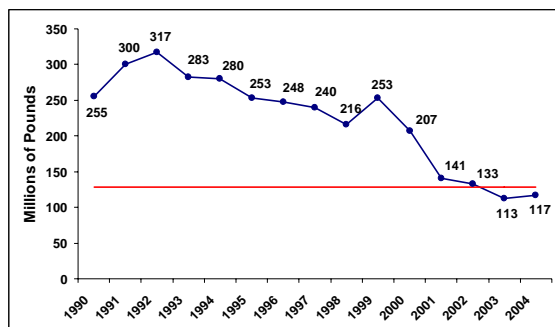
Program Mission

To foster sustainability, prevent pollution, and promote safe waste management.

Environmental Threats

There are inherent risks in the use of hazardous chemicals. When chemicals become hazardous waste, they are, by definition, harmful to the environment and/or human health. Many of these wastes are persistent in the environment, remaining toxic for a very long time, and some can build up (bio-accumulate) in the food chain. Currently, about 7,000 facilities and businesses produce more than 117 million pounds of hazardous waste annually in Washington (2004 data).

The agency addresses both the long-term inherent risks of using hazardous chemicals, and improper hazardous-waste handling and disposal. Reducing the use of toxic chemicals is a top priority, with a second major focus being to ensure that hazardous waste generated is managed safely.



Progress toward meeting the 50% hazardous waste reduction goal

Authorizing Laws

- Chapter 70.105 RCW (1976), Washington's Hazardous Waste Management Act
- Federal Resource Conservation and Recovery Act (1980)
- Chapter 173-303 WAC, Dangerous Waste Regulations (2000)
- Chapter 70.95 RCW, Hazardous Waste Reduction Act
- Chapter 70.95C RCW, State Solid Waste Act
- Chapter 70.95E RCW, Hazardous Waste Fees

- Chapter 173-307 WAC, Pollution Prevention Plans (1991)
- Chapter 173-305 WAC, Hazardous Waste Fees (1992)
- Chapter 70.105D RCW (1989), State Hazardous Waste Cleanup (MTCA)
- Chapter 70.102.020 RCW, Hazardous Substance Information Act
- Chapter 49.70 RCW, State Worker and Community Right-to-Know Act
- Federal Emergency Planning and Community Right-to-Know Act
- Chapter 15.54 RCW, Fertilizer Regulation Act (Clarifies the Department of Ecology's oversight authority over waste-derived fertilizers)

Constituents and Interested Parties

- General public
- Local governments and other agencies
- Business groups and associations
- State agencies: Department of Agriculture; Department of Health; Washington State University
- Regulated businesses and agencies
- Tribes
- Environmental groups
- Environmental Protection Agency (EPA)

Major Activities and Results

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 substances and waste generation, and requires certain businesses to prepare plans for voluntary reduction. The agency provides assistance through innovative programs for source and waste generation reduction, including more than 250 pollution prevention technical assistance visits each year to businesses. In addition, the agency focuses on improvements to industry sectors that have the highest rate of waste generation and non-compliance. The goal is to help businesses achieve energy savings, water conservation, and reduce hazardous waste generation, which can also reduce the business' production costs. In

addition, reducing the initial generation of hazardous waste minimizes disposal costs, reduces the need for cleanup, and minimizes public exposure. (Authorizing laws - 70.95C and 70.95E RCW, and 173-305 and 173-307 WAC)

Result

The amount of hazardous waste generated is reduced. Businesses save on cleanup and disposal costs, public exposure to hazardous waste and toxics in products is minimized, and future cleanups are avoided.

- Reduce statewide generation of hazardous waste by two percent annually (about five million pounds a year).
- Achieve quantifiable savings in energy (dollars); process water conservation (gallons); and reduce hazardous waste (pounds) at several businesses that volunteer for assistance (Toxics Reduction Engineer Efficiency or TREE).
- Focus on improvements for sectors that have the highest rate of contamination and non-compliance.
- Create a partnership with hospitals and auto recyclers to reduce the use of mercury.
- Make progress on purchasing environmentally preferable products and services at state and local government agencies (sustainability).
- Conduct 250 pollution prevention technical assistance visits annually.
- Implement the long-range strategic State Hazardous Waste Management Plan to reduce or eliminate hazardous substances (the plan is called Beyond Waste and, at times, is referred to as Never Waste).
- Support the highly popular annual Governor's Award for pollution prevention and sustainability practices.
- Reduce the number of large- and medium-quantity generators that have to report hazardous waste generation annually through technical assistance, process efficiencies, and hazardous waste generation reductions.

Increase Safe Hazardous Waste Management through Technical Assistance

Businesses are provided with education and technical assistance about safe hazardous waste management. This activity is important because it prevents problems from happening in the first place or from getting worse. The goal is to avoid future state costs in spending millions to clean up

contamination and to minimize threats to public health and the environment.

Annual workshops are offered to thousands of businesses on how to manage their hazardous waste safely and remain in compliance with appropriate regulations. Although formal compliance enforcement work is essential to maintaining compliance with hazardous waste regulations, compliance-related technical assistance visits and information can also bring facilities into regulatory compliance, using substantially fewer resources for a given level of environmental benefit. Safe management of hazardous waste protects employees and the public and avoids cleanup costs. (Authorizing law - 70.105 RCW)

Result

Hazardous waste is safely managed, employees and the public are protected, and businesses are in compliance with state hazardous waste laws.

- Conduct 275 compliance-related technical assistance visits annually at industrial and business sectors prioritized in the Beyond Waste strategic plan.
- Assist businesses with determining how to manage their wastes safely.
- Conduct annual workshops to explain regulatory requirements and best management practices.
- Adopt rules that provide the best environmental protection while being flexible to meet business needs.
- Increase the number of facilities that achieve and stay in compliance with regulatory requirements.
- Visit new businesses to help explain what hazardous waste requirements they need to meet.

Increase Compliance and Act on Environmental Threats from Hazardous Waste

The agency annually conducts formal compliance enforcement inspections at large- and medium-quantity generator and hazardous waste management facilities to ensure compliance with state and federal regulations. Because there are times when the agency must use its expertise and enforcement authority to protect the environment and public health, a credible enforcement capability is essential to preserving the effectiveness of technical assistance and compliance efforts. When technical assistance

and warning notices fail to bring about compliance, enforcement is used for repeated refusal or inability of a facility to correct violations. (Authorizing law - 70.105 RCW)



Hazardous waste inspectors visit facilities to check on compliance with hazardous waste regulations

Result

Improve facility compliance in managing hazardous wastes for the protection of public health and the environment when other voluntary efforts fail.

- Improve compliance by an increase in the number of facilities that have few or no violations.
- Conduct 320 compliance inspections annually (including 15 treatment, storage, and disposal facilities; 17 recyclers; and 70 large-quantity hazardous waste generators).
- Issue penalties and regulatory orders when necessary.
- Respond to approximately 180 complaints regarding hazardous wastes or substances.
- Investigate and respond to environmental crimes (illegal dumping, falsifying records, etc.).

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

Facilities that treat, store, and/or dispose of hazardous wastes are required to obtain a permit to ensure that their design, construction, maintenance, and operating procedures protect public health and the environment. This sets the initial standards businesses need in order to treat, store, or dispose of hazardous waste. 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. Sites that pose the greatest hazard to human health and the environment are addressed first. The agency is currently working on 27 high-priority corrective action cleanup sites. (Authorizing laws - 70.105, 70.105D RCW, and the Federal Resource Conservation and Recovery Act)



Properly closed drums, stacked with aisle space and under cover are far less likely to cause harmful spills

Result

Assurance that facilities treating, storing, or disposing of hazardous wastes are constructed and operated properly to prevent soil, water, or air contamination.

- Issue protective permits for hazardous waste management facilities.
- Process permit modifications for facilities that want to change or expand operations for treating, storing, or disposing of hazardous wastes.
- Increase by eight percent annually the goal toward complete cleanup or remediation at 27 high-priority facilities.
- Improve compliance at treatment, storage, and disposal facilities.
- Prevent future abandoned facilities requiring cleanup by proposing statutory and regulatory improvements for Washington’s waste management system.
- Address proper financial assurance requirements at used oil processors and recyclers to ensure taxpayers don’t have to pick up the tab when these facilities are abandoned.

Improve Community Access to Hazardous Substance and Waste Information

The agency uses automated data systems to track compliance and technical assistance visits;

measure pollution prevention and compliance progress; track amounts of hazardous waste generated each year and its proper transport, treatment, and/or disposal; identify toxic chemicals released and stored by businesses; and track information on hundreds of facilities that prepare pollution prevention plans and pay fees.

This data provides the agency, public, and local government with accurate information about the type, location, and source of hazardous substances that affect them. In accordance with federal and state Community Right-to-Know laws, the agency also responds to public inquiries about toxic chemicals and provides a Web site for this purpose. (Authorizing laws - 49.70, 70.102, and 70.95E RCW, 173-305 and 173-307 WAC, and the Federal Emergency Planning and Community Right-to-Know Act)

Result

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

- Improve Web site and public access to hazardous waste information.
- Respond to over 9,500 phone calls for assistance annually (the 1-800 hazardous assistance hotline).
- Issue "Shoptalk" (a helpful newsletter) to 25,000 businesses.
- Develop 40 new or revised publications for businesses annually.
- Assist the State Emergency Response Commission and local emergency planning committees with data on chemicals and hazardous substances.
- Collect and analyze 7,000 reports annually from businesses that generate and report on their hazardous waste.
- Provide guidance to agency staff and local government on environmental justice issues.

Major Issues

State Hazardous Waste Management Plan (HWMP) Implementation

The state HWMP was completed in November 2004, and the agency has begun implementing critical recommendations identified in the plan. It is commonly referred to as the Beyond Waste Project. Beyond Waste is a long-range statewide

plan for reducing and managing hazardous and solid wastes in Washington over the next 30 years. Statewide strategic plans for hazardous waste and solid waste management are required by state law (70.95.010 and 70.105 RCW). Agency staff, local government officials, and many others agree that reducing the use of toxic substances and the generation of wastes should be the agency's main focus.

Moving beyond waste to reuse and reduce materials use (especially toxic materials) will take many years. The essence of the Beyond Waste strategic plan is to make the transition from managing wastes to eliminating them from being generated in the first place. Moving beyond waste will help the agency integrate efforts to protect the environment, human health, and the state's economic development.

The Beyond Waste strategic plan focuses on the following five initiatives:

- Elimination of industrial wastes through partnerships with industry sectors.
- Establishment of a closed-loop reuse and recycling system for capturing organic materials.
- Encouragement of a green-built environment by making sustainable building the norm in Washington.
- Reduction of hazardous wastes from small businesses and households.
- Tracking of overall progress toward the Beyond Waste vision through performance measures and improved data tracking.

Mercury Chemical Action Plan

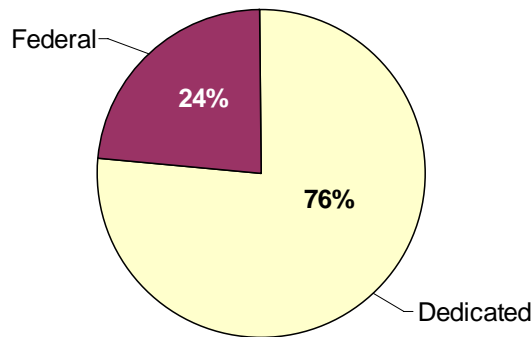
The agency is working with other local, state, and federal entities to reduce, and ultimately eliminate, the generation of mercury waste and releases of mercury to the environment. The agency has developed an action plan for mercury to ensure a comprehensive and balanced approach. The 2003 Legislature also directed the agency to implement mercury waste reduction under Engrossed Substitute House Bill 1002.

Hazardous Waste and Toxics Reduction Program Budget

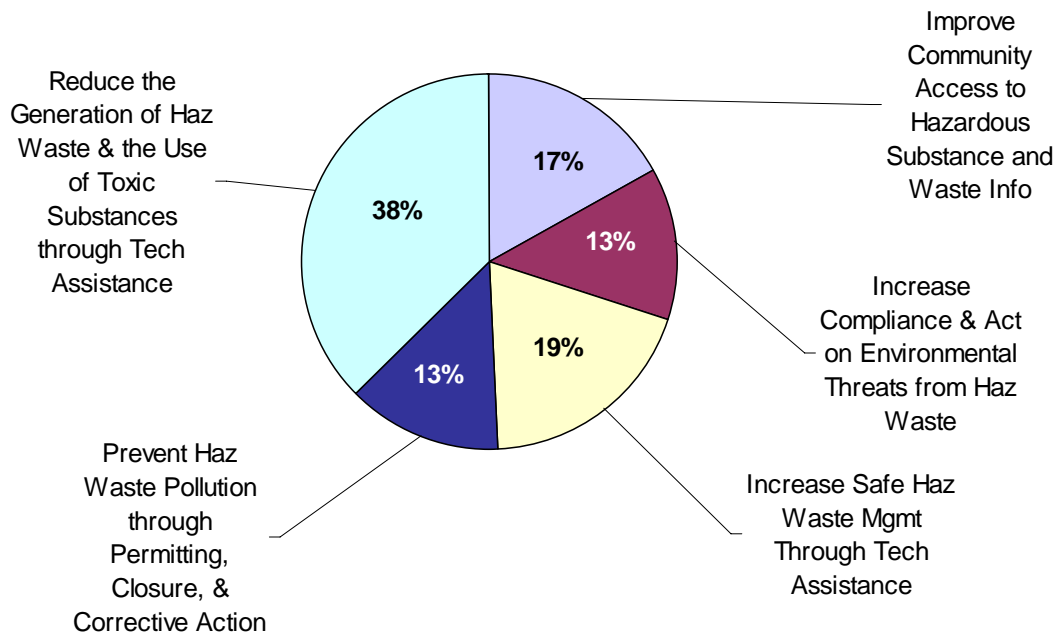
Budget = \$23.6 million; FTEs = 119.2

Federal	(\$) Amount	Sources	Uses
General Fund – Federal	5,578,532	Federal Grants	Grant funds received from EPA for implementing federal Resource Conservation and Recovery Act (RCRA) and for pollution prevention
Dedicated Funds			
General Fund – Private/Local	6,733	Cost reimbursement contracts	To promote pollution prevention and safe waste management, primarily through technical assistance to businesses.
State Toxics Control Account	12,546,512	Hazardous-substance tax; recovered remedial actions and penalties collected	To promote pollution prevention and safe waste management, primarily through technical assistance to businesses, inspections of large quantity generators of hazardous waste and permitted treatment, storage and disposal facilities, and hazardous waste cleanups. To conduct criminal investigations and enforcement actions.
Hazardous Waste Assistance Account	4,327,572	Hazardous Waste Fees	Technical assistance to hazardous waste generators and hazardous substance users
Workers Right-to-Know	855,062	Labor and Industries fee on employers reporting more than 10,400 worker hours per year in designated industries	Dedicated fund used to compile information on hazardous substance use and to make this information available to citizens and other public entities
Local Toxics Control Account	198,465	Hazardous substance tax	Quantify metals and dioxins in fertilizer, assess concentrations of dioxin in wood ash, and review and analyze waste derived fertilizers as part of the fertilizer registration process.
TOTAL	\$23,512,882		

Hazardous Waste Toxic Reduction Program Dollars by Fund Source



Hazardous Waste and Toxic Reduction Program Dollars by Activity



Activity	Dollars	FTEs
Improve Community Access to Hazardous Substance and Waste Information	3,959,944	30.0
Increase Compliance and Act on Environmental Threats from Hazardous Waste	3,118,470	20.0
Increase Safe Hazardous Waste Management through Technical Assistance	4,494,932	22.0
Prevent Hazardous Waste Pollution through Permitting, Closure, & Corrective Action	3,130,548	16.0
Reduce the Generation of Hazardous Waste and the Use of Toxic Substance through Technical Assistance	8,808,985	31.2
Total Hazardous Waste and Technical Assistance Program	\$23,512,879	119.2

Program Mission

To lead the effective and efficient cleanup of the United States 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 consists of 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 53 million gallons of radioactive and chemically hazardous waste in Hanford's 177 underground storage tanks.
- Removing the residual sludge remaining after removal of 2,100 tons of disintegrating nuclear fuel rods stored in concrete basins near the Columbia River.
- Monitoring approximately 190 square miles of contaminated ground water that flows toward and eventually enters the Columbia River. Approximately 95 square miles of contaminated ground water currently violate both 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 1,500 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 United States Department of Energy (USDOE), which operates the Hanford Site, the federal 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), is an agreement that directs the Hanford Site cleanup and reflects a concerted goal of achieving, in an aggressive

manner, full regulatory compliance and remediation with enforceable milestones.

The Nuclear Waste Program was created in support of the agency's commitment to the Tri-Party Agreement. USDOE was not required to comply with hazardous waste, air, and water pollution standards until the late 1980s. Over the next 30 years, the Tri-Party Agreement will bring the Hanford Site into compliance with the same rules that regulate private industry. Laws that govern the program include:

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

Constituents/Interested Parties

- *Congress, USDOE, EPA, the Nuclear Facility Safety Board, and U.S. Fish and Wildlife Agency*
- *Environmental Council of States, National Governor's Association, Western Governors' Association, USDOE's State and Tribal Government Working Group, and the Oregon Office of Energy*
- *Yakima, 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 Watch of Oregon, Physicians for Social Responsibility, Washington League of Women Voters, and Columbia Riverkeeper*
- *Tri-Cities area business and labor groups*
- *Washington State Departments of Health and the Northwest Compact*

Major Activities and Results

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

The agency protects public health and natural resources by ensuring the safe storage and management of 53 million gallons of high-level radioactive tank waste at the Hanford Nuclear Reservation. The Hanford Tank Waste Project is focused on permitting the double-shelled tank waste storage system, removing highly radioactive hazardous wastes from the single-shelled tanks, and beginning to close portions of the tank waste storage system. The tank waste will be removed and treated, leading to eventual closure of all 177 Hanford tanks by 2028. (Authorizing laws - 70.105 RCW and 173-303 WAC)

Result

Public health and environmental risk from the highly toxic, mixed radioactive and hazardous tank waste is reduced.

- Improve the safety of the double-shelled tanks by issuing a hazardous waste storage permit by November 2006.
- Move waste from 16 of 149 single-shelled tanks to double-shelled tanks by September 2006.
- Issue the single shell tank system hazardous waste closure plan.



Hanford's Tank Waste Treatment Plant under construction

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

The agency protects public health and natural resources by providing regulatory oversight for the treatment and disposal 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. (Authorizing laws - RCW 70.105RCW and 173-303 WAC)

Result

The Hanford Tank Waste Treatment Plant is scheduled to be operating by January 2011. However, recent construction delays indicate that this date will be missed by a few years. By 2028, 53 million gallons of high-level radioactive mixed waste from Hanford's interim storage tanks will be retrieved and treated.

- Continue on the critical path schedule (permit approvals are submitted and approved on time) for construction of the waste treatment.
- Complete work to demonstrate the viability of bulk vitrification (changing into glass) as an additional way to treat tank waste.
- Develop and complete the permit for Immobilized High-Level Waste Storage facility (Canister Storage Building) by January 2006 (permit application received June 2003) – measured by % complete on permitting schedule.

Ensure the Safe Management of Radioactive Mixed Waste at Hanford

The agency provides regulatory oversight for the safe storage, treatment, and disposal of liquid and solid dangerous and radioactive mixed wastes at the Hanford Nuclear Reservation, as well as radioactive mixed-waste sites throughout the state. It is the focus of this activity to regulate the management of this historic and ongoing waste stream and to assure the retrieval, treatment, and safe disposal of high-risk transuranic and other wastes currently buried in shallow, unlined trenches. (Authorizing laws – 70.105 RCW and 173-303 WAC)

Result

Treat and dispose of 2.6 billion gallons of liquid waste and 35 million cubic feet of solid wastes by 2017 to significantly reduce the risks posed by the waste to Hanford workers and the environment.

- Groundwater and closure plans for Hanford's Low-Level Burial Grounds will be developed by January 2007.
- Implement innovative waste disposal initiatives developed by the Hanford accelerated disposal workgroup.
- Make at least six shipments per month of contact-handled transuranic waste to the permanent disposal facility in New Mexico.

- Complete the US Ecology, Inc. site investigation and determine required cleanup actions by August 2006.

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

The agency works on decommissioning large, complex, and high risk facilities throughout the Hanford Nuclear Reservation, including nuclear reactors and chemical processing facilities used for nuclear weapons material production. Transition of these facilities to safe and stable conditions requires coordination of multiple regulatory and technical requirements. Additionally, the agency is responsible for regulatory oversight of three active operating facilities not on the Hanford Site. (Authorizing laws – 70.105 RCW and 173-03 WAC 173-303)

Result

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

- Assure U.S. Department of Energy’s (USDOE) establishment of a schedule, including detailed planning and milestones, for disposition of surplus facilities in Hanford’s 300 Area by December 2005.
- Complete deactivation and dismantle of the 232-Z Building at the Hanford Plutonium Finishing Plant by September 2006.
- Close the Framatome liquid waste lagoons (not on Hanford) by August 2006.
- Complete transition of the 105-H Reactor to Interim Safe Storage by December 2005.
- Complete the Puget Sound Naval Shipyard mixed waste storage facility permit by June 2006.
- Develop a strategy and schedule for deactivation and decommissioning of all facilities in the central area of Hanford and incorporate the approach into the Tri-Party Agreement by July 2006.

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

The agency protects public health and natural resources by working to restore the public use of air, soil, and water at the Hanford Nuclear Reservation. This is accomplished by; cleaning up contaminated sites from past Hanford activities; removing radioactive and hazardous contaminants, containing and monitoring residual

contaminants, and mitigating natural resource damage at Hanford. (Authorizing laws - 70.105D RCW, 173-340 WAC, and Federal CERCLA 40 CFR 300)

Result

Public use of the air, soil, and water at Hanford will be restored and human and environmental risks associated with past Hanford activities are removed or reduced.

- Remove and dispose of 500,000 tons of contaminated soil per year through 2011.
- Complete clean up of 50 waste sites per year in Hanford’s 200 Area from 2008 - 2024.
- Remediate three sites that are high risk to groundwater by 2006.
- Identify a preferred approach to clean up groundwater under Hanford’s 300 Area by March 2007.

Major Issues

The USDOE Environmental Management Program is the largest environmental program in the nation. The cleanup of the Hanford Site is one of the largest elements of this program.

Tank Waste Cleanup

The cleanup of underground tanks at the Hanford Site will be one of the longest and most costly public works projects ever undertaken. A key element of the cleanup work has been retrieving radioactive wastes from failing and aging storage tanks and placing the waste in interim, stable storage tanks. Construction of the tank waste treatment facility by USDOE is roughly 39% complete. However, the scheduled completion date of January 2011 has slipped. The agency will continue to use available legal and political tools to prevent further schedule slips.



An old tank next to the Columbia River is torn down and will be safely disposed

Continuation of Hanford Cleanup Progress

Cleanup progress has started on major Hanford facilities. The USDOE must be encouraged to continue seeking ways to maintain progress on the stabilization and decommissioning of these facilities to reduce hazards to workers and the environment. Progress must be maintained on issuing closure or final operating permits for waste transportation, storage, and disposal at the Hanford Site.

Protection of the Columbia River

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



The Columbia River borders the Hanford Nuclear Reservation

Decisions about Additional Waste Storage or Treatment at Hanford

Many recent and pending national decisions link the cleanup of former nuclear weapons plants and the disposition of surplus weapons materials.

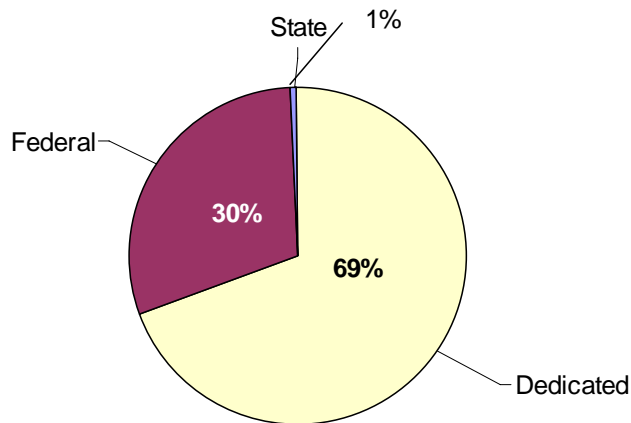
Hanford is a potential storage, treatment, and disposal site for not only its own wastes and materials, but also those from many other sites in the country. At the same time, long-term plans for Hanford cleanup include shipping transuranic and high-level wastes, spent nuclear fuel, and surplus plutonium to other sites for disposal. The agency participates actively in national forums that deal with these issues and advises state policy makers on the state's response to these cleanup plans.

Nuclear Waste Program Budget

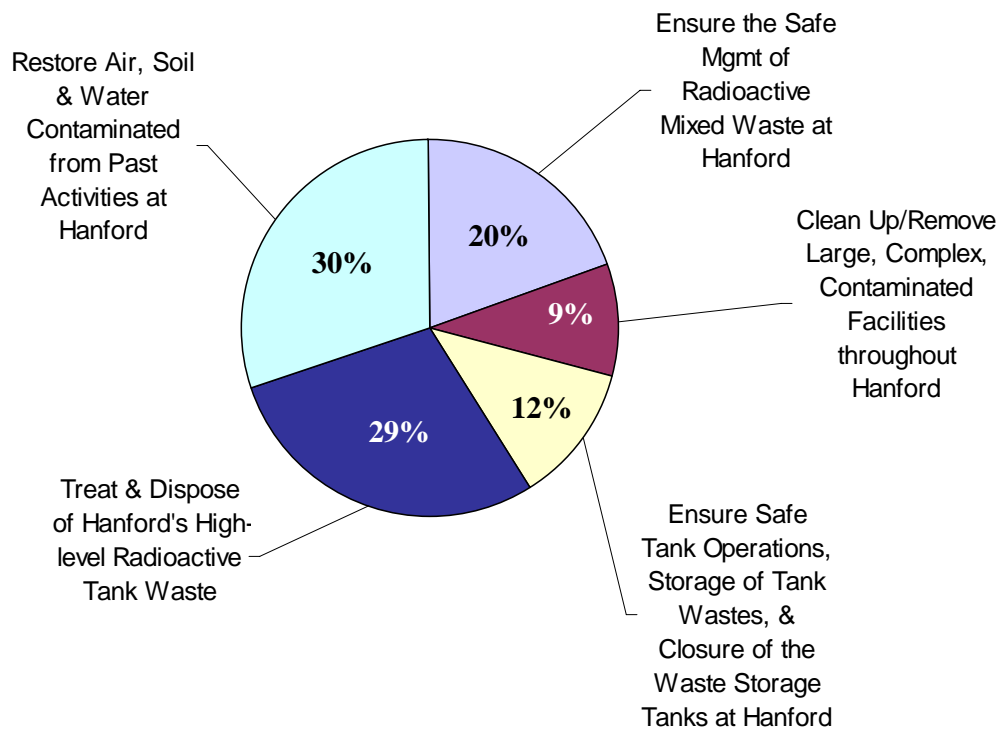
Budget = \$14.7 million; FTEs = 72.8

State	(\$) Amount	Sources	Uses
General Fund – State	80,527	Multiple	Air Pollution Control oversight of Hanford activities with potential for contaminated air emissions.
Federal			
General Fund – Federal	4,462,553	Federal grants	Oversee removal of radiological and chemical contaminants on Hanford, provide regulatory assistance to USDOE and USEPA and implement the provisions of the Hanford Federal Facility Agreement and Consent Order.
Dedicated Funds			
General Fund – Private Local	163,854	The Department of Ecology subleases 100 acres of land to U.S. Ecology, Inc. for operation of the radioactive waste disposal site	All moneys except the \$600 required for Ecology’s annual prime lease payment to US DOE are passed through to Benton County.
Site Closure Account	566,608	Site use permit fee for generators, packagers, or brokers using the Hanford Low-Level Radioactive Waste Disposal Facility are deposited into the Site Closure Account	Policy oversight of commercial low-level radioactive waste disposal within the state and the Northwest Interstate Compact on low-level radioactive waste management.
State Toxics Control Account – Mixed Waste Fees	8,949,319	Permit fees for Mixed Waste Facilities	Oversee management of hazardous and radioactive mixed wastes on Hanford and other mixed waste facilities, provide regulatory assistance to USDOE and USEPA and implement the provisions of the Hanford Federal Facility Agreement and Consent Order and the Hazardous Waste Management Act.
Water Quality Permit Fees	245,297	Fees collected for waste water discharge permits	Actions needed to maintain safe facilities that treat wastewater discharges on the Hanford site
Air Operating Permit Fees	217,625	Permit fees collected for air contaminant sources	Actions needed to maintain safe facilities that treat waste discharges on the Hanford Site
TOTAL	\$14,685,783		
Capital Budget Funding:			
Site Closure Account	6,267,202	Fee charged to generators of radioactive waste	Investigation, closure, and decommissioning of the Hanford low-level radioactive waste disposal facility

Nuclear Waste Program Dollars by Fund Source



Nuclear Waste Program Dollars by Activity



Activity	Dollars	FTEs
Ensure the Safe Management of Radioactive Mixed Waste at Hanford	2,895,234	14.0
Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford	1,398,447	7.2
Ensure Safe Tank Operations, Storage of Tank Wastes, and Closures of the Waste Storage Tanks at Hanford	1,742,693	9.8
Treat and Dispose of Hanford's High-level Radioactive Tank Waste	4,205,779	23.4
Restore the Air, Soil, and Water Contaminated from Past Activities at Hanford	4,443,630	18.4
Total Nuclear Waste Program	\$14,685,783	72.8

Shorelands and Environmental Assistance Program

Contact: Gordon White, Program Manager, (360) 407-6977

Program Mission

The mission of the Shorelands and Environmental Assistance Program is to work in partnership with communities to support healthy watersheds and promote statewide environmental interest.

Environmental Threats

Washington State's quality of life is defined by its beautiful environment. Our state is bestowed with an abundance of rivers, streams, lakes, wetlands, and marine waters. These priceless shoreline and aquatic resources are part of the natural beauty that attracts people to the state. Ironically, this attraction presents one of the greatest threats to the very resources that create the allure. At the same time, the process for regulating development can be cumbersome and not always effective in protecting these important resources.

By the middle of the 21st century, Washington's population is expected to double, adding the equivalent of 29 cities the size of Tacoma. Increased population leads to increased development and places a growing strain on existing utilities, infrastructure, and natural resources. On average, more than 700 shoreline permits and 600 water quality certifications are written each year for development and other activities along rivers, lakes, and marine shorelines. Increased demand for energy and transportation improvements places added stress on aquatic resources.

The challenge facing the citizens of Washington is how best to allow and support appropriate development while ensuring the long-term health of watersheds. This includes improving regulatory and permit processes, such as the timeliness of permit decisions, while preventing the incremental degradation of fish and wildlife habitat and water quality. It also means reducing the threats of flooding and erosion to public safety and property.

Authorizing Laws

- *Chapter 90.58 RCW, Shoreline Management Act*
- *Chapter 90.82 RCW, Watershed Planning Act*
- *Chapter 86.16 RCW, Floodplain Management Act*

- *Chapter 86.26 RCW, State Participation in Flood Control Maintenance*
- *Chapter 90.71 RCW, Puget Sound Water Quality Program*
- *Chapter 43.220 RCW, Washington Conservation Corps(WCC)*
- *Chapter 90.48 RCW, Water Pollution Control Act*
- *Chapter 43.21C RCW, State Environmental Policy Act (SEPA)*
- *Chapter 90.84 RCW, Wetlands Mitigation Banking*
- *Chapters 90.03.265 and 43.21a.690 RCW, Cost Reimbursement*
- *Chapter 47.06C RCW, Permit Efficiency and Accountability Act*
- *Chapter 43.42 RCW, Office of Regulatory Assistance*
- *Transportation Streamlining (ESB 6188, 2001 Legislative Session)*
- *Federal Clean Water Act*
- *Federal Coastal Zone Management Act*

Constituents/Interested Parties

- *Local government*
- *State and federal resource agencies*
- *Tribes*
- *Business*
- *Environmental organizations*
- *Citizens/property owners*

Major Activities and Results

Protect, Restore, and Manage Wetlands

The State Water Pollution Control Act requires the protection of wetlands, and the Department of Ecology has the lead responsibility for implementing this law. In addition, the agency provides technical assistance to local governments, helping them apply requirements to protect wetlands as part of the Shoreline Management Act and Growth Management Act. Staff provides technical assistance to non-government entities, assisting them with wetland conservation and stewardship programs. The agency also provides state leadership on wetlands issues, coordinating statewide policy issues and developing new approaches for managing and restoring wetlands. Properly functioning wetlands protect water quality, reduce flooding, provide

aquifer recharge for drinking water and other uses, and provide critical habitat for fish and wildlife. (Authorizing laws - 90.58 and 90.48 RCW)



Wetland near housing development

Result

Wetlands are protected, restored, and managed, and local governments and other parties are assisted in carrying out local wetland protection efforts.

- Review and comment on 80% of Critical Area Ordinances required to be updated during 2005 and 2006.
- Number and acreage of wetland banks approved or under review.
- Provide 25 training classes and presentations to stakeholders on wetland management.
- 80% of participants in wetlands training classes rate the training as useful.

Protect and Manage Shorelines in Partnership with Local Governments

The Shoreline Management Act establishes a cooperative program between local and state governments. Local governments develop and administer local Shoreline Master Programs, and the Department of Ecology provides support and oversight. The agency is involved in shoreline management in four primary ways: developing guidelines for local shoreline programs; providing technical assistance to local governments and applicants on shoreline planning and permitting activities; reviewing and approving updated local shoreline master programs; and reviewing shoreline permits to ensure an appropriate level of resource protection and implementation of Shoreline Management Act policies.

The agency works jointly with local governments to ensure permit compliance. This includes responding to public inquiries and complaints, making field visits, providing compliance-related technical assistance, and issuing notices of correction, orders, and penalties. Properly managed shorelines provide habitat for fish and

wildlife, minimize flooding and other personal property damage, and provide land use certainty to local landowners. (Authorizing law - 90.58 RCW)



Bulkheads increase wave action and scouring of the beach

Result

Shorelines of the state are protected, restored, and managed consistent with state and local laws. Coastal and shoreline decision making is improved by increasing the knowledge, skills, and abilities of local, tribal, and state planners and resource managers.

- Provide technical and financial assistance to 24 local governments updating their shoreline master programs.
- 20% of the state's cities and counties submit updated Shoreline Master Plans that increase the percentage of shorelines protected.
- Provide technical assistance, training, and networking opportunities to 750 local planners and resource managers.
- Provide Web-based guidance for shoreline planning and permitting, serving 2,000 non-Ecology visitors to the Coastal Atlas Web site per month.

Streamline Environmental Permit Review for Major Transportation Projects

To address traffic congestion and allow businesses to efficiently transport products in Washington State, the Legislature approved significant funding for transportation projects. The agency has agreements with the Department of Transportation (DOT) to fund and coordinate permit review of these important projects. Using these agreements, the agency permits and mitigates transportation projects through multi-agency transportation permitting teams, multi-agency programmatic approvals, watershed-based mitigation

alternatives, and assignment of dedicated organizational infrastructure at the agency. (Authorizing law - 47.06C RCW)

Result

Issue project decisions within an agreed-upon timeframe. Conduct site visits on transportation liaison projects and review all relevant documents in order to ensure environmental compliance. Clearly communicate certification conditions and/or regulatory requirements to the Washington State Department of Transportation.

- 90% of project decision documents are completed within agreed-upon timeframe.
- 90% of transportation liaison projects receive a site visit.
- 90% of projects receive pre-Joint Aquatic Resource Application (JARPA) coordination.

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

The agency administers the Flood Control Assistance Account Program, providing grants and technical assistance to local governments for flood damage reduction projects and comprehensive flood hazard management planning. Staff review and approve local Comprehensive Flood Hazard Management Plans and inspect construction of flood damage reduction projects. The agency also coordinates the state's role in the National Flood Insurance Program (NFIP) and receives an annual Community Assistance Program grant to provide technical assistance and support to 287 communities enrolled in the NFIP. In this role, staff make regularly scheduled technical assistance visits to communities, assess local regulatory programs for compliance with state and federal requirements, and provide workshops and other outreach on flood hazard recognition and reduction. Proper flood control planning and projects protect private and public property, as well as natural resources and fish and wildlife habitat. (Authorizing laws - 86.16 and 86.26 RCW)

Result

Flood damage to properties and the environment is minimized through development and implementation of local Comprehensive Flood Hazard Management Plans and related flood control projects. Facilitate local government efforts toward flood hazard reduction with direct technical assistance support; increase local

government capabilities and public awareness on flood hazards with direct financial support via the Flood Control Assistance Account Program (FCAAP) grant funding; improve the accuracy of flood hazard mapping to enable local governments to direct development away from flood hazard areas and increase public awareness of flood hazard areas.

- 40% (94) of flood-prone communities receive direct support on regulatory issues, flood hazard reduction, and the protection of floodplain functions and values.
- 90% (94) of flood-prone communities are reviewed and assisted with Frequently Flooded Area Ordinances and have adequate standards for reducing flood hazards.
- 90% (50) of FCAAP Grantees receive guidance on applications and/or direct support for projects and plans.
- 30% (78) of communities receive improved maps.

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

The Padilla Bay National Estuarine Research Reserve is one of 25 national reserves established to protect estuaries for research and education. The Padilla Bay Reserve in Skagit County conducts a broad array of public education programs, technical and professional training, coastal restoration, and scientific research and monitoring. The Reserve, managed in partnership with the National Oceanic and Atmospheric Administration (NOAA), includes over 11,000 acres of tidelands and uplands, the Breazeale Interpretive Center, a research laboratory, residential quarters, trails, and support facilities. The Reserve also provides funding and technical support to local Marine Resource Committees as part of the Northwest Straits Initiative and administers the Northwest Straits Marine Commission, as established by Senator Murray in 1998. (Authorizing law - Coastal Zone Management Act).



Padilla Bay

The Reserve is in the process of completing a major construction project (\$3.2 Million), partnering with the NOAA to expand educational and training spaces and new research laboratory capabilities.

Result

The Padilla Bay Reserve is managed and maintained in a cost-effective and efficient way to provide public education, training, and scientific research and monitoring. Estuarine and coastal resources are enhanced and protected using appropriate data and methods. Resource managers and coastal decision-makers receive and utilize need-based, high-priority technical information.

- Conduct 28 professional training workshops and receive evaluations from 80% of participants (18 in 2006 and 20 in 2007)
- 90% of workshop participants favorably evaluate workshops.
- 80% of Padilla Bay Research and Monitoring data are available on-line.
- Conduct 150 educational programs for school children, serving 8,000 participants.

Provide Technical and Financial Assistance for Local Watershed Planning

In 1998, the Watershed Planning Act established a framework for state, local, and tribal governments to collaboratively create watershed plans that address water needs, reduce water pollution, and protect fish habitat. By the end of 2003-05, 13 of the first watershed plans were completed. Now, emphasis is shifting to implementing the water management strategies developed in the completed plans. The agency supports watershed planning and implementation by providing staff support and technical and financial assistance to local groups. The agency also will implement strategies for water resource management and adopt county approved plans into rules, as agreed

to in the locally developed watershed plans. (Authorizing law - 90.82 RCW)

Result

Strategies for managing water supply to meet future instream and out-of-stream needs are developed and implemented on a local watershed basis. Funding and technical assistance are provided to local watershed planning groups. Participation is ongoing with appropriate state, federal, and local agencies, tribes, and stakeholders to help solve water issues in local communities.

- New instream flow or water management rules are adopted in 19 watersheds.

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

The Washington Conservation Corps (WCC) was established in 1983 to conserve, restore, and enhance the state's natural and environmental resources, while providing educational opportunities and meaningful work experiences for young adults (ages 18-25). The WCC creates partnerships with federal, state, and local agencies, private entities, and non-profit groups to complete a variety of conservation-related projects. These include stream and riparian restoration, wetlands restoration and enhancement, soil stabilization, and other forest restoration activities, fencing, and trail work. The Conservation Corps also provides emergency response and hazard mitigation services to local communities. (Authorizing law - 43.220 RCW)

Result

The Washington Conservation Corps carries out conservation and emergency response related projects in support of local communities, and provides valuable educational and work experiences. 250 young adults will be given formal training, valuable on-the-job experience with natural resource agencies, over \$1,000,000 in future scholarship/educational funding will be given, and 600 acres of critical salmon habitat will be restored.

- 500,000 rooted stock plants planted.
- 100 instream barriers removed.
- 100 instream structures placed.
- 50,000 linear feet of exclusion fencing constructed.

- 80% of Washington Conservation Corps members complete the one-year program and earn the educational award.



WCC provided four emergency response crews to assist in Hurricane Katrina relief efforts

Protect Water Quality by Reviewing and Conditioning Projects

The agency issues water quality certifications and Coastal Zone Management Act consistency determinations for water-related construction projects. Staff provide early review on projects whenever possible (e.g. through State Environmental Policy Act review and pre-application meetings) and provide project guidance and technical assistance through phone calls, e-mails, site visits, and workshops. Projects are approved, denied, or conditioned to protect water quality, sediment quality, and fish and shellfish habitat. This activity allows the state to actively participate in federal permitting activities to ensure state interests are adequately represented and considered. (Authorizing Laws – Federal Clean Water Act and 90.48 RCW)

Result

Review and certify projects to protect water quality, habitat, and aquatic life. Review and certify projects in a timely, efficient, consistent, and thorough manner.

- 90% of applicants are notified within 14 calendar days (10 working days) when a Joint Aquatic Resource Permit Application is received.
- 90% of routine 401 water quality certifications are issued within 90 days.

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

SEPA was adopted in 1971 to ensure that state and local decision makers consider the environmental impacts of their actions. The agency provides training and assistance to local

governments and the public, and manages the SEPA register. The SEPA law provides an opportunity for local citizen involvement in the environmental review process and provides developers an opportunity to identify mitigation opportunities that facilitate overall project approval and minimize development costs. (Authorizing law - 43.21C RCW)

Result

The environmental review process in SEPA is used to effectively mitigate environmental impacts, minimize development costs, and provide public input into the process.

- Provide technical assistance and education on procedures and use of SEPA to 1,000 requestors, including government and other interested parties.
- Provide a list of current SEPA documents through the Internet SEPA Register to assist the public in identifying new proposals throughout the state.
- Conduct review and comment on 4,000 SEPA documents at the regional office level, where there is greatest knowledge of projects and potential impacts.

Provide Regulatory Assistance for Significant Projects and Small Businesses

The Office of Regulatory Assistance (ORA) was created in 2003 to provide businesses and citizens with access to information regarding state regulations, permit requirements, and agency rulemaking processes in Washington State. The agency's regulatory assistance services include regional permit assistance specialists in four regional offices (Bellevue, Spokane, Yakima, and Lacey) to work on complex permitting. The agency also manages the Office of Regulatory Assistance One-Stop Service Center in Lacey. (Authorizing laws - 43.42, 90.03.265, and 43.21a.690 RCW)

Result

The Regional Permit Assistance Specialists increase service and efficiencies in permit processing by coordinating complex project permitting processes; arranging pre-application meetings with regulatory personnel; building partnerships and collaborative problem-solving relationships with Washington's business community; and assisting in navigating the complex regulatory process. The Office of Regulatory Assistance One-Stop Service Center

helps applicants understand environmental permitting requirements by providing Web, telephone, and drop-in visitor service.

- Provide permit assistance information to 1,000 applicants per year through the Office of Regulatory Assistance One-Stop Service Center.
- Manage two major projects per year through cost-reimbursement and interagency reimbursement agreements.



Watershed restoration and protection

Major Issues

Shoreline Master Program Updates

Shoreline Master Program updates will be a central function and significant challenge for the agency in the coming years. A total of 250 cities and counties will be submitting updated Shoreline Master Programs over the next 10 years. At the beginning of the 2005-07 biennium, eight counties and 36 cities were underway or in grant negotiations. There is wide and shifting variation in regional workload; 16 west-side counties and their cities are required to update plans by 2011-2012. In contrast, 20 east side counties and their cities have a 2013-2014 deadline. The agency continues to refine guidance and rules to support the new generation of shoreline planning.

Regulatory Improvement Projects

Streamlining the process by which state, federal, and local agencies identify and approve environmental mitigation is a significant area of interest to the agency and the Governor. The agency is supporting establishment of wetland banks for situations where on-site mitigation of development projects would be ineffective in protecting aquatic resources. In addition, work continues on the Water Quality Certification 90/90/10 process (90 percent of all certification decisions are made within 90 days, and the agency contacts applicants within 10 days to tell them whether their application is sufficient). Over the biennium, the agency will strive to extend this from a successful pilot project in the northwest region to all regions of the state.

Watershed Planning

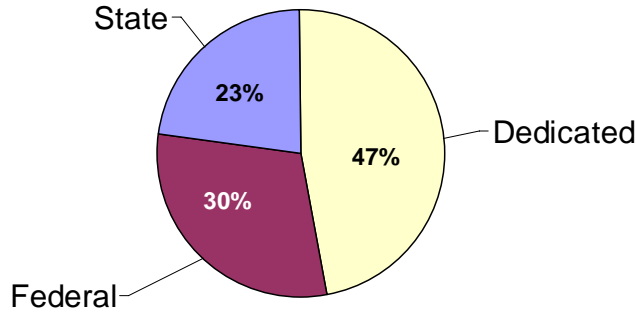
A key challenge for watershed planning in 2005-2007 will be moving from planning to action. 31 planning groups are still actively developing or implementing plans for 39 of the state's 62 watersheds. At the end of Fiscal Year 2005, 13 of these plans were completed. Critical issues this biennium include obtaining adequate funding for implementation actions; setting instream flows for fish; and meeting out-of-stream needs for agriculture, energy production, population, and economic growth.

Shorelands and Environmental Assistance Program Budget

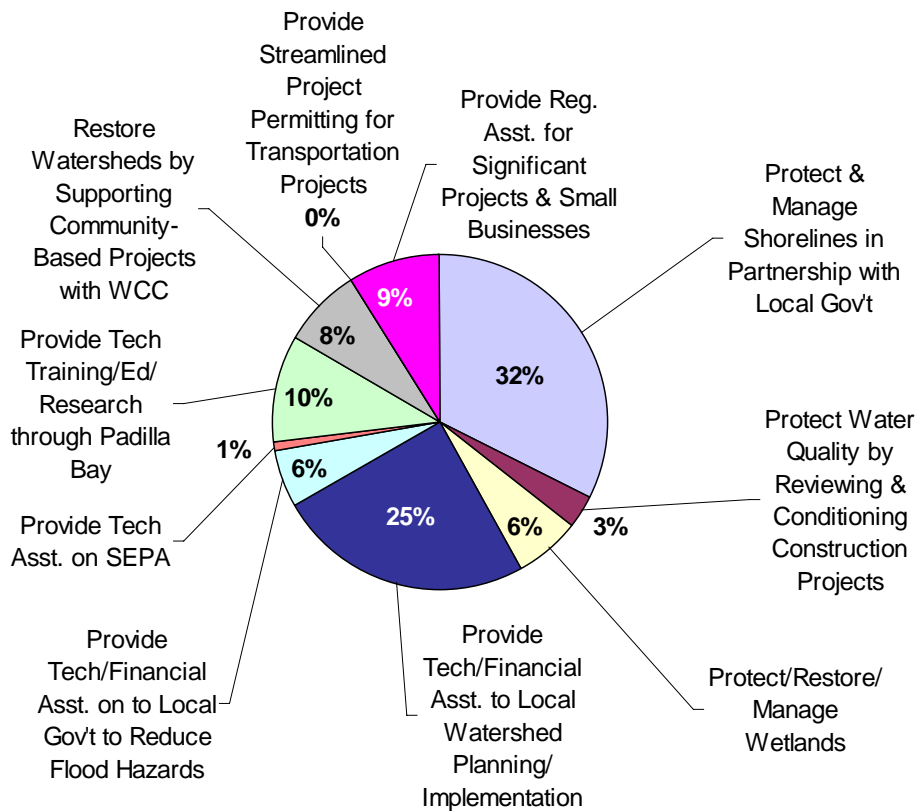
Budget = \$58.3 million; FTEs = 146.8

State	(\$) Amount	Sources	Uses
General Fund – State	13,420,787	Multiple	Shoreline management planning, implementation, enforcement, and technical assistance to local governments. Wetlands Protection and Puget Sound Action Team Plan implementation requirements. Watershed planning grants. Match for federal grants. SEPA, Permit Assistance Center.
Federal			
General Fund – Federal	17,471,655	Federal grants	Primary grant – NOAA Coastal Zone Management. Coastal zone management planning, implementation, enforcement, and technical/financial assistance to local governments. EPA grants for wetlands. Various Padilla Bay operating, data collection, and analysis grants. Sediment cleanup. WCC
Dedicated Funds			
General Fund – Private	8,079,098	Cost reimbursement contracts, donations, and other miscellaneous income	Permit and project review and outsourcing contracts. Padilla Bay operations and Washington Conservation Corps.
Flood Control Assistance	2,888,185	Treasurer transfer from the State General Fund	Administer Flood Control Assistance program. Grants to local governments for comprehensive flood mitigation projects, repair of damaged dikes and levees.
Water Quality Account	16,302,160	Tobacco Tax	Washington Conservation Corps, watershed assessments, streamflow monitoring, watershed coordination assistance, and grants.
Environmental Excellence	128,000	Agreements with businesses or local governments	Provides authority to enter into agreements to develop innovative ways to protect human health and the environment, by improving operating efficiency.
TOTAL	\$58,289,885		
Capital Budget Funding:			
State Building Construction New Appropriation	\$100,000	Bonds	Grant to local government for a demonstration wetland mitigation bank.

Shorelands and Environmental Assistance Program Dollars by Fund Source



Shorelands and Environmental Assistance Program Dollars by Activity



Activity	Dollars	FTEs
Protect and Manage Shorelines in Partnership with Local Governments	18,997,798	46.8
Protect Water Quality by Reviewing and Conditioning Construction Projects	1,694,329	9.1
Protect, Restore, and Manage Wetlands	3,699,345	16.2
Provide Technical and Financial Assistance for Local Watershed Planning & Implementation	14,472,671	17.7
Provide Technical and Financial to Local Governments to Reduce Flood Hazards	3,278,793	6.6
Provide Technical Assistance on State Environmental Policy Act (SEPA) Review	487,390	2.4
Provide Technical Training, Ed. & Research through Padilla Bay Estuarine Reserve	5,978,152	15.0
Restore Watersheds by Support Community-Based Projects with the WCC	4,445,389	29.0
Provide Streamlined Project Permitting for Transportation Projects	0	0
Provide Regulatory Assistance for Significant Projects and Small Businesses	5,236,018	4.0
Total Shorelands and Environmental Assessment Program	\$58,289,885	146.8

Solid Waste and Financial Assistance Program

Contact: Cullen Stephenson, Program Manager, (360) 407-6103

Program Mission

The mission of the Solid Waste and Financial Assistance Program is to reduce both the amount and the effects of wastes generated in Washington State.

Environmental Threat

The agency works to minimize environmental threats from pollution of the state's ground water, surface water, and air that result from the improper disposal of wastes. Some of the largest toxic-waste cleanup sites in Washington are former solid waste landfills that have failed to contain hazardous materials disposed at them.

Wastewater, air contaminants, and hazardous wastes generated by industrial sources are produced in very large volumes and remain significant threats to Washington's environment. The industries associated with these waste streams are pulp and paper, aluminum smelting, and oil refining businesses.

The continued increase in waste caused by the state's growing population will require a shift in policy emphasis to waste reduction and prevention as a basis for sustainable solid waste management.

Authorizing Laws

- *Chapter 70.95 RCW, Solid Waste Management Act – Reduction and Recycling*
- *Chapter 70.93 RCW, the Waste Reduction, Recycling, and Model Litter Control Act*
- *Chapter 70.95C RCW, Waste Reduction*
- *Chapter 70.105 RCW, Hazardous Waste Management Act*
- *Federal Resource Conservation and Recovery Act*
- *Chapter 70.138 RCW, Incinerator Ash Residue*
- *Chapter 70.105D RCW, Hazardous Waste Cleanup - Model Toxics Control Act*
- *Chapter 70.95D RCW, Solid Waste Incinerators and Landfill Operators*
- *Chapter 70.95J RCW, Municipal Sewage Sludge - Biosolids*

Constituents/Interested Parties

- *State and local governments*
- *Environmental interests*

- *Private sector*
- *Businesses*
- *Citizens*

Major Activities and Results

Eliminate Waste, Promote Material Reuse, and Safely Manage Trash

Waste reduction and recycling conserves resources and saves money in both the public and private sectors. The agency created a 30-year vision and strategic plan for solid waste reduction that includes: technical assistance on pollution prevention strategies; assistance in establishing and operating local recycling programs; improved management of building materials (new and waste); and implementation of an organic materials reuse strategy. This strategic plan is called the Beyond Waste Plan, also referred to as Never Waste. (Authorizing laws - 70.95 and 70.93 RCW)

Result

Solid waste generation per capita decreases, saving businesses and people money, and saving resources for future generations.

- Implement the Beyond Waste Plan, including strategic partnerships with business and government, to reduce solid waste and leverage resources.
- Offer incentives and technical assistance to increase green building practices, expand closed loop recycling and reuse of organic matter, and compost to save resources and decrease the amount of material going to landfills.
- Reduce generation and use of toxic materials by citizens and industries.
- Increase markets for environmentally preferred purchasing through state and local government purchasing.
- Design performance indicators to track progress toward the 30-year vision of eliminating most wastes.

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

The agency protects public health and promotes resource recovery through the administration of three capital grant programs. Coordinated

Prevention Grants support landfill regulation to protect groundwater, recycling, and reuse programs, and hazardous waste collection. New initiatives focus on reuse of organic materials and waste and toxicity reduction for buildings. Remedial Action Grants are used to clean up contaminated sites for groundwater protection and/or redevelopment of the land. Public Participation Grants are used to inform citizens of local cleanups and waste reduction efforts. (Authorizing laws - 70.105D and 70.93 RCW)

Result

Grant funding is provided to local governments for cleaning up contaminated sites and for local solid waste and recycling programs. Grant funding is provided for citizen participation in local contaminated site cleanups.

- Provide and manage over \$110 million in grants to local governments, leveraging approximately \$45 million in local government resources.
- Provide technical assistance for approximately 223 agreements with roughly 400 projects.
- Collect over 25 million pounds of moderate-risk waste each year for proper recycling or disposal at moderate-risk waste collection facilities funded through Coordinated Prevention Grants.
- Manage grant funds to local jurisdictional health departments to ensure that approximately 350 solid waste facilities statewide are in compliance with regulatory standards.
- Provide and manage funding for 31 toxic site cleanups and the cleanup of drinking water systems.
- Provide access and information to citizens about local cleanup activities.

Provide a One Stop Shop to the State's Largest Industrial Facilities for Environmental Permitting

The agency provides a single point of contact for petroleum refineries, pulp and paper mills, aluminum smelters, and three chemical manufacturing facilities. Rather than having multiple inspectors work on the many environmental issues at a facility, one engineer provides coverage for all environmental media. This results in balanced regulation for these major industries. (Authorizing laws: 70.94, 90.48, 70.105, 70.95C, 70.95, and 70.105D RCW)

Result

Compliance with environmental standards at facilities regulated by the Industrial Section is ensured.

- Provide one-stop environmental permitting, compliance, and technical assistance to major industry sectors.
- Maintain an 80% rate of current permits.
- Ensure an 80% compliance rate with federal and state standards.

Reduce Persistent Bioaccumulative Toxins (PBTs) in the Environment

Persistent Bioaccumulative Toxins (PBTs) are a particular group of chemicals that can significantly affect the health of humans, fish, and wildlife. The agency 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. The 2005 Legislature provided funding to complete the Chemical Action Plan for polybrominated diphenyl ethers (PBDEs - a flame retardant found in many household products), to monitor a number of Washington lakes for mercury and PBDEs, and to complete a third Chemical Action Plan. (Authorizing laws - 70.94, 90.48, 90.52, 70.105,, 70.95C, 70.95, 70.105D, 49.70, and 70.95M RCW)



Mercury is a highly toxic liquid metal that has been linked to movement and learning disabilities

Result

Reduce and phase out PBT uses, releases, and exposures.

- Continue to implement the Mercury Chemical Action Plan. Areas of focus are dental offices, hospitals, and automobile recyclers. Agreements concerning how these sectors can best reduce their use of mercury are being developed. Mercury monitoring in the environment is also being conducted to establish a baseline.
- A Chemical Action Plan for the flame retardant PBDE is being developed. Of particular concern is the potential for significant exposure in residential settings.
- Funding has been provided to begin development of a third Chemical Action Plan by the end of the biennium.

Prevent and Pick Up Litter

Litter control efforts include a litter prevention campaign, Ecology Youth Corps litter pickup crews, Community Litter Cleanup contracts, and coordination with other state and local efforts to maximize litter pickup. Litter prevention and pickup helps to keep Washington green, supports tourism, and provides employment opportunities for youth. (Authorizing law - 70.93 RCW)



Bags of litter picked up in Okanogan County by the Ecology Youth Litter Corps

Result

Roads are cleaner, as indicated by a Road Cleanliness Indicator, through prevention campaigns and litter being picked up in a timely manner.

- The annual road cleanliness rating improved for the first time in years when the prevention campaign started, dropping from 4.8 in 1999 to 4.0 in 2004.
- Pick up, with local partners, 3,500 tons of litter annually.
- Ecology Youth Corps employs 400 youths in litter pickup each year.
- Receive and respond to 14,000 litter hotline calls each year.
- Conduct a litter survey to evaluate the efficiency and effectiveness of litter programs. Litter generation decreased 24% between 1999 and 2004 (from 8,322 tons to 6,315 tons).
- Provide \$3 million in grants to local governments to clean up litter and illegal dumps.

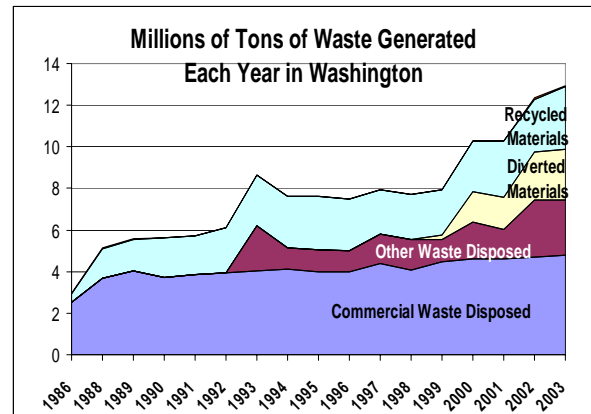
Major Issues

Waste Prevention

Preventing waste is a more effective strategy than managing waste. The Legislature recognized this when it established a waste management hierarchy

for both solid waste and hazardous waste, with waste prevention as the highest priority. Major accomplishments of the last two decades, however, have been with waste management (landfills) in the 80s and recycling in the 90s. Neither has slowed the growth of waste generation. The population continues to grow and waste generation per capita is rising. Additionally, for each pound of garbage that enters the waste system or is recycled, roughly 15 pounds of waste is created in the processing and material extraction phases.

The challenge is to meaningfully reduce wastes and its undesired effects while maintaining a high quality of life and a strong economy in Washington.



Beyond Waste Implementation

Beyond Waste is Washington's long-range strategy for reducing wastes and its impacts throughout the entire production life cycle. A closed-loop recycling system will help to eliminate most wastes, where products will be designed to enter a technical or organic recycling loop, creating business opportunities. Waste is lost profit. Using recycled feedstock is financially sustainable for the long-term. One early stage of implementing the Beyond Waste plan uses state and local government purchasing power to increase markets for environmentally preferable products. Other steps address waste generation more directly, offering incentives and technical assistance to increase green building practices and composting, and working with industry to reduce hazardous waste in priority categories, including electronics.

Local Funding

Local governments will continue to be essential partners in carrying out the Beyond Waste agenda, in addition to businesses and non-profit organizations. Most local government solid waste infrastructure and programs are paid for with disposal (user) fees of some sort, although about a third of their costs are for non-disposal-related activities, such as recycling programs and household hazardous waste collection. For the long term, financing non-disposal activities with surcharges on disposal fees is fiscally unsustainable, especially as waste disposal decreases due to recycling and reduction.



Managing electronic waste is a growing problem

State grant funds through the Coordinated Prevention Grant program provide needed additional funds for a broad range of solid waste related project and programs. These monies are appropriated from the Local Toxics Control Account. Currently, funding for Coordinated Prevention Grants is significantly lower than in past biennia, causing serious challenges for local solid waste managers to continue offering the programs they have established, let alone tackle new reduction initiatives.

Environmental Footprint

The agency has received a federal innovation grant from the Environmental Protection Agency to explore how to more effectively regulate facilities with multiple permits and impacts. The grant will support work to develop a measurement tool that includes environmental, economic, and social indicators, consistent with the Beyond Waste vision of sustainability.

Chemical Policy

With the completion of the Persistent Bioaccumulative Toxins (PBT) rule (scheduled

for December 2005), the agency has laid out a path to reduce the health impacts of toxins to citizens. However, hundreds of new chemicals are introduced every year, and the federal Toxics Substances Control Act has not been successful in preventing problems from occurring. Completing one or two Chemical Action Plans per year is unlikely to keep up with the need to address toxins in our environment.

Maintaining Momentum of Litter Reduction

Since launching the “litter and it will hurt” campaign in the spring of 2002, Ecology has tracked several indicators that suggest the state is on the right path to reducing roadway litter. For example, the state’s litter survey measured a 25% reduction in the amount of litter on state roadways since 1999. However, with a growing population and more cars on the road, roadway litter is still a visible problem in many areas of the state.

The challenge is to maintain momentum and keep the litter prevention campaign materials fresh and interesting. During 2005, the agency will revise the litter prevention strategy with several goals in mind.

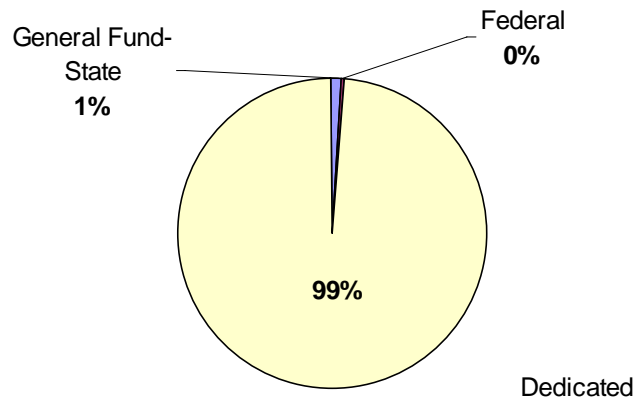
- *Emphasis on enforcement:* Enforcement is the greatest deterrent to littering. The agency continues to build partnerships with the law-enforcement community. The agency funded a pilot local enforcement project in Snohomish County, however, it was semi-successful; media attention was excellent, but few tickets were actually written. In addition, there are reports from the Washington State Patrol that 1,025 tickets written for “potentially dangerous litter” are being tossed out of court. Identifying barriers and solutions to enforcement of litter laws will continue to be a substantial challenge.
- *Increase focus on safety:* Roadway litter is increasingly being recognized as a safety hazard. In 2004, Maria Federici of Renton was blinded when a board fell off a truck and crashed through her windshield. In 2005, Doris Heneghen of Omak was killed when a heavy metal pin smashed through her windshield. The agency will continue to look for opportunities to promote its unsecured load brochure and video.

Solid Waste and Financial Assistance Program Budget

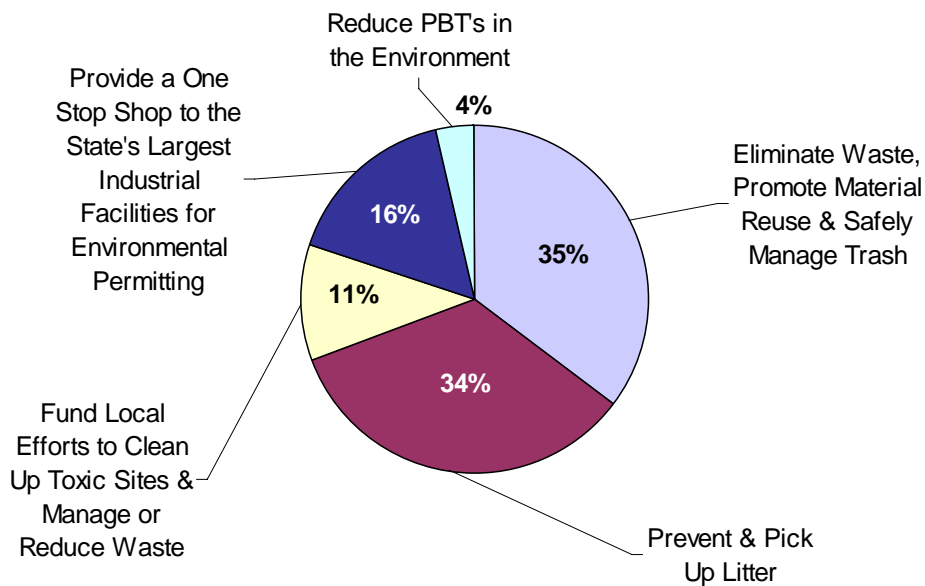
Budget = \$26.4 million; FTEs = 97.8

State	(\$) Amount	Sources	Uses
General Fund – State	280,989	Multiple	Water quality permit enforcement actions.
Federal			
General Fund – Federal	98,618	Environmental Protection Agency	Grants for product stewardship and innovative water quality permits.
Dedicated Funds			
Local Toxics Control Account	3,058,685	Hazardous substance tax	Technical assistance and grants are provided to local governments for local solid waste planning and oversight of solid waste facilities.
State Toxics Control Account	5,429,637	Hazardous substance tax; recovered remedial actions and penalties collected	Provide technical assistance to local health departments, pollution prevention initiatives, regulatory reform, industrial dangerous waste and cleanup activities; public participation grants.
Waste Reduction/Litter Control Account	13,880,650	Litter Tax	Supports the Ecology Youth Corps and other efforts to clean up litter, litter prevention campaign, (50%); recycle hotline, technical assistance in waste reduction, pollution prevention initiatives and recycling (30%); litter grants to local government (20%).
Water Quality Permit Fees	1,508,555	Permit fees collected for wastewater discharge permits	Industrial water quality permitting and inspections, sediment source control.
Air Operating Permit	1,179,068	Permit fees collected for air contaminant sources	Industrial air quality permitting, inspections, enforcement.
Biosolids Permit	705,140	Fee on sewage treatment facilities	Develop and implement the biosolids program.
Environmental Excellence	300,000	Environmental Excellence	Appropriation authority for innovative pollution reduction projects.
TOTAL		\$26,441,342	
Capital Budget Funding:			
Local Toxics Reappropriation	32,608,000	Hazardous substance tax	Grants to local governments for contaminated site cleanups and waste prevention
Toxics New Appropriation	75,000,000	Hazardous substance tax	Grants to local governments for contaminated site cleanups and waste prevention

Solid Waste and Financial Assistance Program Dollars by Fund Source



Solid Waste and Financial Assistance Program Dollars by Activity



Activity	Dollars	FTEs
Eliminate Waste, Promote Material Reuse, and Safely Manage Trash	9,325,019	52.0
Prevent and Pick Up Litter	8,940,784	8.2
Fund Local Efforts to Clean Up Toxic Sites and Manage or Reduce Waste	2,916,946	15.4
Provide a One Stop Shop to the State's Largest Industrial Facilities for Environmental Permitting	4,314,041	19.1
Reduce Persistent Bioaccumulative Toxins (PBTs) in the Environment	944,553	3.1
Total Solid Waste and Financial Assistance Program	\$26,441,343	97.8

Spill Prevention, Preparedness, and Response Program

Contact: Dale Jensen, Program Manager, (360) 407-7450

Program Mission

The mission of the Spills Program is to protect Washington's environment, public health, and safety through a comprehensive spill prevention, preparedness, and response program. The Spills Program focuses on preventing oil spills to Washington waters and land and ensuring 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 into Washington's waters can threaten some of the most productive and valuable ecosystems in the world, while spills on land threaten public health, safety, and the environment. The effects can be acute and chronic and can 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 aroused public concern and resulted in state and federal legislation to protect the environment and human health from such spills. Specific Washington laws include:

- *Chapter 90.56 RCW, Oil and Hazardous Substance Spill Prevention and Response*
- *Chapter 88.46 RCW, Vessel Oil Spill Prevention and Response*
- *Chapter 90.48 RCW, Water Pollution Control*
- *Chapter 88.40, Transport of Petroleum Products - Financial Responsibility*
- *Chapter 70.105 RCW, Hazardous Waste Management Act*
- *Chapter 70.105D RCW, Model Toxics Control Act*

Constituents/Interested Parties

The agency works closely with people interested in environmental protection, emergency response organizations, the oil industry, the shipping and transportation industry, 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, 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*
- *Environmental organizations and the general public*

Major Activities and Results:

Prevent Oil Spills from Vessels and Oil Handling Facilities

Oil and chemical spills from vessels, oil handling facilities, and tank trucks pose a significant environmental threat in Washington State. To minimize this threat, the agency works with the regulated community to carry out four core activities.

Vessel Screening and Inspection, and Oil Transfer Oversight: The agency reviews safety related information (screening) on approximately 2,600 cargo and passenger vessels, and conducts approximately 1,200 onboard inspections per year to provide technical assistance and verify compliance with international, federal, and state requirements. The agency inspects bunkering (vessel refueling) operations and provides technical assistance to help reduce the frequency of spills during fuel transfers.

Oil Handling Facilities: There are 35 oil handling facilities and major transmission pipelines in Washington under state regulation. Agency staff review and approve the facilities' oil spill prevention plans, operation manuals, and certifies personnel training programs to ensure that tanks and pipelines are designed and operated in a manner that will minimize the risk of oil spills.

Neah Bay Rescue Tug: Over the past six winters, a tug stationed at Neah Bay has provided an important additional margin of safety for vessel propulsion and steering failures in the western Strait of Juan de Fuca

and off Washington's rugged outer coast. The rescue tug is capable of controlling a drifting, fully loaded oil tanker or cargo ship in bad weather to prevent vessel casualties, major oil spills, and loss of life.

Incident Investigation: Agency staff investigates oil and hazardous material near-miss incidents and actual accidents to determine what can be done to prevent future problems. Investigations help target inspections and risk management initiatives, and allow the agency to disseminate educational materials with the goal of preventing reoccurrence of similar spills. (Authorizing laws - 90.56 and 88.46 RCW)

Result

Oil and chemical spills from vessels and oil handling facilities are minimized and avoided through risk management, the Neah Bay Rescue Tugboat, and targeted inspections. Spill prevention activities and results include:

- Conduct 1,200 inspections focused on high-risk commercial vessels.
- Enroll 60% of all tank vessels in the voluntary Best Achievable Protection program to prevent oil spills.
- Reduce the number of spills where 25 or more gallons of oil enter surface waters.
- Reduce the total volume of oil entering surface waters.
- Reduce the percent of vessels having "incidents" that can lead to spills (for instance, power loss).
- Assist vessels as needed with the Neah Bay Rescue Tug.
- Increase prevention emphasis on oil transfer inspections, and reach out to "non-regulated" entities.
- Complete an evaluation of the oil tanker escort system.
- Eliminate intentional waste oil discharges from vessels.

Prepare for Aggressive Response to Oil and Hazardous Material Incidents

Operators of large commercial vessels and oil handling facilities are required to maintain state approved oil spill contingency plans. These plans help to assure that when major oil spills occur, the responsible party is able to rapidly mount an effective response.

Once agency staff have reviewed and approved an oil spill contingency plan, the contingency plan holders and spill response contractors maintain their readiness through required spill drills. The agency also partners with the U.S. Coast Guard and the Environmental Protection Agency to maintain a single, overarching policy document (the Northwest Area Contingency Plan) that guides how spills are managed in the Northwest.

Staff works with other agencies and private sector spill response experts to develop geographic based response plans. The geographic response plans identify and rank response strategies that best protect natural resources, drinking water supply intakes, marinas, sensitive archeological sites, and commercial shellfish beds. These pre-defined plans work in concert with private sector contingency plans to enable spill cleanup contractors to immediately begin aggressive response actions with minimal initial consultation. (Authorizing laws - 90.56, 88.46, and 88.40 RCW)



Tank barge, Millicoma, grounded at Cape Disappointment

Result

The agency and regulated community are fully prepared to promptly respond to and mitigate the impacts of oil spills. Spill preparedness activities and results include:

- Enhance the capability of regional spill response teams.
- Approve oil spill contingency plans.
- Complete 95% of internal DRILLTRAC training (spill responder training and certification program).
- Complete 100% of required oil spill drills to assure all plan holders are able to mount effective actions in response to all oil spills to surface or ground water.

- Update the Northwest Area Plan (single plan among several agencies that pre-defines how spills are managed).
- Develop new inland Geographic Response Plans.

Rapidly Respond to and Clean Up Oil and Hazardous Material Spills

The agency is responsible for responding to and overseeing the cleanup of oil spills, hazardous material incidents, and methamphetamine drug labs. These activities include:

24-Hour Statewide Response Capability: The agency provides round-the-clock response (from five field offices) to oil spills and hazardous material incidents that pose a risk to public health, safety, and the environment. This work is a critical service to local communities and the public. The agency ensures that damage from these spills is contained within the smallest area possible and cleaned up as quickly as possible, with minimum damage to public health, safety, natural resources, and private property.



Beach cleanup from an oil spill

Methamphetamine Drug Lab Cleanup: Agency spill responders work with local, state, and federal law-enforcement personnel to dispose of drug lab chemicals from the sites of illicit methamphetamine drug manufacturing labs and lab dumps.

Compliance and Enforcement: The agency may take enforcement and compliance actions for violations related to oil and hazardous material spills. These actions include imposing fines or requiring changes in operating practices to prevent future spills.

(Authorizing laws - 90.56, 90.48, 70.105, and 70.105D RCW)

Result

Oil spills, chemical spills, and methamphetamine labs are rapidly responded to and cleaned up in a timely manner to protect public health, safety, natural resources, and property. Spill response activities and results include:

- Maintain 24-hour, seven-days-per-week spill response capacity throughout the state.
- Increase the response time to spills within 24 hours to 95%.
- Manage agency response to 4,000 annual incident reports.
- Complete up to 1,500 drug lab removals per year.
- Increase the percent of drug lab chemicals that are batched by local government for the agency to properly handle and dispose.
- Respond to all oil spills from regulated vessels and facilities.
- Support environmental crime investigations.

Restore Public Natural Resources Damaged by Oil Spills

When an oil spill causes significant damage to publicly owned natural resources, the agency coordinates with other organizations to complete an assessment of the monetary value of the damages. Once the assessment is complete, the agency seeks fair compensation from the responsible party(s). After the compensation is collected, the agency works with other organizations to assure the money is used for projects to restore the damaged natural resources. (Authorizing laws - 90.56 and 90.48 RCW)

Result

The environmental impacts from oil spills to publicly owned natural resources are partially compensated using damage assessment funding. Natural resource damage assessment related activities and results include:

- Issue a Natural Resource Damage Assessment on 100% of oil spills where 25 or more gallons reach surface waters and a responsible party is identified.
- Restore or protect priority wildlife habitat using natural resource damage funds.

Major Issues

Strengthening the State/Coast Guard Partnership

On May 25, 2001, former Governor Gary Locke and 13th U.S. Coast Guard District Commander

Admiral Brown signed a memorandum of agreement on oil spills. This agreement further strengthens federal and state collaborative efforts to prevent and respond to oil spills in Washington's waters. The agency and the U.S. Coast Guard continue their efforts to implement a cooperative vessel inspection program, share information, and monitor oil transfer operations. Other joint initiatives include implementing recommendations from the North Puget Sound Oil Spill Risk Management Panel, managing the risk of oil spills in Haro Strait and on the Columbia River, and working with the Pacific States/British Columbia Oil Spill Task Force to implement a coastal vessel risk management system from California to Alaska.

Improving Tug Escorts for Loaded Tankers

The 2003 Legislature passed Substitute Senate Bill 6072 which, among other things, directed the agency to complete:

"An evaluation of tug escort requirements for laden tankers to determine if the current escort system requirements under 88.16.190 RCW should be modified to recognize safety enhancements of the new double hull tankers deployed with redundant systems."



The tug, Lauren Foss, located at the western end of the Strait of San Juan de Fuca

A detailed technical report was completed in December 2004. The agency anticipates completing additional work on the "human factors" issue during 2006.

Enhancing Oil Spill Contingency Plans

The agency's rules for facility and vessel oil spill contingency plans were adopted in 1994. Recent drills have identified gaps in the ability of industry contingency plan holders to respond to a probable "worst case" oil spill. The agency is updating its rule to improve spill response standards, improve

the drill program, and make other necessary changes. Rule adoption is scheduled for June 30, 2006.

Making the Neah Bay Rescue Tug Permanent

During the six years of seasonal deployment, the rescue tug has proven its value by providing assistance to vessels in distress. The 2003 Legislature established a new funding mechanism for the Rescue Tug, using an existing transportation fee. This fee provides funding for seasonal tug deployment through the spring of 2008. Ecology's long-term goal is to have a year-around, government-funded rescue tug permanently stationed at Neah Bay.

Meeting Drug Lab Cleanup Workload

Since 1994, the agency has been involved in the cleanup of methamphetamine drug labs. This activity has reduced the agency's ability to respond to oil spills and hazardous material incidents. Fortunately, this work load appears to have reached a plateau.

Oil Transfer Rule

The 2004 Legislature passed Substitute Senate Bill 6641, and adopted a "zero spills strategy to prevent oil from entering the waters of the state." The legislation directed the agency to complete rules by June 30, 2006, addressing oil transfer operations that occur over state waters. These rules are under development and will establish pre-booming and alternative measures to prevent and contain these spills. The legislation did not provide funding to implement the rule.

Future Program Development

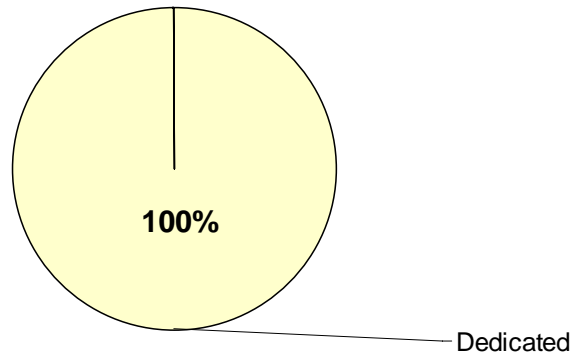
Many new initiatives are either under development or are being implemented. The agency has a well-trained and equipped 50-person Incident Management Assist Team that can be deployed to manage major oil spills and hazardous material incidents. The agency will continue to actively engage interested parties, including the Legislature, the new Oil Spill Advisory Council, regulated industries, local government, tribes, environmental groups, and communities to make sure the program is right-sized and continues to be responsive to the public interest.

Spill, Prevention, Preparedness, and Response Program Budget

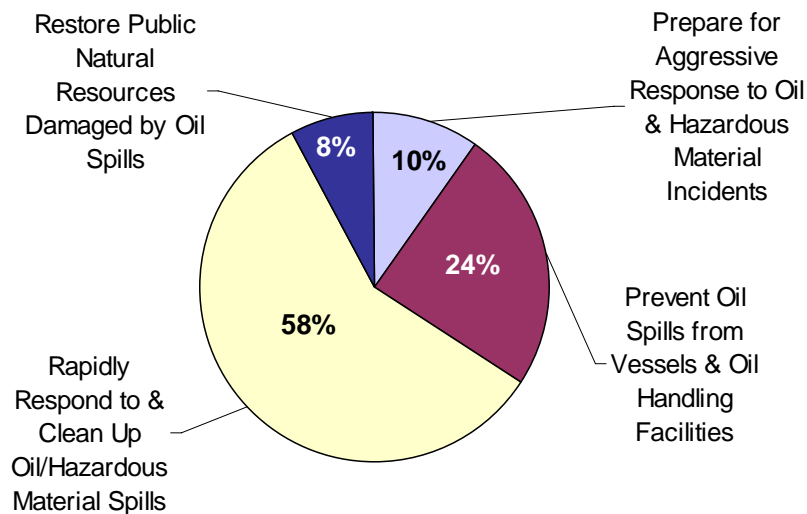
Budget = \$27.6 million; FTEs = 69.9

Dedicated Funds	(\$) Amount	Sources	Uses
General Fund – Private/Local	377,636	Multiple	Methamphetamine drug lab cleanup grants, British Columbia/Pacific States oil spill task force
Vessel Response Account	2,876,000	Existing vehicle title transfer fees	Emergency vessel towing including the Neah Bay rescue tug
State Toxics Control Account	6,817,396	Hazardous substance tax; monies recovered from remedial actions and penalties	Routine hazardous material spill preparedness and response work including drug lab cleanup
Oil Spill Prevention Account (OSPA)	8,705,678	Barrel Tax – 4 cent per barrel tax on first possession of petroleum imported into and consumed in State is deposited to OSPA	Routine oil spill prevention, preparedness, and response work
Oil Spill Response Account (OSRA)	7,057,552	Barrel Tax – 1 cent per barrel tax on first possession of petroleum imported into and consumed in State is deposited to OSRA	Oil spill cleanup where state response costs are expected to exceed \$50,000.
Coastal Protection Fund	1,775,000	Natural Resource Damage Assessments (NRDA); spill penalties; and a small contribution from the marine gas tax	Restoration of natural resources damaged by oil spills, certain non-personnel related oil projects
TOTAL	\$27,609,262		

Spill Prevention, Preparedness, and Response Program Dollars by Fund Source



Spill Prevention, Preparedness, and Response Program Dollars by Activity



Activity	Dollars	FTEs
Prepare for Aggressive Response to Oil & Hazardous Material Incidents	2,764,673	15.3
Prevent Oil Spills from Vessels & Oil Handling Facilities	6,690,275	19.1
Rapidly Respond to and Clean Up Oil and Hazardous Material Spills	15,971,718	33.2
Restore Public Natural Resources Damaged by Oil Spills	2,182,596	2.3
Total Spill Prevention, Preparedness, and Response Program	\$27,609,262	69.9

Program Mission

To get and keep contaminants out of the environment.

Environmental Threats

The agency has identified nearly 10,000 contaminated sites in Washington. Roughly 6,000 of these are the result of underground storage tanks leaking into the environment and contaminating the soil and/or ground water.

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.

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

Authorizing Laws

- *Chapter 70.105D RCW, Model Toxics Control Act*
- *Chapter 90.76 RCW, Underground Storage Tanks*
- *Chapter 90.48 RCW, Water Pollution Control Act*
- *Chapter 90.71 RCW, Puget Sound Water Quality Protection*

Constituents/Interested Parties

An important element of the Model Toxics Control Act (MTCA) is including the public and other interested parties throughout the process of cleaning up contaminated sites and developing

new initiatives. The agency continues 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*
- *Business and individuals engaged in the cleanup of contaminated sites*
- *Ports*
- *Insurance companies*
- *Tribes*
- *Lenders, developers, realtors*
- *Owners of contaminated sites*
- *Water purveyors*
- *Citizens interested in, living near, or affected by contaminated sites*
- *Tank owners/operators*
- *Homes and businesses affected by leaking underground storage tanks*
- *Petroleum companies*
- *Underground storage tank service providers*

Major Activities and Results

Clean the Worst Contaminated Sites First (Upland and Aquatic)

The agency protects public health and natural resources by cleaning up and managing contaminated sites. Resources are first focused on cleaning up contaminated sites that pose the greatest risk to public health and the environment. This includes sites where contamination threatens drinking water, exists in a large quantity, is very toxic, may affect a water body, 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, and/or surface water.

For sediment sites, this includes addressing the environmental health of aquatic sediments in source control permits, managing sediment standards and regulations, and maintaining a sediment information database. The agency also manages multi-agency sediment cleanup projects. The cleanup of contaminated aquatic sediments reduces toxic contamination in food fish and protects the aquatic environment. The cleanup of these sites protects public health, safeguards the

environment, and promotes local economic development by making land available for new industries and other beneficial uses. (Authorizing laws - 70.105D, 90.48, and 90.71 RCW)

Result

The most highly contaminated sites are cleaned up, public and environmental health is protected, and sites are ready for redevelopment and job creation. The most highly contaminated marine sediments are cleaned up and managed to minimize public health and environmental impacts.

- Increase the number of sites cleaned up by over 3% annually (includes sites cleaned up voluntarily).
- Increase the number of sites with cleanup actions in progress.
- Decrease the number of sites that are waiting to be cleaned up.
- Increase the sediment acreage evaluated for source control, cleanup, or constructive purposes.



Whatcom Waterway

Manage Underground Storage Tanks to Minimize Releases

The agency currently regulates over 11,000 active tanks on over 4,000 different properties, including gas stations, industries, commercial properties, and governmental entities. The agency is working to ensure that tanks are installed, managed, and monitored in accordance with federal standards and in a manner 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 in cleanup costs and prevents contamination of limited drinking water

and other ground water resources. (Authorizing law - 90.76 RCW)



Tank removal in Rosalia

Result

Underground storage tanks are properly installed, monitored, and/or decommissioned to minimize the release of oil, gas, and other toxic materials into drinking water and other underground water sources.

- Decrease the number of reported releases from underground storage tanks over time.
- Increase the number of leaking underground storage sites that are cleaned up or considered “No Further Action.”
- Increase the percentage of underground storage tanks inspected that pass operational compliance for leak detection.

Services to Site Owners that Volunteer to Clean up their Contaminated Sites

The agency provides services to site owners or operators who initiate cleanup of their contaminated sites. Voluntary cleanups can be conducted in a variety of ways: completely independent of the agency; independently, with some agency assistance or review; or with agency oversight under a signed legal agreement (an agreed order or a consent decree). They may be done through consultations, prepayment agreements, prospective purchaser agreements, and brownfields redevelopment. Carrying out the voluntary cleanup program facilitates overall cleanup efforts by encouraging site owners to initiate and complete site cleanup. It also minimizes the need to have public funding used for such cleanup, and promotes local economic development through new industries and other beneficial uses of cleaned properties. (Authorizing laws - 70.105D, 90.48, and 90.71 RCW)

Result

Contaminated sites are voluntarily cleaned up by site owners and prospective buyers using private funding.

- Increase the number of sites voluntarily cleaned up.
- Increase the number of sites with cleanup actions in progress.
- Decrease the number of sites that are awaiting cleanup.
- Increase the number of determinations made on final cleanup reports submitted by parties who voluntarily cleaned up sites.

Major Issues

Areas of Wide-Spread Contamination

In large areas of Washington State, land is contaminated with low-to-moderate levels of arsenic and lead. The contamination is from historical activities, including aerial deposition from smelters and the past use of lead arsenate pesticides. These areas are distinct from more typical cleanup sites because they cover several hundred acres to many square miles, and generally have lower contaminate levels. As Washington's population has grown, areas impacted have been developed into schools, child-care facilities, neighborhoods, and parks. These development activities have created pressures for cleanup and have raised health, environmental, and financial concerns.

The agency is working with state and local agencies to reduce or prevent exposure to soils that contain elevated levels of arsenic and lead. The agency currently is focusing on areas where young children are likely to be present on a regular basis (e.g. schools, child-care facilities, neighborhoods, parks).

Unexploded Ordnances at Federal Facilities

The Department of Defense has over 350 areas in this state that are currently or were formally used for purposes of defense. Of those 350-plus sites, known as Formerly Used Defense sites, 55 are known to have significant Unexploded Ordnance contamination on them (explosive weapons that did not explode). "Significant" means that they pose a threat to human health and the environment. These sites have the potential to contaminate groundwater. In some instances, injury, and even death has occurred when

someone accidentally came into contact with an unexploded ordnance.

Burlington Northern-Santa Fee Skykomish Site

Skykomish is an isolated town of just over 200 people and one of the state's gateways into the Northern Cascades. This town is also home to one of the state's more complex cleanup sites.



Town of Skykomish

Contamination from a historic railroad maintenance and fueling station has leaked into the community's soils, groundwater, surface water, and sediments, both on and off the rail yard. Petroleum has been seeping into the Skykomish River. Other contaminants include lead, arsenic, polychlorinated biphenyls (PCBs), and chemicals from incomplete combustion of materials at the site. Contamination remains beneath much of the town itself, and the agency has been working with Burlington Northern on solutions to clean up the contamination.

Abandoned Mine Sites

Historically, Washington State has seen extensive mining throughout its 68 mining districts. Although the exact number of abandoned mine sites in Washington is not known, one estimate indicates there may be as many as 3,500. Of these, it is estimated that approximately 500-600 are considered to have significant contamination. Contaminants consist largely of metals such as arsenic, lead, copper, cadmium, and zinc. Work at associated mills where the ore was processed may contain cyanide and mercury contamination. Future activities will focus on the identification and prioritization of abandoned mine lands and the short- and long-term actions needed, including cleanup. While this will make the work load more manageable, it will still be a major challenge for the agency, since some of these sites will likely

require treatment of acid mine drainage for hundreds of years. There are a large number of government agencies that may have ties to lands with abandoned mines. Some governing agencies are trustees and not land owners, which will create issues of site cleanup and responsibility for cleanup.



Holden Mine entrance

Record levels of Funding for Remedial Action Grants

Remedial Action Grants provide dollars to local governments to clean up contaminated sites. Local governments include towns, cities, school districts, fire districts, public utility districts, and port districts. The demand for these local toxics grant dollars has been increasing, and this is expected to continue. In the last couple years, the demand has exceeded the available dollars. However, this biennium, the agency will receive a record amount of dollars for these grants, and expects to fully fund all grant requests. The agency is working with local governments on priority cleanup sites. Currently, over 200 publicly owned contaminated sites are in the cleanup stage or awaiting cleanup. The majority of sites are located along industrial corridors, and include public works sites and ports.

Funding for Priority Cleanups: “Clean Sites III” and Orphan Sites

Among the nearly 10,000 contaminated sites that have been reported to the state, many no longer have an owner to pay for the cleanup costs. These sites are referred to as “orphan sites.” To get these sites cleaned up, the agency has received funding specifically targeted for these orphan sites. This funding increases the agency’s capacity to clean up these sites where the state is the only viable entity to conduct the cleanup.

Funds from the Clean Sites Initiative will also be used to partially meet state obligations for its share of cleanup costs incurred by the Environmental Protection Agency under the federal Superfund program.

Coeur d’Alene Basin/Spokane River Superfund Activities

Heavy metals from historic mining practices in the Coeur d’Alene basin of Idaho have affected the Spokane River for decades. This has resulted in fish consumption advisories, recreational use advisories for several upper Spokane River beaches, and consistent violations of Washington’s water quality standards. In September 2002, the Environmental Protection Agency (EPA) released a legal decision document that identifies cleanup activities for the next 30 years in Idaho and in upper portion of the Spokane River. The states of Idaho and Washington, Coeur d’Alene and Spokane tribes, and federal agencies concurred with the decisions. The agency is working with the EPA on cleanup activities for Spokane River beaches that have been identified for cleanup.

Lake Roosevelt/ Upper Columbia River

Lake Roosevelt, created by the construction of Coulee Dam, is the largest reservoir, by volume, in the state of Washington. It extends 150 miles from Grand Coulee Dam to the United States - Canada border. The reservoir is bordered by five counties and the Colville and Spokane Indian reservations. 1.5 million visitors a year recreate at the Lake Roosevelt National Recreation Area.

Metals such as zinc, cadmium, lead, copper, and mercury are present in Lake Roosevelt sediments at elevated concentrations. Studies have found metals and other chemicals at elevated levels in fish. Sources for metals in Lake Roosevelt include the Teck Cominco lead-zinc smelting complex at Trail, British Columbia. In 2003, the Environmental Protection Agency issued a Unilateral Administrative Order (UAO) to conduct a study determining the extent of contamination in the reservoir. Teck Cominco has not complied with the UAO. The Colville Confederated Tribes filed a citizens’ suit under federal Superfund Program for failure to comply with the UAO, and the state of Washington is a plaintiff in support of the lawsuit. There are ongoing negotiations between Teck Cominco, the Colville Confederated Tribes, the Spokane Tribe,

and the state of Washington in an attempt to settle the lawsuit. In the meantime, the Environmental Protection Agency is conducting work to identify the extent of the contamination.

Lower Duwamish Waterway Cleanup

The agency is working with the Environmental Protection Agency (EPA) on a 5.5 mile stretch of the Lower Duwamish Water Way that is contaminated. Contaminated sediment cleanup and pollution source control are the key projects in the area. Contaminants include polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), metals, and others.

Many cleanup actions were completed during Phase 1 cleanup. Phase 2 cleanup is now underway, with collection of sediment and fish tissue data. Phase 2 also includes ecological and human health risk assessments, determination of what additional areas will need cleanup, and a feasibility study. The agency leads source control activities with the City of Seattle, Port of Seattle, King County, and EPA. Source control is currently focused on stormwater and combined sewer overflow drainages.



Lower Duwamish Waterway Cleanup

Superfund Site Transfers to the State

Under federal law, Washington is required to operate and maintain Superfund financed cleanup remedies after a remedy is determined by the Environmental Protection Agency (EPA) to be “operational and functional.” The amount of time for EPA to make this determination is one year for soil remedies and 10 years for groundwater remedies. After that time has lapsed, the state must fund and conduct operation and maintenance at Superfund sites with a completed cleanup. The agency will need increased funds

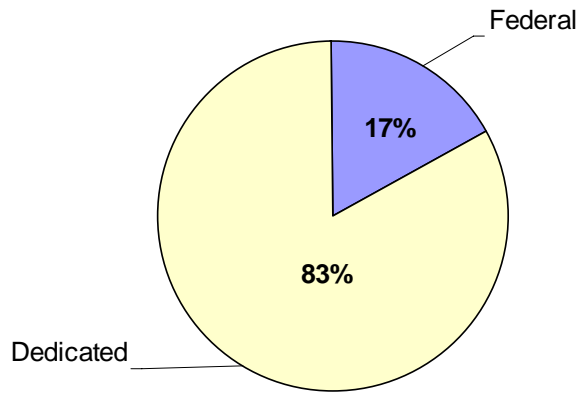
and staff to conduct the operation and maintenance at these sites. In addition, difficult decisions about the completeness of any given remedy will need to be agreed upon by the EPA and the state. This can become more important at larger, more costly sites, like the Wyckoff site on Bainbridge Island.

Toxics Cleanup Program Budget

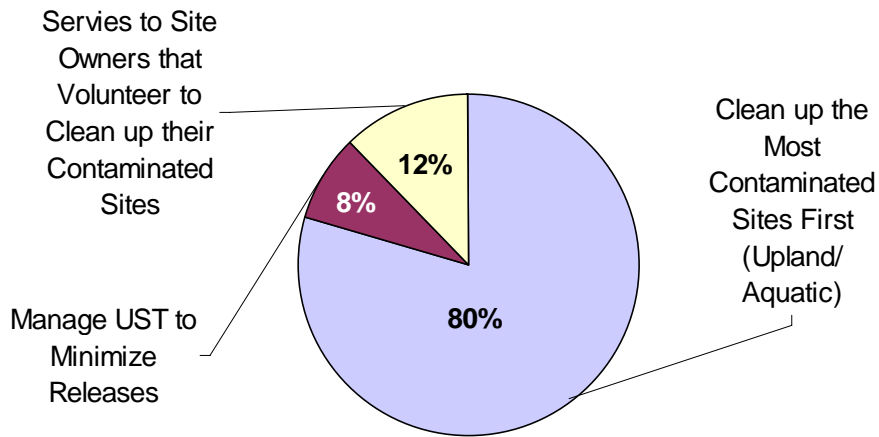
Budget = \$41.5 million; FTEs = 144

Federal	(\$)	Amount	Sources	Uses
General Fund – Federal		7,145,203	Federal Grants	Grants funds received from EPA and Dept. of Defense for cleanup at National Priorities List sites and federal Superfund sites at military facilities and technical assistance/cleanup related to leaking underground storage tanks.
Dedicated Funds				
State Toxics Control Account – includes \$2M of STCA Capital		28,263,653	Hazardous substance tax; recovered remedial actions and penalties collected	Clean up toxic sites, investigate and rank new toxic sites, prepayment cleanup, technical assistance, site information management, and natural resource damage assessment.
State Toxics Control Account – Private/Local		356,444	Recovered LUST (Leaking Underground Storage Tank) dollars from Federal Grants.	Activities related to the cleanup of leaking underground storage tanks.
State Underground Storage Tank Account		2,531,473	Annual tank fees	Pollution prevention, inspection, and permitting activities related to underground storage tanks.
Worker/Community Right to Know Account		995,772	Hazardous Material Manufacturing	Public information compilation and dissemination.
Local Toxics Control Account		1,110,632	Hazardous Substance Tax	Technical assistance, oversight, and administration of the Local Toxics Control Account Remedial Action Grant Program.
Water Quality Permit Account		1,079,820	Fees on Wastewater Discharge	Sediment source control
TOTAL		\$41,482,997		
Capital Budget Funding:				
State Toxics Control New Appropriation		\$2,000,000	Hazardous substance tax	Safe soil remediation and awareness on lead reduction in schools.

Toxics Cleanup Program Dollars by Fund Source



Toxics Cleanup Program Dollars by Activity



Activity	Dollars	FTEs
Clean up the Most Contaminated Sites First (Upland and Aquatic)	32,922,998	102.2
Manage Underground Storage Tanks to Minimize Releases	3,499,999	17.0
Services to Site Owners that Volunteer to Clean up their Contaminated Sites	5,060,000	24.8
Total Toxics Cleanup Program	\$41,482,997	144.0

This page left intentionally blank

Program Mission

To protect and restore Washington's waters.

Environmental Threats

Across Washington, water pollution threatens the state's lakes, estuaries, streams, and ground water. A 1998 report by the Department of Natural Resources quantified the variety of impacts affecting the water quality in our state. "The sheer number of people in the state, and the activities we undertake, contribute to the pollution of fresh water. Significant sources of pollution include:

- 5.2 million vehicles on 80,000 miles of public road.
- More than 36,000 farms on 15.7 million acres of land.
- 275 municipalities with existing residential, commercial, and industrial sources.
- About 40,000 additional houses built each year."

As Washington's population continues to increase, so will these potential sources of water pollution. In spite of efforts to date, Washington has a significant number of streams, rivers, lakes, estuaries, and groundwater polluted by an array of pollutants.

Authorizing Laws

- *Chapter 90.48 RCW, Water Pollution Control Act*
- *Federal Clean Water Act*
- *Federal Safe Drinking Water Act*
- *Chapter 76.09 RCW, Forest Practices Act*
- *Chapter 90.71 RCW, Puget Sound Water Quality Protection*
- *Chapter 70.146 RCW, Water Pollution Control Facilities Financing Act*
- *Chapter 70.105D RCW, Model Toxics Control Act*
- *Chapter 43.21A.650 RCW, Freshwater Aquatic Weeds Account*
- *Chapter 90.64 RCW, Dairy Nutrient Management Act*
- *Chapter 90.46 RCW, Reclaimed Water Use*
- *Chapter 90.50A RCW, Water Pollution Control Facilities Federal Capitalization Grants*

- *Chapter 90.42 RCW, Water Resources Management Act*

Constituents/Interested Parties

- *Citizens*
- *Special interest groups*
- *Local government*
- *Businesses*
- *Environmental organizations*
- *Industries*
- *Small businesses*
- *Local, state and federal governments*
- *Tribal governments*
- *Conservation districts*
- *Cities, counties, tribes, and state and federal agencies*

Major Activities and Results

Prevent Point Source Water Pollution

The agency 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, which is designed to ensure that a facility can meet treatment standards and water quality limits. The permit is followed by regular inspections and site visits. Technical assistance and follow-up on permit violations are also provided through various means. (Authorizing Laws - Federal Clean Water Act, 90.48, 90.46, and 70.105D RCW)

Result

Surface and ground water resources meet federal and state water quality standards for the protection of human health and the environment (supply/use, public health, aquatic life, recreation, habitat, and commerce).

- Reduce the amount and toxicity of water pollution by administering the permit program for the state's 2,300 permit holders.
- Issue or renew 85 National Pollution Discharge Elimination System wastewater discharge permits per year.

- Reduce the backlog of permit requests and provide responses to new permit applicants within 60 days of receiving an application.
- Administer eight general permits for 1,400 dischargers.
- Conduct 700 site visits per year.
- Provide certification for 2,000 wastewater plant operators.
- Assist communities in increasing the production and use of reclaimed wastewater.
- Reduce the number of repeat violators (five or more violations per year).
- Administer the \$31 million Permit Fee Account.

Control Stormwater Pollution

The agency prepares tools, gives assistance, and provides compliance pathways for people to control the quantity and quality of stormwater runoff from development and industrial activities. The agency is providing training and assistance to communities and industries on implementing the guidelines in the Western and Eastern Washington Stormwater Manuals. The agency is also working with local governments and other stakeholders to develop a municipal stormwater program and permitting system. (Authorizing Laws - Federal Clean Water Act and 90.48 RCW)



Stormwater runoff at a construction site

Result

Contamination of streams, rivers, estuaries, lakes, and ground water from the runoff of stormwater from roads and other impervious surfaces is reduced.

- Administer the stormwater program for the state's 2,500 construction and industrial stormwater dischargers that require permits.
- Provide responses to new permit applicants within 45 days of receiving an application.
- Issue the municipal Phase 1 and Phase 2 permits, which will cover more than 100

jurisdictions with two-thirds of the state's population.

- Maintain stormwater manuals for both Eastern and Western Washington to identify best management practices.
- Provide Web-based information and support for low- and zero-impact development.

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, hydro modification, and loss of aquatic ecosystems. The agency addresses these problems through raising awareness, encouraging community action, providing funding, and supporting local decision makers. The agency also coordinates with other stakeholders through the Washington State Nonpoint Workgroup and the Forest Practices Technical Assistance group. (Authorizing Laws - Federal Clean Water Act and 90.48 RCW)

Result

Protect surface and ground water through community implementation of the State's Nonpoint Pollution Management Plan to address Washington's number one cause of water pollution.

- Surface and ground water resources meet water quality standards.
- Assist the Department of Natural Resources and the forestry industry in managing 12 million acres of state and privately owned forests.
- Assist the Department of Agriculture in developing and implementing a new program for managing animal feeding operations.
- Complete Endangered Species Act assurances for the Forest and Fish program.
- Administer Washington's Plan to Control Nonpoint Source Pollution.
- Ensure state and federal grants are available to, and used efficiently by, organizations in Washington.
- Work with local communities and other agencies to increase the number of stream miles restored or protected.



Restoration of stream bank vegetation

Provide Water Quality Financial Assistance

The agency provides grants and low-interest loans, along with technical assistance, to local governments, state agencies, and tribes so they can 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. The agency 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 cause ratepayers a financial hardship. Local governments use loans for both point and nonpoint source water pollution prevention and correction projects. The agency coordinates grant and loan assistance with other state and federal funding agencies. (Authorizing Laws - Federal Clean Water Act, 90.48, 70.146, 43.21A 650, and 90.50A RCW)



Wastewater Treatment Plant

Result

Public funds dedicated to improve and protect water quality for the protection of public health and the environment are managed responsibly.

- Improve water quality through the disbursement of \$68 million in water quality

grants and loans per year to local communities.

- Award 60 new grants and loans per year for projects that demonstrate clear benefits for the environment.
- Administer 350 existing loans and grants per year.
- Capture and illustrate environmental benefits through the data generated from grants and loans.
- Meet recipients' loan and grant timing expectations.

Clean up Polluted Waters

The federal Clean Water Act requires the agency to develop water quality standards and identify water bodies that fail to meet those standards. The agency completes this identification by reviewing thousands of water quality data samples and publishing an integrated water quality assessment report. The report, known as the "303d," lists the water bodies that do not meet standards. The agency works with local interests in the development of cleanup plans (also known as TMDLs – Total Maximum Daily Loads) to reduce the pollution sources to water bodies on the 303d list. The agency also establishes conditions in discharge permits and prepares nonpoint source management plans to monitor the effectiveness of the cleanup plan. (Authorizing Laws - Federal Clean Water Act, 90.48, 90.64, 76.09, and 90.42 RCW)

Result

Water quality cleanup plans to protect public health and the environment are implemented.

- Develop and implement water cleanup plans for 650 water bodies (Washington's legal commitments specified in a Memorandum of Agreement prompted by a lawsuit).
- Submit 50 water cleanup plans and associated technical reports, per year, to the Environmental Protection Agency.
- Assist local communities in implementing water cleanup plans.
- Develop an updated list of water bodies failing to meet water quality standards (303d list).
- Assist local communities and businesses in implementing the newly revised water quality standards regulation by developing "Use Attainability" and other guidance documents.

Major Issues

Point Source Water Pollution

In response to a survey of permittees conducted by the agency, the agency is undertaking a number of steps to assist permit applicants. Three specific areas will be addressed: help applicants better understand the regulatory process and expectations; make timely and predictable decisions; and improve the permit process.

Clean Up Polluted Waters

The agency recently adopted new water quality standards. The next steps are to secure a federal decision on the standards and to assist local communities and businesses in implementing the new standards. The agency published a revised list of contaminated water bodies in Washington (fall 2005).

Nonpoint Source Water Pollution

With the assistance of a broad range of agencies, tribes, local governments, and interest groups, the agency will administer the state's nonpoint source management plan. The plan includes an analysis of Washington's efforts to address nonpoint pollution, identifies actions needed to improve the effectiveness of existing programs, and introduces some new approaches. The plan requires federal approval.

Stormwater

The agency will work to build a common sense stormwater program for urbanizing cities and counties to address the problems associated with stormwater. The agency will use multi-stakeholder advisory groups to prepare municipal stormwater permits and a construction stormwater permit.



Stormwater runoff

Financial Assistance

The agency will issue approximately \$90 million in water quality grants and loans per year. The agency will build on and implement a strategy developed last biennium to demonstrate the environmental benefit of the grant and loan program.

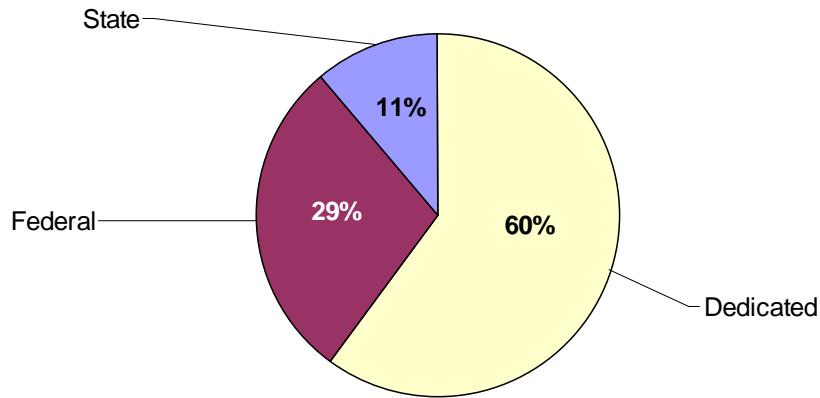
Water Quality Program Budget

Budget = \$54.1 million; FTEs = 231.5

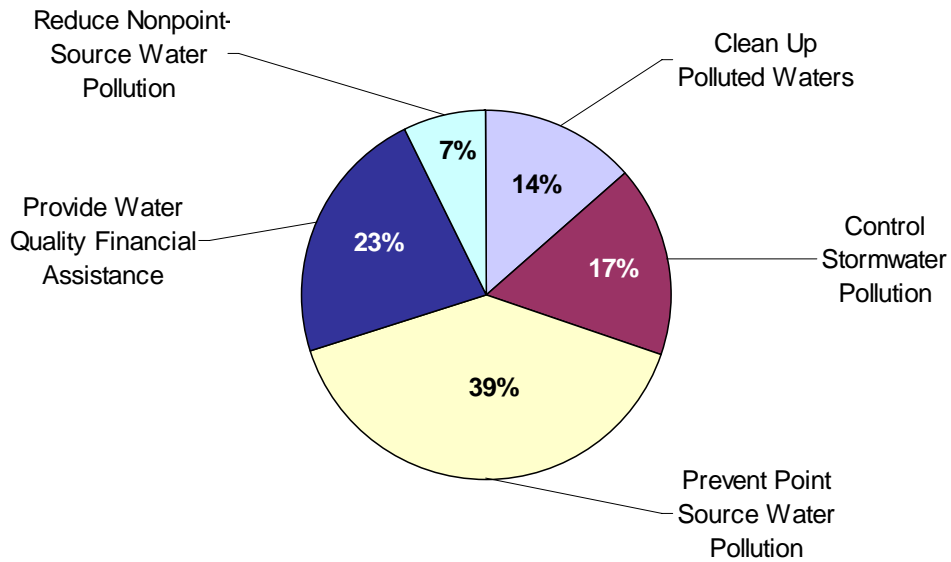
State	(\$) Amount	Sources	Uses
General Fund – State	6,003,703	Multiple	Enforcement of permit requirements; Puget Sound Plan activities such as nonpoint source watershed management; operator certification program; forest practices compliance; water cleanup plans; wastewater re-use; data management, and aquatic plant management.
Federal			
General Fund – Federal	15,690,126	Federal grants	Numerous EPA grants for point and nonpoint source control; water clean up plans; management of water quality grants and loans to local governments; and groundwater protection.
Dedicated Funds			
General Fund – Private/Local	710,887	Agreements with local governments	Miscellaneous, targeted water quality projects such as King County's Brightwater Waste treatment plant
Water Quality Account	2,597,907	Excise taxes on cigarettes and other tobacco products; sales tax transfer; loan repayments, interest payments; and state general fund transfer	Grant and loan management; technical assistance to local governments for wastewater treatment facilities and nonpoint source projects.
State Toxics Control Account	3,335,928	Hazardous substance tax, recovered remedial actions and penalties collected	Stormwater management; water quality standards; support to Lower Columbia river Estuary Management Program; aquatic pesticides management.
Water Quality Permit Account	21,051,334	Fees assessed on the holders of wastewater discharge permits	Issue and manage federal and state wastewater discharge permits.
Freshwater Aquatic Weeds	2,264,526	Fees on boat trailers	Grants to local governments to prevent, remove, or manage invasive freshwater aquatic weeds.
Freshwater Aquatic Algae Control Account	509,000	Fees on boat licenses	Grants to local governments to prevent, remove, or manage freshwater aquatic algae.
Metals Mining	14,000	Fees collected from active metals mining and millings operations	Inspections required by Metals Mining Act.
Water Pollution Control Revolving Fund	1,970,333	EPA grant and state match	Administer a loan program for constructing or replacing water pollution control facilities. Activities include portfolio management and technical assistance to local governments for

			point, nonpoint, and estuary projects.
TOTAL \$54,147,744			
Capital Budget Funding: \$456,838,489			
State Building Construction Account	30,181,926 (\$10,181,926 reappropriation, \$20,000,000 new, which includes \$1,000,000 for Hood Canal Wastewater Treatment facility, \$750,000 for Kitsap Co Long Lake, and \$50,000 for Wapato Lake in Pierce County.)	Sale of Bonds	Grants/loans for water pollution control facilities, nonpoint-source control, and water quality improvement planning and implementation/activities.
Local Toxics Control Account	3,000,000 (\$2,700,000 new for Phase II Storm Water permits, and \$300,000 new for Belfair/Hoodsport storm water plans)	Hazardous Substance Tax Miscellaneous Revenue	Local toxic grants for storm water improvement planning and implementation/activities.
State Toxics Control Account	10,500,000 (new)	Hazardous Substance Tax Hazardous Waste Cleanup Recoveries Hazardous Waste Fees Misc. Revenue	Grants/loans for water pollution control facilities, nonpoint-source control, and water quality improvement planning and implementation activities.
Water Quality Account	22,981,418 (\$15,481,418 reappropriation, \$7,500,000 new)	Excise tax on cigarettes and tobacco products; sales tax transfer; loan repayments/ interest payments	Grants/loans for water pollution control facilities, nonpoint-source control, and water quality improvement planning and implementation activities.
Public Works Assistance Account	287,359 (reappropriation)	Solid Waste Collection Tax, Real Estate Excise Tax, Public Utilities Tax, Grant Repayment, Loan Repayment, Other Revenue	Grants/loans for water pollution control facilities, nonpoint-source control, and water quality improvement planning and implementation activities.
State Revolving Loan Fund	389,887,786 (\$150,271,500 reappropriation and \$239,616,286 new)	Federal, capitalization grants, loan repayments, interest repayments, and state match	Loans for constructing or replacing water pollution control facilities, nonpoint-source control activities, and estuary management.

Water Quality Program Dollars by Fund Source



Water Quality Program Dollars by Activity



Activity	Dollars	FTEs
Clean Up Polluted Water	7,436,710	34.8
Control Stormwater Pollution	9,003,820	43.7
Prevent Point Source Water Pollution	21,411,720	102.8
Provide Water Quality Financial Assistance	12,363,818	26.2
Reduce Nonpoint-Source Water Pollution	3,931,676	24.0
Total Water Quality Program	\$54,147,744	231.5

This page left intentionally blank

Program Mission

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 in a relatively water-rich state. But water availability is no longer being taken for granted. Washington increasingly lacks water where and when it is needed for communities and the environment, largely due to unprecedented population and economic growth.



Lake Roosevelt (mouth of the Colville River) in Stevens County, April 2005. During normal flow, much of this riverbed would be under water.

There is heightened awareness of water needs and availability. A number of factors have combined to build the awareness:

- The threat of extinction to once abundant fish stocks and the Federal Endangered Species Act response.
- Recurring droughts resulting in dry streams, withered crops, dead fish, and concern for wildfire hazards and reduced hydropower production.
- Record low stream flows and declining aquifer and ground water levels in some areas of the state.
- The lack of water for further allocation without impairing senior water rights, instream flows, or depleting aquifers.

- Legal uncertainty related to the validity and extent of water rights and claims, which includes federal and tribal rights and claims.
- An absence of established streamflow levels for most state rivers and streams.
- Inadequacy of information on water availability, streamflows, and groundwater.
- A growing awareness and concern over the long-term effects of climate change on the water supply.

As the state adjusts from a historic era of water abundance to one of water limitations, progress is being made to more actively account for and manage water by increased funding, shifts in policy, and improved management.

Authorizing Laws

Water use and water resources management are regulated by a complex web of statutory law (passed by legislation) and case law (court interpretations). Statutory laws include:

- *Chapter 90.03 RCW, Water Code (1917)*
- *Chapter 90.44 RCW, Regulation of Public Ground Waters (1945)*
- *Chapter 18.104 RCW, Water Well Construction Act (1971)*
- *Chapter 90.14 RCW, Water Right Claims Registration and Relinquishment (1967)*
- *Chapter 90.22 RCW, Minimum Water Flows and Levels (1969)*
- *Chapter 90.54 RCW, Water Resources Act (1971)*
- *Chapters 90.38 and 90.42 RCW, Trust Water Rights Program (1989 and 1991)*
- *Chapter 90.80 RCW, Water Conservancy Boards (1997)*
- *Chapter 90.82 RCW, Watershed Planning (1997)*
- *Chapter 43.99E RCW, Water Supply Facilities - 1980 Bond (Referendum 38)*
- *Chapter 43.27A.190 RCW, Water Resource Orders*
- *Chapter 43.83B RCW, Water Supply Facilities*
- *HB 1832 - Year 1 Water Law Reform of 2001 two line water rights processing (Chapter 237, Washington Laws 2001)*

- *2ESHB 1338 - municipal water supply and efficiency requirements (Chapter 5 Laws of 2003, First Special Session)*

Constituents/Interested Parties

- *Agricultural groups*
- *Business and industry*
- *Local governments: cities, counties, utilities, irrigation districts*
- *Local watershed planning groups*
- *State and federal agencies*
- *Indian tribes*
- *Environmental organizations*
- *People near dams and owners of dams*
- *Real estate developers*
- *Recreational water users*
- *Sport and commercial fishers*
- *Water and power utilities*
- *Water-right holders*
- *Well drillers*

Major Activities and Results

Sustain Water Resources

Assess, Set, and Achieve Instream Flows

The agency evaluates and sets instream flows, which 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. The agency acquires water and uses other management techniques to restore and protect flows, while meeting out-of-stream needs. (Authorizing law - 90.22 RCW)



Measuring stream depth

Result

Progress toward setting and achieving instream flows to benefit people, fish, farming, and the environment.

- Set 19 instream flows in the 2005-07 biennium, working with local watershed groups and in select basins not engaged in watershed planning.
- Acquire 10,000 acre feet of water to improve instream flows.

Support Local Watershed Management of Water Resources

The agency works with local watershed planning groups, state and federal agencies, and tribes to address water quantity issues under the Watershed Management Act and other local efforts. The agency provides technical support and studies for local watershed planning groups to develop and adopt local plans. Adopted plans serve as the basis for sound water resources management. After plans are adopted, the agency engages with local watershed groups to implement the plans. (Authorizing law - 90.82 RCW)

Result

Development, adoption, and implementation of sound local watershed management plans

- Provide technical assistance and support for development, adoption, and implementation of local watershed planning.
- Support other geographic initiatives including the Columbia River, Walla Walla, Nooksack and others.

Support Water Use Efficiency

The agency provides agricultural, commercial, industrial and non-profit water users with services that deliver water savings. These include information, planning, technical, engineering, and financial assistance. Support also is provided for water re-use projects and to the Department of Health for municipal water conservation. (Authorizing law: RCW 90.54.020 (7))

Result

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

- Increase the volume of water saved as a result of water use efficiency.

- Provide technical and financial assistance to a limited number of agricultural, commercial, industrial, and non-profit water users.

Provide Water Resources Data and Information

The agency develops, manages, and shares water resources data and information essential for modern management of water resources. Sound data and information are critical to local watershed groups, conservancy boards, businesses, local governments, non-profit groups, the Legislature, other agencies, and the media. The information 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. (Authorizing law - 90.54.030 RCW)

Result

Increased availability of accurate and timely water resources data and information essential for modern water management, and improved public service and business decisions.

- Develop and maintain data and information systems for an increasing number of external users (watershed groups, conservancy boards, businesses, etc).
- Improve the collection, preservation, and availability of data and information for water allocation, dam safety, well construction, instream flows, and communication.

Promote Compliance with Water Right Laws

The agency helps ensure that water users comply with the state's water laws so that other legal water users are not impaired; water use remains sustainable over the long term; and the environment is protected for the benefit of people and nature. This includes water metering and reporting, education, technical assistance, and strategic enforcement in egregious cases. (Authorizing law - 90.03.400 RCW)

Result

Increased awareness of, and compliance with, the state's water right laws so that legal water users and applicants for water rights are not impaired, water use remains sustainable, and the environment is protected.



Methow River

- Expand water use metering and reporting.
- Provide compliance information and assistance and take strategic enforcement actions.
- Broaden geographic capacity to regulate water use during periods of low flows on streams with set flows.

Allocate water

Manage Water Rights

The agency allocates surface and groundwater to meet the many needs for water. It does this by making decisions on applications for new water rights applications for changes to existing water rights to reallocate water. Water rights decisions require consideration of many of factors, including determining whether water is available and whether existing rights would be impaired. The agency is responsible for managing an existing water rights portfolio of over 49,000 certificates, 3,000 permits and 166,000 claims. (Authorizing law - 90.03 RCW)

Result

Timely and sound decisions on applications for new water rights and changes to existing water rights to allocate and reallocate water. More active management of the existing water rights portfolio.

- Make decisions on 800 water right change applications.
- Make 260 decisions on new water right applications.

Adjudicate Water Rights

Adjudication is fundamental to sound water management by increasing certainty regarding the validity and extent of water rights and reducing water conflicts. It is a judicial determination of existing water rights and claims, including federal, tribal, and non-tribal claims. The current focus is

supporting the Yakima River Basin adjudication. (Authorizing law - 90.03.110 RCW)

Result

Removal of major uncertainty regarding the validity and extent of the water rights in the Yakima Basin (Yakima River Basin Adjudication).

- Completion of the Yakima River Basin Adjudication.
- Preparation for future adjudications or other forms of water rights settlement.

Prepare and Respond to Drought and Climate Change

The agency 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. The agency 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. (Authorizing law - 43.83.B RCW)

Result

Mitigation of drought effects and climate change through improved planning, communication, coordination, and loss-prevention efforts.

- Timely processing of temporary water right applications during periods of drought.
- Effective planning, communication, coordination, and response to drought and climate change.

Protect Public Health and Safety by Ensuring that Wells and Dams are Safe

Regulate Well Construction

The agency protects consumers, well drillers, and the environment by licensing and regulating well drillers, investigating complaints, approving variances from construction standards, and providing continuing education to well drillers. This work is accomplished in partnership with delegated counties. The agency also delivers technical assistance to homeowners, well drillers, tribes, and local governments. (Authorizing law - 18.104 RCW)

Result

Improved protection of consumers, well drillers, and the environment and reduction in the risk of aquifer contamination and cleanup costs.

- More wells constructed to standard by trained and licensed well drillers.
- More wells inspected in partnership with delegated counties.

Ensure Dam Safety

The agency protects life, property, and the environment by overseeing the safety of Washington's dams. This includes inspecting the structural integrity and flood and earthquake safety of existing state dams not managed by the federal government; approving and inspecting new dam construction and repairs; and taking compliance and emergency actions. The agency also provides support for water storage projects. (Authorizing law - 90.03.350 RCW)



Failed dam

Result

The risk of potentially catastrophic dam failures is reduced, increasing the safety of people and property located below dams.

- Inspect 56 high hazard dams.

Major Issues

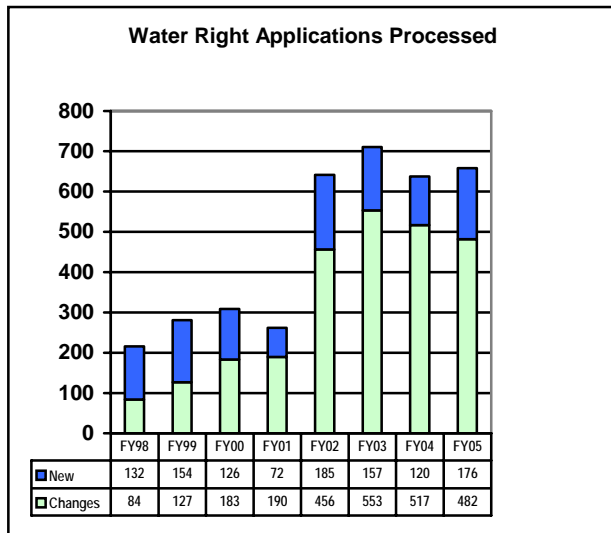
Improving Water Management Capacity

Increasing water demand, recurring droughts, and growing awareness and concern over the impacts of climate change on water supplies and the environment have highlighted the need for more active water management.

Over the past several years, the state has reinvested in water policy and funding to address the increased demands on water. This has resulted in some progress, but also has highlighted the mismatch between existing water management

capacity and increasing water management challenges:

- **Instream Flows:** After more than a decade-long break, a concerted effort is underway to set instream flows on streams and rivers.
Challenge: Successfully setting a record number of flows, implementing local water management plans, and taking other actions to make progress in achieving flows.
- **Watershed Planning and Implementation:** Most of the state is engaged in local watershed planning, and some plans are already being implemented to meet water needs and to protect the long-term sustainability of water resources.
Challenge: Bringing local planning to successful conclusion; funding and implementing plans that include actions ranging from storage projects to compliance.
- **Water Rights Applications:** Water rights change applications are being processed more quickly to facilitate sale, transfer, and changes in use to make better use of existing water supplies.
Challenge: Continue progress on processing water rights while improving consistency and quality of decisions and catching up with post-decision work of permit extensions, certificates and other work; and working on applications for new water.



- **Innovative Water Supply Solutions:** As traditional supplies of water become increasingly scarce and requests for new water rights are denied, water users are turning to innovative water supply solutions.

Challenge: Supporting the transition to innovative water supply solutions; and developing awareness, incentives and institutional capacity to capitalize on new water efficiency technologies, water storage, reclaimed water, and stormwater management projects.

- **Water Use Accountability:** More water is being accounted for through water use metering and stream gauging.
Challenge: 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 egregious violations of water law.
- **Settlement of Water Rights:** The Yakima River Basin Adjudication is nearly complete, bringing clarity and certainty regarding the validity and extent of surface water rights and claims in the basin.
Challenge: Increasing the clarity of water rights and claims throughout the state by improving the system of resolving water disputes, including unquantified federal and Indian water rights.
- **Water Data, Information, and Transparency:** More water resources data and information are being made available internally for improved decision making and externally for enhanced public service and transparency.
Challenge: Developing, maintaining, and enhancing water data systems, including mapping, to keep pace with increased demands of modern water management, public service expectations and technology.

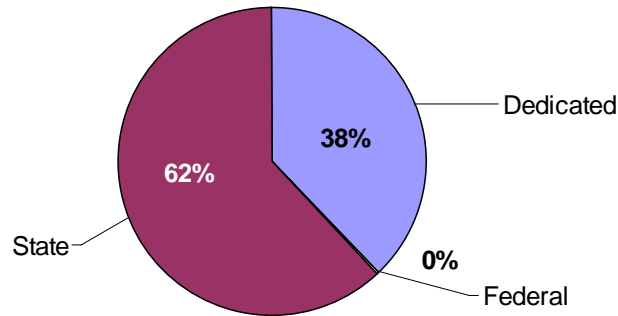
Water Resources Budget

Budget = \$35.4 million; FTEs = 148.9

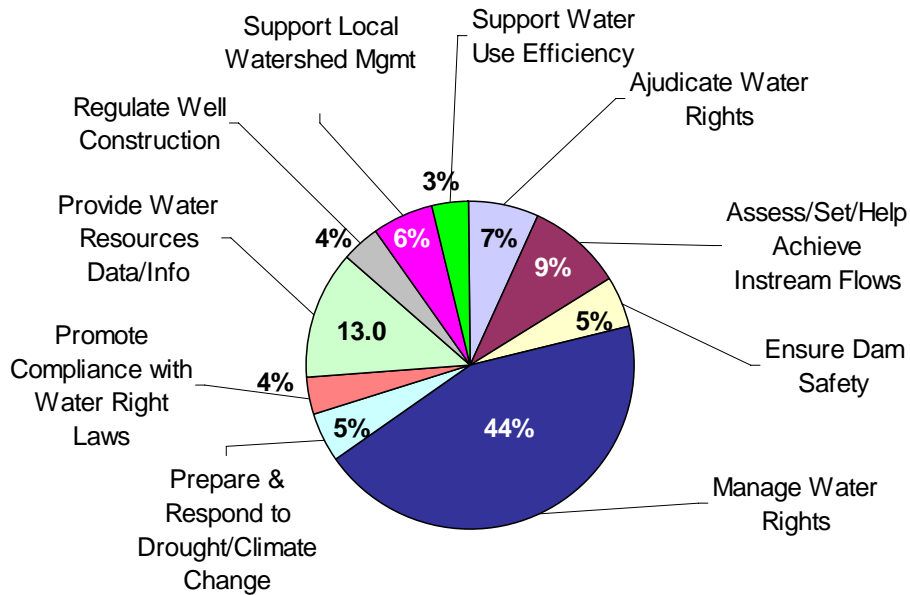
State	(\$) Amount	Sources	Uses
General Fund – State	21,933,612	Multiple	Water rights decision making, county water conservancy board assistance, compliance, data management, public information, dam safety, water use efficiency, watershed support, instream flows, Yakima adjudication and Columbia River activities (\$177,065 proviso).
Federal			
General Fund – Federal	163,321	Federal grants	Dam safety inspections and Yakima Enhancement liaison.
Dedicated Funds			
General Fund – Private/Local	3,091,900	Grants and other receivables.	Instream flows, water acquisition and cost reimbursement contracts for water rights processing.
Reclamation Revolving Account	2,362,401	Well construction fees; well operators' licenses, and hydropower fees	Administration of the well construction oversight program including revenue transfers to delegated counties with well construction management authority, compliance, well information systems (\$615,130 proviso). Contract with the US Geological Survey for stream gauging.
Emergency Water Projects Revolving Account	1,393,403	Previous bond sales; loan repayment and interest payments;	Drought relief activities; primarily permit staffing for Ecology. Grants to state agencies and others for drought relief activities.
Referendum 38 (Agricultural Water Supply Bond Funds)	317,290	Bond sales; loan repayments and interest payments	Staff support for grants and loans for the improvement and/or construction of agricultural water supply facilities. Technical assistance to irrigation districts. Operation and maintenance of Zosel Dam (Lake Osoyoos in Okanogan County)
Basic Data Fund	310,000	Contributions from private & local entities	Pass through to the U.S. Geological Survey for stream gauging data collection and studies.
Drought Preparedness Account	221,000	Previous bond sales, transfer from Emergency Water Fund, loan repayments and interest payments	Drought relief projects and activities to prepare for future droughts.
Water Quality Account	5,648,619	Excise tax on tobacco products	Water rights decision making, county water conservancy board assistance, compliance, data management, public information, water use efficiency, watershed support, instream flows.
TOTAL	\$35,441,546		

Capital Budget Funding: \$72,472,396			
State Building Construction Account	49,150,403	Sale of bonds	Water measuring devices, on-farm irrigation efficiencies, water conveyance improvement or replacement, water storage investigations, water acquisition, watershed councils, agriculture water supply, Comprehensive Irrigation District Management Plans, Columbia River feasibility studies and implementation.
State and Local Improvements Revolving Account (Ref. 38)	13,552,410	Sale of bonds; loan repayment and interest payments	Grants/loans for agricultural water supply facilities. Grants for on-farm water use efficiency improvements, water conveyance improvements and storage studies.
State Drought Preparedness Account	7,971,692	Previous bond sales, loan repayments and interest payments	Grants/loans for drought related agricultural and municipal water supply facilities projects. Purchase and lease of water rights to improve stream flows in fish critical streams
Water Quality Account	1,797,891	Excise tax on tobacco products	Grants for on-farm water use efficiency improvements. Drought well pumping mitigation projects in the Yakima basin and water conveyance improvements

Water Resources Program Dollars by Fund Source



Water Resources Dollars by Activity



Activity	Dollars	FTEs
Adjudicate Water Rights	2,498,879	8.6
Assess, Set, and Help Achieve Instream Flows	3,272,150	15.4
Ensure Dam Safety	1,773,920	7.8
Manager Water Rights	15,494,985	62.5
Prepare and Respond to Drought and Climate Change	1,736,197	2.8
Promote Compliance with Water Right Laws	1,290,096	6.8
Provide Water Resources Data and Information	4,556,736	22.8
Regulate Well Construction	1,402,314	6.8
Support Local Watershed Management of Water Resources	2,146,284	9.5
Support Water Use Efficiency	1,269,985	5.9
Total Water Resources Program	\$35,441,546	148.9

Contacts:

Carol Fleskes, Administrative Services, (360) 407-7012
David Workman, Communication and Education, (360) 407-7004
Joy. St. Germain, Employee Services, (360) 407-6218
Patricia McLain, Financial Services, (360) 407-7005
Ted Sturdevant, Governmental Relations, (360) 407-7003

Program Mission

The primary purpose of these internal support services 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 air, land, and water for the benefit of current and future generations.

Environmental Threat

Agency Administration assists the agency's environmental activities in many ways. These include providing information to citizens about environmental threats, fostering a working relationship with members of the Legislature, managing financial systems and issues, providing personnel services, and providing high-quality information services, as well as a number of other important administrative functions.

Authorizing Laws

Chapter 43.21A RCW, 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.

Constituents/Interested Parties

The primary constituents of the Administration Program are internal management and staff. However, issues that affect other government agencies or private interests often require working closely with the full range of parties interested in environmental issues.

Major Activities and Results

Office of Communication and Education

This office provides advice and guidance to management and staff on effective communication, education, and public involvement strategies related to environmental issues.

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

Employee Services

The Employee Services Office provides a full scope of human resources support, including safety, equal employment opportunity, labor relations, and training and development. Employee Services is responsible for ensuring that appointments, recruitment, classification and pay, corrective/disciplinary actions, reduction-in-force actions, complaints, and grievances are in compliance with federal and state employment laws, civil service rules, and agency policy. Implementation of collective bargaining agreements also is facilitated by Employee Services. The office develops and monitors the agency's Affirmative Action Plan and coordinates diversity activities for the agency, including helping to create a supportive work environment that reflects the diversity of the community the Department of Ecology serves.

Regional and Field Offices

Each of the agency's four regional offices (Lacey, Yakima, Spokane, Bellevue) and two field offices (Bellingham, Vancouver) has executive management representatives and provides core administrative support to regional office staff in the areas of reception, mail, records management, complaint tracking, and central library functions. The Regional Directors in these offices provide assistance to local communities, as well as cross-program coordination and management for large, multiple-program environmental reviews and permitting projects. (*Note: Although these offices are budgeted in Agency Administration, their*

work is most often connected closely with environmental priorities.)

Executive, Financial, and Administrative Services

From the Executive Offices come direction and leadership for the agency. Financial Services provides centralized financial support in the areas of accounting, budget, contracts, purchasing, and inventory. This office also manages and coordinates strategic planning for the agency, coordinates performance 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. The office maintains the agency's centralized 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. Security services and maintenance of facilities and property are also handled by this office.

Agency Administration is supported by each fund source available to the agency. 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.

Results

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

- Agency work environment reflects the diversity of the community the Department of Ecology serves.
- Agency staff receive reliable, secure, and high-quality desktop support and network services.
- Customers have easy access to the agency's information.
- Facilities and vehicles are well maintained, safe, and efficient.

Major Issues

Information Management/Communication

- Develop Internet applications that allow customers to do more on-line business with the agency.
- Use the Internet more effectively to engage the public in commenting on and shaping policy proposals, and to streamline paperwork and reports for those regulated by the agency.
- Help improve information availability and accessibility so citizens can evaluate the state of their environment and consider ways to make a meaningful contribution toward protecting and improving it.

Human Resource Management

- Implement the four major statewide personnel system changes with the least amount of disruption to employees and to the accomplishment of the agency's environmental mission. This includes Collective Bargaining, Competitive Contracting, Civil System Reform, and the Human Resource Management System.
- Maintain adequate staffing to meet workload needs.
- Develop and implement strategies that match the right number of people with the right set of competencies in the right jobs at the right time.

Long-term Financial Stability

- Monitor toxics revenues and update strategies to manage the impact of revenue volatility.
- Identify long-term funding for ongoing water related functions that have been initiated using temporary fund sources.

External Relationships

- Improve the transparency of the agency's permit processes; improve timeliness and predictability of permit decisions while

maintaining environmental standards; support a problem-solving culture to provide helpful, responsive, and knowledgeable service; and explore other methods to streamline processes and improve systems.

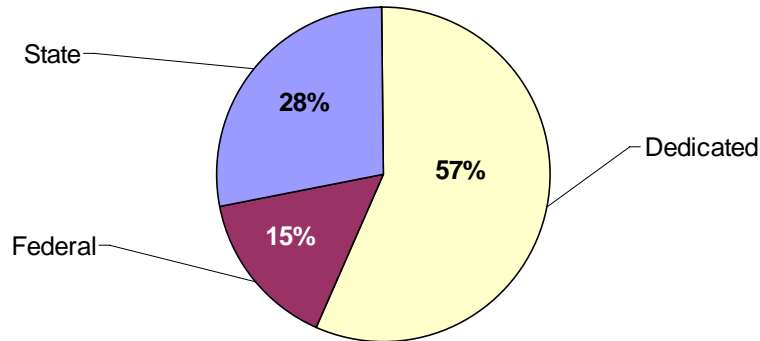
- Provide support to the Governor and the Legislature in re-examining and modernizing water policies.
- Develop and maintain working relationships with external interests, including members of the Legislature, interested parties, and other governmental agencies and tribal governments.

Agency Administration

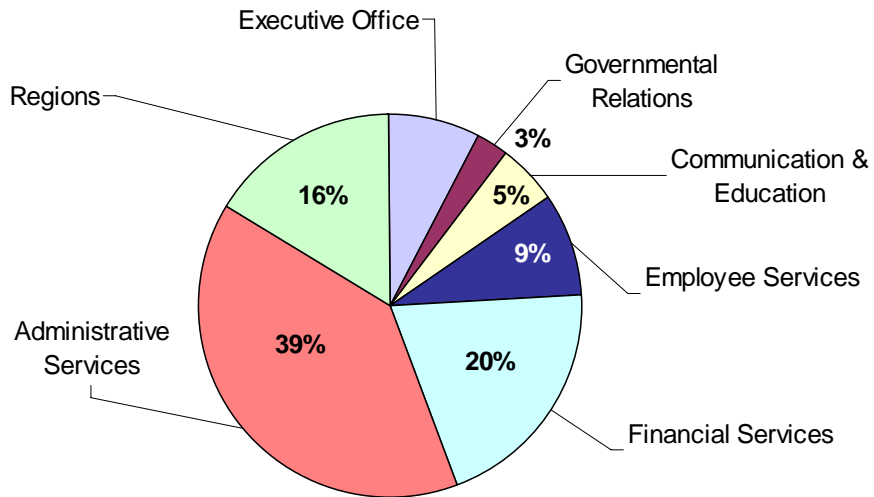
Budget = \$43.3 million; FTEs = 226.3

State	(\$) Amount	Percentage
General Fund – State	12,274,427	28.3%
Federal		
General Fund – Federal	6,665,527	15.4%
Dedicated Funds		
General Fund – Private Local	487,801	1.1%
Reclamation Revolving	283,599	0.7%
Flood Control	195,815	0.5%
Emergency Water Projects Revolving	62,597	0.1%
Waste Reduction/Litter Control	1,186,350	2.7%
Referendum 38	66,710	0.2%
Site Closure Account	88,392	0.2%
Water Quality	2,502,381	5.8%
Wood Stove	20,137	0.0%
Worker/Community Right to Know	291,166	0.7%
State Toxics	9,879,160	22.8%
Local Toxics	890,218	2.1%
Water Quality Permit Fee	4,204,484	9.7%
Underground Storage Tank	351,527	0.8%
Biosolids Permit Account	145,860	0.3%
Hazardous Waste Assistance	825,428	1.9%
Air Pollution Control Account	260,165	0.6%
Oil Spill Prevention	1,513,322	3.5%
Air Operating Permit	578,969	1.3%
Oil Spill Response	76,423	0.2%
Freshwater Aquatic Weeds	21,448	0.0%
Water Pollution Control – State	87,237	0.2%
Water Pollution Control – Federal	350,430	0.8%
TOTAL	\$43,309,573	100%

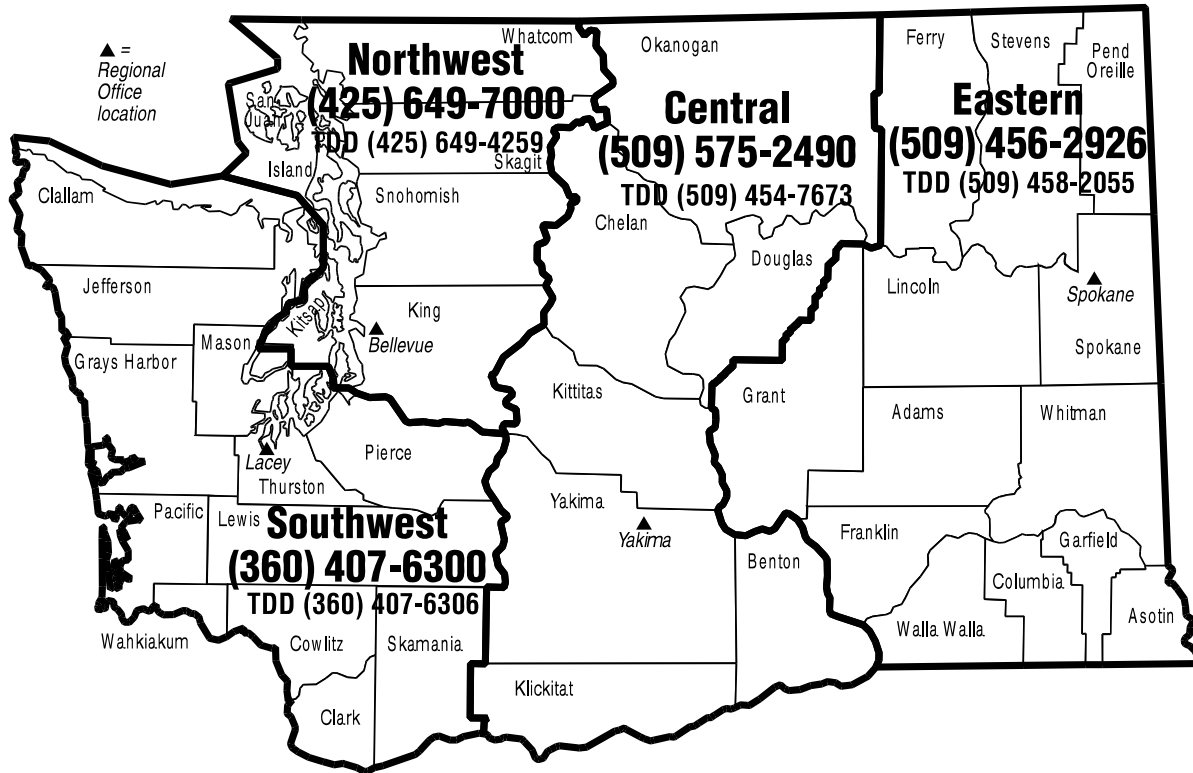
Agency Administration Dollars by Fund Source



Agency Administration Dollars by Activity



Administrative Office	Dollars	FTEs
Executive Office	3,417,628	11.1
Governmental Relations	1,288,795	6.0
Communication and Education	2,144,888	10.8
Employee Services	3,684,891	21.5
Financial Services	8,636,012	53.5
Administrative Services	17,058,443	79.6
Regions	7,078,916	43.8
Total	\$43,309,573	226.3



Ecology Contact Information:

<p>Headquarters: 300 Desmond Drive SE PO Box 47600 Olympia, WA 98504-7600 (360) 407-6000</p>	<p>Northwest Regional Office: 3190 160th Avenue SE Bellevue, WA 98008-5452 (425) 649-7000</p>
<p>Central Regional Office: 15 West Yakima Avenue, Suite 200 Yakima, WA 98902-3401 (509) 575-2490</p>	<p>Southwest Regional Office: 300 Desmond Drive SW PO Box 47775 Olympia, WA 98504-7775 (360) 407-6300</p>
<p>Eastern Regional Office: 4601 North Monroe Street, Suite 202 Spokane, WA 99205-1295 (509) 329-3400</p>	

Ecology Satellite Locations:

<p>Bellingham Field Office: 1204 Railroad Avenue, Suite 200 Bellingham, WA 98225 (360) 738-6250</p>	<p>Methow Valley Field Office: 502 Glover Street PO Box 276 Twisp, WA 98856 (509) 997-1363</p>
<p>Columbia River Field Office: 811 SW Sixth Avenue, 8th Floor Portland, OR 97204 (503) 229-6103</p>	<p>Padilla Bay National Estuarine Research Reserve: 10441 Bayview-Edison Road Mt. Vernon, WA 98273 (360) 428-1558</p>
<p>Kennewick Hanford Project Office: 1315 West 4th Kennewick, WA 99335-6018 (509) 735-7581</p>	<p>Puget Sound Field Office: 1011 SW Klickitat Way – Suite 211 Seattle, WA 98134 (206) 389-2431</p>
<p>Manchester Laboratory: 7411 Beach Drive East Port Orchard, WA 98366-8204 (360) 871-8860</p>	<p>Vancouver Field Office: 2108 Grand Boulevard Vancouver, WA 98661-4622 (360) 690-7171</p>
<p>Manchester Quality Assurance Section: 2350 Colchester Drive Manchester, WA 98353-0488 (360) 895-4649</p>	