

Washington State
Department of Ecology

2006
Enforcement Report



May 2007

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Message from Jay Manning

Director, Department of Ecology



The Department of Ecology is responsible for the protection of Washington's environment. This includes the air we breathe, the water we and countless other species need, and the land our children play on. To do this, we administer a number of environmental laws designed to protect Washington's environment.

Most people and businesses subject to these laws voluntarily comply. Some need technical or financial assistance, or time to reach full compliance, but the vast majority of Washington's citizens share our goal of protecting our precious natural resources and the health of our citizens.

Unfortunately, there is a small percentage of our citizenry that require a more forceful response from the agency to achieve compliance. A spectrum of enforcement tools, ranging from relatively informal to very serious, are available to the agency and are regularly used.

Enforcement is difficult, contentious and resource intensive. It is also critically important to achieving the environmental protection mission of the agency. Enforcement actions penalize and deter bad behavior and level the playing field for those who choose to play by the rules. We are fortunate that our enforcement presence is credible, visible and quite effective.

I want to stress that enforcement is not an end, but simply a means to achieve compliance and environmental protection. Environmental protection is our goal, not punishment. We typically find that the air, land and water is better protected when we assist and educate than when we "control" and "punish." However, we are not adverse to using enforcement as a method to gain compliance, especially in egregious cases or unwilling compliance. We will be expanding this report next year to include compliance assistance information.

Finally, it is important to recognize that achieving compliance is getting more difficult. In years past, the agency's focus was on large, stationary sources of pollution. Large industrial facilities and sewage treatment plants were easy to find and had the resources to come into compliance. Those sources are, for the most part, in compliance with current standards of protection.

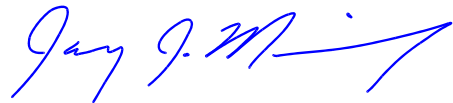
The sources of pollution we are focusing on now are widespread, diffuse and attributable to hundreds of human activities. It can be confusing and complex to know what may be required to control sources of pollution. Our job is to help people understand how to comply with environmental laws. When we discover a violation we first try to help people understand what they need to do, unless the violation is intentional or very harmful to human health or the environment. We assist by visiting

sites, holding workshops, writing guidance documents and keeping our Web site up-to-date.

In cases where a business or individual continues to be out of compliance, our next step is often a warning letter that clearly states what they must do and by when. If that doesn't work we will take an enforcement action by issuing a notice, order and/or penalty. This report focuses on the "formal" enforcement actions of notices, orders and penalties.

I will conclude by thanking Maylee Collier, who compiled this report, and the numerous agency employees who helped her put the report together. If you have any questions about the data or information presented in this report, please contact Dee Ragsdale at 360-407-6986.

Sincerely,

A handwritten signature in blue ink that reads "Jay J. Manning". The signature is fluid and cursive, with a long horizontal stroke at the end.

Jay Manning
Director, Department of Ecology

Introduction

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

Ecology's goals are:

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

Figure 1: Ecology's Primary Environmental Business Functions



Compliance with Environmental Laws & Rules

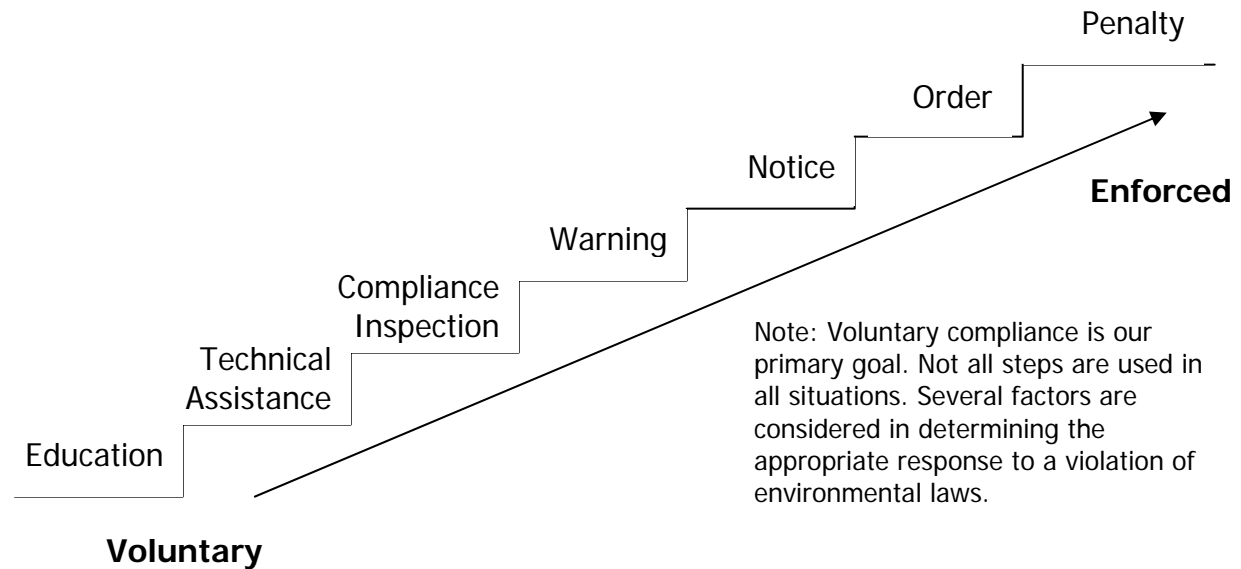
Ecology is responsible for managing Washington's environmental laws and rules that protect the air, land and water. We require, expect, and help those we regulate to know how to voluntarily comply with these laws and rules. This includes the Revised Code of Washington (state law), the Washington Administrative Code (state rules) and, in the case of federal rules, the Code of Federal Regulations.

Ecology's Enforcement Principles

Ecology uses enforcement, along with education, technical assistance and cooperation-based programs to make sure businesses comply with state laws and rules. In cases of non-compliance we carefully match the significance of the violation to the type of enforcement actions we take.

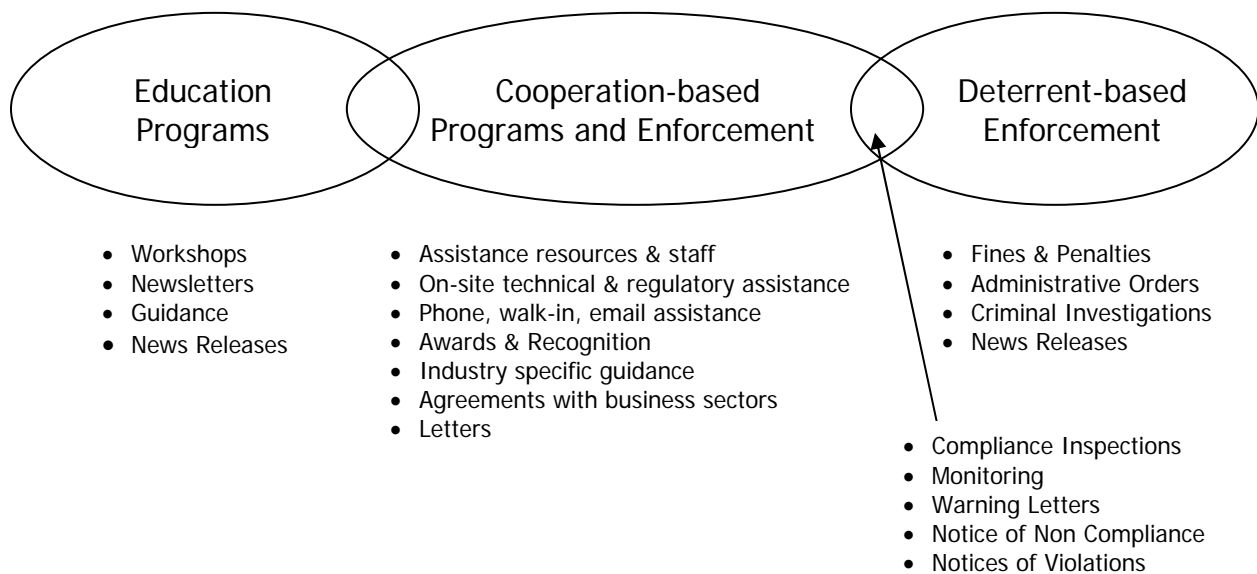
In most cases, we use cooperation-based solutions to solve environmental problems. However, we also have a strong deterrent-based enforcement policy to address significant threats to human health, the environment, and intentional violations.

Figure 2: Pathway to Compliance with Environmental Laws



Some of our tools to gain compliance fall in-between cooperation-based and deterrent-based enforcement such as compliance inspections. Our enforcement actions are based in fact and law, well documented, appropriate to the violation, and issued in a professional, equitable, and effective manner.

Figure 3: Tools to Gain Compliance



State and Federal Roles in Enforcement

The federal Environmental Protection Agency (EPA) has delegated Ecology the authority to enforce certain federal environmental laws. These laws are the:

- Clean Air Act
- Clean Water Act
- Resource Conservation and Recovery Act

Every two years Ecology and EPA enter into a joint agreement to align their individual commitments to protect Washington's air, land, and water. This agreement is called the Environmental Performance Partnership Agreement. The purpose of the Environmental Performance Partnership Agreement is to:

- Establish common environmental goals, strategies, activities, and performance measurements.
- Maintain a core level of environmental protection for all of Washington's citizens.
- Measure environmental progress using indicators that reflect environmental conditions, trends, and results.
- Allocate Ecology and EPA Region 10 resources to the highest environmental priorities of the state.
- Establish a joint work plan for managing the federal grant dollars that EPA Region 10 provides to Ecology for air quality, water quality, and hazardous waste management.

To view the Environmental Performance Partnership Agreement go to <http://www.ecy.wa.gov/ppa.html>.

Ecology takes the lead role in implementing the federally delegated programs in Washington. We routinely coordinate with the EPA to avoid duplicating compliance and enforcement actions. EPA Region 10 and Ecology have agreed to these four major principles:

- Collaborative Planning: Commitment to "up-front" planning to avoid problems, duplication, and surprises.
- Role Definition: Recognition that the state has the lead on agreed-upon work in a delegated program, except in situations where regional or national initiatives warrant an EPA lead.
- Performance Measurement and Oversight: Commitment to defining expectations and program review criteria.
- Information Sharing and Data Responsibilities: Commitment to making data systems more user friendly and improving the ability to link data.

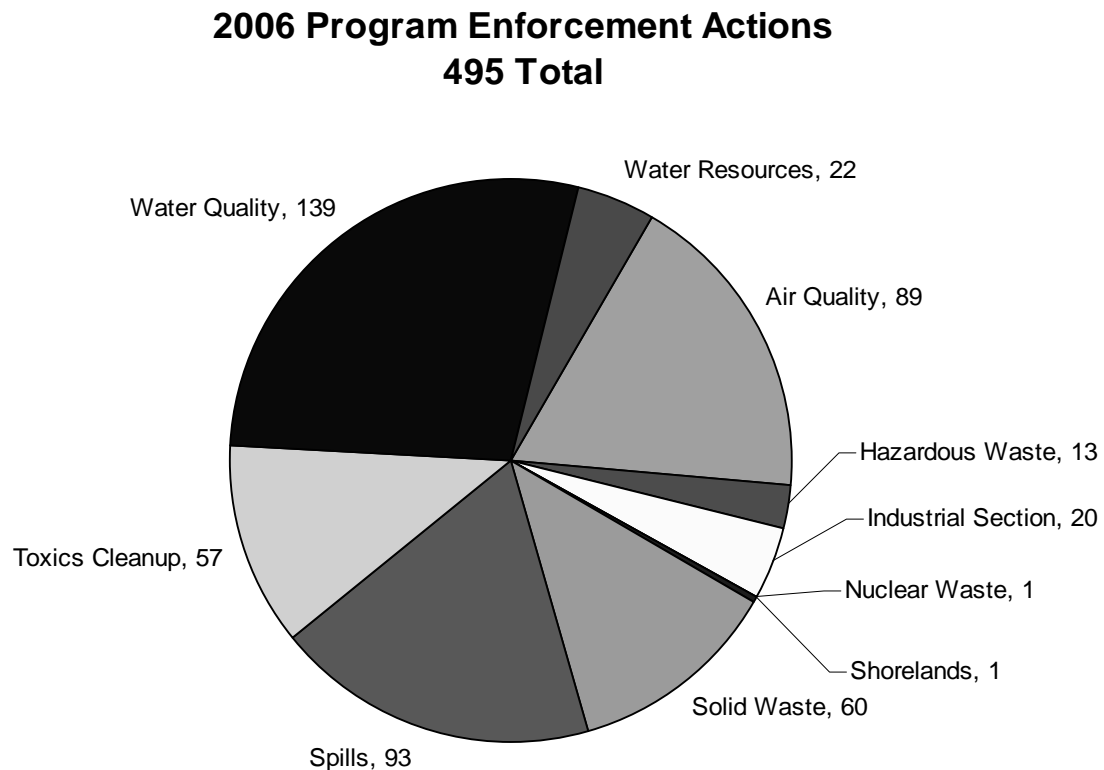
Enforcement Actions

There are two paths for enforcing environmental laws and rules: civil and criminal. Civil enforcement may be pursued through the courts (judicially) or directly through action by Ecology (administratively). We pursue most of our enforcement through administrative civil action. However, if an Ecology employee identifies possible criminal activity, they will refer the case to the Ecology Criminal Investigations Task Force. This investigation may be concurrent with ongoing inspections or other civil enforcement actions.

Administrative enforcement is the exercise of state civil authority to direct the owner or operator of a facility, site or property to comply with state law. An administrative enforcement action is based upon a violation, or potential to violate, a state law or rule; and the authority to enforce that law or rule.

Administrative enforcement often starts with a warning letter or a letter of non-compliance. If the warning does not result in compliance, enforcement is escalated to notices, orders, or civil penalties. These tools are described in more detail in the following sections. Please note that not all Ecology programs have legal authority to use all administrative enforcement tools available (see figure 3) because we delegate some enforcement authority to local government. The following pie chart shows the number of enforcement actions issued by Ecology in 2006.

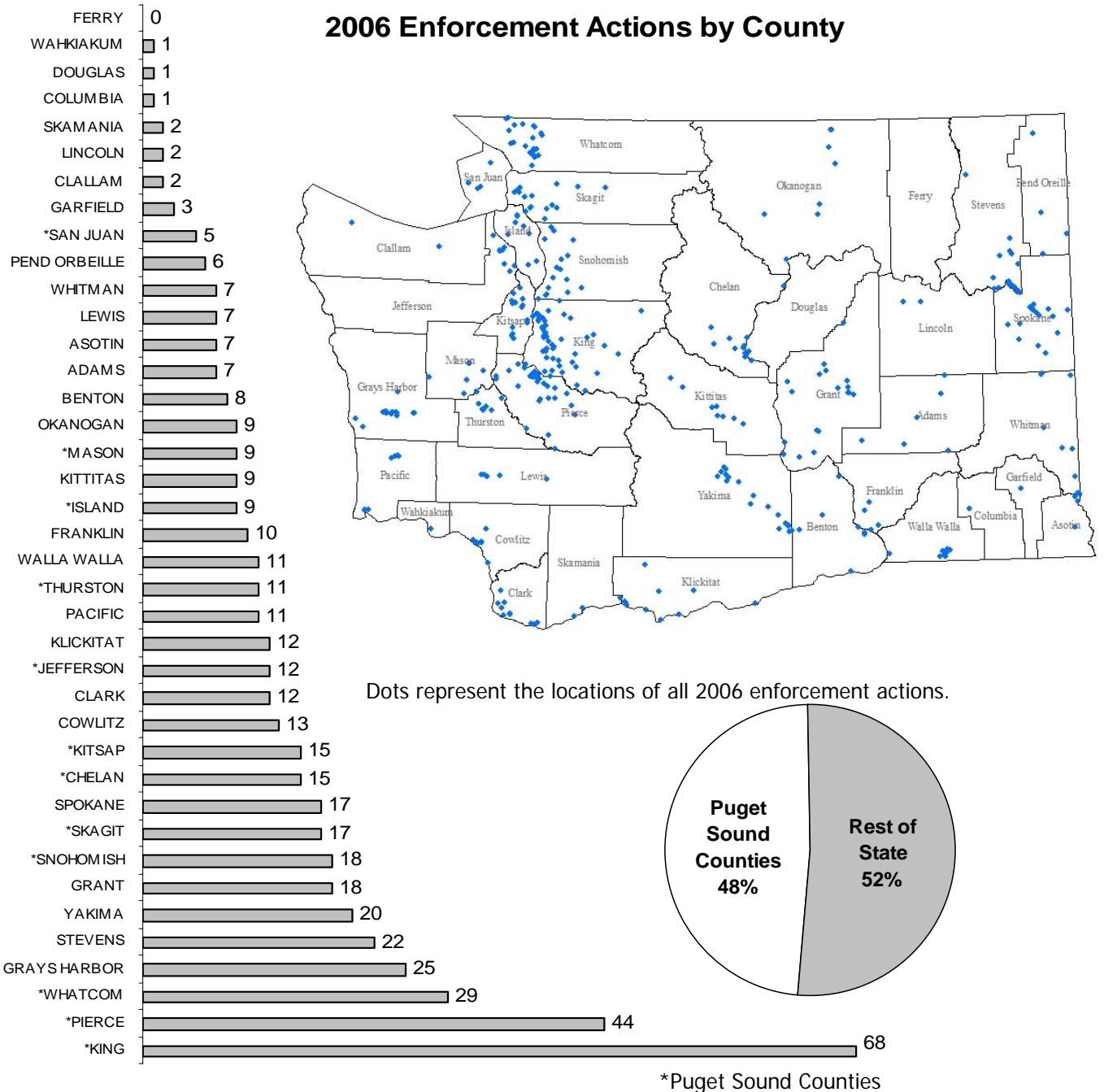
Figure 4:



Actions by County

Ecology tracks each facility or site where an enforcement action occurs through our Facility/Site database and the Docket Management System. The facilities or sites, represented by dots on the Washington State map below, are locations where enforcement actions (penalty, order, notice) occurred in 2006. Ecology also uses the Facility/Site database to track other sites that Ecology has an environmental interest in. The public can access the Facility/Site data at www.ecy.wa.gov/fs/.

Figure 5:



Trends in Notices, Orders, and Penalties

The following graphs represent 21 years of consistent data collection for agency notices, orders and penalties, and the initial penalty assessment amount (the original dollar amount of the penalty before any appeal process). Throughout the mid-1980s and mid-1990s, the number of enforcement actions Ecology issued was constant.

The increase in notices and orders seen in 1999, 2000, and 2001 are attributed to:

- Increased efforts to control smoke from agricultural burning.
- Targeted inspections of facilities that produce hazardous waste.
- Targeted inspections of underground storage tanks.
- Large number of well-drilling related violations.
- Slight increase in oil and hazardous material incidents responses.
- Emphasis on compliance with water quality certifications; and orders to meter water use.
- Increased dairy farm inspections. (The Legislature handed over dairy farm inspections to the Department of Agriculture in 2003.)

Several of these actions come from new or enhanced programs authorized by the Washington State Legislature, the federal government or an Ecology administrative action.

Figure 6:

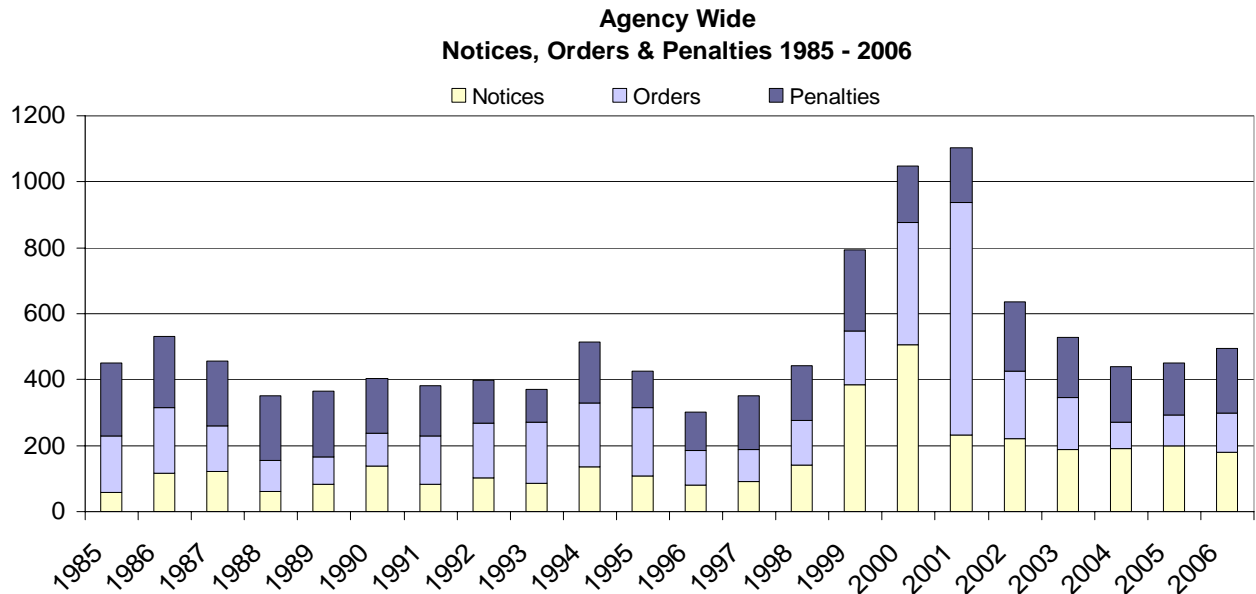


Table 1: Agency Total Enforcement Actions and Penalty Amounts

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Penalty Initial Assessed Amount
1985	58	172	220	450	\$822,028
1986	116	200	216	532	\$1,009,468
1987	121	138	198	457	\$1,046,147
1988	62	94	195	351	\$1,082,875
1989	83	83	199	365	\$1,615,977
1990	138	100	167	405	\$2,566,900
1991	84	146	152	382	\$1,532,580
1992	101	167	130	398	\$2,246,782
1993	85	185	100	370	\$1,811,350
1994	135	194	185	514	\$1,211,150
1995	107	209	109	425	\$703,380
1996	79	107	115	301	\$1,128,899
1997	90	99	163	352	\$1,506,295
1998	141	136	165	442	\$1,895,777
1999	385	162	247	794	\$2,691,353
2000	507	370	171	1048	\$2,335,678
2001	231	707	166	1104	\$1,193,650
2002	221	205	211	637	\$17,051,430
2003	188	159	181	528	\$1,207,992
2004	191	79	170	440	\$1,465,362
2005	198	96	156	450	\$1,991,441
2006	180	118	197	495	\$2,056,023

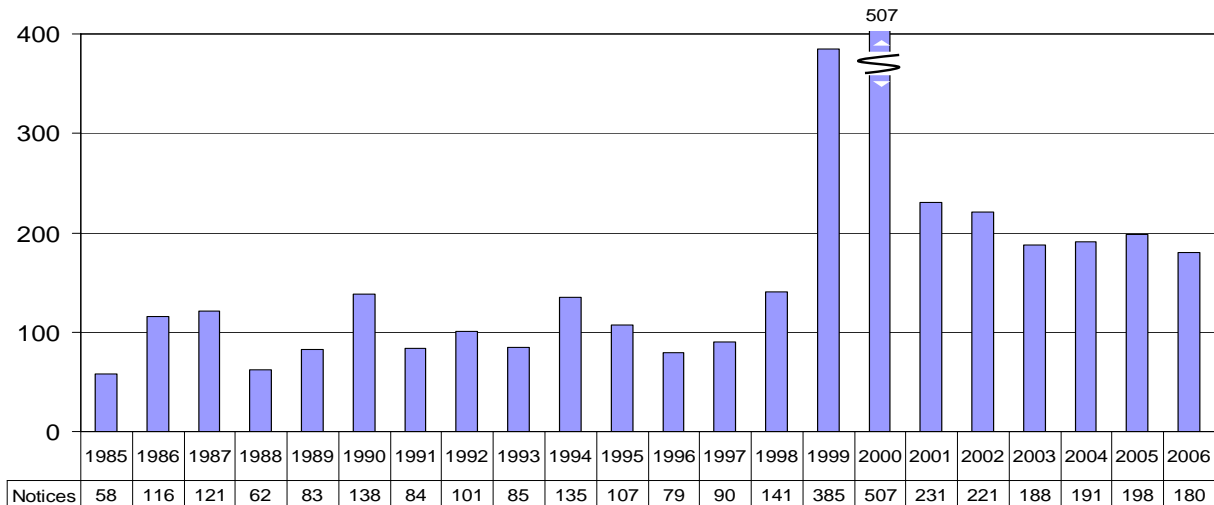
These penalty amounts reflect the initial assessment amount before any appeals process or negotiations where the total amount may be reduced. 2002 totals include \$15,720,000 in penalties issued for the 1999 Bellingham spill and fire.

Notices

Ecology uses a Notice of Violation or a Notice of Non-compliance to officially inform a facility owner they have violated or have the potential to violate environmental laws. Notices can not be appealed to the Pollution Control Hearings Board or the Shoreline Hearings Board. In some cases, Ecology will issue a field citation up to \$3,000 with a Notice of Non-Compliance.

Figure 7:

**Agency Wide
Number of Notices by Year
1985 - 2006**

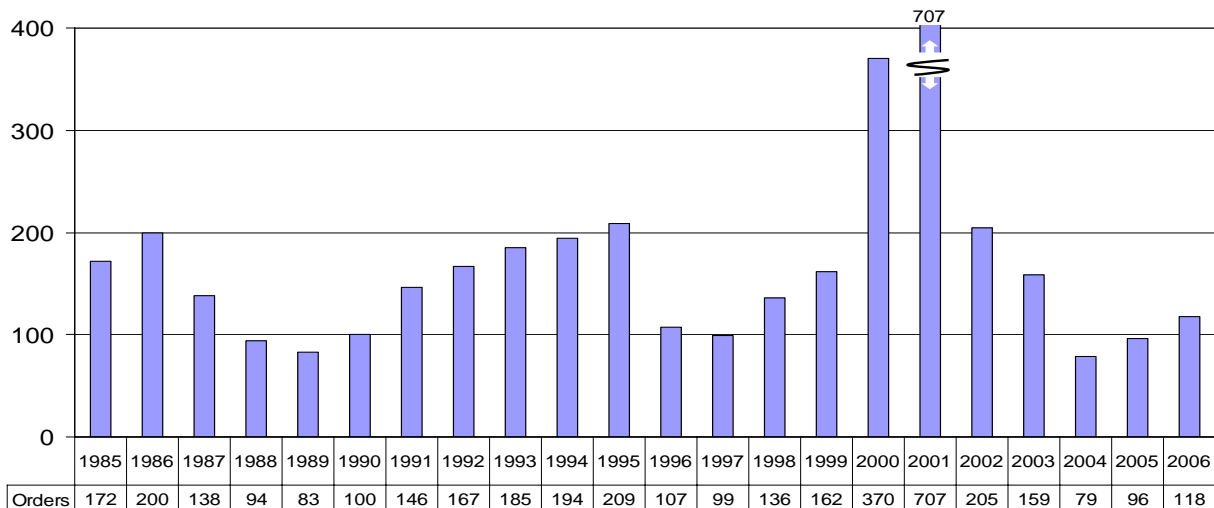


Administrative Orders

Ecology uses Orders to direct a person or business to correct a violation of an environmental law. Orders are authorized by statute, and most can be appealed to either the Pollution Control Hearings Board or the Shoreline Hearings Board.

Figure 8:

**Agency Wide
Number of Orders by Year
1985 - 2006**

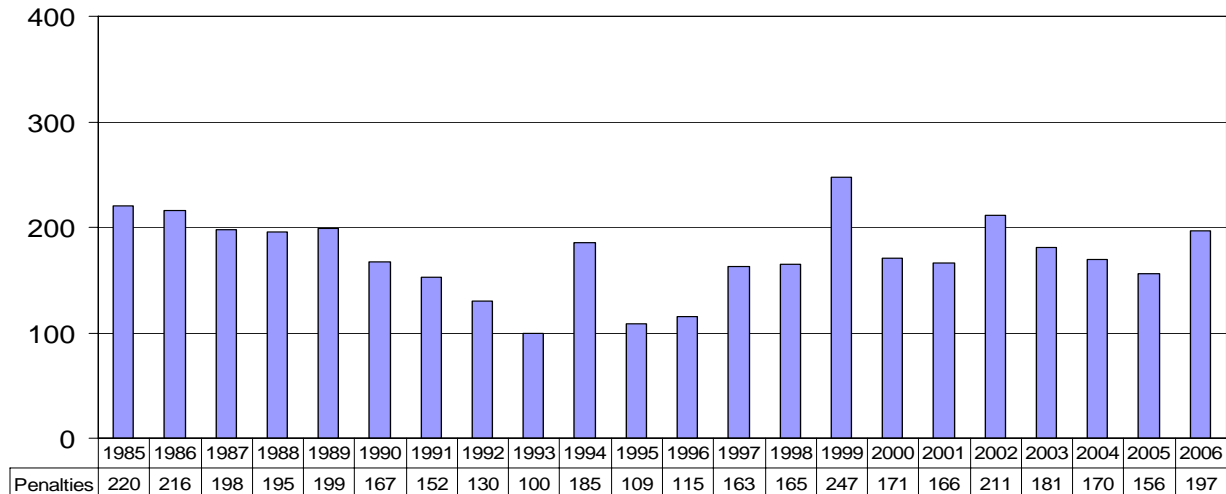


Civil Penalties

When Ecology issues a civil penalty, our investigation must prove that a violation of law occurred. State laws set the maximum amounts, usually on a per-day and/or per-violation basis. *Civil penalties are not considered "punitive."* We use them to secure correction of violations and to deter future violations. Civil penalties can be appealed to the Pollution Control Hearings Board or the Shoreline Hearings Board.

Figure 9:

**Agency Wide
Number of Penalties by Year
1985 - 2006**



Criminal Enforcement

Ecology must prove that a violator knowingly, intentionally, willfully and/or through reckless actions broke the law in order to investigate and prosecute the violator for an environmental crime. The Ecology – U.S. EPA Criminal Investigations Task Force investigates all possible criminal violations. The task force works to maximize the use of state and federal resources and share information. While the numbers of criminal cases pursued are relatively small, we feel the penalties and associated jail times are significant deterrents to criminal behavior.

Examples of criminal wrongdoing are:

- Conflicting data (keeping two sets of books or inconsistent monitoring reports of the same incident)
- Conflicting stories
- Deliberate actions (an employee was told to do something illegal)
- Claims of ignorance about requirements

Table 2: Criminal Prosecution Actions, 1994 - 2006.

Type of Action	1994–2006 Cumulative Totals
Criminal Investigations Initiated	236
Criminal Warrants Served	90
Cases Referred for Criminal Prosecution (Number of Cases)	153
Criminal Charges Filed (Number of Defendants)	139
Criminal Convictions (Number of Defendants)	121
Court Ordered Fines & Penalties	\$35,843,971
Total Jail Time (Months)	609.9
Total Probation Time (Months)	2,864

This includes all criminal cases prosecuted in Washington State under both state and federal jurisdiction, or jointly.

The numbers in Table 3 are not interrelated. Each category is independent of the others. For example:

- The Courts may or may not issue a criminal warrant or may issue multiple warrants before Ecology refers a case for criminal prosecution.
- Cases may result in no charges or possibly multiple charges filed against multiple defendants.
- Criminal investigations and prosecutions typically take more than one year to resolve and can result in Ecology filing charges or convicting violators any time during a five-year period.

Table 3:

Criminal Enforcement Trends 1994 – 2006

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Criminal Investigations Initiated	19	47	24	20	31	16	11	12	10	11	14	13	8
Criminal Warrants Served	8	10	21	8	4	4	2	4	0	0	1	20	8
Cases Referred for Criminal Prosecution (Number of Cases)	11	14	17	10	19	11	11	5	9	10	16	12	8
Criminal Charges Filed (Number of Defendants)	9	25	11	17	17	9	10	6	7	8	11	3	6
Criminal Convictions (Number of Defendants)	4	18	11	13	19	9	9	6	1	13	7	5	6
Court Ordered Fines & Penalties	\$561,225	\$553,333	\$377,000	\$300,140	*\$780,644	\$27,500	\$35,137	\$540,686	**\$128,000	***\$21,954,816	\$4,465,000	\$5,014,500	****\$1,105,990
Total Jail Time (Months)	11	76	143	72	78.6	30	36	36	0	60.3	1.0	31.0	35.0
Total Probation Time (Months)	300	276	339	300	511	206	246	96	12	168	108	134	168

* Includes "innovative settlement" \$350,000 environmental restoration in lieu of fine.

** Includes restoration settlement \$108,000 in lieu of fine.

*** Includes restoration settlement \$202,706 in lieu of fine; does not include \$15 million civil and \$76 million in innovative settlements.

****Includes fines=\$20,750; restitution=\$1,001,000; community service payments=\$83,000; other=\$1,240

Penalty Assessment

Civil penalties are a monetary incentive to change behavior to ensure compliance with state law. Monetary penalties are aimed at correcting environmental violations and deterring future violations. Ecology considers several factors when we decide what the appropriate amount of the penalty should be.

1. The nature of the violation:

- Severity of the violation (public health and/or environmental effect).
- Magnitude of the violation (amount and type of pollution).
- Whether the violation was due to negligence, recklessness or was intentional.
- Precautions taken to prevent the violation.

2. The prior behavior of the violator:

- Record of similar violations or a pattern of violations.
- Multiple notices of the violation and applicable corrective actions.

3. Actions taken by the violator to correct the problem:

- Degree of cooperation in working toward compliance.
- Timeliness and appropriateness of corrective actions taken.
- Compensation paid or agreed to for damages to public resources.

A violator has the option to respond to a penalty in one of four ways.

1. The violator does not file an appeal within the allowed time.
2. The violator files an "Application for Relief", whereupon Ecology may issue a Notice of Disposition that reduces the penalty amount.
3. The violator appeals the penalty to the Pollution Control Hearings Board or the Shorelines Hearings Board and the amount is reduced.
4. The violator and Ecology negotiate a traditional or innovative settlement agreement that may include a Supplemental Environmental Project in lieu of part of the penalty being reduced.

Ecology makes every effort to collect the final penalty. If a violator fails to pay the penalty, we refer the case to the state Attorney General's Office. The Attorney General's Office decides whether the agency should seek a judgment in Superior Court or the services of a collections agency.

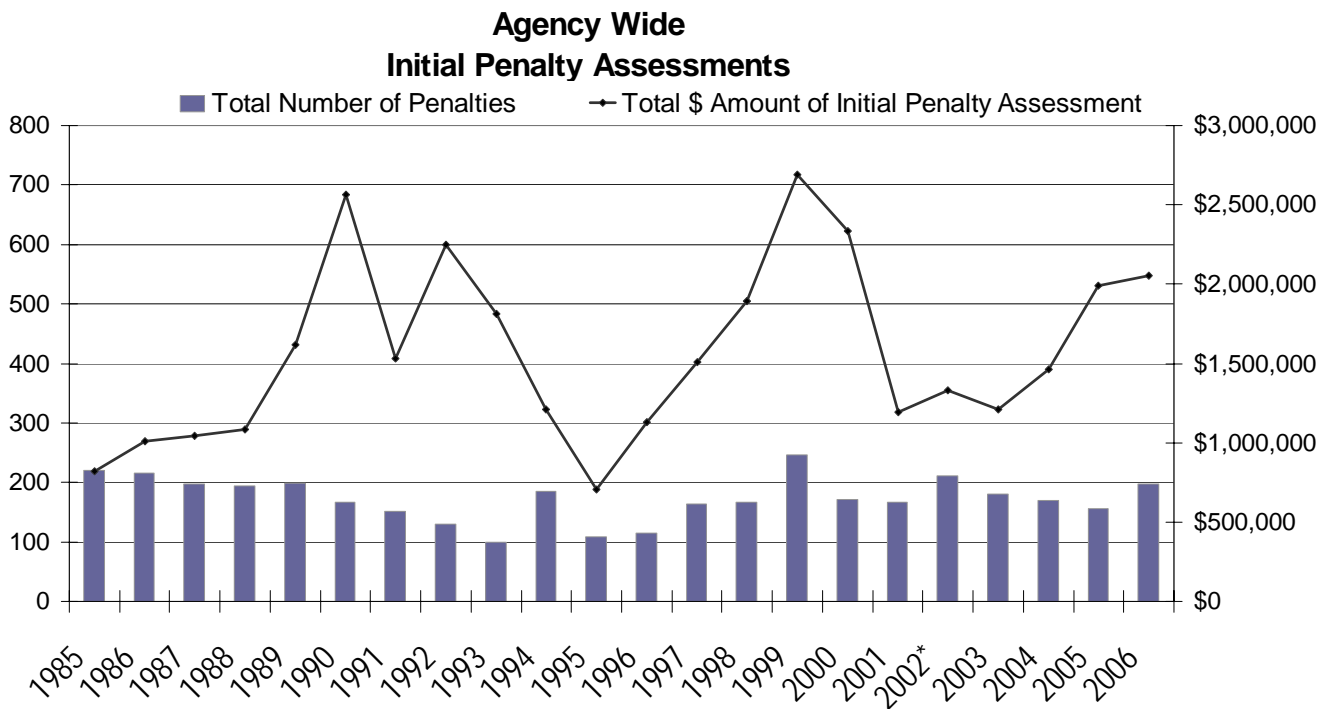
Not all penalty dollars are collected. This can be due to many factors:

- An inability to locate the debtor.
- The costs exceed the benefits of further collection procedures.
- The statute of limitations has expired.
- A compromise is negotiated.
- Collection remedies are exhausted.
- Businesses are bankrupt.
- Corporations with no assets.

When a penalty is appealed, the Pollution Control Hearing Board (PCHB) or Shorelines Hearing Board (SHB) may reduce the penalty amount owed. The following graphs show:

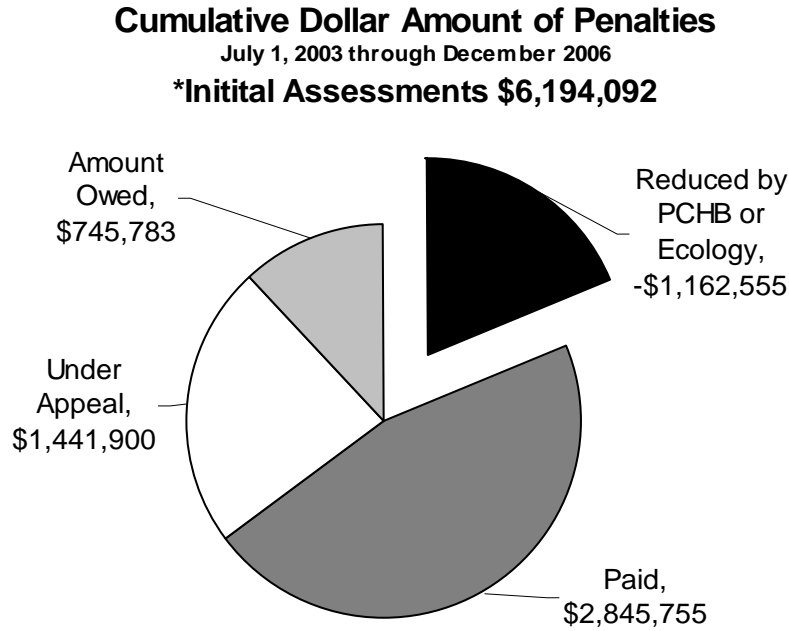
- Total initial penalty dollars assessed compared with the number of penalties.
- Amount of penalties paid, reduced, under appeal, and the outstanding balance owed (not under appeal).

Figure 10:



* 2002 totals exclude \$15,720,000 in penalties issued for the 1999 Bellingham spill and fire.
 Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Figure 11:



*The initial penalty amount is the amount prior to an appeals process where the amount may be reduced.

The money collected from enforcement penalties is deposited in special accounts that pay for:

- Restoration and enhancement projects that compensate Washington citizens for damage to our environmental, recreational, archaeological, or aesthetic natural resources.
- Research and development of projects that help prevent or mitigate damage to our environmental resources and help protect human health.
- Permitting and regulatory programs to promote the wise management of our air, land and water.
- Projects that provide grants to local governments for various environmental programs.
- Projects that help inform, educate, and assist local government, industry and the public in order to help preserve, protect, and enhance our natural resources and human health.

The most common accounts and corresponding laws, Revised Code of Washington (RCW), are:

- Coastal Protection – RCW 90.48.400 and RCW 90.48.390
- Vessel Response - RCW 90.56.335
- Underground Storage Tank - RCW 90.76.100

- Air Pollution Control - RCW 70.94.015
- Biosolids Permit - RCW 70.95J.025
- State Toxics Control - RCW 70.105D.070
- Oil Spill Prevention - RCW 90.56.510
- Reclamation - RCW 18.104.155 and RCW 89.16.020

To learn more about the RCWs go to the Washington State Legislature Website:
<http://www1.leg.wa.gov/CodeReviser>.

Major Penalties of 2006

ConocoPhillips - Polar Texas Spill (Dalco Passage)

The owner of the Polar Texas - the oil tanker that spilled more than 1,000 gallons of crude oil into Puget Sound's Dalco Passage on Oct. 13, 2004 – agreed to pay in full a \$540,000 fine issued by Ecology. The \$540,000 fine was the largest fine we ever issued for a spill in marine waters, and was the maximum possible penalty under state law. Meanwhile, negotiations continue on a state-federal-tribal damage assessment that is separate from the penalty. Funds from this assessment will be placed in a fund that supports restoration projects that compensate Washington citizens for damage to the public's environmental resources.

Evergreen International Shipping Line - Criminal Actions

Fourteen projects to restore the Puget Sound, the Hood Canal, and associated marine waters will be undertaken with funding from the National Fish and Wildlife Foundation's Puget Sound Marine Conservation Fund. The Fund was established as part of the settlement of a criminal case with Evergreen International Shipping Line, which resulted from Ecology's investigation of an oil spill on the Columbia River in March 2001. Ecology's investigation resulted in a \$67,500 penalty against Evergreen in 2003. Following the 2001 Columbia River event, Ecology inspectors discovered an Evergreen ship was bypassing the oily water separator and dumping waste oil directly overboard. A federal criminal investigation ensued and similar practices were discovered on at least seven other Evergreen ships around the U.S. Following a guilty plea by Evergreen, the company was ordered to pay \$25 million in monetary penalties, of which \$10 million was to be paid as community service. The Puget Sound Marine Conservation Fund was established with Western Washington's share of the \$10 million split among five U.S. attorney districts for environmental community service projects. In 2006, U.S. Attorney John McKay and Ecology Director Jay Manning announced \$1.7 million in grants for conservation and restoration projects around Puget Sound and the coastal straits. These are being enhanced by \$1.3 million in matching contributions from the project sponsors. For details, see this map and summary: www.ecy.wa.gov/puget_sound/marine_conservation_fund.pdf

The Port of Seattle - Sea-Tac Airport Runoff

The Port of Seattle and its contractor was fined \$81,000 for allowing six releases of muddy water from the Sea-Tac Airport third-runway project into Miller and Walker Creeks and for pumping industrial waste water into a storm-water treatment system. The violations occurred in October, November and December of 2005. Ecology issued the penalty to the Port -- which owns and operates the airport -- and to TTI Constructors LLC-- the prime contractor. The Port is constructing a large earth-fill embankment for its runway expansion project to prevent this from happening again.

Central Puget Sound Regional Transit Authority - Water Quality Violations

Ecology fined the Central Puget Sound Regional Transit Authority (Sound Transit) \$66,000 for water-quality violations along a 4½-mile section of its light rail line under construction between Seattle and Tukwila. Ecology also issued an order directing the transit agency to work with their contractor to make construction-practice changes to prevent stormwater problems when the fall and winter rains arrive. The penalty cited Sound Transit for 14 discharges amounting to 26 violations of their project's construction stormwater permit between August 2005 and June 2006. Sound Transit self-reported each of the discharges as required by its permit.

The U.S. Department of Energy - Hanford Nuclear Reservation

At the urging of Ecology, the U.S. Environmental Protection Agency (EPA) issued a fine of \$120,000 to the U.S. Department of Energy (Energy) for a spill of highly concentrated sodium dichromate at the Hanford Nuclear Reservation, potentially threatening workers and the Columbia River. The spill occurred when an Energy Department contractor was excavating pipelines at the reservation. Energy is liable for the violations under the terms of the Tri-Party Agreement between Ecology, the EPA and Energy. These violations are a significant concern to Ecology, because the spill occurred near the Columbia River. Besides the potential threat to human health the area is an extremely valuable and sensitive habitat for spawning salmon and for other species.

For more penalty information please visit our Enforcement web page:

www.ecy.wa.gov/enforce.html

Innovative Settlements

Violators can appeal all penalties to the Pollution Control Hearings Board or the Shorelines Hearing Board. Both boards strongly encourage each party to reach a settlement to avoid a formal hearing. Settlements typically fall under two categories: traditional and innovative. Settlements that simply reduce a penalty or revise an order to avoid litigation are considered traditional. Innovative settlements may divert all or part of the assessed penalty amount to a Supplemental Environmental Project (SEP). SEPs are projects that benefit the community where the violation took place. There are four types of SEPs:

1. Pollution prevention
2. Environmental restoration
3. Enhancement and monitoring
4. Environmental auditing; and public awareness projects

Ecology's objective for any settlement is to achieve compliance and mitigate or restore damage done to the environment. We also encourage the use of pollution prevention strategies to reduce future environmental damage. Penalty amounts cannot be reduced for actions or activities that are already required by law or those that are set to become enforceable requirements at a future date.

Innovative settlements must include three general elements:

1. The proposed SEP must result in benefits beyond correcting existing violations and provide assurances regarding future compliance.
2. The penalty paid, plus the net cost of the innovative proposal, must reflect the gravity of the violation and the economic benefit of non-compliance.
3. There should be a relationship between the nature of the violation and the environmental benefit sought through the proposal.

2006 Innovative Settlements:

B & G Farms - Spokane

In 2006, Ecology issued a \$69,000 penalty to B&G Farms for mishandling hazardous waste and used oil on a decommissioned missile site. The company has agreed to use \$34,000 of their penalty to help pay for two Grant County projects:

1. A fire truck for the local fire district.
2. An event to collect discarded appliances and scrap metal. B&G Farms will help promote the event, provide staff and transportation, and will properly dispose of the collected items.

Ecology will also defer an additional \$20,600 of the penalty if B&G:

- Initiates a voluntary clean-up process to remove contaminated soil from the site.
- Stops storing hazardous waste and used oil at the site.
- Stays in compliance with dangerous waste regulations for 3 years.

Emerald Services Ind. – Tacoma

Ecology fined Emerald Services Inc. \$128,000 for violations of water quality and hazardous waste management rules. The action was taken after an explosion in the stormwater system occurred when spills of solvent were not cleaned up. The settlement required changes in material management and site infrastructure to prevent releases to the environment. \$86,000 of the penalty will be used to make structural changes beyond regulatory requirements in the product management area to keep any future spilled solvent from entering the storm water system, and to improve the storm water system monitoring with better inspections analysis and improved alarm systems. Emerald also implemented a spill training plan, including practice drills.

I.P. Callison and Sons - Chehalis

\$22,557 of their \$28,1987 penalty will go to the Chehalis Basin Fisheries Task Force to help fund the Forrest Road Fish Barrier Culvert Correction project. This project will help restore fish habitat. I.P. Callison & Sons violated its state waste discharge permit when they failed to submit the required discharge monitoring reports about discharges to the sanitary sewer system. Discharges from their facility could impact the City of Chehalis Sewage Treatment Plant.

Safeway, Inc. - Bellevue

Ecology fined Safeway, Inc. \$96,000 for violating several conditions of the sand and gravel general permit. The violations occurred at the company's regional distribution center in Auburn, which was under construction. Safeway appealed the penalty and negotiated an innovative settlement with Ecology. Safeway will give \$30,000 to the city of Auburn to expand the restored wetland and other natural areas of Auburn Environmental Park. The project helped the city's efforts to create open space in urban areas while offering opportunities for:

- Economic development
- Water quality improvement
- Stormwater detention and flood control
- Fish and wildlife enhancement
- Public education, and recreation

Safeway also paid \$10,000 of the original penalty which Ecology placed into the Coastal Protection Fund.

Shakertown - Winlock

\$8,500 of their \$24,000 penalty will go to the Winlock Wastewater Treatment Plant to pay for ongoing facility upgrades. Ecology issued Shakertown the penalty for failing to monitor their discharges as required by the State Waste Discharge permit. Shakertown has since stopped their wastewater discharge. However, before they stopped, discharges from their facility made their way to the City of Winlock Sewage Treatment Plant. Upgrades to the treatment plant will help protect Olequa Creek from inadequately treated sewage.

Union Pacific Railroad - Ridgefield

\$78,000 of their \$106,000 penalty will go to Clark County Washington State Extension. They will use the funds to restore fish habitat in Gee Creek. In 2003, a Union Pacific northbound train ran into a Burlington Northern Santa Fe southbound train on a rail siding in the city of Ridgefield near Kelso. The collision resulted in a release of 1,372 gallons of diesel, most of which seeped into groundwater.

Weyerhaeuser - Raymond Saw Mill

In November 2004 Ecology fined the Weyerhaeuser Raymond Saw Mill \$49,000 for failing to properly monitor and report flow and pollution levels in its wastewater. In January 2006, Ecology and Weyerhaeuser settled the fine for a \$19,000 Supplemental Environmental Project (SEP) and a \$6,000 payment to the Coastal Protection Fund. The SEP is a stream restoration on Middle Creek, a tributary to the Bear River and Willapa Bay. This was conducted by the Willapa Bay Fisheries Enforcement Group, and should open up an additional 3.7 miles of salmon habitat. Weyerhaeuser has corrected the problems at the mill and is properly monitoring wastewater discharges to the City of Raymond sewer system.

Tree Top, Inc. – Cashmere

Tree Top, Inc. released more air pollution than federal limits allowed and they did not have the required Title V Air Operating Permit. When Tree Top became aware of this problem they quickly modified their fuel combustion operations to reduce their air pollution emissions. Ecology facilitated a “tolling agreement” with Tree Top that essentially paused time. This allowed us to move forward with pre-penalty settlement negotiations without risking our ability to assess a penalty if the negotiations had failed. Ecology and Tree Top negotiated appropriate methods for calculating and tracking fuel combustion emissions. A pre-penalty settlement was agreed upon, directing Tree Top to pay \$25,343. The penalty amount reflected the environmental significance of the violation. As a result, Tree Top’s emissions are below the limits that would require a Title V Air Operating Permit and they have reduced air pollution in the Cashmere and Wenatchee Valley air sheds.

Air Quality

Overview

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

Air quality affects public health, the environment and quality of life. Air pollution causes lung disease and makes existing respiratory and cardiopulmonary disease worse. It can sometimes speed up the death of people who have these diseases. Hundreds of studies prove that short and long-term exposure to air pollution increases emergency room visits, hospitalizations, and medication use. Exposure to air pollution can cause absences from work and school, and restricts the activity of people with impaired respiratory or cardiopulmonary function. Air pollution also harms plant and animal life, negatively affects the value of homes, and disrupts personal comfort and well-being.

Ecology's Air Quality Program goals are to have all areas of the state meet federal air quality standards and to reduce outdoor air pollution to levels that are protective of public health and the environment.

To accomplish its mission, our Air Quality Program focuses its work around these six objectives:

1. Prevent unhealthy air and violations of air quality standards.
2. Reduce health and environmental threats from motor vehicle emissions.
3. Reduce risk from toxic air pollutants.
4. Reduce health and environmental threats from smoke.
5. Reduce air pollution from industrial and commercial sources.
6. Measure air pollution levels and emissions to make sound policy decisions.

To meet these objectives, the Air Quality Program uses the tools mentioned in the follow pages and has observed the following trends.

Three levels of government are responsible for controlling air pollution in Washington State.

1. The federal government, through the Environmental Protection Agency (EPA), sets national air pollution standards. The EPA is also responsible for air quality issues on tribal lands and is in the process of setting up tribal air quality programs.

2. State government, through Ecology and, in some cases, the Energy Facility Site Evaluation Council, is required to enforce certain federal standards and state air quality requirements developed to meet the specific needs of Washington State.
3. Local government, in the form of local air pollution control agencies, has responsibility within single or multi-county jurisdictions. Local air pollution control agencies issue air permits and make sure businesses comply with state and federal air quality standards. They develop local rules to meet specific community needs.

Air Quality Permits

Local air pollution control agencies and Ecology issue permits for new and existing industrial and commercial facilities that create air pollution. These permits are written to make sure all federal and state air quality laws are met. Ecology also issues air permits for agricultural, land clearing and other outdoor burning to make sure farmers, land owners and businesses manage and minimize the public health threats from smoke.

The priorities of our air quality permit programs are to:

- Provide consistent and clear permit requirements to the regulated community.
- Decrease the time it takes to process a permit.
- Focus on permit requirements that provide environmental benefit.
- Keep local control of federal permit programs.
- Protect public health and the environment.

Compliance Assurance

Ecology uses many approaches to make sure facilities comply with air quality requirements. State and local governments invest a lot of resources and effort in technical assistance, permitting assistance, and public outreach. Examples of these approaches are:

- Economic and non-regulatory incentives.
- On-site visits to build and maintain good relationships between the regulated community and us.
- Mutual voluntary agreements and negotiated orders to resolve problems.
- Dedicated and trained field staff that provides technical and regulatory assistance.
- Public meetings, workshops, and hearings; web pages, publications and other informational materials.
- Single industry or sector based technical assistance initiatives.
- Direct applicants and the public to the right person or agency to get their questions or issues resolved quickly.

All of these approaches are a positive way to help facilities comply with the rules that protect air quality. If a business or citizen violates an air quality rule, Ecology makes every attempt to resolve the problem quickly. Depending on how serious the violation is, Ecology may initiate formal enforcement actions to correct a problem.

Environmental Trends

In 1991, the Washington State Legislature increased efforts to improve and protect air quality statewide. Since then, overall air quality in Washington has greatly improved. A decade ago, Ecology identified 13 areas of Washington that were violating national air quality health standards for six chemicals known as “criteria” pollutants:

- Carbon monoxide
- Nitrogen dioxide
- Sulfur dioxide
- Ozone
- Particulate matter
- Lead

Currently, all areas in the State of Washington meet the federal air quality standards. However, EPA has tightened the standard for particulate matter and is reviewing the ozone standard with the likely outcome that it will also be strengthened. About 5 to 7 counties appear to have the potential to violate the new standard for particulate matter.

Besides the six criteria pollutants above, hundreds of other toxic or hazardous air pollutants enter the atmosphere from a variety of sources. Because of limited air quality data, the level of public health and environmental damage caused by toxic air pollutants is more uncertain than the risks associated with criteria pollutants. With help from the EPA, Ecology has conducted toxic air pollutant studies in several locations in Seattle, Vancouver, and Spokane. We have also conducted a risk review to identify the most serious toxic air pollutants. Together, these studies indicate that diesel vehicle exhaust, wood smoke, and emissions that evaporate from motor vehicles have a significant impact on public health in Washington.

Enforcement Trends

Over the last decade, Ecology has focused our air quality enforcement activities on air pollution from commercial and industrial sources and burning. Commercial and industrial enforcement activity has been relatively stable. We usually identify violations during routine inspections and site visits, and will take an enforcement action when a business or industry is emitting more air pollution than state rules or permits allow. Minor violations that do not

have significant environmental impact are normally resolved through technical assistance and education instead of enforcement.

Outdoor burning and wood stove smoke complaints make up another portion of Ecology's enforcement activities. In the winter, smoke management teams get complaints of wood smoke smelling like garbage and other illegal materials. In the spring and fall, they receive complaints of smoke impacts from land clearing and residential backyard burning. Technical assistance often addresses these behaviors. However, we will issue a formal enforcement action for repeated violations.

Agricultural burning enforcement has declined over the last several years as the agricultural community has become more familiar and accepting of the permitting process. When violations do occur, the nature of the violation has shifted from violations for burning without a permit to violations of permit conditions.

However, overall outdoor burning enforcement has increased for two main reasons.

1. As agricultural burning compliance improves, Ecology is shifting its efforts to other types of outdoor burning.
2. New laws make most outdoor burning illegal in urban growth areas. Many residents in the urban growth areas have routinely burned their garbage. Some of what they burned was illegal material like paint and pesticides that release toxic emissions into the air when burned. There has also been a significant increase in education, outreach, and compliance assistance to help communities better understand state outdoor burning requirements.

For more information about air quality in Washington State, visit Ecology's web site at www.ecy.wa.gov/programs/air/airhome.html.

Table 4: Air Quality Program Enforcement Actions and Penalties Amounts.

YEAR	Notices	Orders	Penalties	Total Number of Enforcement Actions	Total Amount of Initial Penalty Assessment
1985	3	5	20	28	\$24,400
1986	4	3	8	15	\$13,200
1987	3	1	23	27	\$13,000
1988	5	18	43	66	\$58,000
1989	30	8	20	58	\$16,750
1990	61		23	84	\$13,800
1991	31	2	11	44	\$15,250
1992	23	2	10	35	\$38,500
1993	31	8	10	49	\$35,700
1994	41	2	4	47	\$8,250
1995	18	15	4	37	\$10,430
1996	15	2	5	22	\$27,000
1997	32	2	10	44	\$129,945
1998	24	2	7	31	\$284,300
1999	130	5	33	168	\$241,212
2000	208	11	23	242	\$157,458
2001	103	34	5	142	\$57,000
2002	60	9	3	72	\$35,500
2003	41	2	2	45	\$4,500
2004	90	3	13	106	\$66,250
2005	75	1	12	88	\$62,190
2006	78	1	10	89	\$79,443

Figure 12:

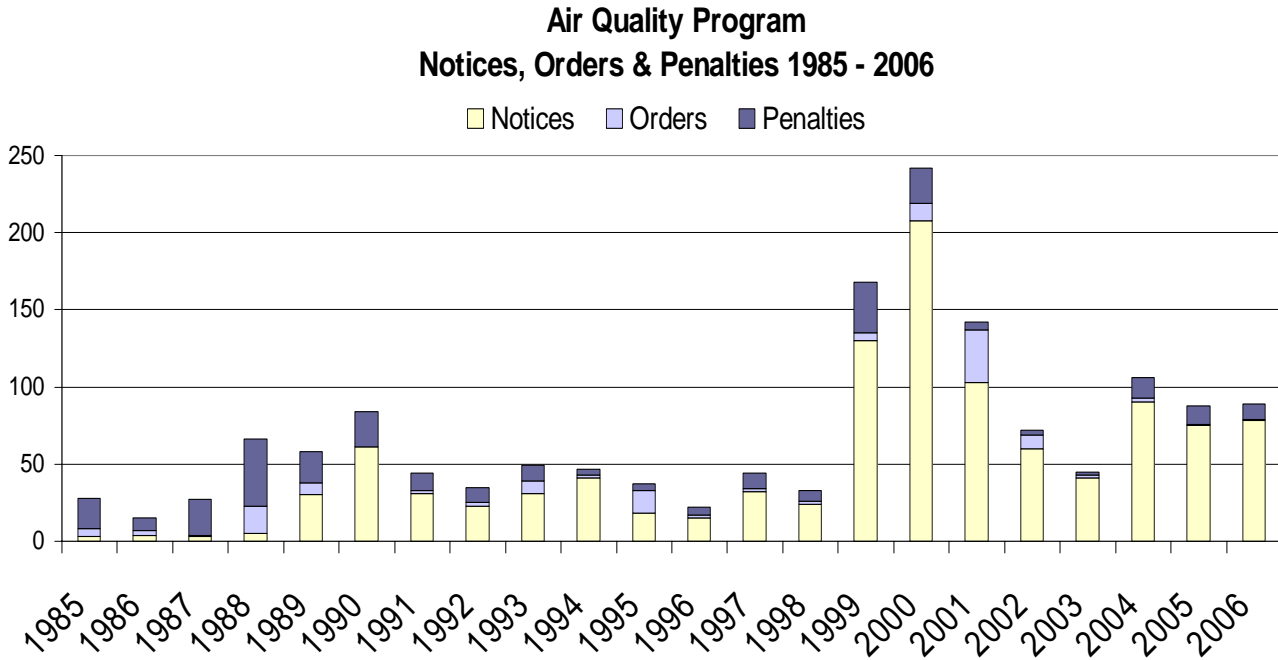
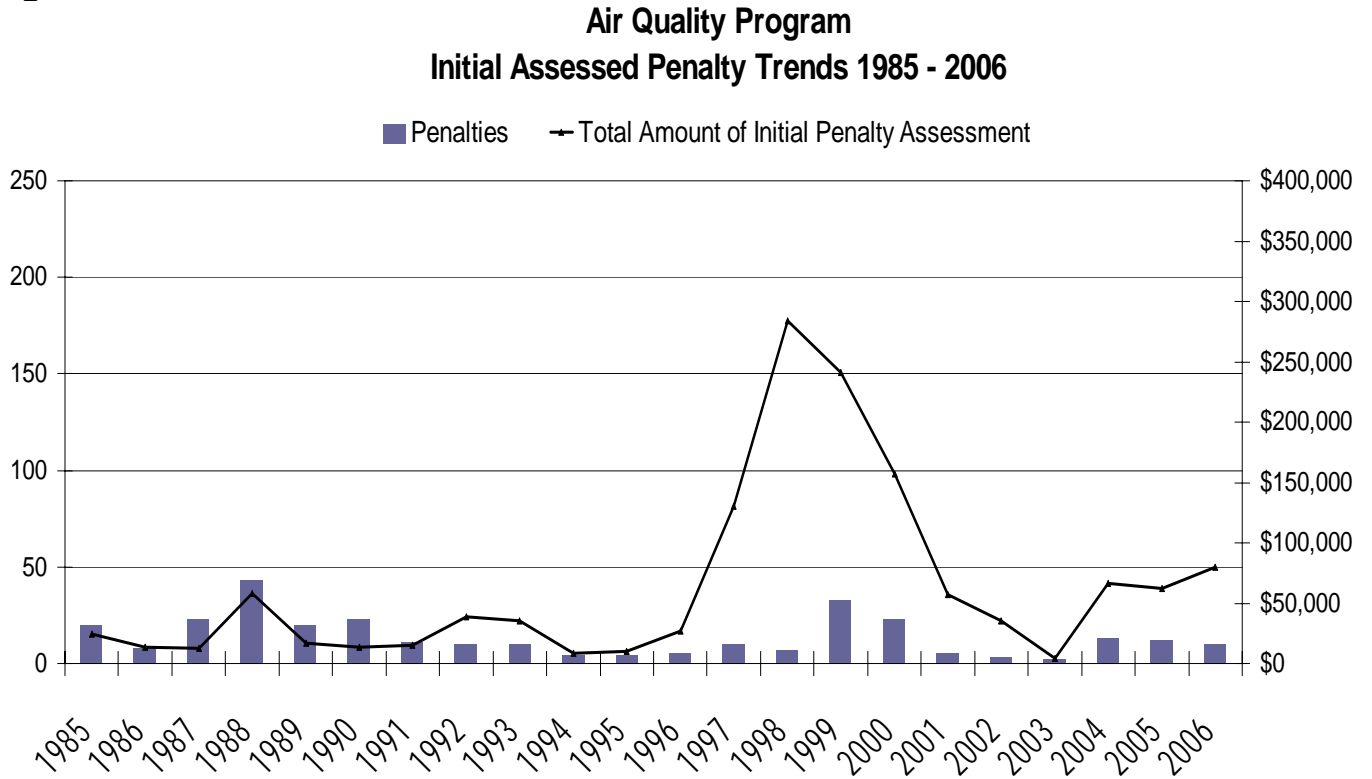


Figure 13:



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Hazardous Waste

Overview

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

Many manufacturers, businesses, service industries and homes use hazardous and toxic chemicals. If these chemicals are not disposed of properly, they can harm the environment and the public. When these chemicals get into the environment, through the waste stream, they may stay for a very long time and build up in the food chain.

Currently, about 4,600 hazardous waste generators generate more than 116 million pounds of hazardous waste each year in Washington (2005 data). Ecology's goal is to work with these generators to reduce the amount of hazardous waste they generate each year by 2 percent.

To accomplish its mission, the Hazardous Waste and Toxics Reduction Program focuses its work around these objectives:

- Reduce the generation of hazardous waste through technical assistance.
- Increase safe hazardous waste management through technical assistance.
- Increase compliance and take action on significant environmental threats from hazardous waste.
- Prevent hazardous waste pollution through permitting, closures, and corrective actions.
- Improve community access to hazardous waste information and quality data.

Hazardous Waste Management Permits

Ecology requires all facilities that treat, store and/or dispose of hazardous wastes to get a permit. This permit makes sure their design, construction, maintenance and operating procedures protect public health and the environment. Currently, Washington State has 15 active facilities covered under the Treatment, Storage and Disposal Permitting Program. These facilities treat and dispose of hazardous waste from around the state. Besides their operating permit, Ecology requires these facilities to have a closure plan and financial assurance. The closure plan has step-by-step procedures the facility must follow to remove all waste and clean structures when the facility stops operating. The goal is to prevent pollution and restore the land for future use. Financial assurance will pay for the proper closure of the facility.

Compliance Assurance

Voluntary Compliance

Ecology expects dangerous waste generators to voluntarily comply with the state dangerous waste rules, Chapter 173-303 WAC. Ecology uses a variety of tools to educate facilities on the rules: publications, web-based material for specific industries, and yearly dangerous waste workshops.

Compliance Assistance and Inspections

Ecology provides more than 250 compliance assistance visits and 320 compliance inspections each year to businesses and facilities. Ecology will conduct on-site compliance assistance visits upon request.

Unannounced Inspections

Ecology routinely conducts unannounced inspections to determine regulatory compliance. Depending on the significance of the violation(s), most are resolved through compliance assistance or informal enforcement. Ecology will send the business a report and a compliance certificate to ask them to correct the problems they found during the inspection.

If the business does not comply through the informal processes, Ecology may take one of the more formal actions to get them to comply with the rules. Typically, we do not need to take these more aggressive actions. When formal enforcement is used, Ecology often pursues innovative settlements to allow portions of penalties to be used for Supplemental Environmental Projects (SEPs).

In addition, technical assistance is provided through:

Technical Resources for Engineering Efficiency (TREE) program

The TREE program allows Ecology engineers to help businesses identify ways to reduce energy and water use, and to reduce, reuse or recycle wastes instead of incinerating or burying them. For more information about this program, visit Ecology's web site at www.ecy.wa.gov/programs/hwtr/TREE/index.html.

Pollution Prevention Plans

The state Hazardous Waste Reduction Act requires certain businesses to prepare plans for voluntary waste reduction*. Ecology conducts more than 250 pollution prevention technical assistance visits each year to these facilities. Read the Hazardous Waste and Toxics Reduction Program Plan on Ecology's Web site at: www.ecy.wa.gov/pubs/0501055/0501055_hwtr.pdf

*For waste reduction tracking, the program does not include non-recurrent waste streams, waste reported by the Hanford Nuclear Reservation, waste reported by treatment, storage and disposal facilities (because this waste is already reported by generators) and certain wastes that are treated on-site or discharged as waste water under a water quality permit or authorization.

Environmental Trends

In 1992, Washington businesses generated 317 million pounds of hazardous waste. By 2005, the amount was reduced by 201 million pounds to 116 million pounds. This 60 percent reduction was due to:

- Pollution prevention awareness.
- Implementing pollution prevention business practices.
- Reduced business activity.
- Improved compliance with rules.

Enforcement Trends

Since early 1996, Ecology has analyzed the “compliance indicator violations” issued to find out if our compliance inspections helped facilities reduce problems that affect the environment and public health problems.

“Compliance indicator violations” are specific violations of the dangerous waste rules such as:

- Spills to the environment.
- Illegal disposal of a hazardous waste.
- Failing to check if wastes were hazardous.
- Serious waste storage (container) violations.

Ecology looks for these compliance indicators during every inspection.

Results of the analysis show that when inspectors emphasize technical assistance environmental threats decrease. However, to further reduce environmental threats, Ecology began to target inspections based on:

- Increased response on significant complaints.
- Increased use of referrals from local government or other Ecology employees.
- Better use of our data to target generators not inspected before.
- A “Hitting the Highpoints” philosophy of spending more time resolving environmental threats, and less time at facilities that are managing their waste safely.

The data we collect in the next few years will help us decide if our current strategy is still effective or if change is required. The graph on the next page shows the number of penalties and environmental threats Ecology found during compliance inspections. In general, penalties track closely to the number of environmental threat violations found during inspections.

Figure 14:

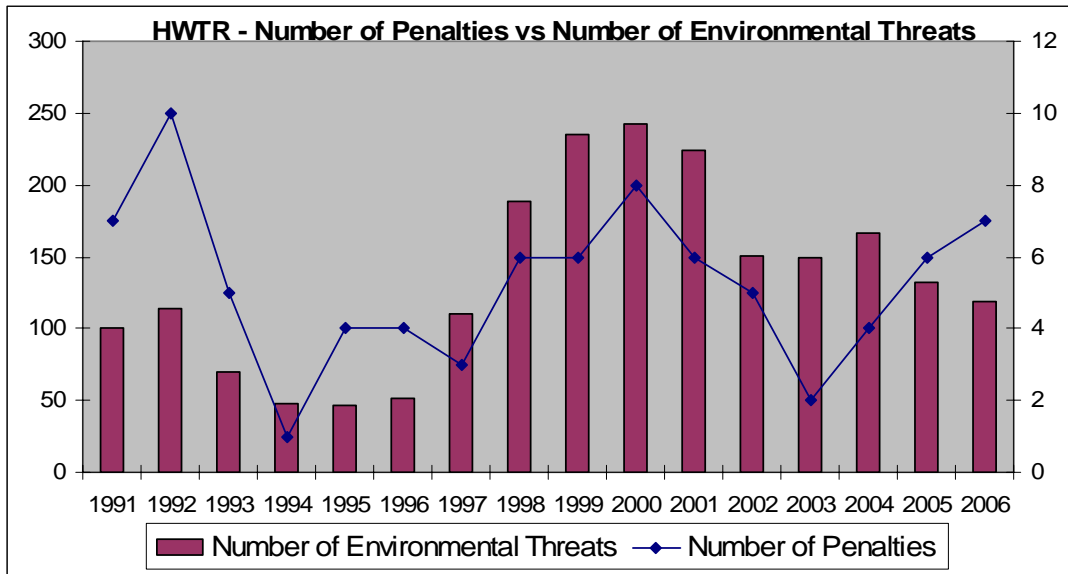
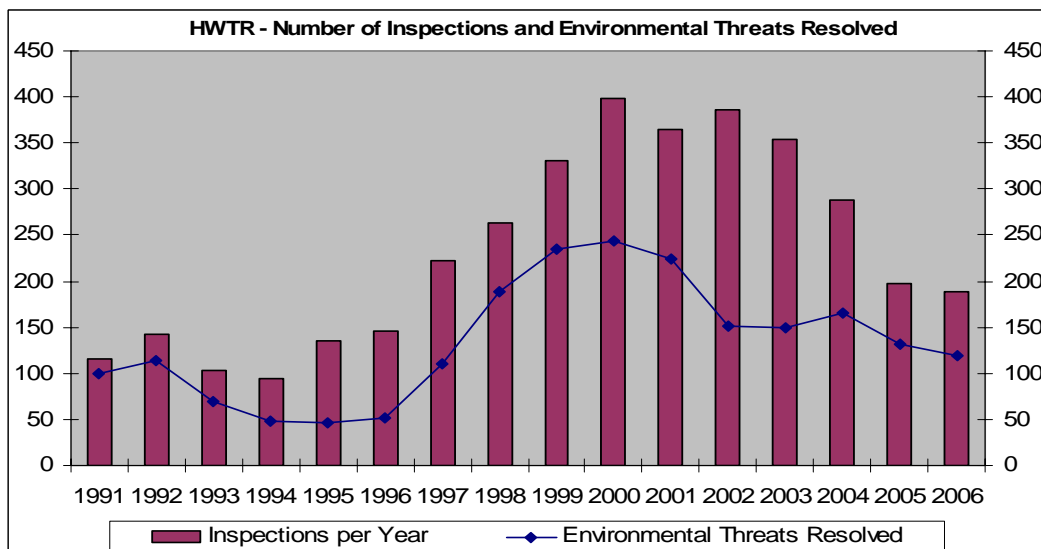


Figure 15:



The graph immediately above shows the number of compliance inspections and environmental threat violations Ecology found and resolved. The EPA gave national recognition to our Hazardous Waste and Toxics Reduction Program for success in resolving violations. The increased number of inspections and of environmental threats found from 1997 to 2000 reflects the program's focus on finding violations that contribute to environmental threats; for example, illegal disposal. That focus allowed for more inspections. With more inspections and accompanying education, the number of environmental threats found decreased from 2000 to 2003. Since 2003, some environmental threats have not been able to be resolved voluntarily, but have instead resulted in formal enforcement actions. The number of environmental threats found has been relatively steady for the past five years, but some inspectors have been diverted from normal inspection work to formal enforcement.

For more information about the Hazardous and Toxic Reduction Program, visit Ecology's web site at www.ecy.wa.gov/programs/hwtr/index.html.

Table 5: Hazardous Waste Management Enforcement Actions and Penalty Amounts.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1985	0	24	14	38	\$97,500
1986	0	26	12	38	\$163,000
1987	0	23	15	38	\$259,847
1988	1	19	17	37	\$365,000
1989	0	18	27	45	\$577,000
1990	0	22	15	37	\$1,314,500
1991	0	11	7	18	\$277,000
1992	0	11	10	21	\$1,116,000
1993	0	20	5	25	\$145,000
1994	0	8	1	9	\$70,000
1995	0	11	4	15	\$163,000
1996	0	11	4	15	\$272,000
1997	0	10	3	13	\$119,000
1998	0	10	7	17	\$441,500
1999	0	8	6	14	\$521,500
2000	2	14	8	24	\$363,500
2001	0	10	6	16	\$343,000
2002	0	8	5	13	\$118,480
2003	0	6	2	8	\$59,000
2004	0	10	4	14	\$97,000
2005	0	9	6	15	\$234,000
2006	0	5	8	13	\$541,500

Figure 16:

Hazardous Waste Toxics Reduction Program Notices, Orders & Penalties 1985 - 2006

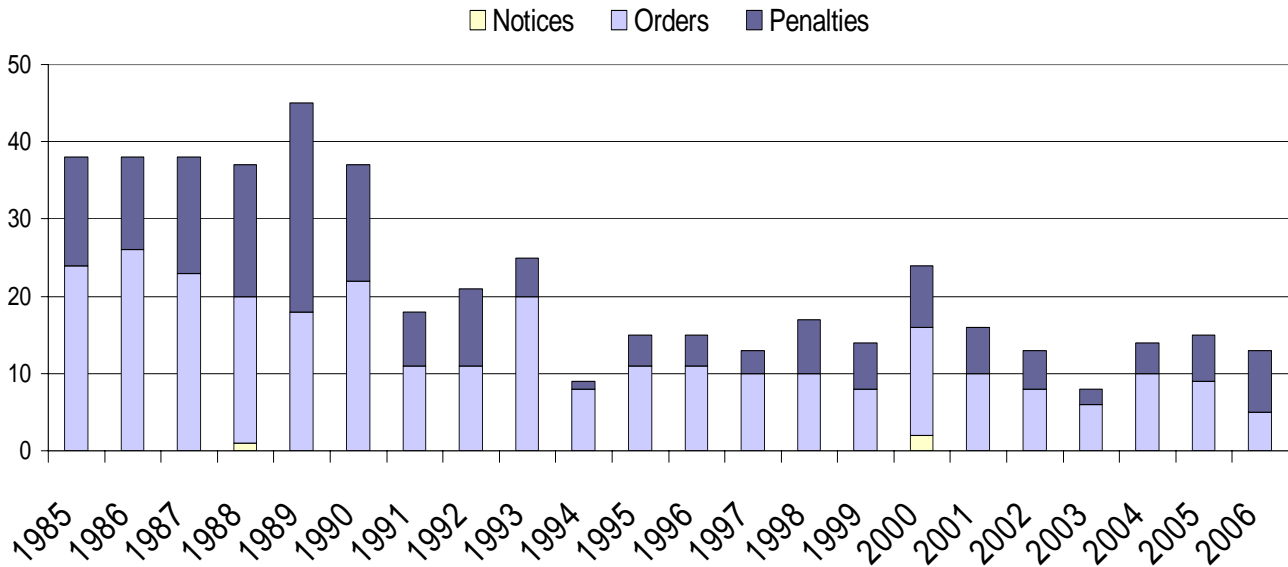
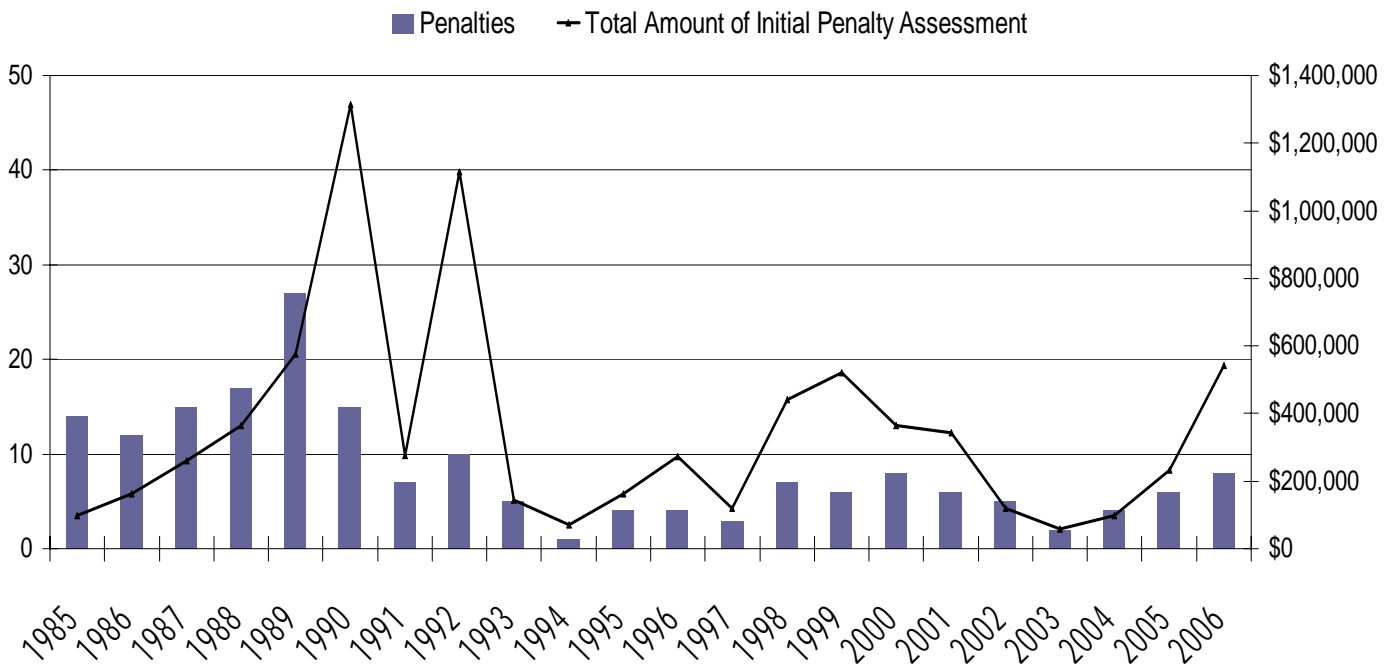


Figure 17:

Hazardous Waste Toxics Reduction Program Initial Assessed Penalty Trends 1985 - 2006



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Industrial Section

Overview

The mission of the Industrial Section is to partner with many of Washington's largest industrial facilities to limit their impact on citizens and the environment.

The Industrial Section is a unique section within the Solid Waste and Financial Assistance Program that focuses on permits and compliance for three major industries of Washington State:

- Aluminum smelters
- Oil refineries
- Pulp-and-paper mills

Industrial Section employees are trained to handle the complex issues related to these specific industries. They are responsible for environmental permitting, site inspections and compliance issues. They regulate air, water, hazardous waste and cleanup activities at pulp-and-paper mills and aluminum smelters. They also regulate water, hazardous waste, and cleanup activities at oil refineries.

Because of recent aluminum smelter closures, the Industrial Section has accepted more responsibilities. This includes water, waste, and clean up issues at:

- Agrium (a fertilizer manufacturer)
- Emerald Kalama Chemical (formerly Noveon, a chemical manufacturer)
- Pacific Functional Fluids (formerly Lilyblad) (a chemical blender)
- Columbia Ethanol (a fuel grade ethanol manufacturer)

The goal of the Industrial Section is to provide a single point of contact for these major facilities. Rather than having multiple inspectors work on the many environmental issues at a plant, one engineer provides coverage for all air, water, and waste permitting and compliance activities.

Permits

The Industrial Section issues and manages the following types of permits for 43 major industries and their associated industries in Washington State:

- Wastewater discharge permits
 - 31 National Pollutant Discharge Elimination System (NPDES) Permits.
 - 15 state wastewater discharge permits.

- Title V Air Operating Permits:
 - 11 air operating permits for aluminum and pulp-and-paper mills.
- Resource Conservation and Recovery Act (RCRA) permits
 - 6 RCRA permits for the 4 largest oil refineries, Emerald Kalama Chemical & Columbia Gorge Aluminum.
- Solid Waste Permits
 - 3 solid waste permits for 1 pulp & paper mill and 2 refineries

Environmental Trends

Air quality continues to improve as more waste streams at the major industries are collected and treated. This is particularly apparent when compared to other sources such as motor vehicles. Compliance with the Federal Maximum Achievable Control Technology (MACT) standards for hazardous air pollutants has been a major cause for the reduction in air emissions from the industries. The first stage of MACT standards went into effect in 2001. Additional stages now apply, and others are expected. The increased monitoring required by MACT can be difficult at times, but industry compliance has been good. The regulatory scheme continues to push for reduced pollution per unit of production.

Enforcement Trends

The economy contributed to fewer enforcement actions during the last several years.

- High electrical costs forced most aluminum smelters in the state to cut back on their operations.
- Sluggish economic activity reduced the demand for packaging products made by the pulp-and-paper industry.
- Reduced mill activities, along with industry efforts to comply with environmental requirements also contributed to fewer enforcement actions.

For more information about multimedia permitting and compliance, visit Ecology's web site at www.ecy.wa.gov/programs/swfa/industrial/.

Table 6: Industrial Sections Enforcement Actions and Penalty Amounts.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1985	9	27	91	127	\$277,200
1986	7	12	77	96	\$390,350
1987	2	10	50	62	\$427,250
1988	3	9	59	71	\$381,950
1989	6	13	92	111	\$589,100
1990	7	11	61	79	\$483,350
1991	3	22	65	90	\$842,000
1992	28	28	41	97	\$438,750
1993	10	6	25	41	\$202,400
1994	31	13	34	78	\$267,200
1995	21	17	28	66	\$209,900
1996	16	18	28	62	\$173,250
1997	26	9	36	71	\$226,500
1998	15	6	20	41	\$181,977
1999	15	13	19	47	\$326,848
2000	14	18	28	60	\$572,800
2001	10	27	17	54	\$95,000
2002	4	6	7	17	\$77,500
2003	10	10	15	35	\$70,817
2004	15	5	19	39	\$237,564
2005	5	4	11	20	\$49,500
2006	7	2	11	20	\$44,000

Figure 18:

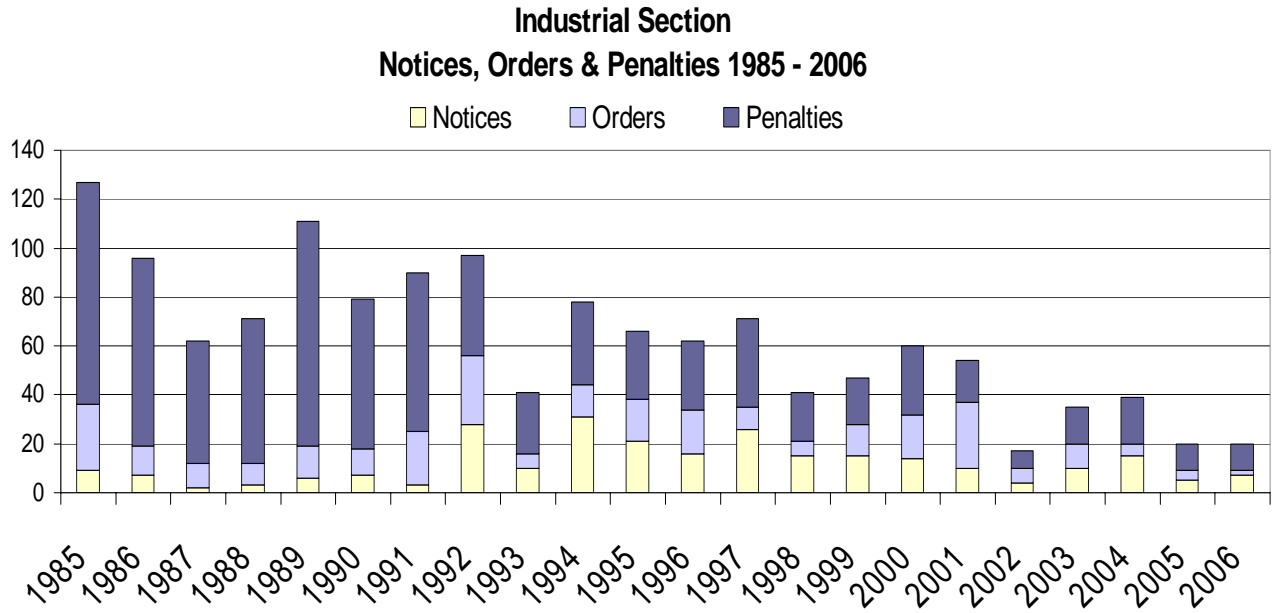
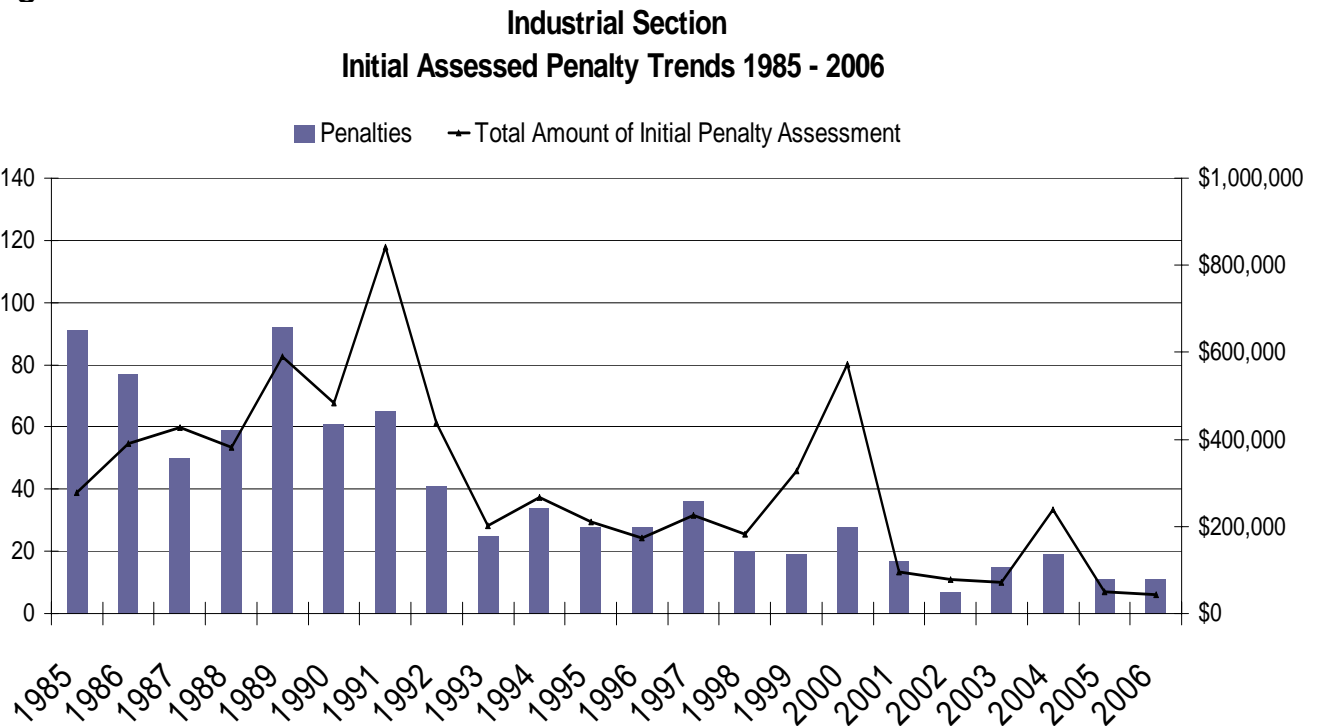


Figure 19:



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Nuclear Waste

Overview

The mission of the Nuclear Waste Program is to lead the effective and efficient clean up of the U.S. Department of Energy's Hanford site, to ensure the 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.

The Hanford site consists of 586 square miles found in southeast Washington. Hanford's half-century of nuclear materials production has created one of the world's most polluted areas. Clean up challenges at the site include:

- Removing and permanently stabilizing an estimated 53 million gallons of radioactive and chemically hazardous waste in 177 underground storage tanks.
- Protecting groundwater and treating 180 square miles of contaminated underground water.
- Operating and closing 62 hazardous waste treatment, storage and disposal sites.
- Cleaning up over 1,500 waste sites.

To accomplish its mission, the Nuclear Waste Program focuses its work around these projects:

- Hanford tank waste storage
- Hanford tank waste disposal
- Hanford waste management
- Hanford facility transition
- Hanford environmental restoration

Nuclear Waste Management Permits

The Nuclear Waste Program oversees Hanford cleanup activities to make sure Hanford complies with environmental regulations. These activities include:

- Removing nuclear wastes from single-shelled tanks and safely storing tank wastes until they are treated.
- Constructing a tank waste treatment plant.
- Treating, storing, and disposing of high-risk transuranic and radioactive mixed wastes.
- Cleaning up contaminated waste sites, groundwater, and buildings.

Most of these activities must comply with the requirements of the Hanford Federal Facility Agreement and Consent Order Tri-Party Agreement. This is an agreement between the U.S. Department of Energy (USDOE), the U.S. Environmental Protection Agency (USEPA) and Ecology to keep clean up at Hanford moving forward. This consent order, signed in 1989, is called the Tri-Party Agreement.

Most clean-up activities must also comply with these permits:

- Dangerous waste operating permit - to make sure the dangerous or mixed radioactive wastes are stored, treated, and disposed of properly.
- Air operating permit - to set limits on the amount of air pollution allowed during from operating facilities.
- Federal and State discharge water quality permits - to control the pollution discharged into Washington's waters.

Compliance Assurance

Ecology maintains a close working relationship with the USDOE and their contractors located on-site. Permit conditions are typically developed together, and all parties meet almost daily on one issue or another. The comprehensive permitting process, public comment cycles, Hanford Advisory Board meetings, and various project manager meetings provide plenty of opportunities for Ecology to provide technical assistance to the USDOE.

If the USDOE or their contractors fail to comply with a permit condition Ecology will generally address the violation through formal or informal enforcement actions. Ecology often adds the corrective measures designed to remedy violations into the various dangerous waste operating permits to help avoid repeat violations.

Environmental Trends

When the USDOE entered into the Tri-Party Agreement with the USEPA and Ecology, the agreed goal was to achieve full regulatory compliance and remediation of the Hanford site. Throughout the 1990s and into the early 2000s the clean up effort has focused on:

- Interim stabilization of mixed radioactive and hazardous waste in 177 single-shelled storage tanks.
- Cleanup of contaminated sites along the Columbia River.
- Removing waste, cleaning up, and decommissioning plutonium production facilities.

Groundwater remediation and monitoring is continuous and improving, but considerable challenges remain to treat or stop the spread of contaminated groundwater plumes.

Enforcement Trends

Enforcement actions taken by Ecology at Hanford tend to be informal enforcement actions with notice of violations and voluntary corrective measures. Formal orders and penalties are used to address regulatory violations when needed or when voluntary measures fail.

As more facilities within the Hanford site are added to the Hanford facility dangerous waste operating permit, or as more cleanup units are added to the Tri-Party Agreement, more of the enforcement actions tend to focus on permit conditions and legal requirements of the Tri-Party Agreement rather than the general interim status standards of federal and state hazardous waste regulations. Hanford is a large quantity generator of hazardous wastes and generator activity remains an enforcement challenge at Hanford.

Since the signing of the Tri-Party agreement in 1989, Ecology has conducted 268 formal compliance inspections at Hanford that have resulted in the enforcement actions below:

- Issued 71 notices of violation, including corrective measures, for not complying with state dangerous waste regulations.
- Issued 9 administrative orders.
- Assessed 12 civil penalties totaling \$940,600.
- Initiated lawsuits to compel USDOE to remove liquid wastes from single shell tanks and to perform adequate evaluation of the environmental impact of proposed federal waste management decisions.

Ecology took the formal enforcement actions when the:

- USDOE failed to voluntarily resolve dangerous waste management problems.
- Violations were more severe.
- Violations were recurrent.

The graphs at the end of this section appear to show a cyclical pattern of enforcement actions, but this is coincidental. Issuing enforcement actions depends on a number of factors, including the types of operations that occur on Hanford at the time and degree of success in resolving hazardous waste management issues voluntarily.

For more information about the cleanup of the Hanford Nuclear Reservation, visit Ecology's web site at www.ecy.wa.gov/programs/nwp/index.html.

Table 7: Nuclear Waste Program Enforcement Actions and Penalty Amounts.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1994	0	1	1	2	\$15,500
1995	0	0	1	1	\$7,000
1996	0	1	2	3	\$25,000
1997	0	0	2	2	\$200,000
1998	0	1	1	2	\$75,600
1999	4	0	1	5	\$9,700
2000	6	2	1	9	\$200,000
2001	0	0	2	2	\$62,800
2002	2	0	0	2	\$0
2003	0	2	0	2	\$0
2004	0	1	1	2	\$270,000
2005	0	0	0	None Issued	0
2006	0	1	0	1	0

Figure 20:

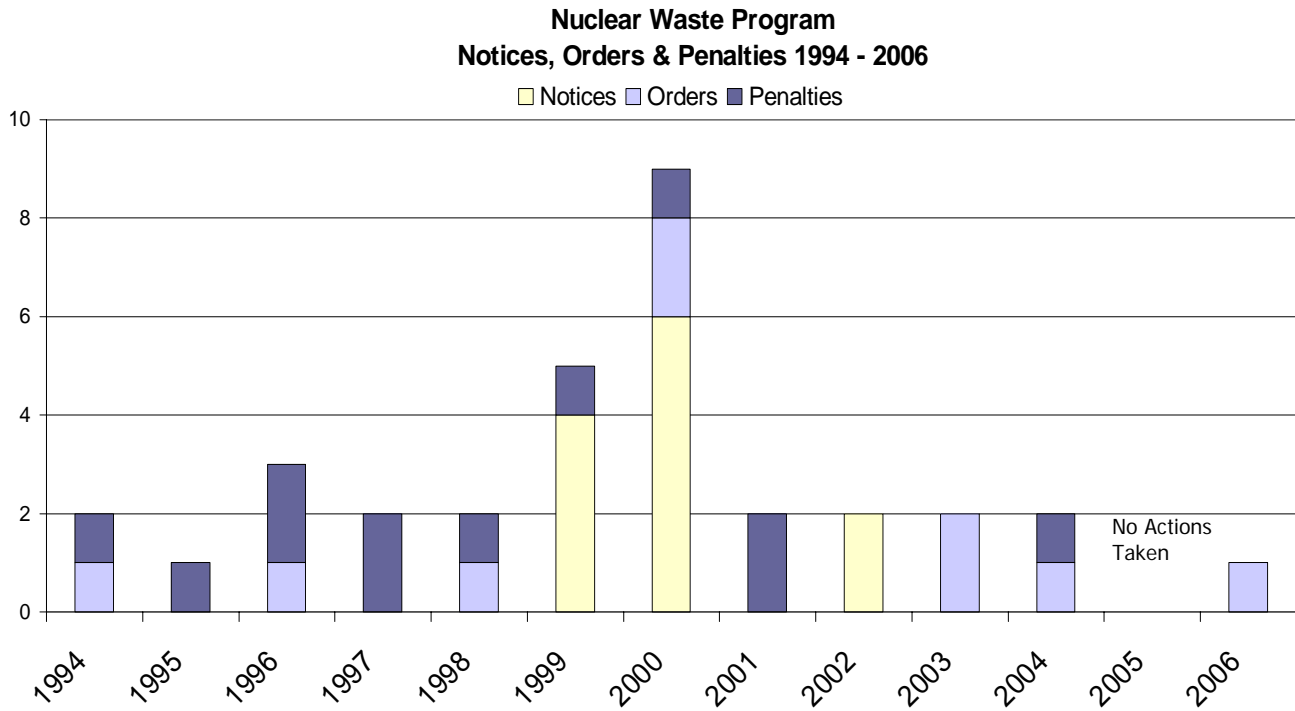
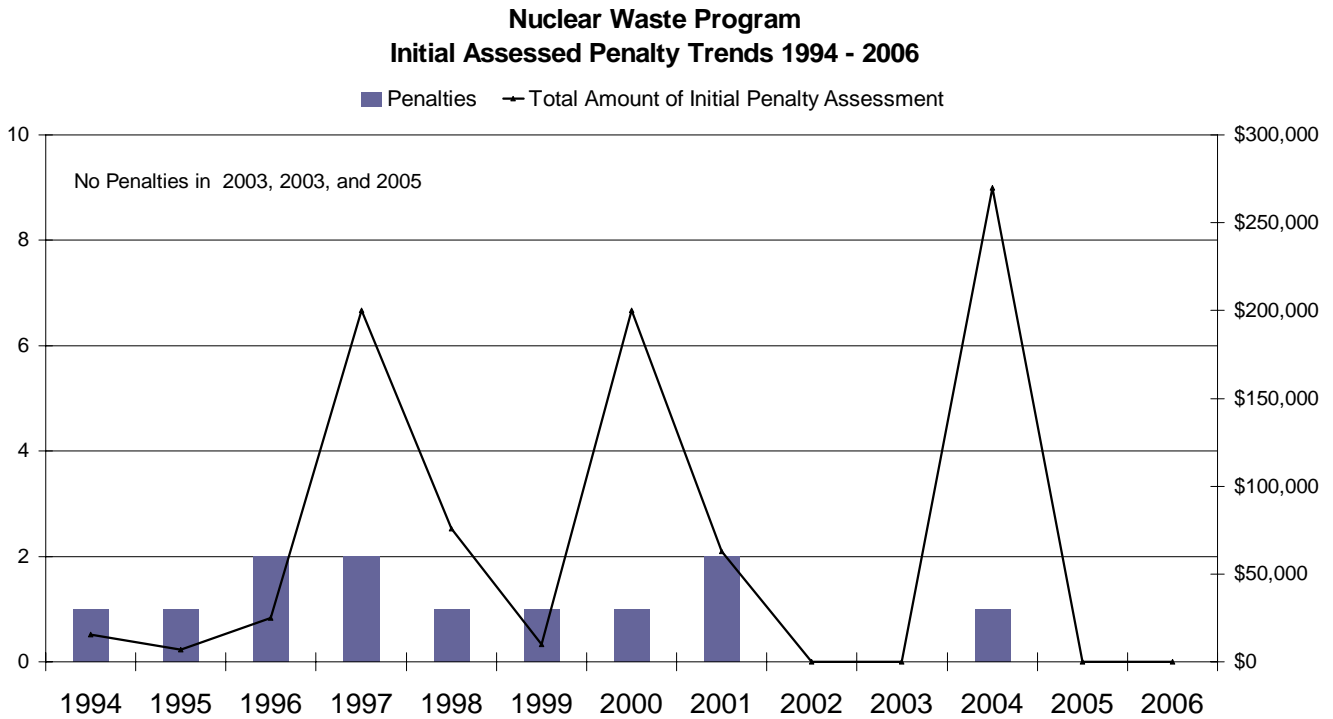


Figure 21:



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Shorelands and Environmental Assistance Program

Overview

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.

To achieve its mission, Ecology's Shorelands and Environmental Assistance Program staff work on the following objectives:

- Protect, restore, and manage shorelands and wetlands, with local government.
- Streamline the review of environmental permits for major transportation projects.
- Provide technical and financial assistance to local governments for reducing flood hazards and local watershed planning.
- Provide technical training, education, and research through the Padilla Bay Estuarine Reserve.
- Restore watersheds by supporting community-based projects with the Washington Conservation Corps.
- Protect water quality by reviewing and conditioning projects.
- Provide technical assistance on reviews required by the State Environmental Policy Act.

In the arena of environmental compliance, the Shorelands and Environmental Assistance (SEA) Program works in close collaboration with local governments, the Ecology Water Quality Program, the Corps of Engineers and other entities. In some cases, we are in the leading role with support from others. In other situations, we provide support to the agency taking lead on compliance. Our support role ranges from technical support to staff to legal involvement.

Shorelines Management Permits

Since the early 1970s, Ecology has been the lead state agency for developing long-term strategies for how to manage the state's shorelands. This includes about 800 lakes, 22,000 river miles, countless wetlands and 2,337 miles of marine shorelines.

Ecology works with local governments to protect and maintain shoreline health. About 250 counties and cities have the primary authority to enforce the Shoreline Management Act (state law) and Shoreline Management Guidelines (state rules). Ecology's primary role is to:

- Write and adopt the state rules.
- Approve city and county Shoreline Master Program updates.
- Provide assistance to local government.
- Ensure compliance with the state law and rules.

The state's shoreline program is designed to protect and manage development of:

- Wetlands
- Floodplains
- Estuaries
- Beaches
- Dunes
- Fish and wildlife habitat

Ecology provides technical and financial assistance to local governments for coastal and floodplain development projects that protect water quality, wildlife habitat, human health, and property. There is an interdependent relationship between local government and Ecology in protection of shoreline resources.

The Shoreline Management Act (SMA) regulates land use. Violation of the SMA may occur when someone violates the conditions of a permit or attempts to develop on the shoreline without a permit. At least as common is violation of activities that are exempt from Shoreline permitting but violate the standards in the local Shoreline Master Program. In practice, this is often building within a buffer zone or filling in a wetland or a flood zone.

For more information about shorelands management, visit Ecology's web site at www.ecy.wa.gov/programs/sea/shorelan.html.

Shorelands and Coastal Zone Management Permits

Each year Ecology has the opportunity to review about 400 Substantial Development Permits (SDP's) issued by local governments. We have the opportunity to appeal SDPs to the Shoreline Hearings Board. Such appeals have been rare in recent years (one appeal filed in the past three years.) Ecology also reviews about 150 Variance or Conditional Use Permits from local government each year. Ecology takes final action on these Variance and Conditional Use permits, including modifying permit conditions or occasionally reversing the action taken by local government.

Because Ecology works with applicants and local governments early in the permit review process, it is able to reduce the number of times that it must make major changes to permit conditions or otherwise reverse actions taken by local governments on these types of shoreline permits. In this way, Ecology is able to add value through technical assistance and insure project proponents get it right the first time rather than make them do it over once the application reaches Ecology for final review. As result, Ecology denies less than half of a percent of all shoreline permit applications submitted.

401 Water Quality Certification

Under the Federal Clean Water Act, Section 401, Ecology reviews projects that require a federal permit or license that may result in a discharge to waters of the United States. Applicants for those permits or licenses must first get a 401 Water Quality Certification (Certification) from the state to prove that the proposed project will meet state water quality standards and other aquatic protection regulations. The Certification covers both the construction and operation of the proposed project. Ecology also inspects these projects to make sure they comply with the conditions of their Certification. If they are not in compliance, Ecology may issue a formal enforcement action.

The 401 authority is a primary tool for regulating fill of wetlands. In wetland protection compliance actions, we may engage with local governments, the Water Quality Program and/or the Corps of Engineers. Wetland violations under the Clean Water Act are often associated with a water quality violation. We often coordinate site visits with the water quality inspectors and may rely on their capacity and expertise to pursue the enforcement action. Similarly, we often are in a supporting role as the Corps pursues illegal fill.

For more information on the 401 certification program visit Ecology's web site at www.ecy.wa.gov/programs/sea/fed-permit/index.html.

Compliance Assurance

Ecology expects all permit holders to comply with conditions of orders, laws and regulations. Our primary focus is education and outreach to citizens and local government officials. We also schedule meetings with applicants before and after they apply for a Certification to assist them with compliance.

If Ecology finds a project is not in compliance, we make every effort to resolve the problem through voluntary compliance. If we cannot get voluntary compliance within a reasonable time, we will take formal enforcement action.

Ecology works hard to make sure all land owners know the intent of the law and how to comply with it. If an enforcement action is necessary, we make sure the penalty is appropriate according to our Compliance Assurance Manual. We prefer to use escalating levels of enforcement to get people to comply and will issue a fair penalty depending on how serious the violation is and the responsiveness of the applicant.

Environmental Trends

Shorelines remain very desirable locations for residences and other development. At the same time, our understanding is increasing that certain activities that were common in the past – such as bulkheads on marine shorelines – can damage highly valuable resources such as forage fish spawning areas. Updating Shoreline Master Programs, which was initiated in 2004 and will continue through 2014, is a primary tool for improving shoreline protection. We also provide technical assistance to local government authorities and “backstop” oversight of permitting for significant projects on the shoreline.

To date, Ecology has not invested in a meaningful comprehensive inventory of shoreline resources to show the status of the resource over time. This limits our ability to track environmental “outcome” trends, (in contrast to “output” trends, such as investment in Shoreline Master Program updates). It is becoming increasingly common for 401 orders and other permits to require permittees to send their monitoring results to Ecology. We may be able to use this data to see a trend in the future.

Enforcement Trends

The graphs on the following pages show a trend of fewer Ecology penalties (late 1980s and early 1990s) and more Notices of Correction (after 2000) when state lawmakers approved them as an enforcement tool. The rise in the number of orders in 2002 and 2003 is due to an increase in requests for 401 water quality certification instead of a change in the Shoreline Management Act enforcement. The focus over the last several years has been to improve the local shoreline master programs, instead of trying to address problems on a project-by-project level through enforcement.

Due to staff workload there has been limited enforcement of 401 orders, so at this time we do not see a clear trend for enforcement actions or penalties. To improve wetland protection, Ecology has proposed an increased level of effort to check on compliance with wetland conditions in 401 orders. The focus will initially be on voluntary compliance and technical assistance to insure that mitigation and other conditions are successfully implemented. In the coming years, we may see an increase in enforcement actions related to this improvement in wetland compliance checking. Ultimately; however, we are fundamentally shifting wetland mitigation compliance issues to a new way of achieving mitigation in the first place via an increase in the number of innovative wetland mitigation approaches such as wetland banks, and fee-in-lieu programs. In this way, we can help project proponents achieve much more effective mitigation in a manner that is more efficient for them.

For more information about shorelands management, visit Ecology's web site at www.ecy.wa.gov/programs/sea/shorelan.html.

Table 8: Shoreline Management and 401 Certification Enforcement Actions Penalty Amounts.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1987	0	1	4	5	\$73,000.00
1988	2	8	16	26	\$14,750.00
1989	0	3	2	5	\$3,000.00
1990	0	3	19	22	\$365,500.00
1991	0	8	16	24	\$59,880.00
1992	1	0	9	10	\$27,500.00
1993	0	1	11	12	\$14,500.00
1994	0	2	4	6	\$9,500.00
1995	0	0	6	6	\$28,500.00
1997	0	1	0	1	0
1998	0	2	4	6	\$46,000.00
2000	19	0	4	23	\$87,000.00
2001	6	6	1	13	\$34,000.00
2002	9	34	1	44	\$10,000.00
2003	4	31	2	37	\$57,000.00
2004	3	7	5	15	\$161,000.00
2005	2	1	2	5	\$35,000.00
2006	0	1	0	1	0

Figure 22:

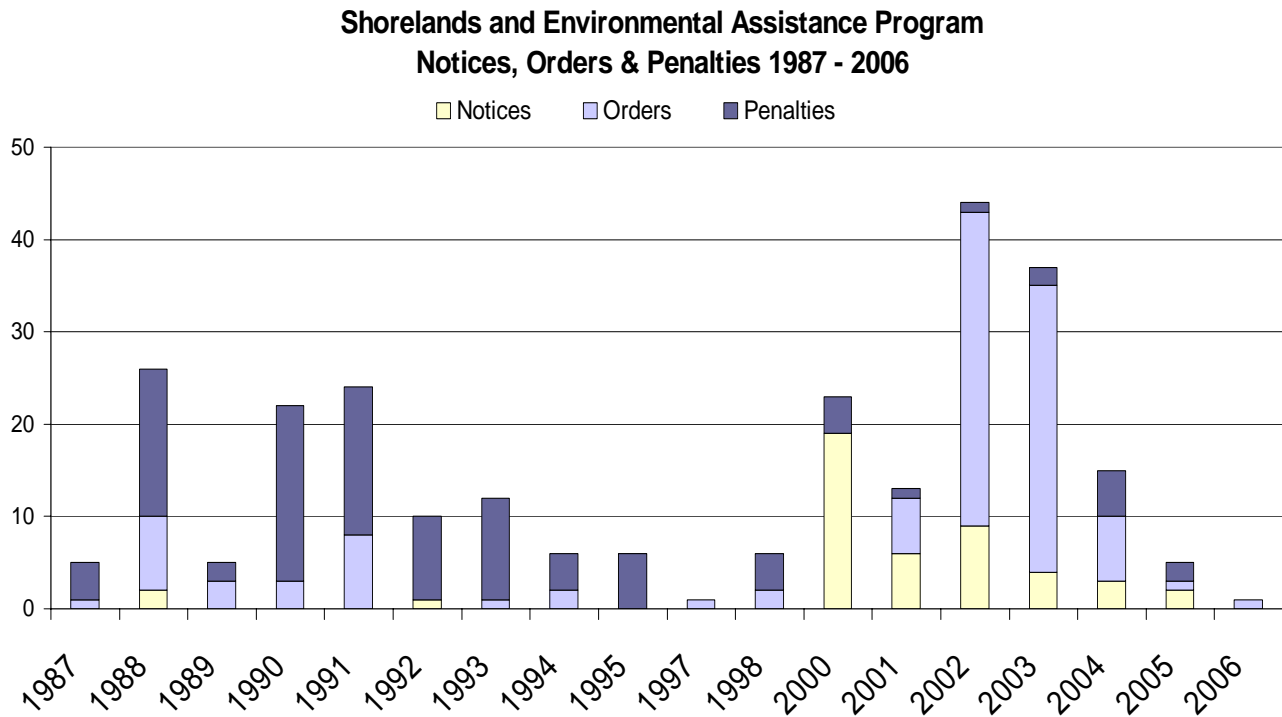
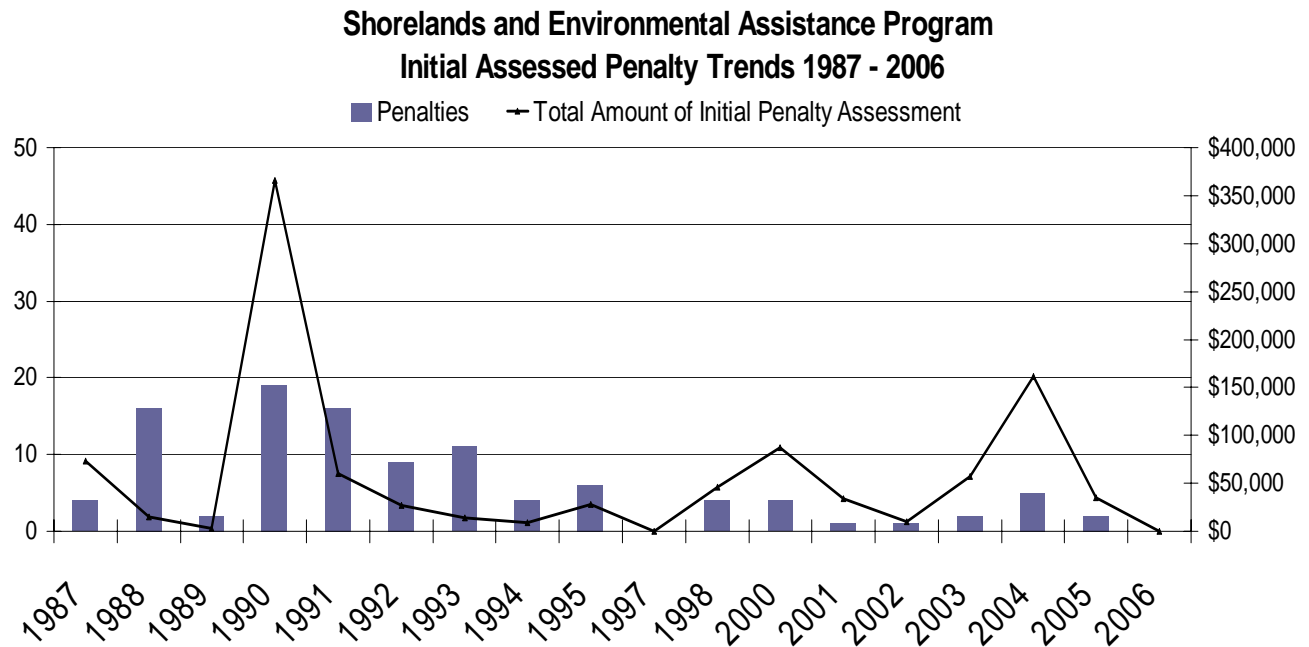


Figure 23:



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Solid Waste

Overview

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.

Solid Waste

Despite the efforts of businesses and citizens to reduce, reuse, and recycle solid wastes the amount of solid waste we generate continues to increase each year. Most of the solid waste created in Washington is taken to eastern Washington landfills for disposal.

In Washington State, local governments are responsible for regulating and permitting the solid waste handling systems. Solid waste handling includes the:

- Management
- Storage
- Collection
- Diversion
- Transportation
- Treatment
- Use
- Processing
- Final disposal of household, business and industrial wastes, and municipal sewage sludge wastes.

Ecology's role is to set environmental protection standards for the design and operation of disposal facilities. We also provide technical and financial assistance to local governments.

To achieve our mission and long-term vision, the Solid Waste and Financial Assistance Program focuses its work on these objectives:

- Eliminate wastes and manage the remaining garbage.
- Fund local government efforts to clean up toxic sites and manage or reduce waste.
- Employ Washington students to pick up litter.

Biosolids Management Permits

Ecology regulates biosolids-related activities. Biosolids are defined as municipal sewage sludge that is a primarily organic, semi-solid product resulting from the treatment of sewage wastewater. Biosolids are commonly applied to land as a soil amendment. All facilities that manage, apply to land, transport or dispose of biosolids must get a general biosolids management permit from Ecology. Because biosolids contain essential plant growth nutrients and small amounts of pollutants and, in some cases, microorganisms, biosolids must be properly treated to protect public health before applying them on land. In some parts of the state, Ecology delegates this permitting function to a city or county health district. However, it is Ecology's responsibility to enforce the biosolids laws, rules, and permit requirements.

Compliance Assurance

To make sure facilities comply with biosolids laws and rules, Ecology provides technical assistance and education materials to the regulated community. Ecology expects all owners and operators of regulated facilities to voluntarily comply with biosolids management laws and rules. When a facility does not voluntarily comply, it may be necessary for us to move to an enforcement action. When this is the case, we make sure we clearly define the violation and that the penalty is consistent with the extent of the violation.

Formal enforcement actions may include an order, civil penalty, or referral to the state Attorney General's Office for court action, permit revocation or criminal action. When Ecology issues a civil penalty, innovative solutions may be considered as appropriate mitigation, as long as the solution complies with the laws and rules. Innovative solutions include mediation, environmental audits, mandatory education programs, and compensatory action such as Supplemental Environmental Projects.

Environmental Trends

Solid Waste

Advances in technology and social values have increased reduction and recycling activities. Improved landfill designs have reduced potential threats to the environment. However, we have now reached a point where we need to shift our focus from proper handling of solid waste, after it is generated, to preventing waste in the first place.

Ecology now has a long-range plan for how to:

- Reduce the amount of solid waste generated.
- Properly manage wastes that remain.
- Reduce the use of toxic substances.

This plan, called "Beyond Waste," was completed in the end of 2004. For Find more information about this plan visit Ecology's web site at www.ecy.wa.gov/beyondwaste/.

Biosolids

In the past 20 years, there has been a sharp decline in the amount of pollutants in biosolids in Washington and across the nation. Industrial pretreatment programs, improved manufacturing practices, and consumer awareness have all contributed to this success.

In the past 10 years, use of biosolids has been increasingly market driven. Biosolids treatment facilities are allowing consumer interest to drive decisions about treatment processes and final uses of biosolids. As a result, "exceptional-quality" biosolids are meeting the more stringent requirements to protect public health from potential pollutants and pathogens.

Exceptional quality biosolids may be sold or applied to the land without further site or management restrictions. Generating exceptional quality products often involves significant upgrades or changes in treatment technologies, and is not essential to successful biosolids management programs. Therefore, the shift to exceptional quality biosolids has been slow.

A more noticeable trend over the last 10 years is that larger treatment facilities are not willing to accept septage, particularly from smaller treatment plants. This is because of the strength of the waste (which can be hard for smaller treatment works to process). This has increased the interest and need for septage land application sites across the state. While this trend is slow paced, it is more difficult to manage. Most septage pumpers have designed their businesses around removing septage from various holding devices. At this time, many lack sufficient land, expertise, and equipment to develop successful land application programs.

Enforcement Trends

Solid Waste

Ecology continues to work with local government to make sure solid waste handling facilities comply with solid waste laws and rules. We adopted new rules in 2003 to clarify our expectations for how to properly handle a variety of waste streams. We are also increasing our focus on prevention through education. We hope this will reduce the need for enforcement.

Analyzing trends for Ecology solid waste enforcement actions does not give a complete picture, since primary authority for most solid waste enforcement rests with local government. We can relate a subjective analysis: while there will always be a small number of "bad actors" in the solid waste arena, the majority of operators try to do the right thing, and the rules are fairly straightforward and easy to follow.

Biosolids

Between 1996 and 2003, Ecology took very few enforcement actions as the new program was being developed and implemented. During this time, Ecology worked diligently with the regulated community on training and other technical assistance measures to develop an understanding of the new program.

In 2004, Ecology sent several Notices of Correction letters to facilities that failed to send us their annual biosolids report on time. Most of these facilities had routinely ignored their reporting obligations since the start of the program in 1998. Given the age of the program and the extensive technical assistance given to the facilities, we now expect all facilities to recognize and meet their reporting obligations.

In June 2005 we issued a new biosolids general permit. About half of the biosolids facilities had failed to complete the necessary documents to apply for coverage under the previous biosolids general permit. While the new permit was being written, we made the decision to not pursue enforcement against these facilities unless they also failed to meet their obligations under the new permit. Ecology gave these facilities three months to comply with the new permit. Those who failed to do so got a Notice of Correction.

In 2006, the number of Notices of Correction remained high because we continued our efforts to get all facilities to fully comply. We expect that we will issue fewer enforcement actions in the future because our efforts have resulted in most Permittees achieving compliance with the management and administrative requirements of the biosolids program.

For more information about solid waste and biosolids management, visit Ecology's web site at www.ecy.wa.gov/programs/swfa/index.html.

Table 9: Solid Waste Financial Assistance Program Enforcement Actions and Penalty Amounts.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1996	1	1	0	2	\$0
1997	0	0	0	0	\$0
1998	0	4	2	6	\$32,000
1999	0	0	0	0	\$0
2000	1	2	1	4	\$2,000
2001	0	2	1	3	\$3,000
2002	0	5	3	8	\$32,000
2003	0	3	2	5	\$7,000
2004	16	2	0	18	0
2005	66	1	3	70	\$277,740*
2006	53	4	3	60	\$10,000

* One penalty of \$268,740 for extensive violations accounted for approximately 97% of the total.

Figure 24:

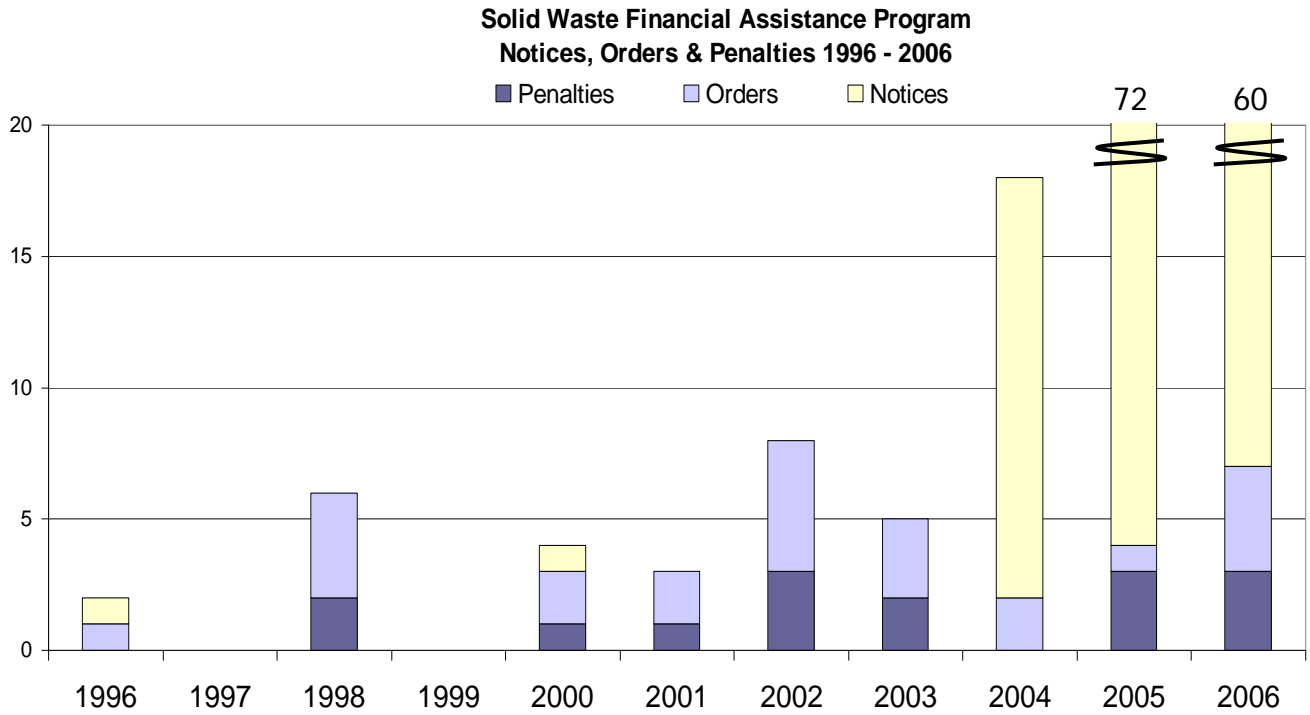
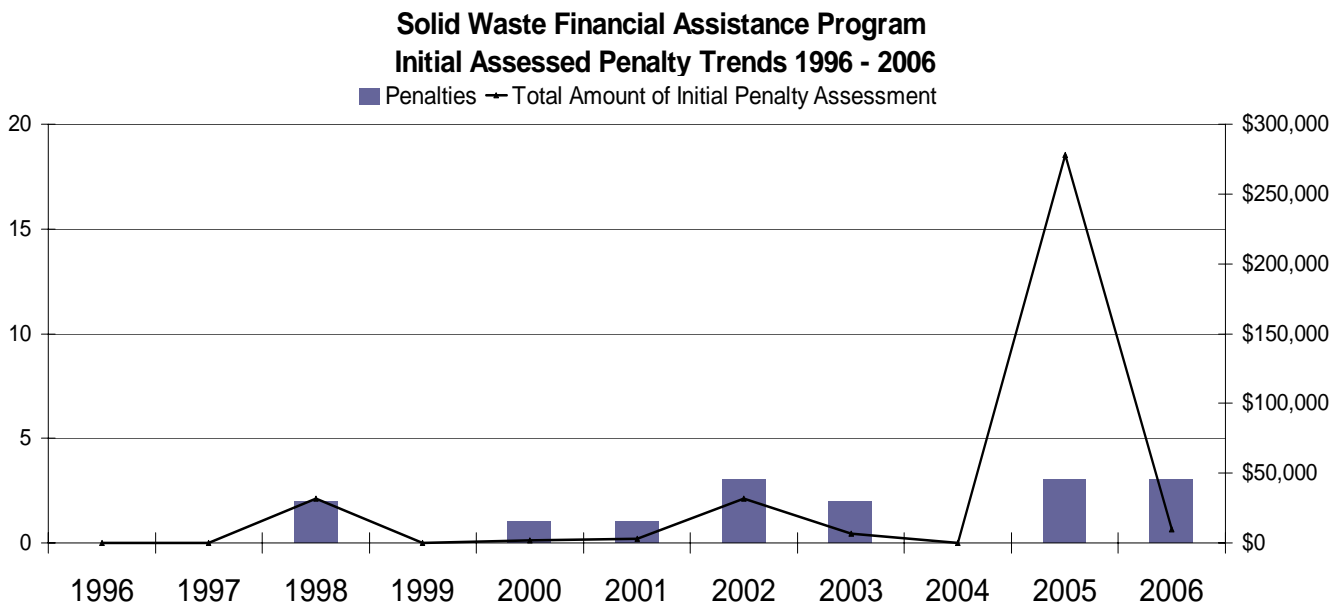


Figure 25:



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Spill Prevention, Preparedness and Response

Overview

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.

Billions of gallons of oil and hazardous chemicals move through Washington each year by ship, pipeline, rail and road. Oil and chemical spills to Washington's waters and shorelines can compromise productive and valuable ecosystems, the public's health and safety, and in a worst case can affect the economy. Ecology's Spill Prevention, Preparedness and Response Program (Spills) works with oil companies, shippers and transporters, and the users of oil to prevent spills and quickly respond to those that do occur.

To accomplish its mission, Ecology's Spills Program is working on these objectives:

- Prevent spills from vessels and oil-handling facilities.
- Prepare for spill response through planning and drills.
- Respond to and clean up oil and hazardous material spills.
- Restore environmental damage caused by oil spills.

Compliance Assistance

Prevention

Prevention is about educating vessel and facility personnel. Approximately 3,500 commercial ships and barges enter Washington waters each year bound for Washington, Canadian, and Oregon ports. There are also 4,500 oil barges moving in our waters. Each of these poses a risk of a serious oil spill. Ecology vessel inspectors conduct about 1,000 onboard vessel inspections per year and facility engineers have 35 oil handling facilities they must inspect to verify they comply with state requirements.

Spills and threats of spills also provide the opportunity to identify prevention measures that can be implemented in the future. Careful investigation and analysis of the systems and personnel involved lead to lessons learned for the company and the agencies involved.

Preparedness

Oil handling facilities and commercial vessels must develop and maintain a Spill Contingency Plan to be used in the event of an oil spill. Vessels and facilities must also conduct spill drills to test their contingency plans to make sure they can provide an effective response should an actual spill occur.

Response

When oil is spilled to water, the spiller must notify Washington's Military Department's Emergency Management Division who notifies the Department of Ecology. Most reports are of small sheens, smells, and spills. Ecology's response units work with federal agencies, and local and regional fire, police and health agencies to improve response times and effectiveness.

Environmental Trends

The Spills Program analyzed the major oil spills (>25 gallons) to surface waters that have occurred since 1997. The total volume of these oil spills is over 460,000 gallons. Encouragingly, the number of major oil spills has decreased dramatically since 2002. In 1999, the number of spills rose from an average of 30 a year to three-year high of 42 in 2002. Since 2003, the number of spills has returned to the trend of 30 a year. The three-year spike in spill numbers may represent Ecology's greater emphasis on detecting and reporting spills, while the decline was a result of the greater awareness of the legal liabilities a responsible party is subject to.

In 2006, Ecology received a total of 2,151 reports of oil spills to water throughout the state. Ecology's spill response units responded in the field to 486 of those reports to contain and cleanup the spill, investigate the source, and determine if enforcement is appropriate. Field response confirmed 31 spills equal to or greater than 25 gallons spilled to surface waters.

Enforcement Trends

The bulk of Ecology's spill related enforcement is issued in the form of citations can be up to \$3,000 for small spills (less than 100 gallons). Penalties that are more substantial are issued for larger spills and for spills that investigators can determine were negligent and preventable. In 2006, Ecology issued 43 citations and 13 penalties for a total of \$ 649,575 (\$540,000 of this amount was the penalty issued against ConocoPhillips for the Polar Texas spill in October 2004).

Other enforcement actions, such as Notices of Violation, Notices of Correction, and Administrative Orders, are issued to companies to encourage them to prevent and prepare for oil spills. Ecology recovers the costs we incur when we respond to an oil spill by issuing an Order for Reimbursement of Expenses to the responsible party. Of the 29 Orders listed in the table below, 26 are Orders of Reimbursement.

Table 10: Spills Program Enforcement Actions Penalty Amounts.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1997	0	0	2	2	\$5,500
1998	47	15	23	85	\$400,660
1999	100	15	19	134	\$302,000
2000	101	19	29	149	\$294,750
2001	42	5	36	83	\$137,250
2002	48	4	61	113	\$16,140,950
2003	32	5	38	75	\$520,242
2004	26	0	49	75	\$178,753
2005	10	9	50	69	\$778,750
2006	2	29	62	93	\$653,325

The 2002 total includes \$15,720,000 in penalties issued for the 1999 Bellingham spill and fire.

Figure 26:

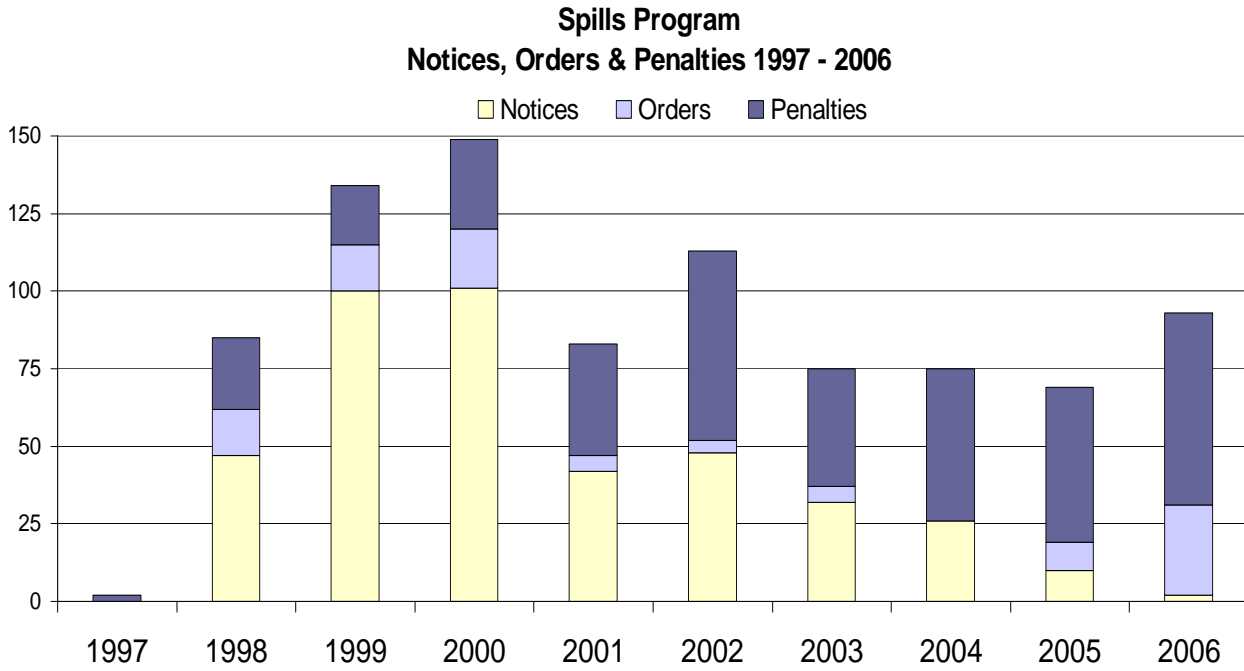
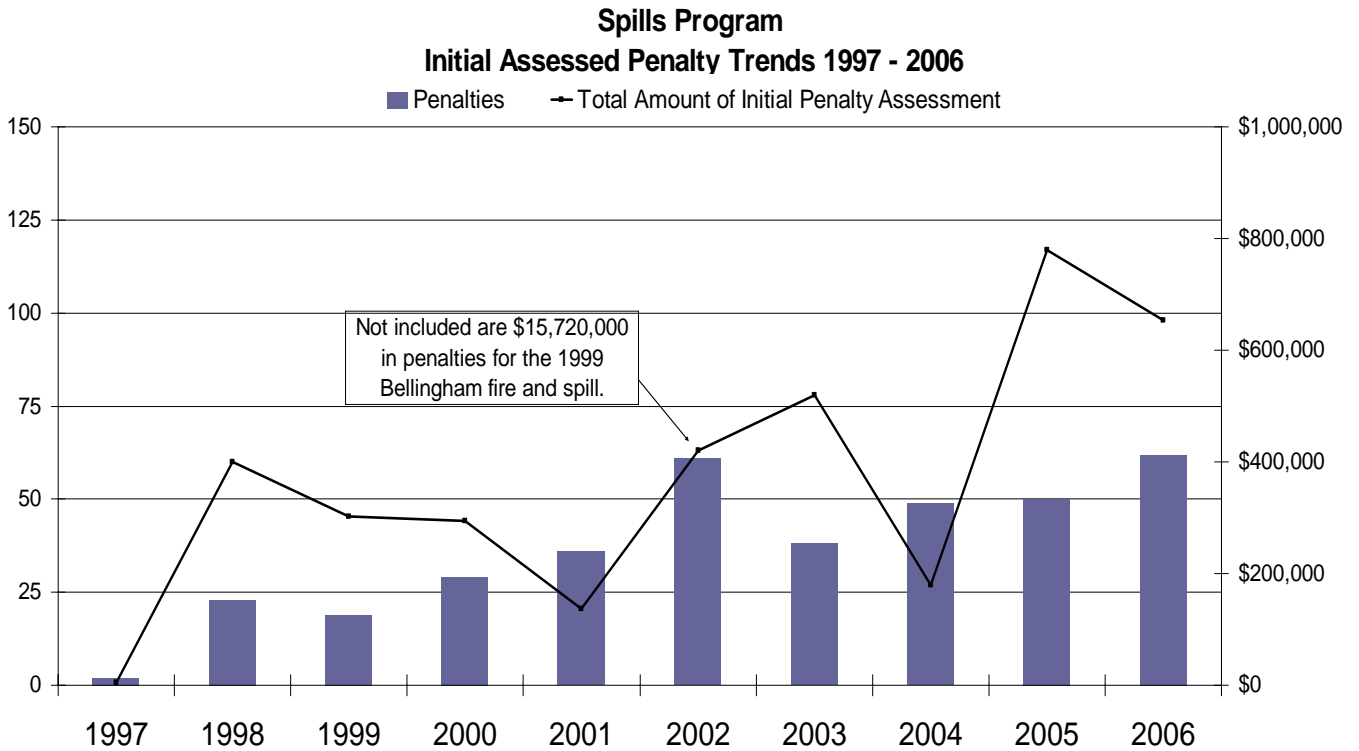


Figure 27:



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Toxics Cleanup

Overview

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

Ecology has identified 10,331 sites in Washington that are contaminated with toxic substances. To date, 58 percent of these sites have been cleaned up independently or with Ecology oversight. About 6,270 sites were identified because a leaking underground storage tank contaminated the soil and/or underground water (groundwater). Contamination at each site is unique and can pose a different type and level of risk to public health and the environment.

It is a priority for Ecology to prevent future leaks from underground storage tanks. We currently regulate 10,268 active underground storage tanks on about 3,870 different properties. These properties include gas stations, industries, commercial properties, and government-owned locations. Ecology's role is to make sure tank owners install, manage, and monitor their tanks in a way that prevents soil and water contamination. We conduct compliance inspections and provide technical assistance to tank owners to help them comply with underground storage tank rules.

In addition to leaking underground tank sites, we help them voluntarily clean up contaminated sites. We also conduct site investigations, cleanup studies and cleanup work. If Ecology cannot find a potential liable party, we take the lead to clean up the site.

To accomplish its mission, the Toxics Cleanup Program focuses its work around these objectives:

- Clean the worst contaminated upland and aquatic sites first.
- Manage underground storage tanks to minimize releases.
- Provide fee-based services to site owners that volunteer to clean up their contaminated sites.

Compliance Assurance

When Ecology identifies a contaminated site, we put it on a state or federal cleanup list. Ecology's first course of action is to encourage the property owner to independently and voluntarily clean up the contaminated soil or water. To date, 49 percent of the cleanup sites (5,057) are done through Ecology's voluntary cleanup process.

When agreements that are more formal are needed, Ecology will enter into agreed orders or consent decrees with the property owner(s). As a last resort, Ecology will use its enforcement authority to order the property owner to clean up the contaminated property. Ecology relies on a tiered approach to achieve compliance with underground storage tank rules:

1. A compliance inspection or technical assistance visit.
2. A written warning (notice of non-compliance) if violations are found.
3. A field citation (monetary penalty), if problems are serious or prior violations were not corrected.
4. A formal enforcement order and penalty if compliance is not achieved through the field citation.

Underground storage tank owners and property owners can request a technical assistance inspection from Ecology. We will not issue a penalty during a technical assistance inspection unless we discover serious violations that may result in significant harm to human health or the environment.

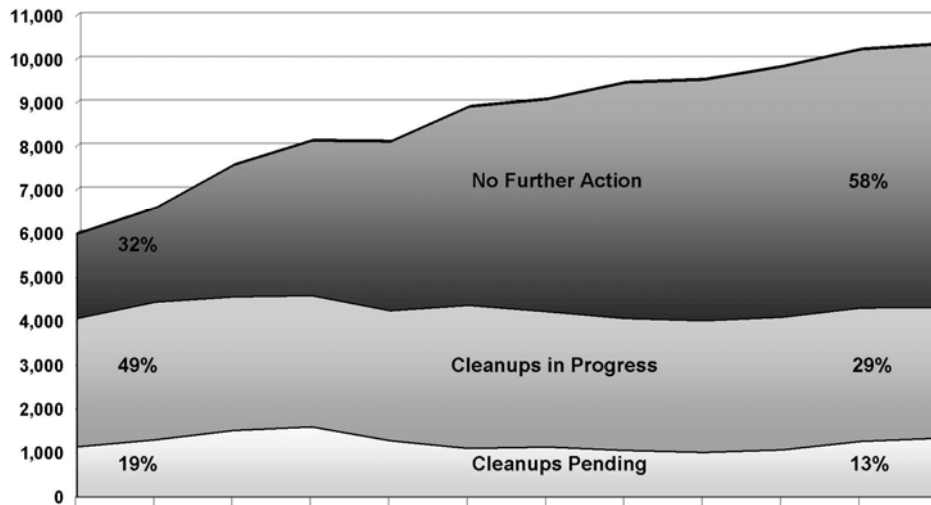
Environmental Trends

The Toxics Cleanup Program has made significant progress since Ecology adopted the Model Toxics Control Act (MTCA) rules in 1990. The graph on the following page shows that as of January 2007 there have been 6,025 contaminated sites cleaned up in Washington State. This represents 58 percent of the 10,331 currently known and suspected contaminated sites in Washington. Most of these cleanups have occurred without the need for formal orders, consent decrees, or unilateral enforcement orders. In addition, cleanup work continues at another 2,985 contaminated sites, which represents 29 percent of all currently known and suspected contaminated sites in Washington. Cleanups have not been started at 1,321 sites, which is 13 percent of the total.

In 1990, Ecology adopted rules for managing underground storage tanks. Since then, the number of reported leaking underground storage tanks has steadily fallen from 924 in 1990 to 79 in 2006.

Figure 28:

Cleanup Trends of Known and Suspected Contaminated Sites
as of January 16, 2007



Enforcement Trends

The Model Toxics Control Account (MTCA) authorizes Ecology to issue penalties up to \$25,000 per day for failure to comply with orders and decrees. So far, Ecology has not needed to use this authority because:

- The unique features of MTCA do not allow appeals and it holds all parties jointly and individually liable.
- Ecology typically works with site owners through the Voluntary Cleanup Program, agreed orders, and consent decrees.

Ecology conducts about 600 to 850 inspections of underground storage tanks each year. Less than 5 percent of the inspections result in field penalties. The average field penalty in 2006 was \$500 and they ranged from \$100 to \$1,500 (the maximum currently allowed). On average, Ecology issues one or two formal underground storage tank orders per year. Penalties for formal orders are generally much higher than field penalties.

Our statewide goal is to inspect all underground storage tanks in Washington at least once by mid-2007. After that, our goal is to inspect every underground storage tank at least once every three years. Ecology expects compliance rates to continue to rise as underground storage tank facilities are inspected more frequently.

Ecology's Underground Storage Tank (UST) inspectors issue Notices of Non-Compliance (NONC) to owners and operators of underground tanks. NONCs are like warning letters that identify the violations found during the inspection and give timeframes for when the violations should be corrected. Ecology inspectors issue NONCs routinely. In 2006, UST inspectors issued several hundred NONCs. NONCs may not be appealed to the Pollution Control Hearings Board (PCHB) or to State Superior Court. A Notice of Penalty (field

citation) may be issued with an NONC. Field citations may be appealed to the PCHB. Underground storage tank NONCs are not shown on Table 11 below.

In 1995, the Washington State legislature passed a new law, RCW 43.05, Technical Assistance Programs. This law made it possible for Ecology to provide technical assistance inspections without subjecting the facility to monetary penalties unless the inspector finds a serious potential threat to human health or the environment. The state's delegation of the federal UST program required that it maintain the authority to issue monetary penalties, even during technical assistance visits. The UST program maintains that penalty authority, however its practice is to offer technical assistance as often as possible.

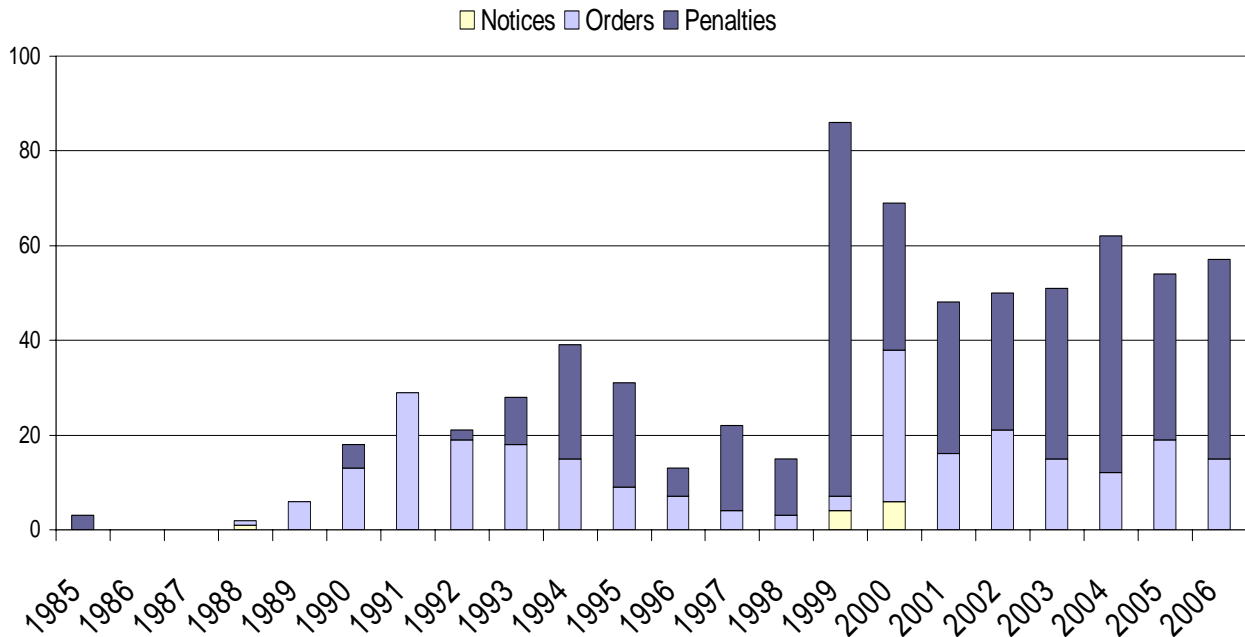
For more information about cleaning up sites contaminated from a leaking underground storage tank, visit Ecology's web site at www.ecy.wa.gov/programs/tcp/cleanup.html.

Table 11: Toxics Cleanup Program Enforcement Actions and Penalty Amounts.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1985	0	0	3	3	\$23,000
1986	0	0	0	0	\$0.00
1987	0	0	0	0	\$0.00
1988	1	1	0	2	\$0.00
1989	0	6	0	6	\$0.00
1990	0	13	5	18	\$113,000
1991	0	29	0	29	\$0.00
1992	0	19	2	21	\$105,052
1993	0	18	10	28	\$133,850
1994	0	15	24	39	\$7,800
1995	0	9	22	31	\$11,600
1996	0	7	6	13	\$6,850
1997	0	4	18	22	\$12,950
1998	0	3	12	15	\$9,100
1999	4	3	79	86	\$83,900
2000	6	32	31	69	\$34,270
2001	0	16	32	48	\$21,100
2002	0	21	29	50	\$11,500
2003	0	15	36	51	\$120,515
2004	0	12	50	62	\$21,850
2005	0	19	35	54	\$24,150
2006	0	15	42	57	\$20,500

Figure 29:

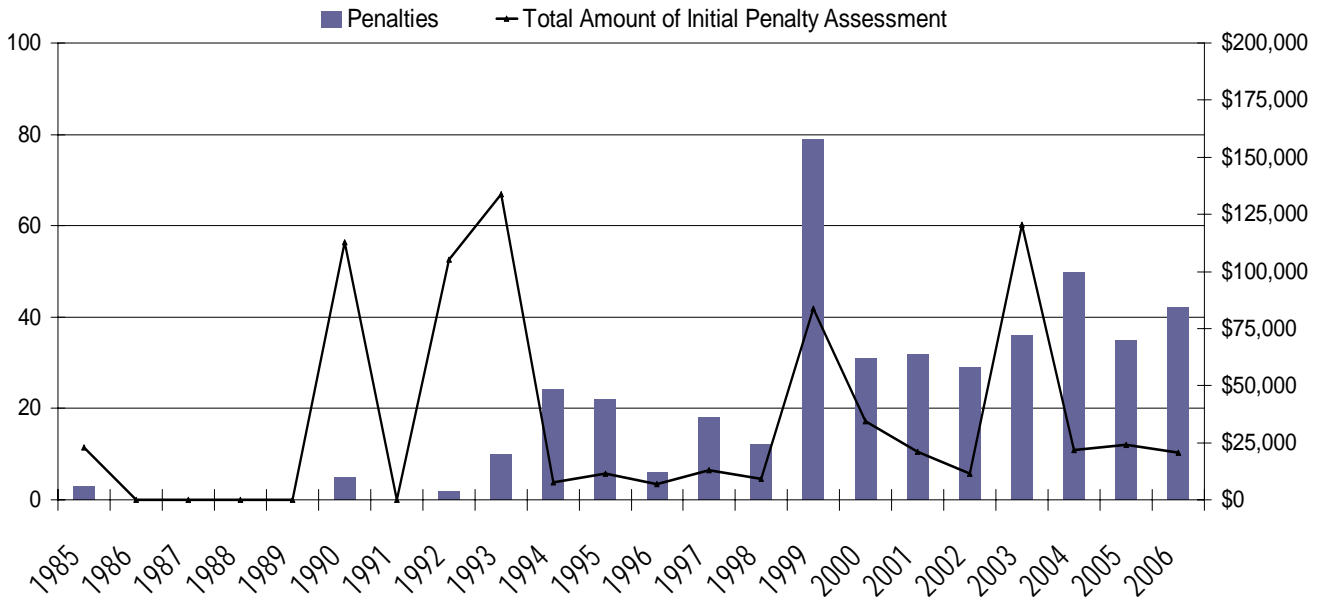
**Toxics Cleanup Program
Notices, Orders & Penalties 1985 - 2006**



Compliance with the operation and maintenance requirements on the date of inspection has risen from 35 percent in 2001 to about 48 percent in 2006. Compliance, measured 60 days after an inspection, ranges from 68 to 89 percent.

Figure 30:

**Toxics Cleanup Program
Initial Assessed Penalty Trends 1985 - 2006**



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Water Quality

Overview

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

Ecology protects Washington's waters by regulating point source (direct) discharges of pollutants to surface and underground waters (groundwater). We accomplish this through a wastewater discharge permit program for sewage treatment plants and other industries that have on-site wastewater treatment. We also have a permit program in place to control the pollution in stormwater runoff from municipal industrial and construction sites.

Ecology also protects water quality by educating and working with communities on controlling nonpoint source pollution. Nonpoint source pollution is caused by the everyday actions of citizens and businesses all over the state. Sources include:

- Pesticides and fertilizers running off:
 - Irrigated agricultural land.
 - Rural lands.
 - Homeowner's lawns.
- Oil and grease running off parking lots and roads.
- Failing septic tanks.

Ecology's goals for protecting water quality are to prevent water pollution, clean up water pollution and support sustainable choices to reduce water pollution. To meet its mission and goals, Ecology's Water Quality Program is working on these objectives:

- Prevent point source water pollution
- Control stormwater pollution
- Reduce nonpoint source water pollution
- Provide water quality financial assistance
- Clean up polluted waters

Water Quality Permits

Ecology has authority to investigate and manage water quality through the Federal Clean Water Act and the state Water Pollution Control Act. We issue permits to more than 4,000 industrial and municipal facilities in Washington State to make sure they manage pollution so it can be safely discharged to lakes, rivers, marine or ground waters. Ecology inspects about 25 percent of the permitted facilities each year.

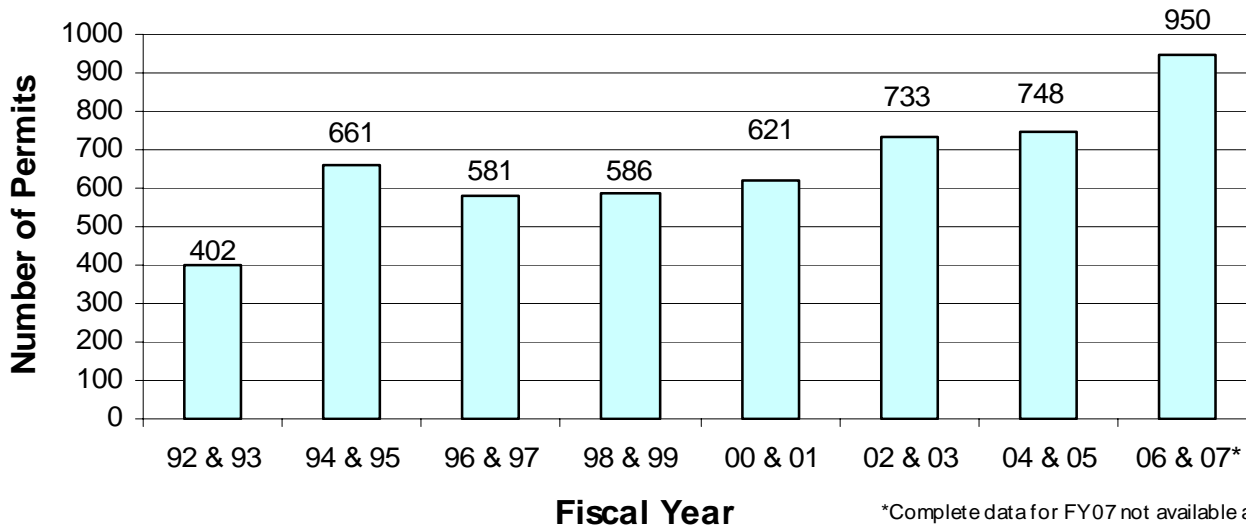
Table 12: Water Quality Permits as of December 31, 2005 *

PERMIT TYPE	TOTAL ACTIVE PERMITS
NPDES Major	78
NPDES Minor	354
State to Ground Water	164
State to POTW (publicly-owned treatment works)	166
NPDES Stormwater Construction General Permit	1450
NPDES Industrial Stormwater General Permit	1245
Municipal Stormwater General Permit	7
Boatyard General Permit	101
Dairy General Permit	98
Fish Hatchery General Permit	79
Fresh Fruit Packer General Permit	189
Water Treatment Plant General Permit	31
Sand and Gravel General Permit	966
Aquatic Pesticides General Permit	53

*2006 data not available at time of report printing.

Figure 31:

Number of Individual Permits Per Enforcement Staff Member



*Complete data for FY07 not available at time of report printing.

Compliance Assurance

Wastewater Discharge Permit

Ecology expects voluntary compliance with water pollution protection laws. When we detect a violation, we gather the initial information through inspections, documented phone calls, or letters. The violation may result in a warning letter, technical assistance, or both. Ecology requires permitted facilities to monitor their discharges and report them to us (Discharge Monitoring Report). We also require them to attach a list of their violations to their report. The list must explain the cause of the violations and the actions taken to stop and prevent further violations.

When Ecology cannot get a facility to voluntarily comply through informal actions, we use a progressive method of enforcement. Generally, each response increases in severity until the facility resolves the problem. If they continue to not comply, Ecology will issue a formal enforcement action in the form of a notice, order or a penalty.

Ecology provides technical assistance on proper design of wastewater treatment facilities and the development of corrective action strategies to prevent water quality violations. Compliance at wastewater treatment facilities is enhanced by training treatment plant operators in key positions. State law requires municipal wastewater treatment operators to take training and pass written tests to become certified to run facilities. Operators must also meet continuing education requirements to maintain their certification.

In addition to the Operator Certification Program, Ecology has a well established accreditation program for environmental testing laboratories. These two efforts contribute significantly to the state's environmental compliance efforts by making sure operators are qualified to run facilities and collect water quality samples, and that the samples processed by laboratories are accurate and valid.

Ecology's Water Quality Program along with the Environmental Protection Agency provide direct assistance to smaller municipal wastewater treatment plants through the use of two roving outreach specialists. These specialists travel from plant to plant to respond to facility requests for technical assistance. There is one outreach specialist for facilities located on the west side of the Cascade Mountains and one for facilities on the east side of the mountains.

Stormwater Permits

Nonpoint sources, including stormwater, are the leading cause of water pollution across the nation and in Washington. Ecology provides technical assistance to owners and operators of dairy and non-dairy livestock operations, and others who

perform stormwater, forestry, and aquatic pesticide activities. These operations generally address pollution by using best management practices.

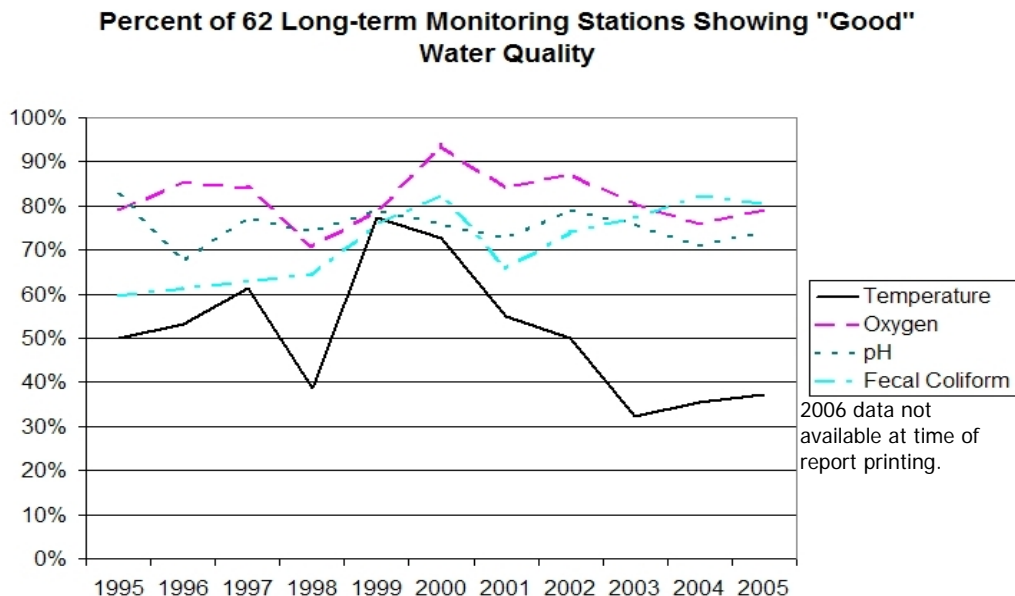
Ecology manages stormwater control through the stormwater general permit programs for municipal, construction and industrial sites. We provide technical assistance to industries and other government entities to make sure water quality is protected from stormwater runoff. Ecology has written stormwater management manuals for eastern and western Washington, that outline the best management practices for stormwater control.

Technical studies show that Washington farms that produce crops and raise livestock can contribute to water pollution. This is particularly true when runoff from several small farms, in one watershed, combines to create an even greater water quality problem. To help address agricultural sources of water pollution, the Washington Conservation Commission, local conservation districts and Ecology entered into the Agricultural Compliance Memorandum of Agreement in 1988. The agreement defines a consistent series of steps that coordinate Ecology's water pollution control responsibilities with the conservation district's technical assistance programs that help farm owners or operators develop and implement a water quality management plan, or "farm plan."

Environmental Trends

Ecology does not have enough resources to monitor every water body in the state. However, for the past nine years, we have been systematically collecting water quality data at 62 long-term stations around the state. Most of these stations correspond to the 62 Water Resource Inventory Areas, or watershed planning areas in the state. The graph below indicates the trends over 11 years for four main water quality parameters.

Figure 32:



Ecology also collects a large amount of water quality data generated by many other studies and projects. We use this data to prepare a list of water bodies that do not meet the state's water quality standards, known as the 303(d) list. We also use the list to target the development and implementation of total maximum daily load (TMDL) plans called water cleanup plans.

The four main pollutants that cause a water body to be listed as polluted are:

- Temperature
- Fecal coliform
- Oxygen
- pH

Since 1996, the number of water bodies listed for fecal coliform, oxygen and pH has declined while those listed for temperature have increased. High temperatures can be caused by the loss of vegetation along streams, and low water flows in rivers and streams. The fecal coliform trend is not surprising. Since state lawmakers adopted the Dairy Nutrient Management Act in 1998* Ecology and many people across the state have worked hard to reduce the amount of fecal coliform that enters our water.

Enforcement Trends

Ecology issues permits to more than 4,000 industrial and municipal facilities in Washington State to protect water quality. In 2005, the Water Quality Program took more than 1,512 compliance or enforcement actions (not including inspections) on facilities with permits (2006 data not available at time of report printing). To evaluate the effectiveness of our enforcement activity we evaluate the compliance rates and number of facilities with five or more violations per year. In 2005, wastewater monitoring reports and Ecology inspections showed that Washington had a compliance rate of approximately 98 percent for water quality protection. The type of enforcement action and the amount of penalty depends on the type of the violations and the potential impacts to public health and the environment. There is no clear trend for enforcement actions or penalties. One very serious case with a large penalty can greatly affect the numbers for any given year.

For more information on water quality policy, visit Ecology's web site at www.ecy.wa.gov/programs/wq/wqhome.html.

For information on the condition of Washington's waters, visit: www.ecy.wa.gov/programs/eap/env-info.html.

* Note: The Legislature handed over dairy farm inspections to the Department of Agriculture in 2003.

Table 13: Water Quality Program Enforcement Actions and Penalty Amounts.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1985	42	91	79	212	\$395,528
1986	78	99	106	283	\$440,718
1987	78	66	99	243	\$271,351
1988	38	20	39	97	\$256,300
1989	37	21	39	97	\$417,252
1990	65	32	29	126	\$229,250
1991	49	34	36	119	\$304,250
1992	48	55	34	137	\$303,700
1993	44	66	21	131	\$112,500
1994	63	89	57	209	\$538,000
1995	68	67	28	163	\$185,400
1996	47	47	49	143	\$510,799
1997	32	63	80	175	\$782,000
1998	55	76	83	214	\$404,040
1999	132	92	83	307	\$1,107,893
2000	150	170	35	355	\$305,000
2001	69	117	60	246	\$231,900
2002	98	87	98	283	\$569,200
2003	98	56	83	237	\$361,618
2004	39	24	28	91	\$444,045
2005	36	35	35	106	\$518,861
2006	32	48	59	140	\$705,155

Figure 33:

**Water Quality Program
Notices, Orders & Penalties 1985 -2006**

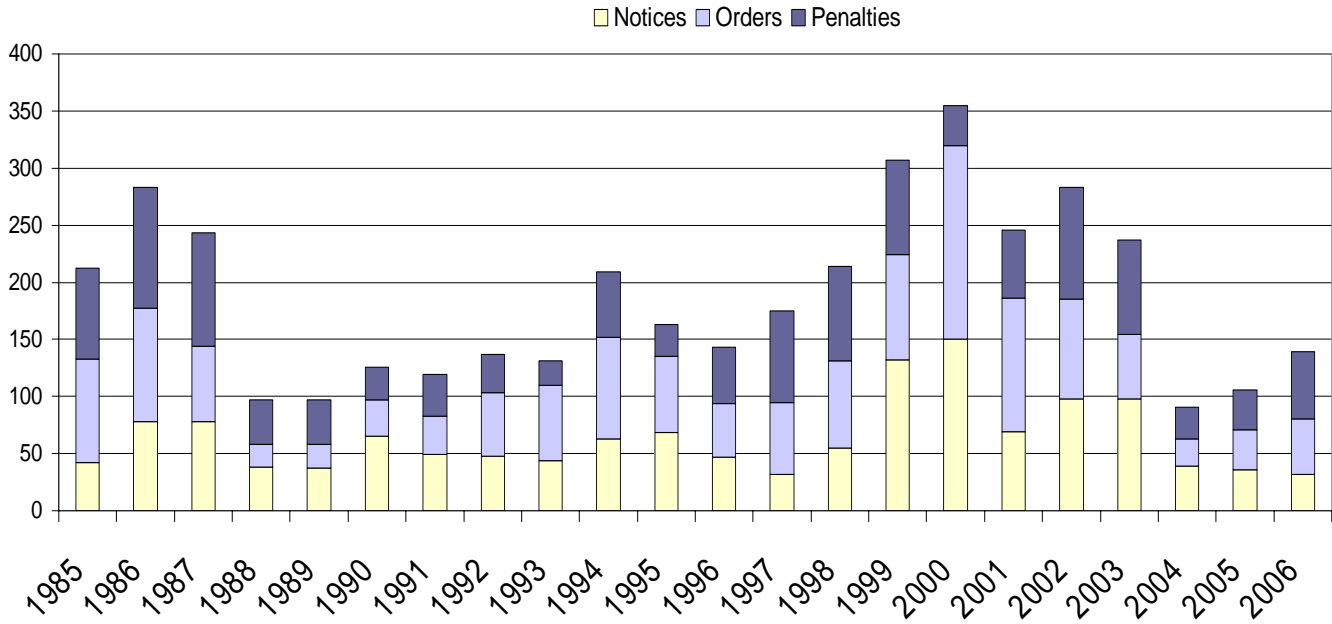
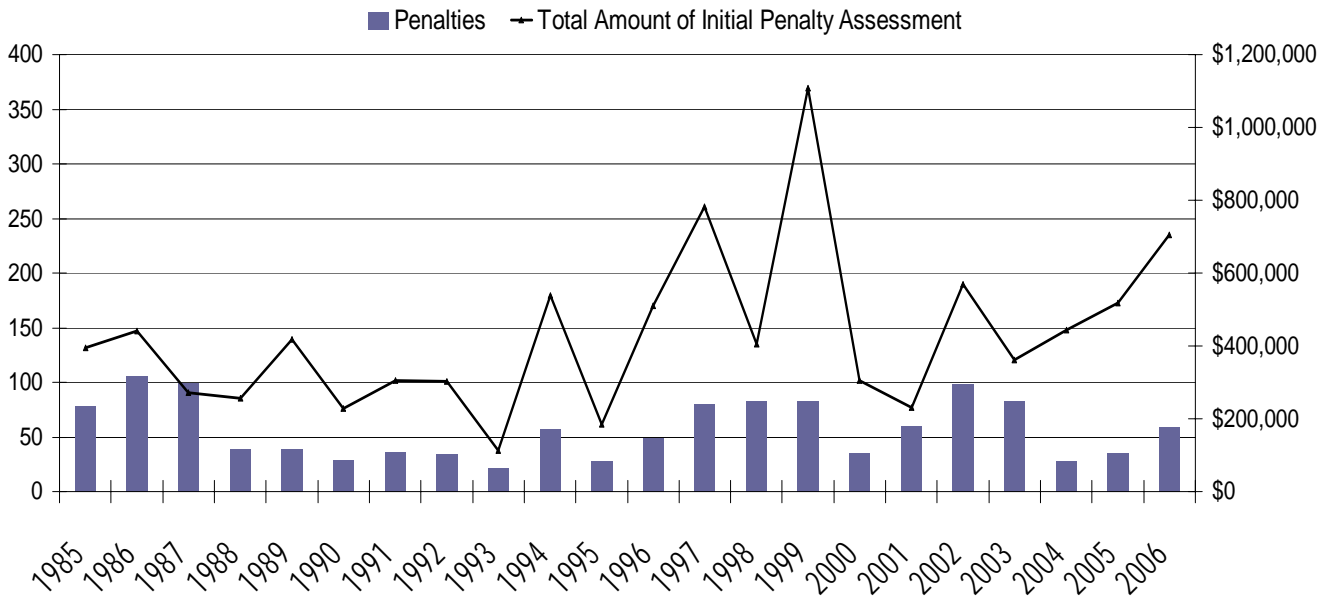


Figure 34:

**Water Quality Program
Initial Assessed Penalty Trends 1985 - 2006**



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Water Resources

Overview

The mission of the Water Resources Program is to support sustainable water resource management to meet the present and future water needs of people and the natural environment, in partnership with Washington communities.

Washington is facing the challenge of how to meet the growing demands for water that are fueled by population and economic growth, while maintaining the natural environment. The threat of extinction to once abundant fish stocks due to poor water quality and inadequate stream flow are significant factors in the debate about water resources.

Water use and water resources management are regulated by a complex web of state law and case law (court interpretations), including English Common Law adopted while Washington was still a territory.

To accomplish its mission and to manage the ever-increasing demand for water, Ecology's Water Resources Program is working on these objectives:

- Promote compliance with water law.
- Manage water rights through sound and timely decision-making.
- Prepare for and respond to drought and climate change.
- Assess, set, and achieve instream flows.
- Support water use efficiency.
- Regulate well construction.
- Ensure dam safety.
- Support local watershed management of water resources.
- Provide water resources data and information.
- Adjudicate water rights and water right claims.

Water Resources Permits

Ecology allocates water by reviewing and processing applications for new water rights and changes to existing water rights and claims. Before Ecology approves any application, staff verify whether:

- Sufficient water is available.
- The proposed use is beneficial,
- Not contrary to the public's interest.
- Existing rights would not be impaired.

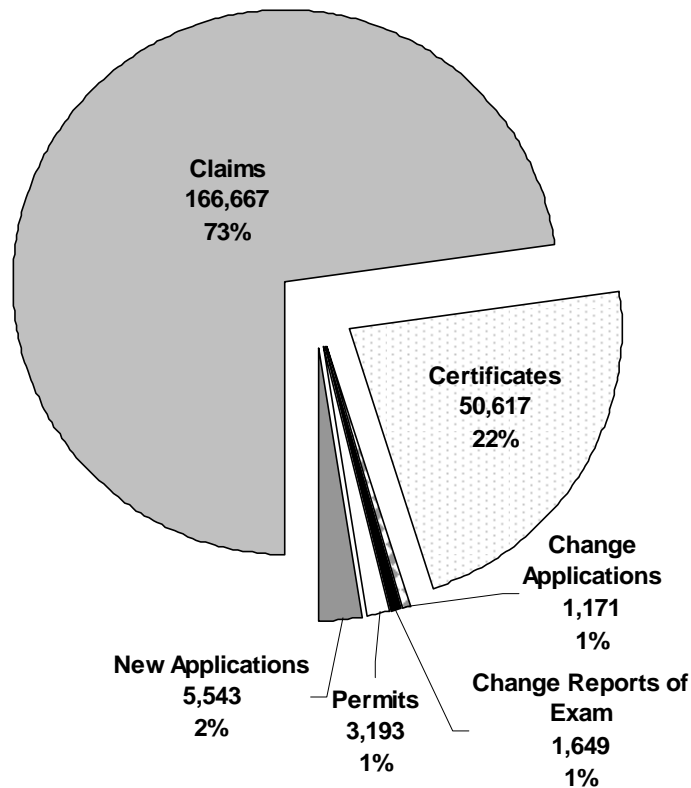
A water right is legal permission to withdraw or divert a certain amount of water from a specific source for use in a specific place for one or more specific purposes. A water right is needed for any diversion of surface water and for all groundwater withdrawals greater than 5,000 gallons per day. Ecology works to make sure all 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.
- The environment is protected.

The caseload for water rights is large and continues to grow, and the legal context for water use is dynamic and complex.

Figure 35:

2006 Water Rights Caseload



Ecology licenses and regulates well drillers. We investigate complaints to make sure all well drilling activities comply with the state minimum construction standards for wells. The well driller and property owner are responsible for meeting the standards and for protecting groundwater from contamination or impairment.

Ecology is responsible for regulating dams that capture and store at least 10 acre-feet or more of water or watery materials such as mine tailings, sewage, and manure waste.

Through plan reviews and construction inspections, we make sure these facilities are properly designed and constructed. To reasonably secure the safety of human life and property, we also conduct inspections of existing dams to assure proper operation and maintenance.

Compliance Assurance

Ecology's goal is to achieve voluntary compliance with state water laws. We do this through education, outreach, training, and licensing activities. These efforts are geared toward the public, water users in specific areas, and individuals. Enforcement actions are important tools that we use in a limited number of special cases when:

- Voluntary or informal compliance efforts are not successful.
- Water rights are impaired
- Risks to safety, health, and the environment are high.
- We have sufficient resources to use formal enforcement actions.

Current compliance priorities are to:

- Make sure a minimum of 80% of all water right withdrawals and diversions in the 16 basins, where fish stocks are depressed, are metered and reported. And to implement a reporting system for this metering data.
- Provide compliance information, assistance, and formal enforcement action in extreme cases and in specific areas, and issue penalties as appropriate.
- Monitor water use (metering, gauging, reporting) and take enforcement actions to make sure purchased trust water rights are protected.
- Regulate water use during periods of low flows to protect senior water users and streams that have stream flow limits.
- Continue formal and informal actions to gain compliance with court rulings in the Yakima adjudication.
- Communicate our enforcement actions for water right violations to discourage future violations.

Formal enforcement actions and responses are reserved to times when voluntary compliance is not achieved. Below is an example of the progression from voluntary compliance to formal enforcement for a water rights case. Ecology will:

1. Call the person who complained, and/or the alleged violator. After we make contact, we might also investigate the complaint.
2. Pursue voluntary compliance through outreach via phone, site visit, and/or office meeting.
3. Provide information to the violator about the potential need for them to apply for a new water right or water right change.

4. Refer the violator to their local government for land use issues, Department of Fish and Wildlife for habitat issues, and other Ecology programs, as appropriate.
5. Follow up through a letter to bring formal closure or at least document what efforts will be made to gain compliance.
6. Schedule a follow up site visit to verify water is not being used illegally.

If the business or individual continues to use water illegally and refuses to voluntarily comply, Ecology may take the following formal enforcement actions:

1. Sends a series of escalating letters that explains the formal enforcement process and the actions we will take if they do not comply within a certain timeframe.
2. Issues an administrative cease and desist order with a penalty notice.
3. Continues with follow-up site visit. This includes:
 - Interviewing neighbors
 - Collecting complaint and witness statements
 - Taking pictures of the property and the water source being used
 - Documenting continued illegal use
4. Issues Notice of Penalty.

Environmental Trends

Washington has been viewed as a water-rich state and residents have historically enjoyed an abundance of clean and inexpensive water. This is changing as unprecedented population and economic growth has fueled the growing demand for water. A number of other factors also contribute to this change:

- In many areas, there is not enough water to allocate for future uses without impairing senior water rights, reducing stream flows, and depleting aquifers.
- The threat of extinction of once-abundant fish stocks due to over-appropriation of surface waters and groundwaters connected with surface water resources.
- Competition and law suits over water.
- Repeated drought conditions that result in dry streams, withered crops, dead fish, reduced hydropower production, and increased wildfires.
- Growing interest and investment in water use efficiency technology, reclaimed water, rainwater catchments, and methods that take salt or chemicals out of water.

An emerging concern is the effect of global warming and climate trends on water availability. A reduction in future water supplies may occur due to reduced volume of stored water in the mountain snow-pack, changes in the timing of snow-pack melt, and the amount and location of precipitation.

Enforcement Trends

The current compliance priority of the Water Resources Program is to meter and report water use in 16 basins with depressed fish stocks. Ecology has:

- Sent orders to over 1,000 water users in these basins to meter and report their water use, as required under a court settlement agreement. This represents 80% of the water volume used in those basins.
- Required new water users and those who have applied for changes, in these basins, to install meters and report their water use.
- Provided funds to help users install meters.

In 2005, the Yakima County Superior Court ordered all water right owners in the Yakima River Basin to install an approved metering or measuring device at each confirmed surface water diversion point below 2,000 feet elevation by April 1, 2006. Those with confirmed rights with diversion points above 2,000 feet elevation were to have an approved metering or measuring device installed by April 1, 2007. In addition to the orders in Table 14 and Figure 36, we have sent out 924 letters to Yakima Basin water rights holders notifying them of the court order. They may request a variance from us for more time to install a meter, which we review and may grant within reason and verification.

State lawmakers gave Ecology funds to develop a data and reporting management system. We are now following-up with these water users to make sure they are complying with the metering and reporting requirements.

The jump in the number of enforcement orders in 2001 (figure 36) was due to the large number of orders Ecology issued to require the metering of water use. The 1994 peak in penalties (figure 37) is from efforts to deal with a large number of well-drilling violations, including proper licensing and well sealing.

For more information about the Water Resources Program, visit Ecology's Web site at www.ecy.wa.gov/programs/wr/wrhome.html.

Table 14: Water Resource Program Enforcement Actions and Penalty Amounts.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1985	4	25	13	42	\$4,400
1986	27	60	13	100	\$2,200
1987	38	37	7	82	\$1,700
1988	12	19	21	52	\$6,875
1989	10	14	19	43	\$12,875
1990	4	19	10	33	\$12,500
1991	0	38	12	50	\$20,200
1992	0	48	17	65	\$30,280
1993	0	65	15	80	\$14,400
1994	0	63	51	114	\$88,900
1995	0	89	6	95	\$30,300
1996	0	18	3	21	\$15,500
1997	0	9	4	13	\$5,400
1998	0	17	7	24	\$20,600
1999	0	26	7	33	\$98,300
2000	0	102	11	113	\$318,900
2001	1	490	6	497	\$208,600
2002	0	31	4	35	\$56,300
2003	3	29	1	33	\$7,300
2004	2	15	1	18	\$20,200
2005	1	17	2	20	\$11,250
2006*	8	12	2	22	\$2,100

* In addition, 924 court orders were issued in 2006.

Figure 36:

**Water Resources Program
Notices, Orders & Penalties 1985 - 2006**

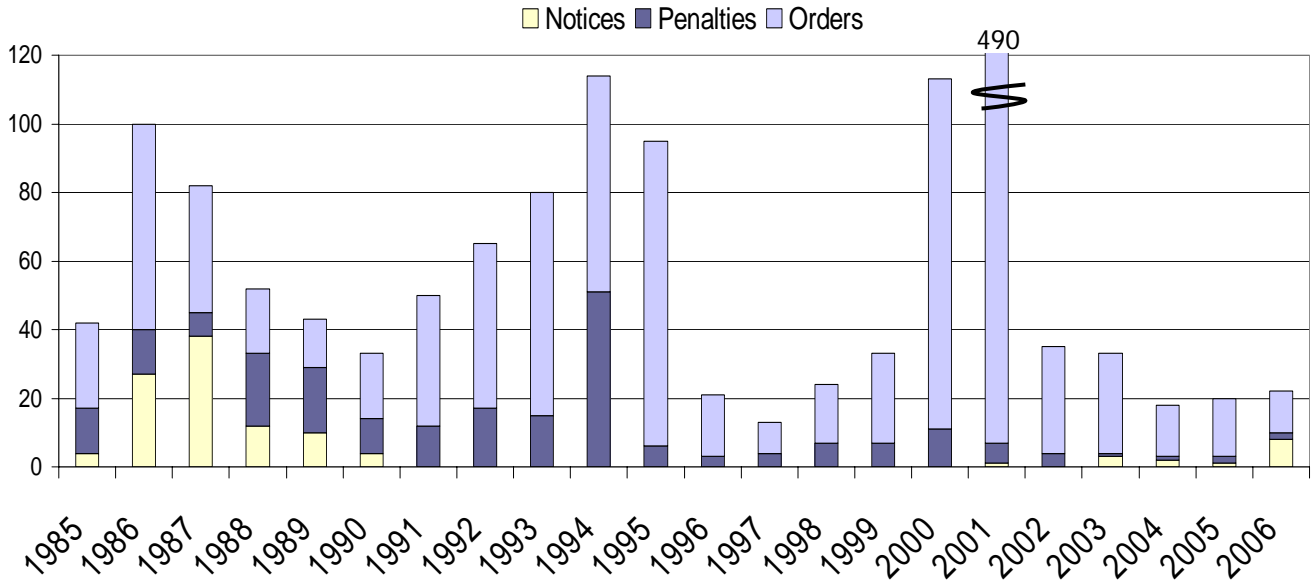
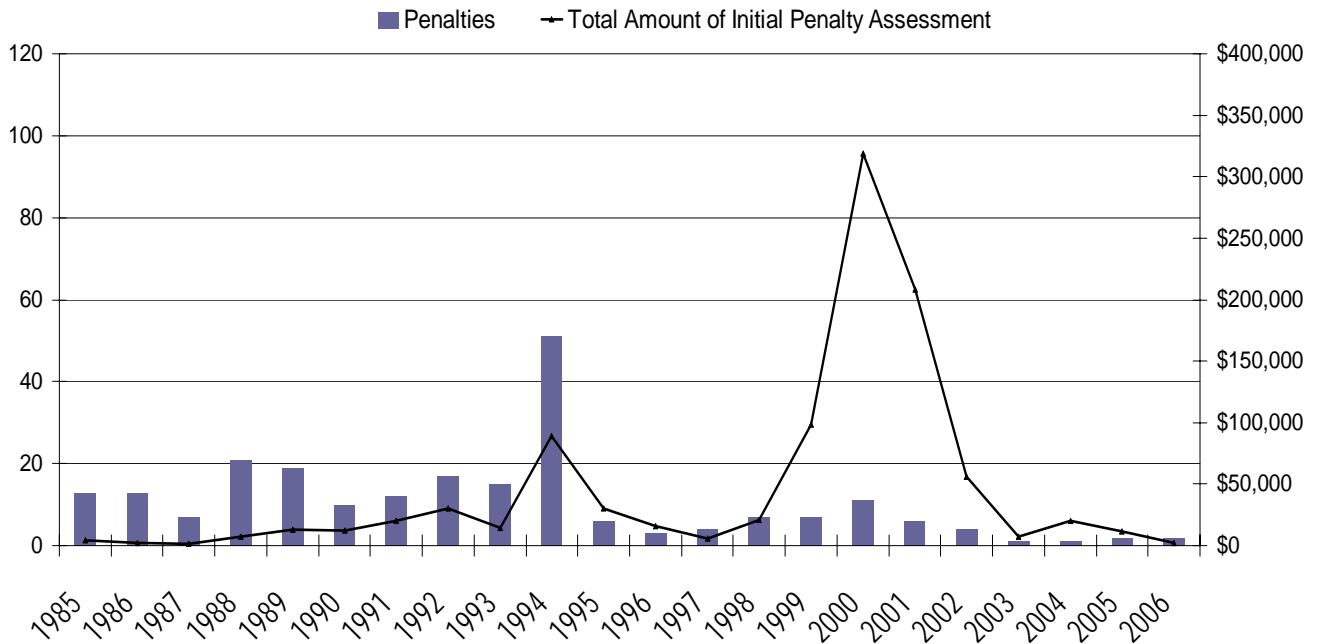


Figure 37:

**Water Resources Program
Initial Assessed Penalty Trends 1985 - 2006**



Note: The penalty issued dates prior to 2004 are derived from the dates Ecology inspectors requested an enforcement/docket tracking number for the enforcement action not the date the action was taken.

Additional Ecology Enforcement Information

Enforcement information is available on the web at:

<http://www.ecy.wa.gov/enforce.html>

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