

Washington State
Department of Ecology

2005
Enforcement Report



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Message from Jay Manning

Director, Department of Ecology



The state legislature created the Department of Ecology in 1970. Since then, we have made great progress on improving the quality of our water, air, soil and sediment to protect public health and the environment. The laws and rules that guide our decision making and the actions of others are core to our success over the years.

On the surface, it appears that our water is clean, that our air is healthy to breathe and that our land is safe and productive. However, our environment is under rising pressure from the effects of population growth. We are seeing an increase in:

- Urban growth,
- Cars and paved surfaces,
- Demands on water supplies,
- Garbage and waste, and
- Toxic substances used in our industrial processes and our homes.

It is Ecology's responsibility to make sure citizens and industries comply with the state's environmental laws. We provide a variety of services to help people voluntarily comply. We offer technical assistance, compliance visits, workshops, brochures and web-based information. Most people want to do the right thing; they just need to know what to do and how to do it. When we work with someone to help them comply with our rules, everyone wins.

Because equity is important, we aggressively pursue enforcement when someone makes a choice to not comply with a rule or there is an extreme violation. It is not fair for one person to spend time and money to comply, when their competitor or neighbor makes a choice not to comply. This report provides an overview of our enforcement policy and actions. If you have questions about the information in this report, please contact Dee Ragsdale at 360-407-6986 or drag461@ecy.wa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Jay J. Manning". The signature is fluid and cursive.

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; and
- Support sustainable communities and natural resources.

Ecology's primary environmental business functions are:



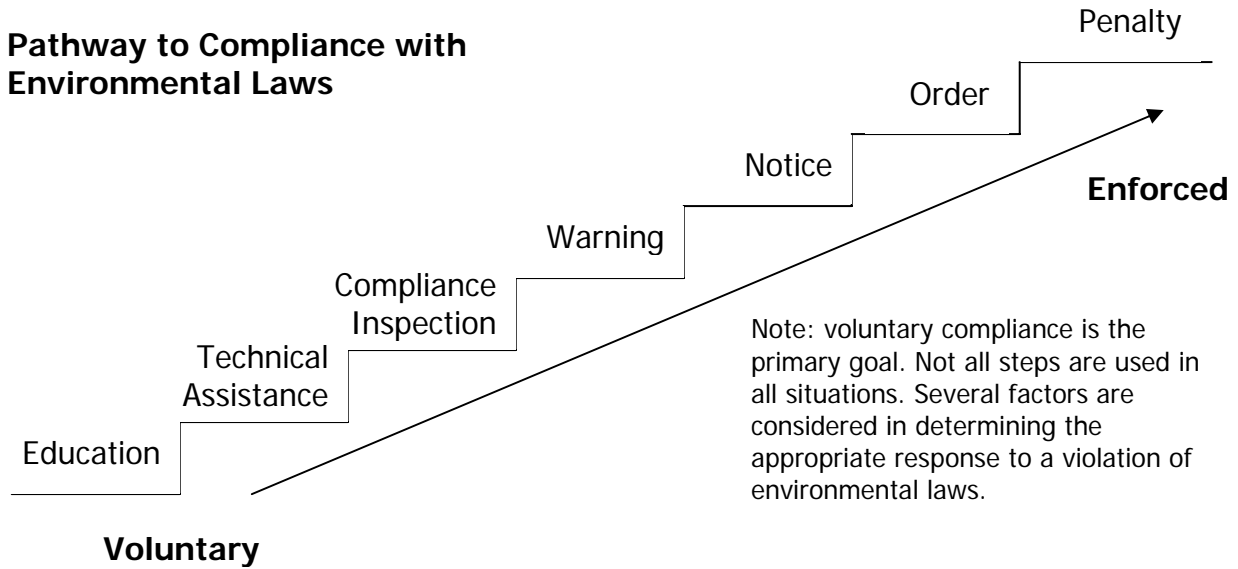
Compliance with Environmental Laws & Rules

We are responsible for managing Washington's environmental laws and rules that protect the air, land and water. We require and expect 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 (agency 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. We carefully match the significance of the violation to the type of enforcement actions we take. When our efforts to achieve voluntary compliance fail, we use a sequence of increasingly stringent enforcement tools. This changes our role from educator to enforcer. See the figure on the next page.

Pathway to Compliance with Environmental Laws



In most cases, Ecology looks for 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. It is our policy to get consent before we enter a facility, business or other private property. If we can't get consent we have the right to get a court order that allows us to access the property. Our enforcement actions are based in fact and law, well documented, appropriate to the violation and issued in a professional, equitable and effective manner.



State and Federal Roles in Enforcement

The federal Environmental Protection Agency (EPA) gives Ecology the authority to enforce certain federal environmental laws. These laws are the Clean Air Act, Clean Water Act and 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 mutual 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 administering the federal grant dollars that EPA Region 10 provides to Ecology for air quality, water quality and hazardous waste management.

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 agree to these four major principles:

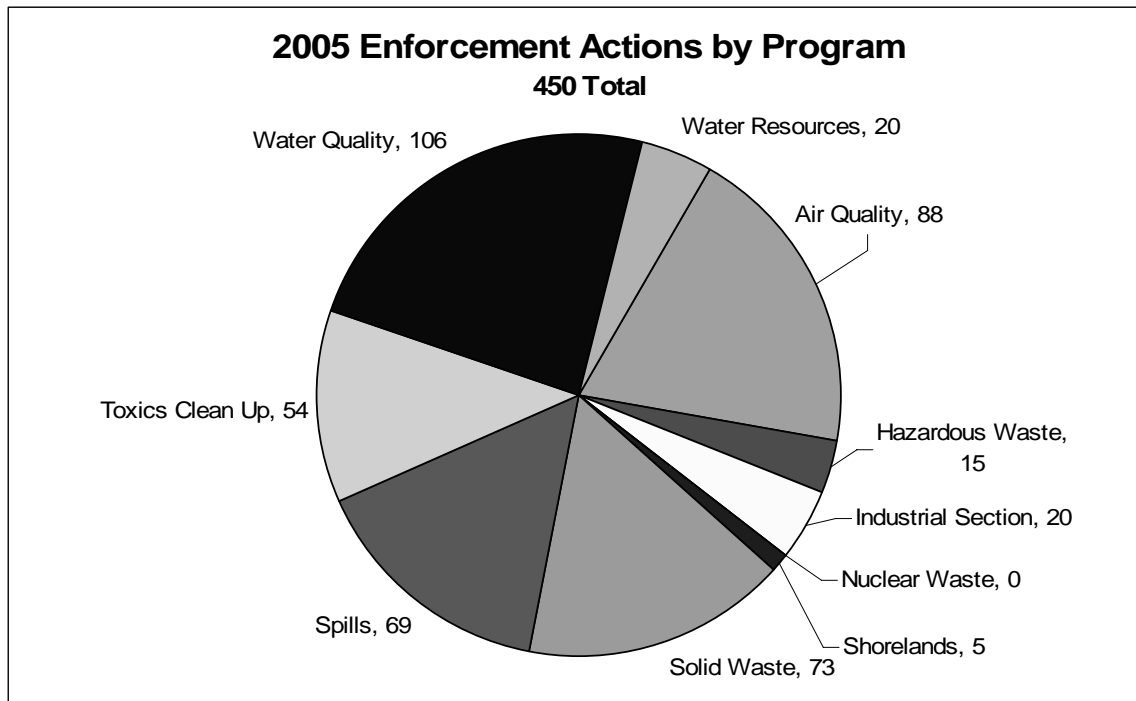
- Collaborative Planning: Commitment to "up-front" planning to avoid problems, duplication and surprises.
- Role Definition: Recognition that the state has the lead on agreed-upon work in a delegated program, except in situations where regional or national initiatives warrant an EPA lead.
- Performance 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 categories are described in more detail in the following sections. Please note that not all Ecology programs have legal authority to use all the tools listed. Ecology also delegates some enforcement authority to local government. The following pie chart shows the number of enforcement actions Ecology programs in 2005.



For more information on enforcement and permitting services, visit Ecology's web site at: <http://www.ecy.wa.gov/services.html>

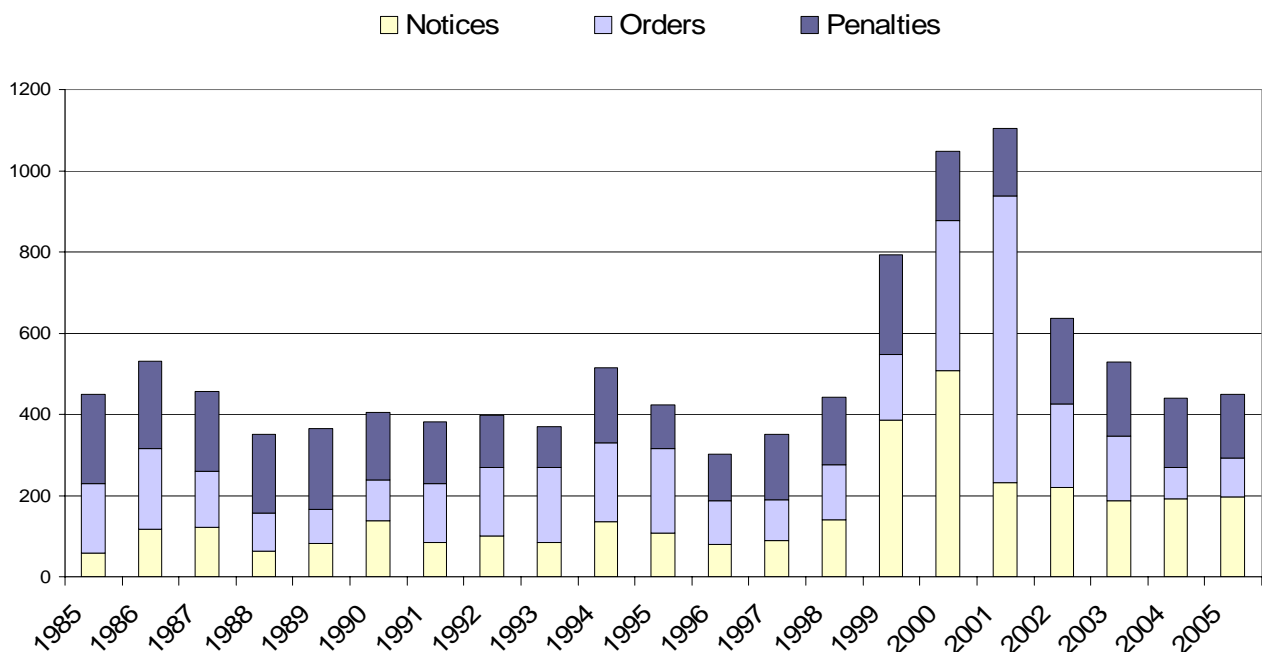
Cumulative Trends in Notices, Orders and Penalties

The following graphs represent 20 years of consistent data collection for agency notices, orders and penalties, and the initial penalty assessment amount (the original dollar amount assessed to the penalized party before any appeal process). Throughout the mid-1980s and mid-1990s, the number of enforcement actions Ecology issued was fairly constant.

Spikes in notices and orders seen in 1999, 2000 and 2001 can be attributed to several new or enhanced programs administered by Ecology that were authorized by either the Washington State Legislature, the federal government or administrative action:

- Increased efforts to control smoke from agricultural burning.
- Targeted hazardous waste inspections.
- 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.)

**Agency-Wide
Notices, Orders & Penalties 1985 - 2005**



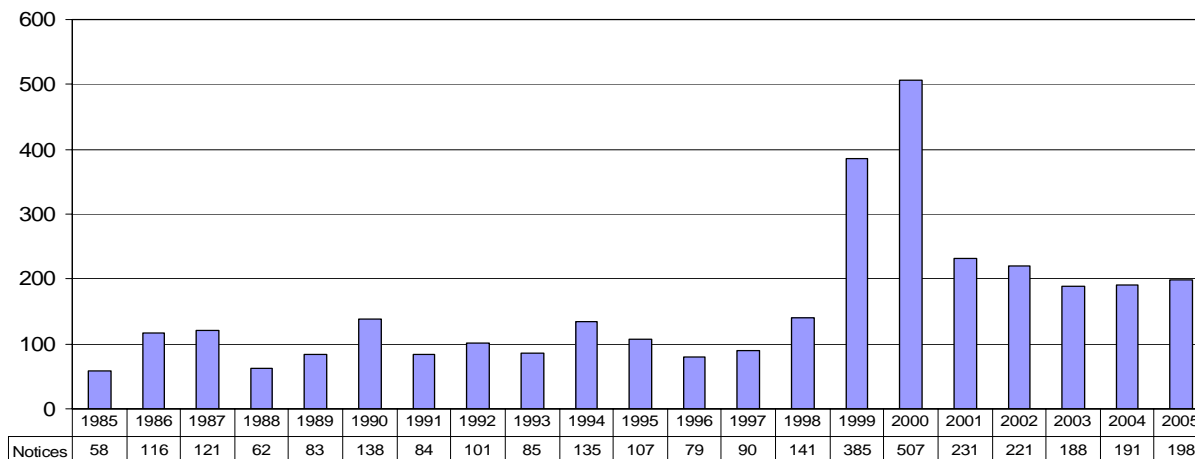
YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Penalty Initial Assessed Amount
1985	58	172	220	450	\$822,028
1986	116	200	216	532	\$1,009,468
1987	121	138	198	457	\$1,046,147
1988	62	94	195	351	\$1,082,875
1989	83	83	199	365	\$1,615,977
1990	138	100	167	405	\$2,566,900
1991	84	146	152	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	108	424	\$696,380
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	\$1,331,430
2003	188	159	181	528	\$1,207,992
2004	191	79	170	440	\$1,465,362
2005	198	96	156	450	\$1,991,441

Penalty amounts Ecology assessed from 1985 to 2005. These figures reflect the initial penalty amount before any appeals process or negotiations where the total amount may be reduced.

Notices

A Notice of Violation or a Notice of Non-compliance officially informs the recipient they have violated or have the potential to violate environmental laws. Notices may not be appealed to the Pollution Control Hearings Board or the Shoreline Hearings Board. In some cases, a field citation up to \$3,000 may accompany a Notice of Non-Compliance.

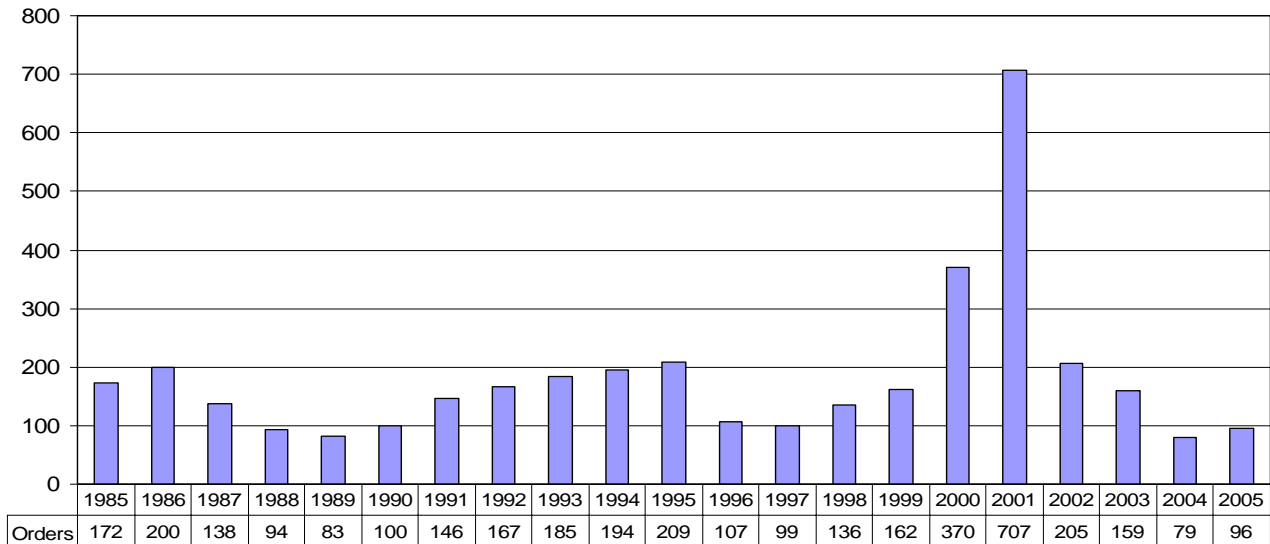
**Agency Wide
Number of Notices by Year
1985 - 2005**



Administrative Orders

An Order is typically a directive requiring a person or business to take steps 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.

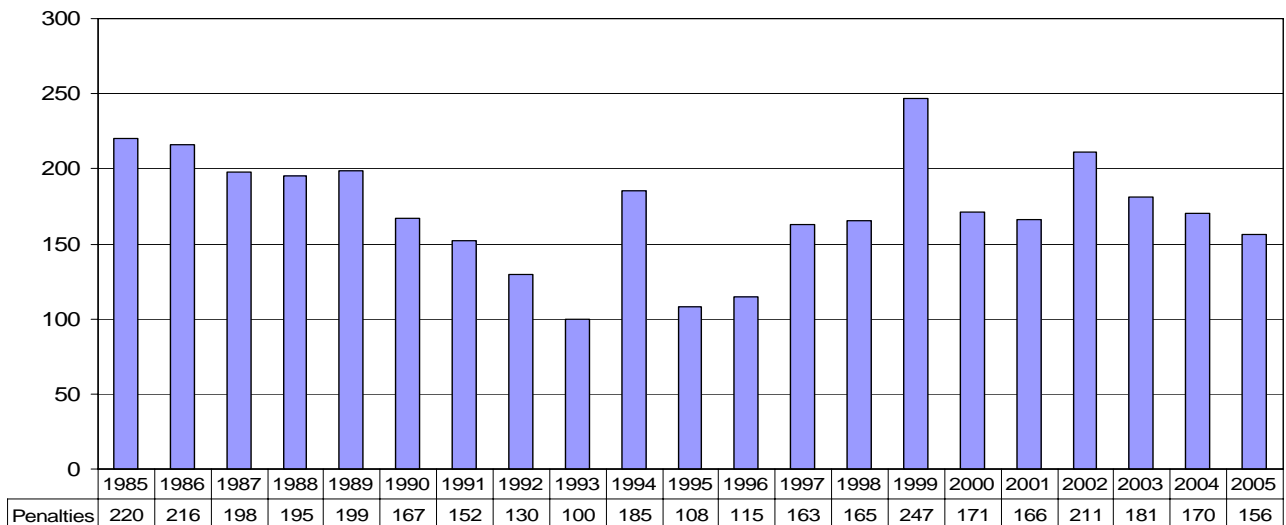
**Agency Wide
Number of Orders by Year
1985 - 2005**



Civil Penalties

In civil penalties, our investigation must establish that a violation of law occurred. State laws authorizing civil penalties 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.

**Agency Wide
Number of Penalties by Year
1985 - 2005**



Criminal Enforcement

To investigate and prosecute a person for an environmental crime Ecology must prove that the person knowingly or intentionally and/or willfully broke the law. Criminal prosecution may also involve fraudulent reporting, testimony, or recordkeeping.

Investigations of possible criminal violations are conducted by the joint Ecology – U.S. EPA Criminal Investigations Task Force. The task force works to leverage state and federal resources and share information. While the number of criminal cases pursued is relatively small, we feel that the penalties and associated jail times are significant deterrents to criminal behavior. Examples of criminal wrongdoing include:

- 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.

The following chart summarizes all actions reviewed and retained for criminal prosecution from 1994 through 2005. Detailed criminal enforcement actions are shown on page 11.

Type of Action	1994–2005 Cumulative Totals
Cases Retained for Criminal Investigations	228
Criminal Warrants Served	82
Cases Referred for Criminal Prosecution (Number of Cases)	145
Criminal Charges Filed (Number of Defendants)	133
Criminal Convictions (Number of Defendants)	115
Penalty Amount Collected	\$34,737,981
Total Time in Jail (Months)	574.9
Total Time in Probation (Months)	2696

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

The numbers in the chart on the next page are not interrelated. Each category is independent of the others. For example:

- No warrant or multiple warrants might be issued before charges are filed or the case is referred for criminal prosecutions.
- Cases may result in no charges or multiple charges being filed against multiple defendants.
- Criminal investigations and prosecutions typically take more than one year to resolve and can result in charges being filed or getting convictions any time during a five year period.

Criminal Enforcement Trends

1994 – 2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Cases Retained for Criminal Investigations	19	47	24	20	31	16	11	12	10	11	14	13
Criminal Warrants Served	8	10	21	8	4	4	2	4	0	0	1	20
Cases Referred for Criminal Prosecution (Number of Cases)	11	14	17	10	19	11	11	5	9	10	16	12
Criminal Charges Filed (Number of Defendants)	9	25	11	17	17	9	10	6	7	8	11	3
Criminal Convictions (Number of Defendants)	4	18	11	13	19	9	9	6	1	13	7	5
Penalty Amount Collected	\$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
Total Number time in Jail (Mo.)	11	76	143	72	78.6	30	36	36	0	60.3	1.0	31.0
Total Number Probation (Mo.)	300	276	339	300	511	206	246	96	12	168	108	134

* 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.

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

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. We consider several factors when determining the appropriate penalty amount to assess:

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; and
- Precautions taken to prevent the violation.

2. The prior behavior of the violator:

- Record of similar violations or a pattern of violations; and
- 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; and
- Compensation paid or agreed to for damages to public resources.

Penalties typically come due and payable to Ecology in one of four ways:

1. The violator does not file an appeal within the allowed time period;
2. The violator files an "Application for Relief", whereupon we 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; or
4. The violator and Ecology negotiate a traditional or innovative settlement agreement that may include a Supplemental Environmental Project.

Negotiated settlements can include:

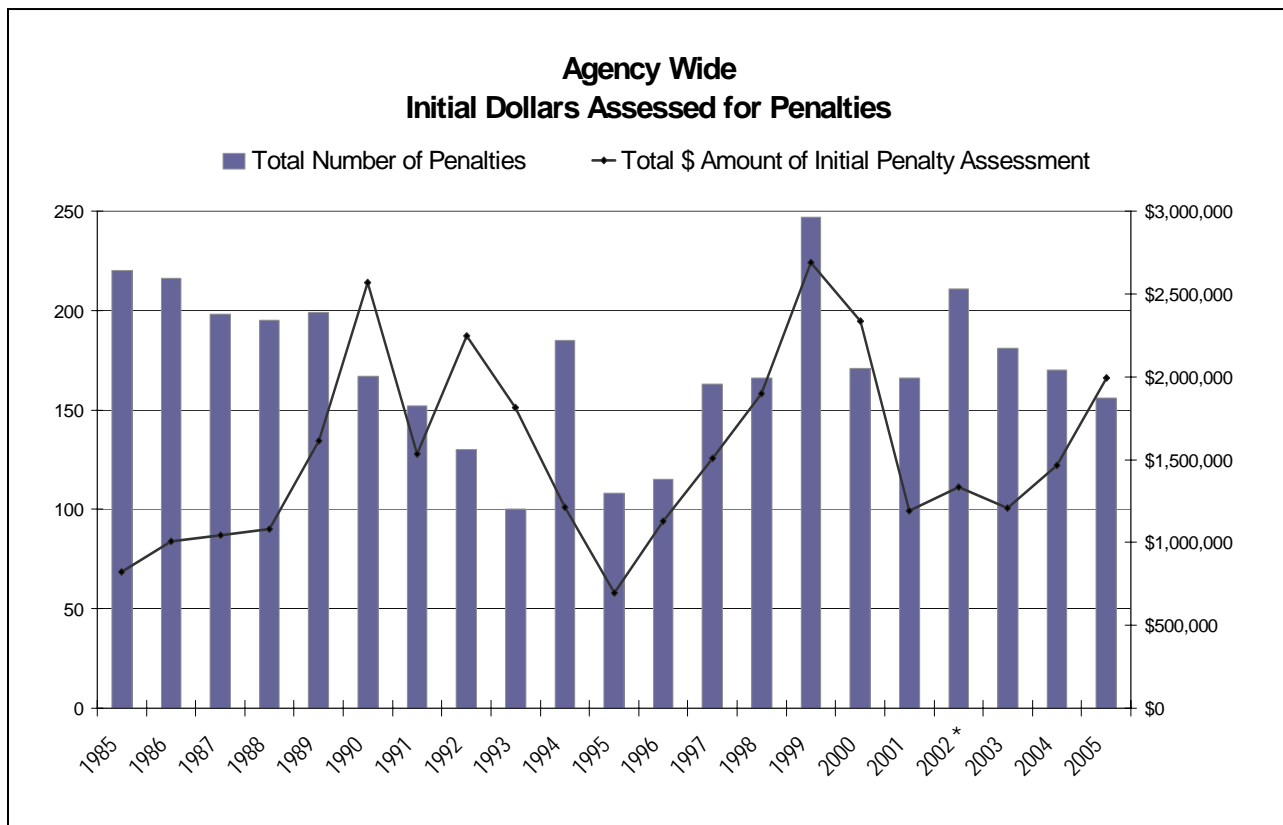
- A reduction in the dollar amount of the penalty; and/or
- An innovative settlement in the form of a Supplemental Environmental Project.

We make every effort to effectively and efficiently collect the final penalty. If a violator fails to pay a penalty Ecology will refer the case to the state Attorney General's Office. The Attorney General's Office decides what action they will take like seeking a judgment in Superior Court or the services of a collections agency.

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

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

Also, 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 the current amount of initial penalty dollars assessed. The pie graph, on the following page, shows the amount paid, the reduced amount, amount under appeal, and the outstanding balance owed (not under appeal).

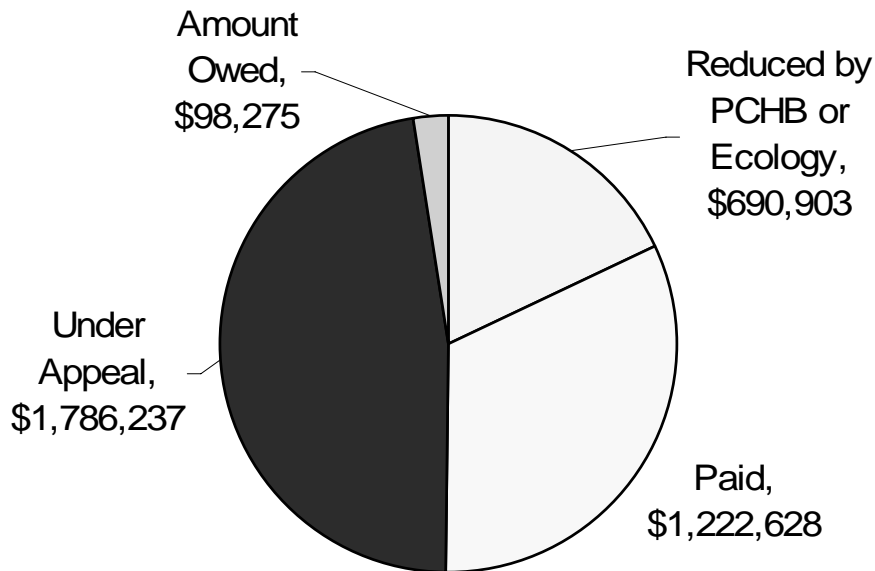


* 2002 totals exclude \$15,720,000 for the Olympic and Shell Pipelines.

Status of Penalty Assessments

July 2003 to December 2005

***Initial Assessments \$3,798,043.00**



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

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.

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 penalty 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, mitigate or restore damage done to the environment. We also encourage the use of pollution prevention strategies to reduce future environmental damage. Penalties can not be reduced for actions or activities already required by law or 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.

2005 Innovative Settlements:

Glacier Bay Catamarans, Monroe

\$22,200 of their \$39,000 penalty will be used at two sites for five SEPs for waste reduction. Violations included: failure to designate hazardous waste, inadequate container management, and inadequate or missing personnel training and contingency plans. Glacier Bay Catamarans worked with us to put on a free "Environmental Seminar for Fiberglass Reinforced Plastics Manufacturers" in 2005. This included a presentation of the fiberglass-boat industry open house with sessions acknowledging problems, sharing technology, and proposing long-term solutions. They also developed a program to motivate employees to stay in compliance and suggest waste reduction strategies.

Glacier Bay Catamarans is now using leftover resin to make trailer chock blocks for the boat trailers and are developing a tool to air clean resin off their fibreglassing tools. Finally, they developed a resin mixing machine that will mix just the right amount of resin and catalyst to prevent leftover unused resin. The unused resins they were previously generating had to be treated before being thrown away and tools had to be cleaned using acetone, which produced hazardous waste. These projects help keep treated waste out of the waste stream as well as reduces the hazardous waste generated.

Freedom Marine, Spokane

\$17,058 of their \$23,470 penalty, for illegally discharging a hazardous substance into a storm drain, will be used to design and construct a utility work boat they will give to the City of Spokane Wastewater Management Department. The city will use the boat to sample and monitor water quality in the Spokane River basin. They will also operate a pollution prevention program at their facility. The pollution prevention program will include a "lean and clean" manufacturing process to reduce or eliminate the waste they generate during boat manufacturing and repair activities.

Janicki Industries Inc., Sedro-Woolley

Janicki Industries received a \$40,000 penalty for failure to report and take action to mitigate a spill of unsaturated polyester resin resulting in the illegal disposal of dangerous waste to the sewer. They also lacked emergency procedures in case of spills. \$32,000 of their \$40,000 penalty was used in SEPs such as hosting an Environmental Compliance and Safety Workshop to representatives from 20 local manufacturing companies in Skagit and Whatcom County. Janicki Industries also purchased emergency equipment and provided hazardous waste and emergency & safety training to employees above and beyond what

would otherwise be required. They are also working with the Economic Development Association of Skagit County to distribute Ecology publications on state environmental regulations.

Kaiser Aluminum & Chemical Corp., Trentwood

\$30,000 of their \$40,000 penalty will be used by Spokane County to drill monitoring wells to evaluate the Spokane aquifer in areas currently without monitoring wells. The penalty was for discharging polychlorinated biphenyls (PCBs) into the Spokane River. The results from the environmental project will give Washington and Idaho a scientifically sound body of information to base future water management decisions in the Spokane-Coeur d'Alene area.

Portac Inc, Forks

\$6,500 of their \$13,000 penalty was used to purchase and preserve sections of the Hoh River, in the Olympic National Park. Portac was fined for allowing its polluted processing water to flow into a ditch, and for a failing to prevent its wood and ash waste from coming into contact with rain water. Portac's SEP puts the land along the Hoh River into a permanent conservation easement.

Weyerhaeuser Company, Raymond

\$19,000 of their \$49,078 penalty was used for a project to open up a blocked stream and salmon rearing habitat along Middle Creek, a tributary to Willapa Bay. The original fine was for failing to properly monitor and report flow and pollution levels from wastewater. The \$19,000 was settled out of court and designated for the restoration project managed by the Willapa Bay Fisheries Enhancement Group.

Sound Refining Inc., Tacoma

\$14,880 of their \$24,700 penalty was used to hire a consultant to conduct an environmental audit in order to comply with Hazardous Waste Regulations. The previous owners failed to complete permit monitoring requirements and to comply with Hazardous Waste Regulations. The consultant helped the company establish a process to make sure no monitoring is missed. The company now tests waste to determine whether it is toxic, and if it is toxic, how it is to be handled and tracked. This closer scrutiny will ensure that Sound Refining stays in compliance and thus helps to protect the environment.

Steel Painters Inc., Longview & Kelso

\$7,187 of their \$9,000 penalty was put towards community projects. Steel Painters Inc. failed to: properly handle and contain dangerous waste, keep adequate inspection logs, prepare and maintain personnel training plans, and submit Annual Reports. Besides getting back into compliance, Steel Painters agreed to do a number of local community projects like build, install, and paint steel railings for the fire department and marine response training facilities. They also built and painted animal pens for the local fair grounds.

Specialty Products Inc., Lakewood

\$4,000 of their \$16,000 penalty was paid to local fire departments to provide oversight to businesses to manage ignitable dangerous waste. Specialty Products Inc. failed to designate dangerous waste, properly accumulate dangerous waste, mitigate or report spills, or notify Ecology in order to meet minimum dangerous waste generator requirements.

Department of Corrections, McNeil Island Correctional Center

\$48,000 of their \$60,000 penalty for seven Department of Corrections' facilities was spent on improvements to plant management practices and audits, and comprehensive management trainings to improve the water quality. Corrections hired a consultant to audit their seven wastewater plants and create plans to improve management, staff training, and operations. The consultant also provided specified training. Corrections has shown improvement with compliance.

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 afflicted with 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 also causes 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.

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

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

1. Prevent 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 and dust.
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 following tools and has observed the following trends:

Responsibility for Air Quality

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, and their own local rules developed to meet the specific needs of the community.

Air Quality Permits

Local air pollution control agencies and Ecology issue permits to 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. Air permits are also issued for agricultural and land clearing burning to make sure farmers 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.
- Improve 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 significant amount 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 us and the regulated community.
- Mutual voluntary agreements and negotiated orders to solve 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.
- Directing sources 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 ambient standards and health-based air quality 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, a number of urban areas in the state remain close to violating one or more of the federal standards. In addition to the six criteria pollutants above, hundreds of other toxic or hazardous air pollutants enter the atmosphere from a wide 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 conducted toxic air pollutant studies in several locations in the Seattle, Vancouver and Spokane areas. The initial results of those studies indicate that diesel vehicle exhaust; wood smoke and evaporative emissions 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 facility is emitting more air pollution than state rules or permit requirements allow. Minor violations that do not have significant environmental impact are normally resolved through technical assistance and education instead of enforcement.

Agricultural burning enforcement has declined over the last several years. The Air Quality Program has begun to shift focus from agricultural burning to outdoor open burning 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.

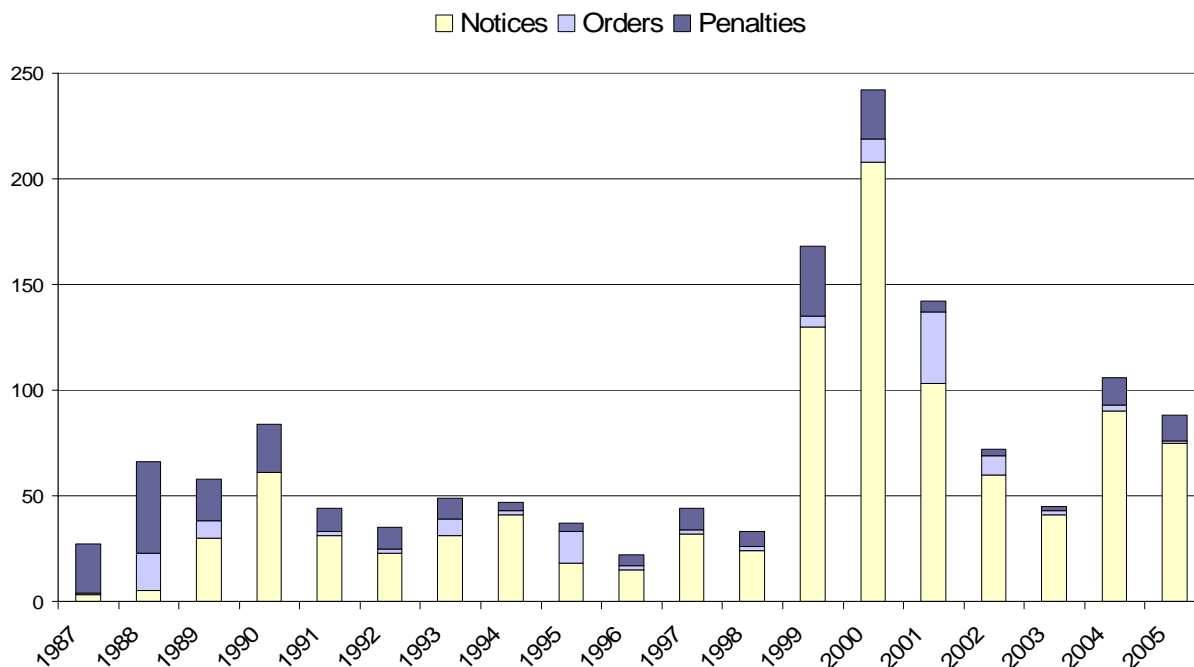
Ecology's outdoor burning enforcement activity has increased for two main reasons.

1. As agricultural burning compliance improves Ecology is shifting their efforts to outdoor burning.
2. The laws have changed to 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 prohibited materials 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.

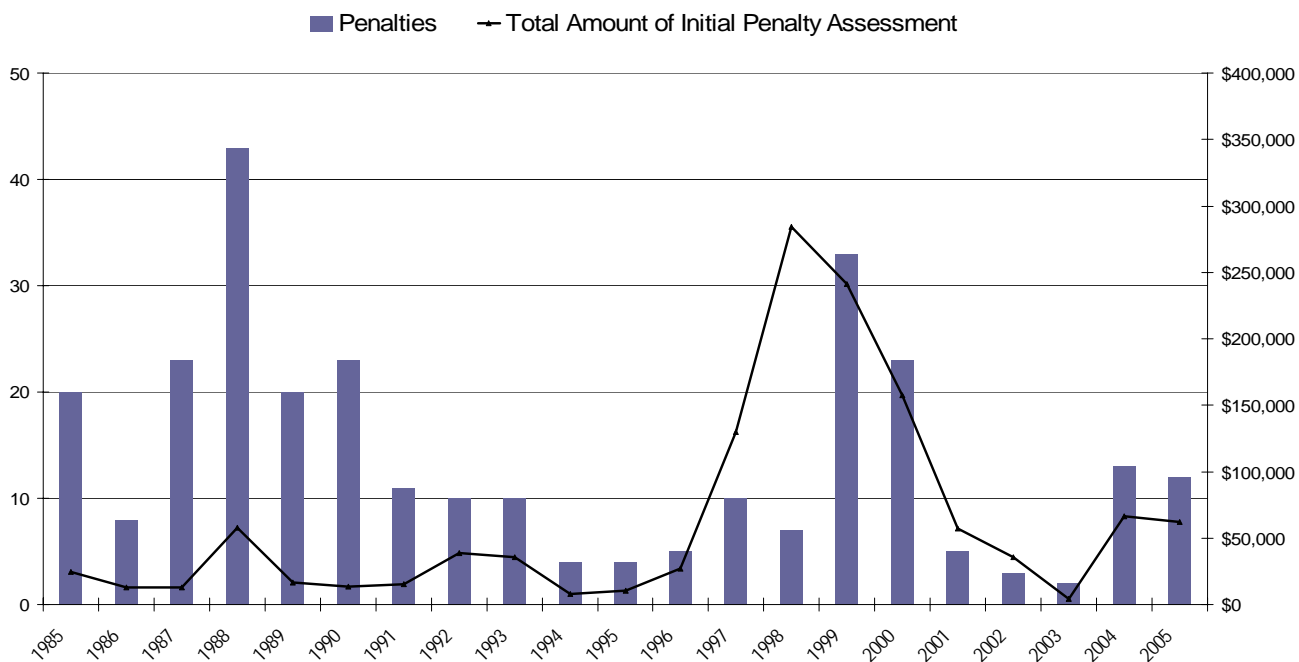
For more information about air quality in Washington State, please visit Ecology's web site at: <http://www.ecy.wa.gov/programs/air/airhome.html>.

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

Air Quality Program Notices, Orders & Penalties 1985 - 2005



Air Quality Program Initial Assessed Penalty Trends 1985 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

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 chemicals that create wastes that can contain toxic chemicals. When chemicals become a hazardous waste, they are potentially harmful to the environment and the public. Many toxic waste chemicals remain in the environment for a very long time and can build up in the food chain.

Currently, about 7,000 hazardous waste generators report more than 113 million pounds of hazardous waste annually in Washington (2004 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 and closure 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 properly treat and dispose of hazardous waste from around the state. In addition to their operating permit, Ecology requires these facilities to have a closure plan. 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 return the land to look and be used like the surrounding land.

To help hazardous waste generators comply with the dangerous wastes rules Ecology provides more than 350 technical assistance visits and 300 compliance inspections each year to businesses and facilities. We also offer annual workshops to thousands of

businesses to show them how to reduce and manage their wastes. 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.

Compliance Assurance

Ecology expects dangerous waste generators to voluntarily comply with the state dangerous waste rules, Chapter 173-303 WAC. Employees in the Hazardous Waste and Toxics Reduction Program use a variety of tools to help educate facilities on the rules: written and web-based material, yearly generator workshops, and dedicated web site pages with information for specific industries like construction and demolition.

Ecology will conduct on-site compliance assistance visits upon request. Ecology has developed a very effective tool called the Technical Resources for Engineering Efficiency (TREE) program. The TREE program is funded through a tax on dangerous waste, to help businesses reduce their waste through process and product changes. This 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. More information about this program can be found on Ecology's web site at: <http://www.ecy.wa.gov/programs/hwtr/TREE/index.html>.

To measure the success of hazardous waste technical and compliance assistance, Ecology routinely conducts unannounced inspections on businesses. 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 more formal actions such as administrative orders or civil penalties 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).

Environmental Trends

In 1992, Washington industries generated 317 million pounds of hazardous waste. By 2004, the amount was reduced by 204 million pounds to 113 million pounds. This 60 percent reduction was due to: pollution prevention awareness, implementing pollution prevention business practices, reduced business activity and improved compliance with rules.

Enforcement Trends

In early 1996, the Hazardous Waste and Toxics Reduction Program analyzed data to find out if technical assistance and compliance inspections were helping reduce the amount of environmental problems at the facilities that generate hazardous waste. The program looked at the total number of “compliance indicator violations” found during all of the inspections conducted each year.

“Compliance indicator violations” are specific violations of the dangerous waste rules and are always covered during an inspection. The following indicator violations have been consistently applied since 1991 and are used to create trend graphs:

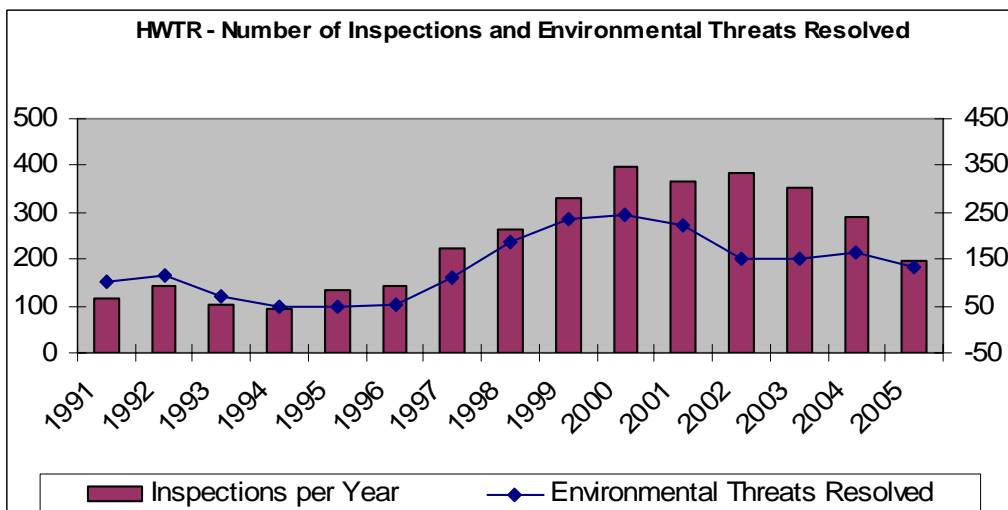
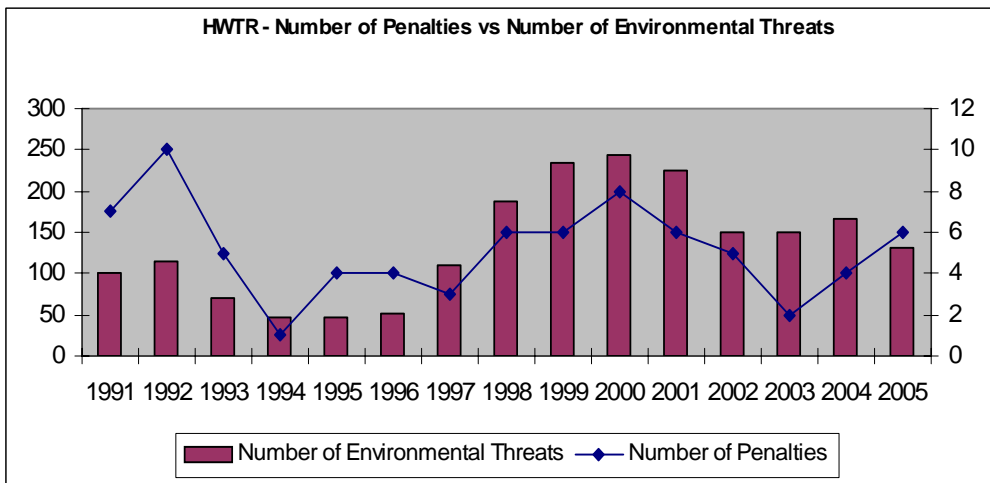
- Spills to the environment
- Illegal disposal of a hazardous waste
- Failing to check if wastes were hazardous
- Serious waste storage (container) violations

Results of the analysis shows that when inspectors emphasize technical assistance environmental threats decrease. However, to further reduce environmental threats, the Hazardous Waste and Toxics Reduction Program 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 targeting strategy is still effective or if change is required.

The graph below shows the number of penalties and environmental threats Ecology found during compliance inspections. In general, penalties track fairly closely to the number of environmental threat violations found during inspections.

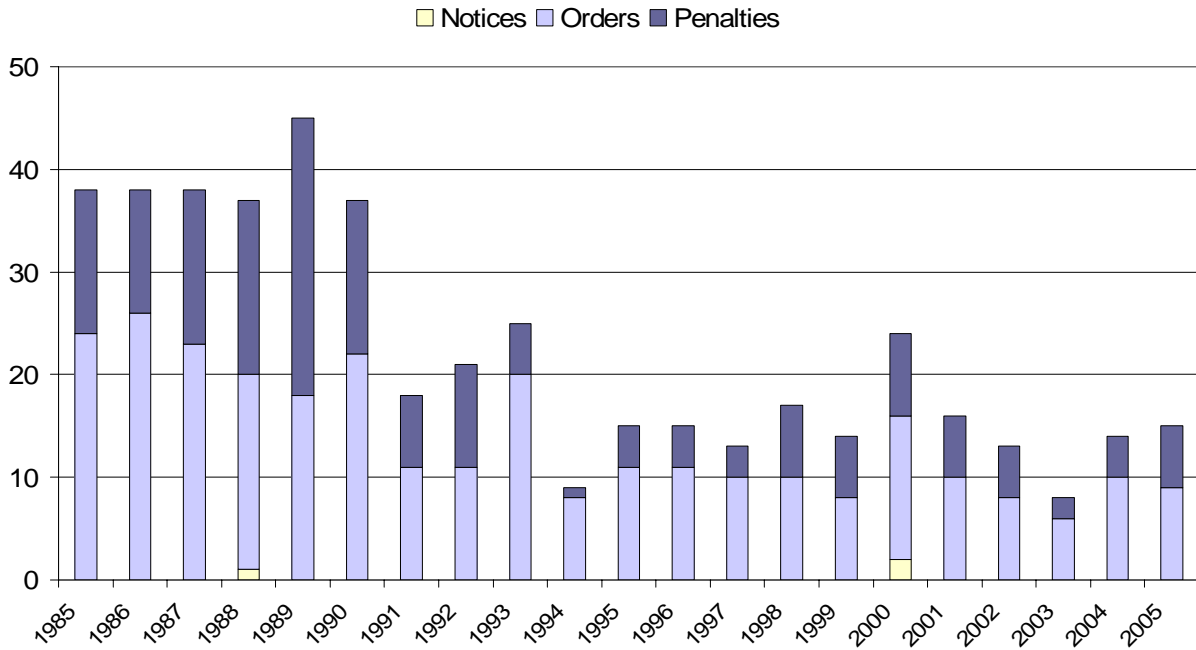


The graph above shows the number of compliance inspections and environmental threat violations Ecology found and resolved. The EPA gave national recognition to our Hazardous Waste and Toxics Reduction Program for their success in resolving violations.

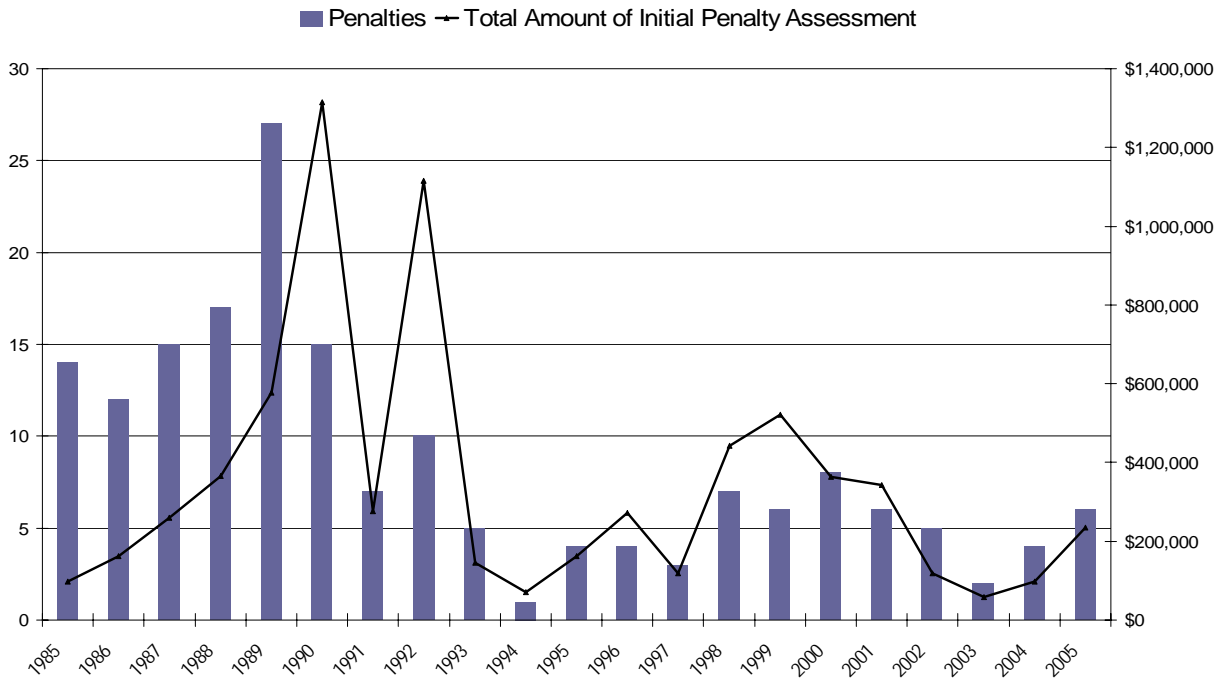
For more information visit: <http://www.ecy.wa.gov/programs/hwtr/index.html>.

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

Hazardous Waste Toxics Reduction Program Notices, Orders & Penalties 1985 - 2005



Hazardous Waste Toxics Reduction Program Initial Assessed Penalty Trends 1985 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

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.

Ecology has a unique section within the Solid Waste and Financial Assistance Program that focuses on multimedia permits and compliance for three major industries of Washington State: aluminum smelters, oil refineries and pulp-and-paper mills. Industrial Section employees are trained to handle the complexities of these industries and 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 some additional responsibilities, including water, waste, and clean up issues at Agrium (a fertilizer manufacturer), Kalama Noveon (a chemical manufacturer), and Lilyblad (a chemical blender).

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.

Multimedia Permits

The Industrial Section issues and manages the following types of permits for the 29 major industries of Washington State:

- Wastewater discharge permits
 - 33 National Pollutant Discharge Elimination System (NPDES) Permits.
 - 9 state wastewater discharge permits.
- Title V Air Operating Permits:
 - 12 air operating permits for aluminum and pulp-and-paper mills.
- Resource Conservation and Recovery Act (RCRA) permits
 - 4 RCRA permits for oil refineries.

Environmental Trends

Environmental effects in the surrounding air due to the regulated industries continue to decline, particularly compared to other sources such as motor vehicles. Maximum achievable control technology (MACT) standards for controlling hazardous air pollutants further regulate industrial air emissions. The first stage of MACT standards went into effect in 2001. Additional stages now apply, and at least two more stages 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.

The Industrial Section rigorously analyzes and controls point source pollution more than non-point source pollution. Environmental data, including data from studies funded by the permitted industries, and analysis of environmental trends are used to make future permitting decisions.

Enforcement Trends

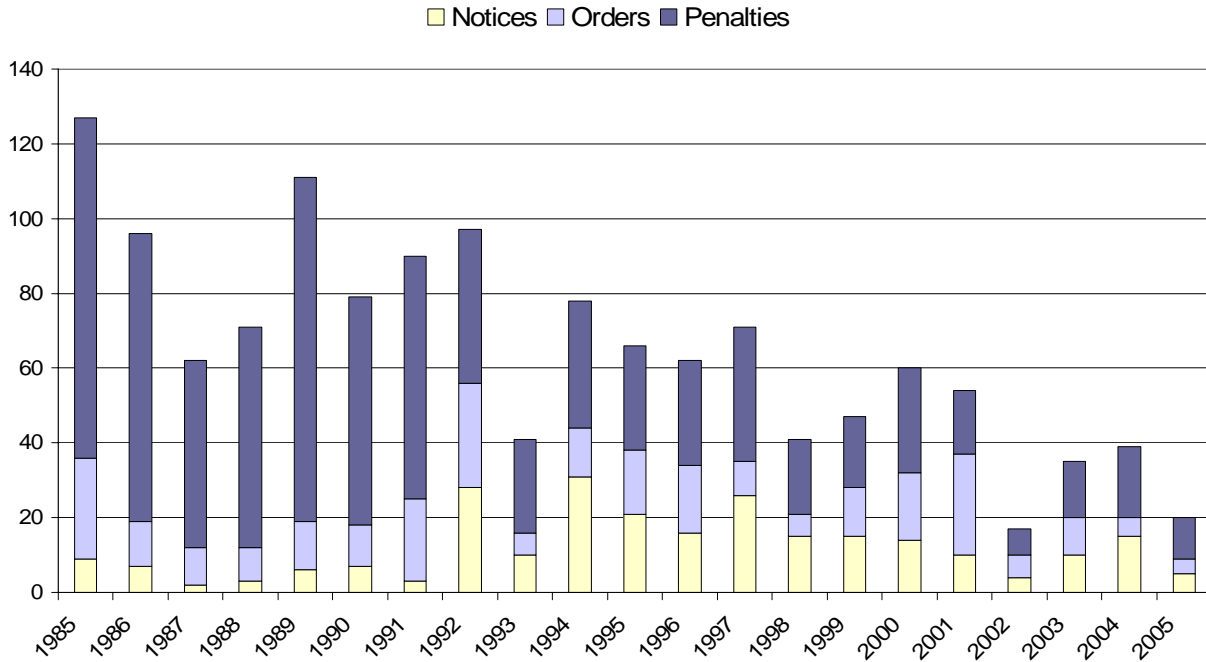
The economy contributed to a reduced number of enforcement actions during the last several years. High electrical costs resulted in operations being curtailed at most aluminum smelters in the state. Sluggish economic activity reduced demand for packaging products produced by the pulp-and-paper industry. Reduced mill activities, accompanied by industry efforts to achieve compliance with environmental requirements, contributed to a reduction in enforcement actions.

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

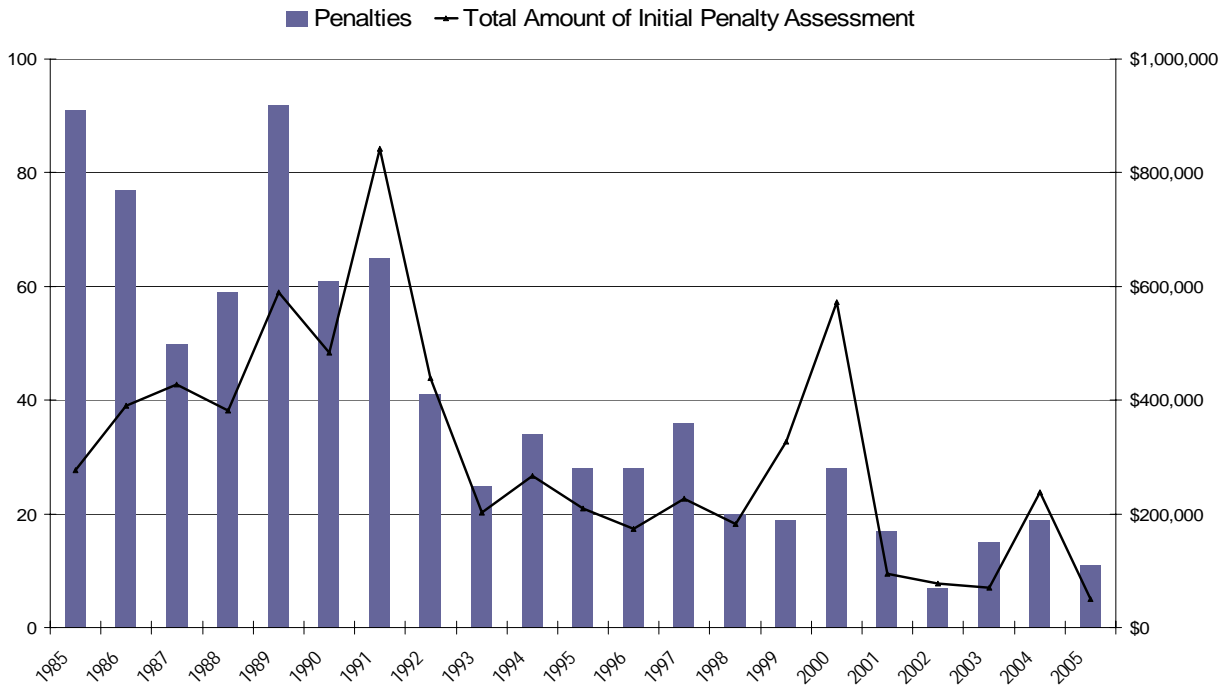
The following chart shows the total number of enforcement actions, by type, per year for violations at pulp and paper, aluminum and oil refining industries. This chart includes the initial amount of the penalty assessment.

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

Industrial Section Notices, Orders & Penalties 1985 - 2005



Industrial Section Initial Assessed Penalty Trends 1985 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

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 located 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.
- Treating and protecting 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 they comply 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, contaminated groundwater, and buildings

Most of these activities must comply with the requirements of the Hanford Federal Facility Agreement and Consent Order: a consent order developed between the U.S. Department

of Energy, the U.S. Environmental Protection Agency and Ecology to keep cleanup at Hanford moving forward. This consent order, signed in 1989, is commonly referred to as the Tri-Party Agreement.

In addition to the requirements of the Tri-Party Agreement, most cleanup activities must 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 liquid discharges.

Compliance Assurance

Ecology maintains a close working relationship with Department of Energy and their contractors located on-site. Permit conditions are typically developed together, and all parties meet almost every day 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 Hanford contractors and project managers.

If the Department of Energy 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 into the various dangerous waste operating permits to help avoid repeat violations.

Environmental Trends

When the Department of Energy entered into the Tri-Party Agreement with the Environmental Protection Agency 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 tank waste in 177 single-shelled, aging storage tanks and cleanup of contaminated sites along the Columbia river.

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 utilized to address regulatory violations when needed. As more facilities within the Hanford site are incorporated into the Hanford facility dangerous waste operating permit, or as more cleanup units are added into the Tri-Party Agreement, enforcement actions increasingly tend to be focused 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.

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

- Issued 71 notices of violation with accompanying 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.

The formal enforcement actions were generally taken after the Department of Energy failed to voluntarily resolve dangerous waste management problems, when violations were more severe, or where the violations were recurrent.

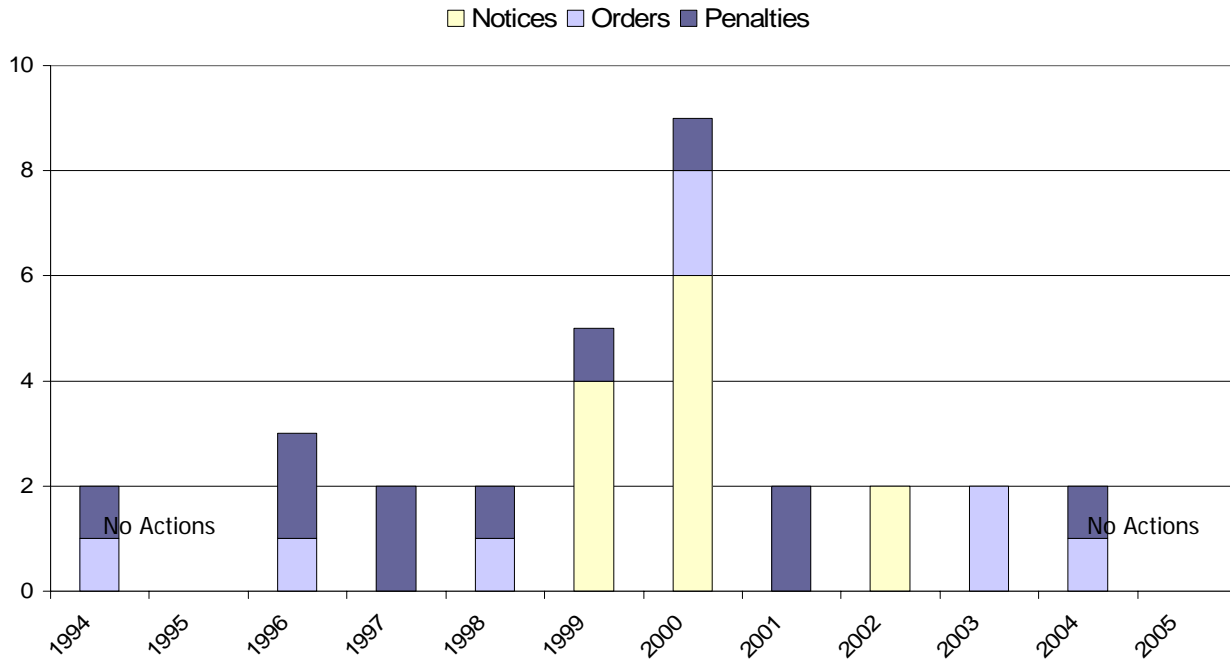
The graphs at the end of this section appear to show a cyclical pattern of enforcement actions, but this is merely coincidental. Issuing enforcement actions depends upon a number of factors, including the types of operations occurring on Hanford at the time, and degree of success in resolving hazardous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

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

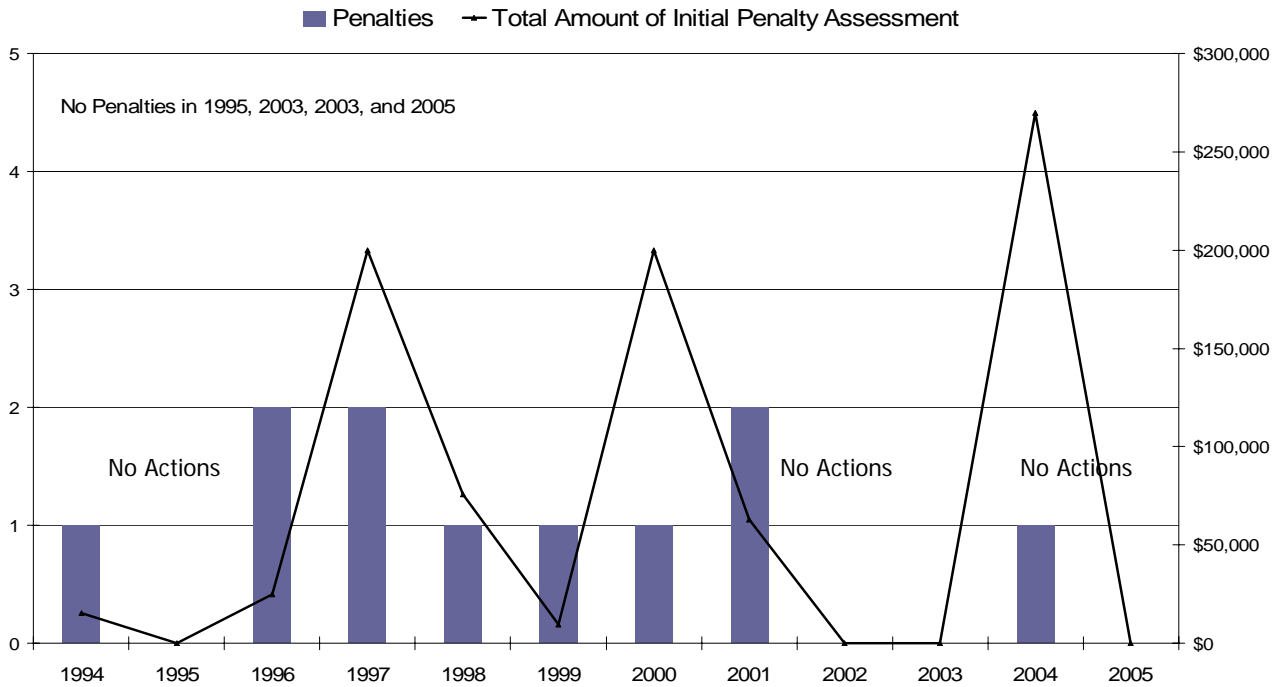
The following chart shows the total number of formal enforcement actions, by type, per year for violations at the Hanford Nuclear Reservation. This chart includes the initial amount of the penalty assessment.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1994	0	1	1	2	\$15,500
1995	0	0	0	0	\$0
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

Nuclear Waste Program Notices, Orders & Penalties 1994 - 2005



Nuclear Waste Program Initial Assessed Penalty Trends 1994 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

Shorelands Management

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.

Since the early 1970s, Ecology has been the lead agency for developing long-term strategies for managing the state's shorelands. This includes approximately 800 lakes, 22,000 river miles, countless wetlands and 2,337 miles of marine shorelines along the Pacific Ocean and the Puget Sound Basin.

Ecology works in partnership with local governments to protect and maintain shoreline health. Local governments, through their zoning and land use rules, are the primary regulatory authority for managing shorelines. Ecology's role is to adopt shoreline management guidance (as a state regulation) based upon state law and to ensure compliance with the laws and rules.

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

- Wetlands,
- Floodplains,
- Estuaries,
- Beaches,
- Dunes,
- Barrier reefs,
- Coral reefs and
- Fish and wildlife habitat.

Ecology provides technical and financial assistance to local governments on coastal and floodplain development to protect water quality, wildlife habitat, human health and property.

To achieve its mission, Ecology's Shorelands and Environmental Assistance Program are working on these objectives:

- Protect, restore and manage shorelands and wetlands, in partnership with local government.
- Streamline review of environmental permits for major transportation projects.
- Provide technical and financial assistance to local governments to reduce flood hazards.

- Provide technical training, education and research through the Padilla Bay Estuarine Reserve.
- Provide technical and financial assistance for local watershed planning.
- 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.

Shorelands and Coastal Zone Management Permits

Approximately 250 counties and cities in Washington have the primary responsibility to administer and enforce the state Shoreline Management Act. Ecology's role is primarily supportive, including a review capacity with emphasis on providing assistance to local government and ensuring compliance with the Shoreline Management Act and state shoreline management guidelines.

Under the Shoreline Management Act, Ecology reviews about 400 substantial development permits from local government and approves, denies or conditions approximately 150 variances or conditional use permits each year. Ecology also has been delegated authority from the federal government, under the Federal Clean Water Act, to review projects that may affect water quality or a wetland. A 401 water quality certification is issued for projects to make sure they protect water quality and wetlands. Ecology inspects these projects for compliance with their 401 certification. Projects that are out of compliance are subject to formal enforcement action.

401 Certification Permits

The Federal Clean Water Act, Section 401, requires states to review projects that require a federal permit or license where the project may result in a discharge to waters of the United States. Applicants for those permits or licenses must first get a 401 certification from the state to prove that the proposed project will meet state water quality standards and other aquatic protection regulations. The 401 Certification covers both the construction and operation of the proposed project.

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

Compliance Assurance

Ecology expects all applicants to comply with conditions of 401 certifications, water quality laws and regulations. Education and outreach to citizens and local government officials are

a frequent and fundamental responsibility of many Ecology employees. Both pre- and post-application review of permits for shoreline development also assists with compliance.

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

Ecology works hard to make sure all projects and entities know the intent of the law and how to comply with it. If an enforcement action is necessary, Ecology will make sure the penalty is appropriate by following the enforcement guidance in 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

Unlike most programs at Ecology, the Shoreline Management Act regulates land use. As the amount of shoreline property is essentially fixed, infilling at less desirable building sites is inevitable due to population increases and other developmental pressures. Therefore, it is apparent that far more shoreline resources are lost or diminished through development than are restored. Ecology has made the strategic decision that the best way we can protect shoreline resources is to improve local shoreline master programs and provide technical assistance to local government administrators. Currently, Ecology does not have a meaningful inventory of shoreline resources to indicate the status of the resource over time.

The 401 program is requiring monitoring results to be submitted to Ecology so we may be able to see a trend in the future.

Enforcement Trends

Shoreline Management Act

A typical violation of the Shoreline Management Act occurs when someone violates the conditions of a permit or attempts to develop on the shoreline without a required permit. In practice, this is often building within a buffer zone or filling in a wetland or a flood zone.

Most enforcement of the Shoreline Management Act is done at the local government level and is not reported to Ecology. So, it is hard to know how much enforcement is going on. The graphs on the next page illustrate a trend away from Ecology penalties (late 1980s and early 1990s) toward Notices of Correction (after 2000) when this tool was introduced in regulatory reform legislation. The rise in the number of orders in 2002 and 2003 is due to an increase in water quality certification permits (under section 401 of the Federal Clean Water Act) rather than a change in the Shoreline Management Act enforcement. Efforts in the last several years have been made to improve the local shoreline master programs,

rather than attempting to address shoreline management problems on a project-by-project level through permits or enforcement.

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

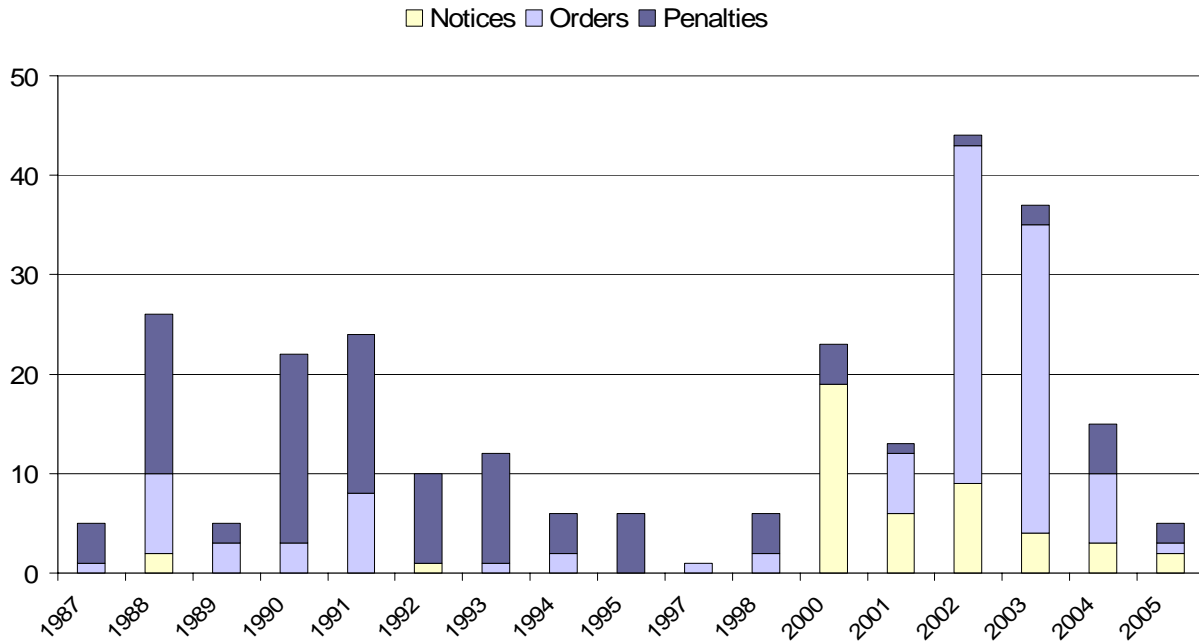
401 Certification Program

There has been no clear trend for enforcement actions or penalties. Ecology is in the early stages of creating and implementing an enforcement program for the 401 certification program. The program will closely follow the Water Quality Program enforcement guidelines.

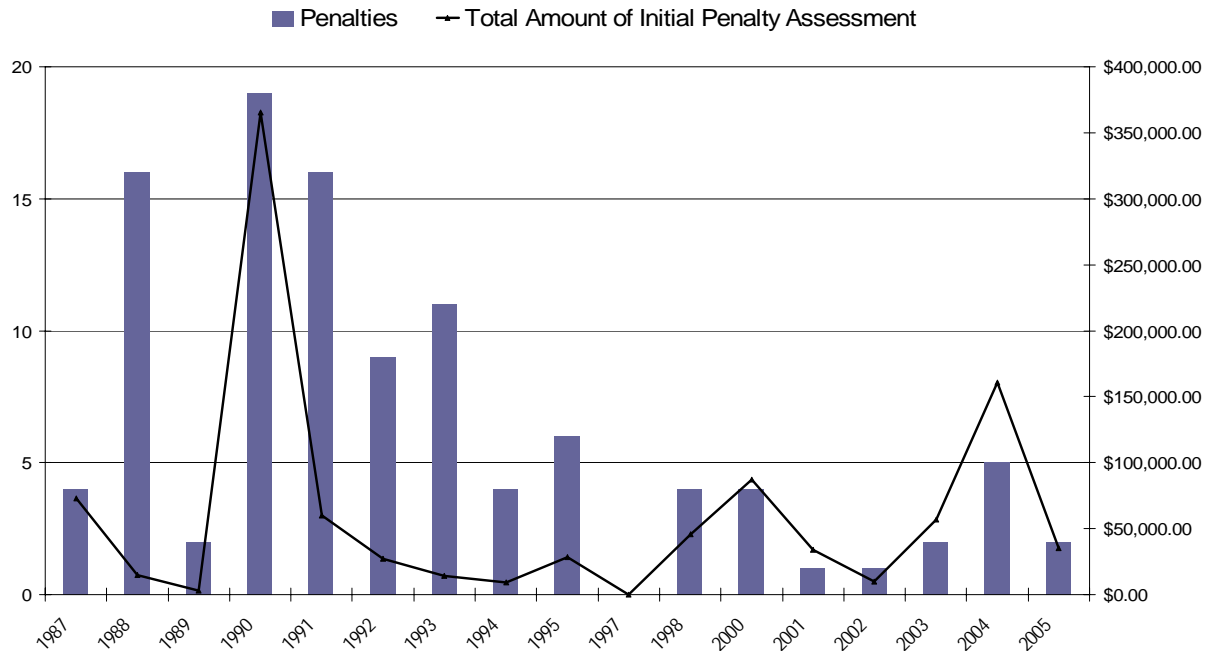
The following chart shows the total number of enforcement actions, by type, per year for shorelands, wetlands and water quality certification violations. This chart includes the initial amount of the penalty assessment.

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	none
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

Shorelands and Environmental Assistance Program Notices, Orders & Penalties 1987 - 2005



Shorelands and Environmental Assistance Program Initial Assessed Penalty Trends 1987 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

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 in our landfills continues to increase each year. Most of the solid waste created in Washington is transferred 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 and
- 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 and provide guidance, technical assistance and financial assistance to local governments.

Biosolids

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.

To achieve its 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

All facilities that manage, apply to land, transport or dispose of biosolids must get a general permit for biosolids management from Ecology. Because biosolids contain both essential plant growth nutrients and small amounts of pollutants and, in some cases, microorganisms, biosolids must be properly treated to protect public health prior to 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 regulated facilities and entities to voluntarily comply with biosolids management laws. 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 magnitude 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 strategic plan for how to decrease the amount of solid waste generated, properly manage wastes that remain, and reduce the use of toxic substances. This plan, called "Beyond Waste," was completed in the end of 2004. For more information about this plan visit Ecology's web site at: <http://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. Biosolid treatment facilities/plants 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 closely with local government to make sure solid waste handling facilities in their areas 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 thus, easy to follow.

Biosolids

In 2004 Ecology sent several *Notices of Corrections* to facilities that failed to submit 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 already 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.

We expect the number of Notices of Correction in 2006 to be relatively high because we intend to apply significant effort to getting all facilities to fully comply. This means there should be a significant decline in the number of enforcement actions in later years.

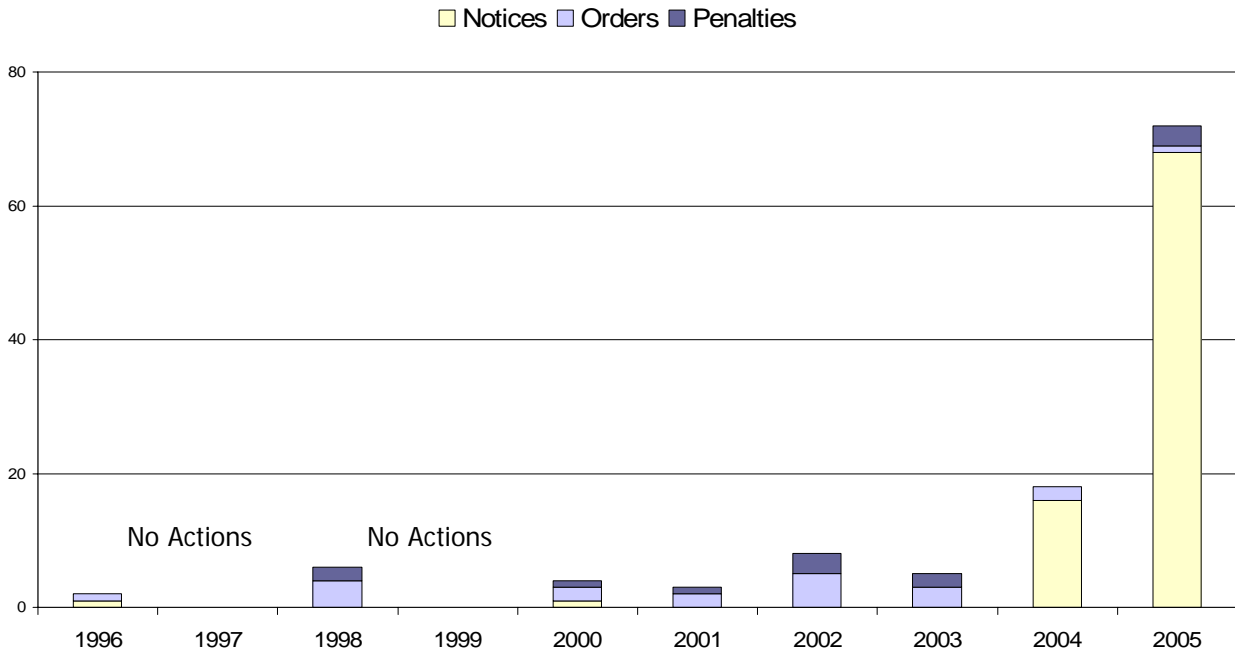
For more information about solid waste and biosolids management, visit Ecology's web site at: <http://www.ecy.wa.gov/programs/swfa/index.html>.

The following chart shows the total number of enforcement actions, by type, per year for biosolids (wastewater sludge) violations. This chart includes the initial amount of the penalty assessment.

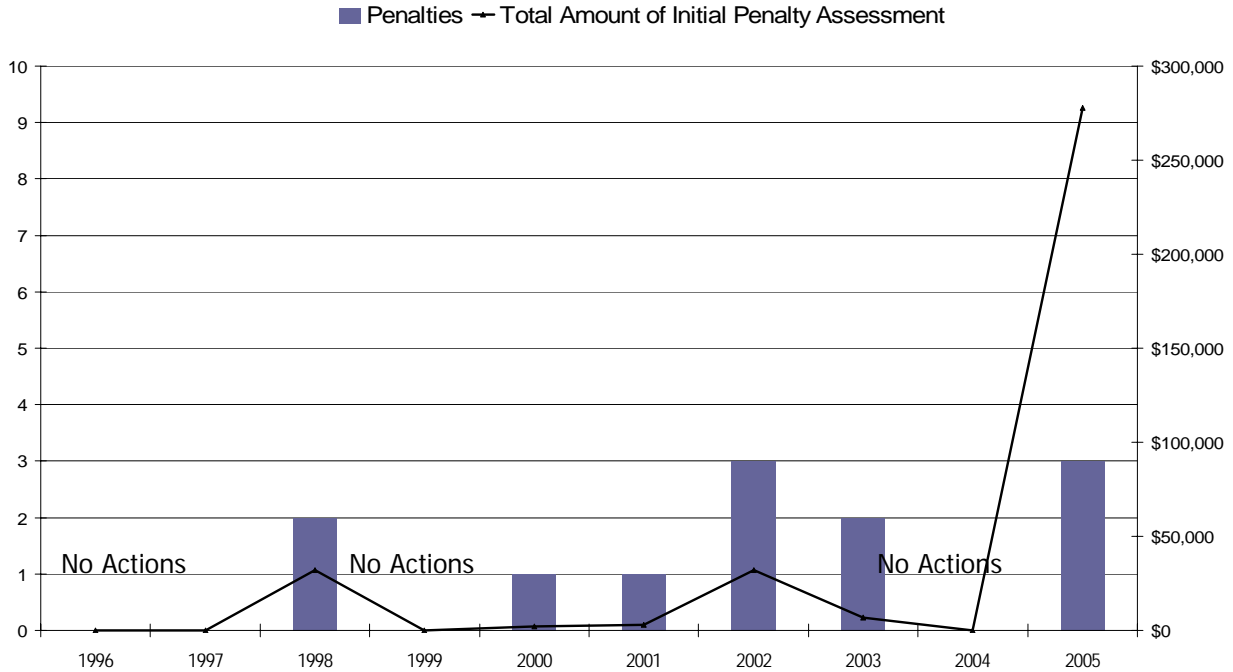
YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1996	1	1	0	2	\$0
1997	0	0	0	0	\$0
1998	0	4	2	6	\$32,000
1999	0	0	0	0	\$0
2000	1	2	1	4	\$2,000
2001	0	2	1	3	\$3,000
2002	0	5	3	8	\$32,000
2003	0	3	2	5	\$7,000
2004	16	2	0	18	0
2005	66	1	3	70	\$277,740*

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

Solid Waste Financial Assistance Program Notices, Orders & Penalties 1996 - 2005



Solid Waste Financial Assistance Program Initial Assessed Penalty Trends 1996 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

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, and the public's health and safety. 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.

Prevention

Prevention is planning and education. Vessel inspectors focus on the safe operation and fueling of commercial vessels. Facility planners review the personnel training program, operations manual, safety systems and spill prevention programs of oil handling facilities. Vessel inspectors and facility planners use each visit to inform personnel of prevention measures to use and the need to keep oil from Washington waters. 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.

Approximately 2,600 commercial vessels enter Washington waters each year. Ecology vessel inspectors conduct about 1,000 onboard vessel inspections per year and facility planners have 35 oil handling facilities they must inspect to verify they comply with state requirements.

Preparedness

Ecology requires all oil handling facilities and commercial vessels develop and maintain a spill contingency plan to prepare for 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, Ecology responds to make sure the spill is quickly contained and cleaned up. Ecology's response unit works both locally and regionally with fire, police and health agencies to improve response times and effectiveness.

Environmental Trends

From 2000 to 2002, the number of spills increased from 33 to 39, and the amount of oil increased from 10,769 gallons to 32,683. But since 2003, the number of spills and the amount of oil has declined. In 2005, there were 21 spills to water that amounted to 2,514 gallons of oil.

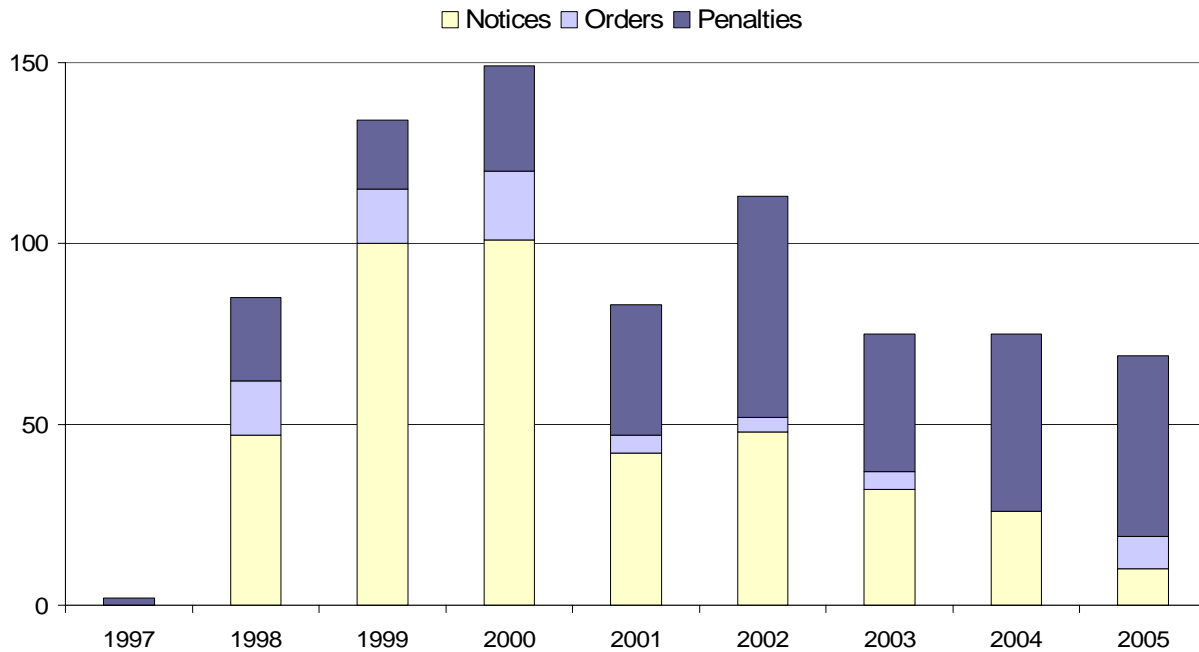
Enforcement Trends

Enforcement seems to run in cycles, as the following graphs show. The Spills Program uses a Citation and a more formal Notice of Penalty to impose monetary penalties on parties that spill oil to Washington waters. The Citation is used by on-scene responders for minor spills involving 100 gallons or less. Notices of Penalty are issued for larger and more complex oil spills. In 2005, the number of penalties issued dropped dramatically but the dollar amount assessed increased significantly. Based on data from 2002 through 2005, there seems to be an inverse relationship between Citations and Notices of Penalty.

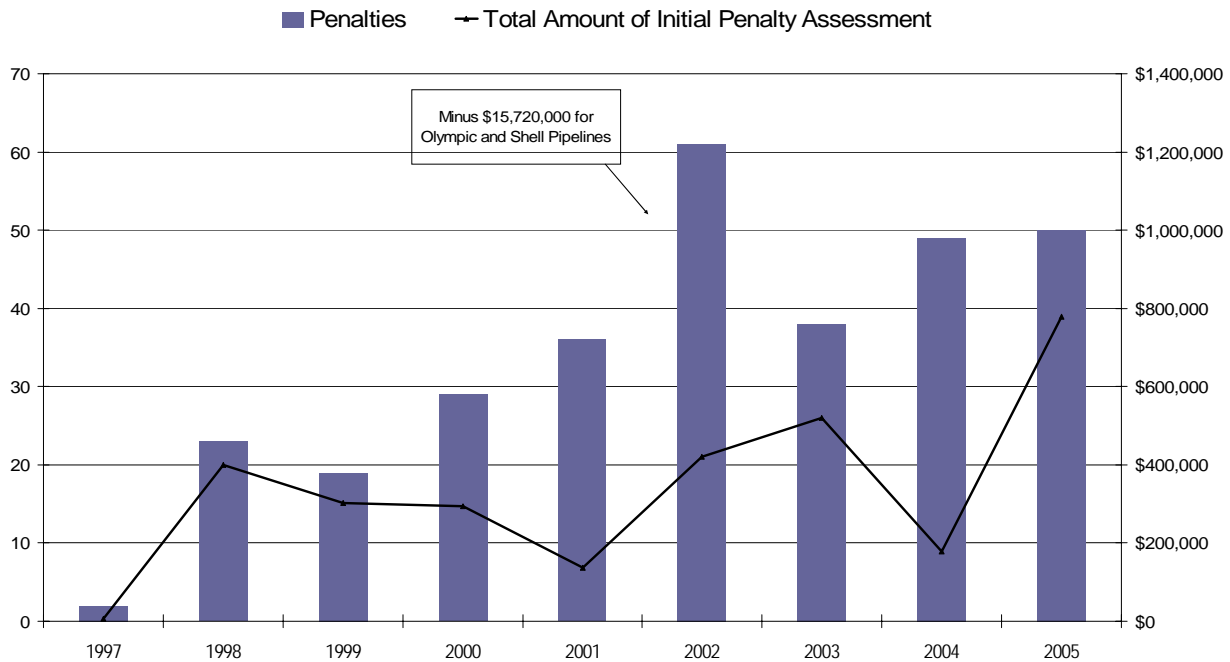
The following chart shows the total number of enforcement actions, by type, per year for oil spill and illegal dumping of hazardous materials violations. This chart includes the initial amount of the penalty assessment.

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	\$420,950
2003	32	5	38	75	\$520,242
2004	26	0	49	75	\$178,753
2005	10	9	50	69	\$778,750

Spills Program Notices, Orders & Penalties 1997 - 2005



Spills Program Initial Assessed Penalty Trends 1997 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

Toxics Cleanup

Overview

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

Ecology has identified 10,019 sites in Washington that are contaminated with toxic substances. To date, 58 percent of these sites have been cleaned up either independently or with Ecology oversight. About 6,200 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 10,342 active underground storage tanks on about 3,876 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.

Ecology also works with potential liable parties to get them to voluntarily clean up contaminated sites. We can also conduct site investigations, cleanup studies and cleanup work. If Ecology can not 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 it is put 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 (4,798) are being accomplished through Ecology's voluntary cleanup process.

When more formal agreements 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:

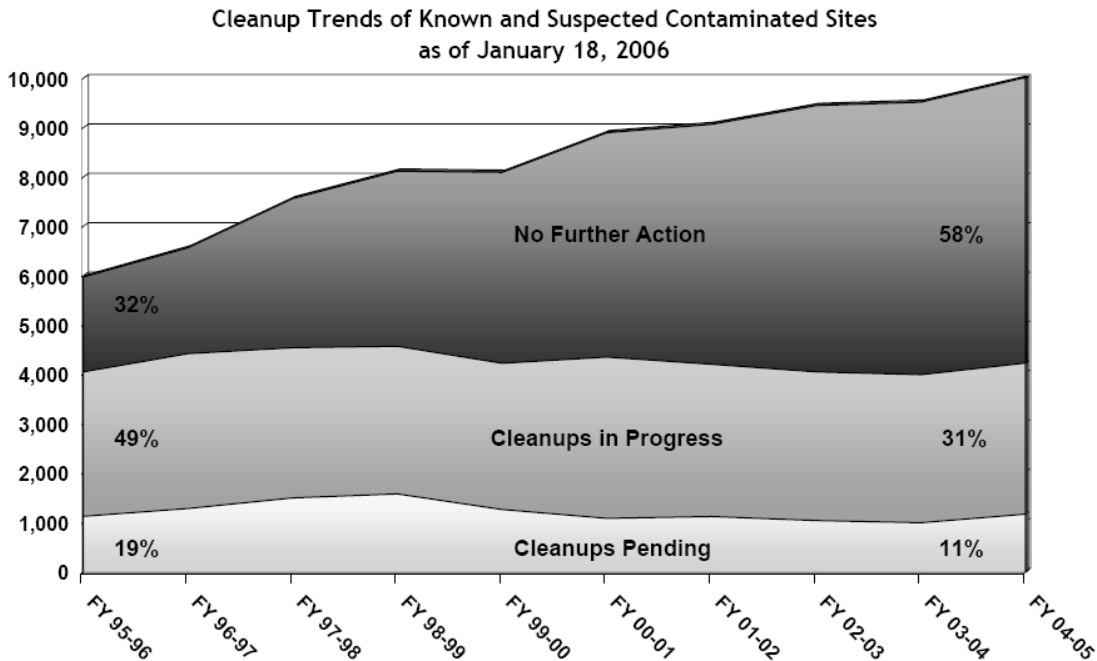
1. A compliance inspection or technical assistance visit.
2. A written warning (notice of non-compliance) if violations are found.
3. A field citation (monetary penalty), if problems are serious or prior violations were not corrected.
4. A formal enforcement order and penalty if compliance is not achieved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

Property owners can request a technical assistance inspection from Ecology. Depending on the significance of the violation, we will not issue a penalty during a technical assistance inspection.

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 December 2005, there have been 5,789 contaminated sites cleaned up in Washington State. This represents 58 percent of all 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 is ongoing at another 3,061 contaminated sites, which represents 31 percent of all currently known and suspected contaminated sites in Washington.

In 1990, Ecology adopted rules for managing underground storage tanks. Since then, the number of leaking underground storage tanks reported to Ecology has steadily fallen from 924 in 1990 to 92 in 2005.



Enforcement Trends

The 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; and
- Ecology typically works with site owners through the Voluntary Cleanup Program, agreed orders and consent decrees.

Ecology conducts approximately 600 to 800 inspections of underground storage tanks each year. Less than 5 percent of the inspections result in field penalties ranging from \$100-\$400 per site. Field penalties rarely exceed \$1,000 per site but may be as high as \$1,500. 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 goal is to inspect all underground storage tank facilities at least once by mid-2007. We are already on our second round of inspections in many parts of the state except for the Northwest Region. Ecology expects compliance rates to continue to rise.

For more information about cleaning up sites contaminated from a leaking underground storage tank, visit Ecology's web site at:

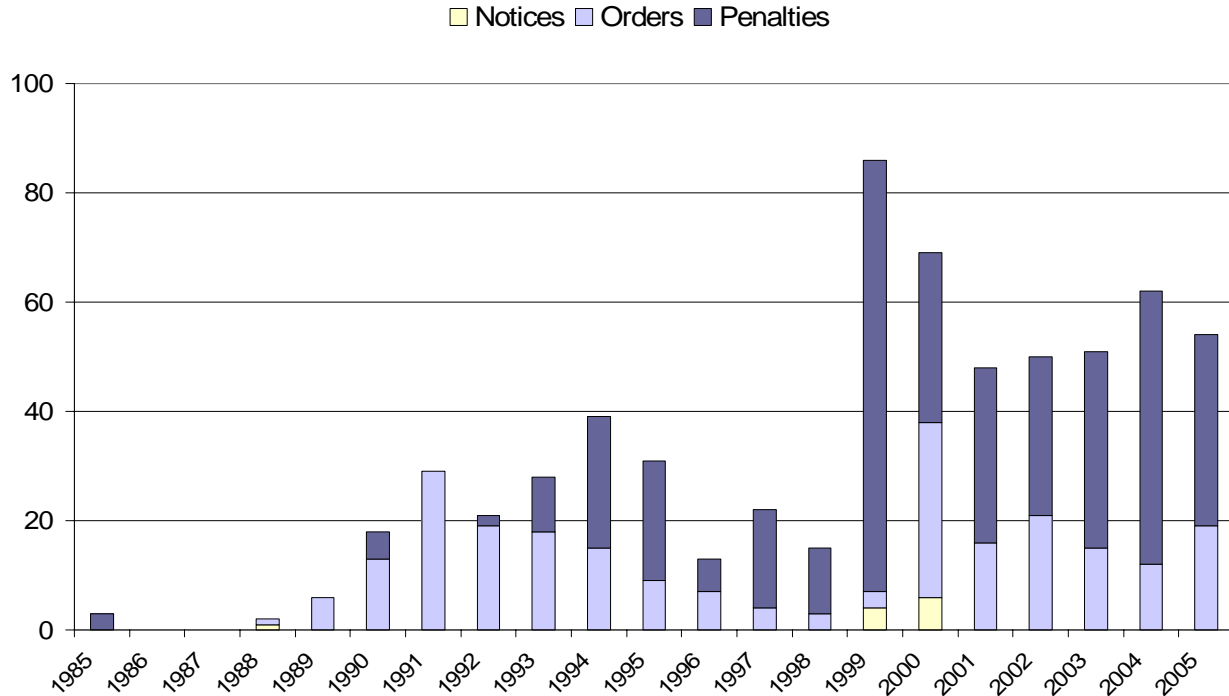
<http://www.ecy.wa.gov/programs/tcp/cleanup.html>.

The following chart shows the total number of enforcement actions, by type, per year for toxic site cleanup violations. This chart includes the initial amount of the penalty assessment.

YEAR	Notices	Orders	Penalties	Total Enforcement Actions	Total Amount of Initial Penalty Assessment
1985	0	0	3	3	\$23,000.00
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	\$113,000.00
1991	0	29	0	29	\$0.00
1992	0	19	2	21	\$105,052.00
1993	0	18	10	28	\$133,850.00
1994	0	15	24	39	\$7,800.00
1995	0	9	22	31	\$11,600.00
1996	0	7	6	13	\$6,850.00
1997	0	4	18	22	\$12,950.00
1998	0	3	12	15	\$9,100.00
1999	4	3	79	86	\$83,900.00
2000	6	32	31	69	\$34,270.00
2001	0	16	32	48	\$21,100.00
2002	0	21	29	50	\$11,500.00
2003	0	15	36	51	\$120,515.00
2004	0	12	50	62	\$21,850.00
2005	0	19	35	54	\$24,150.00

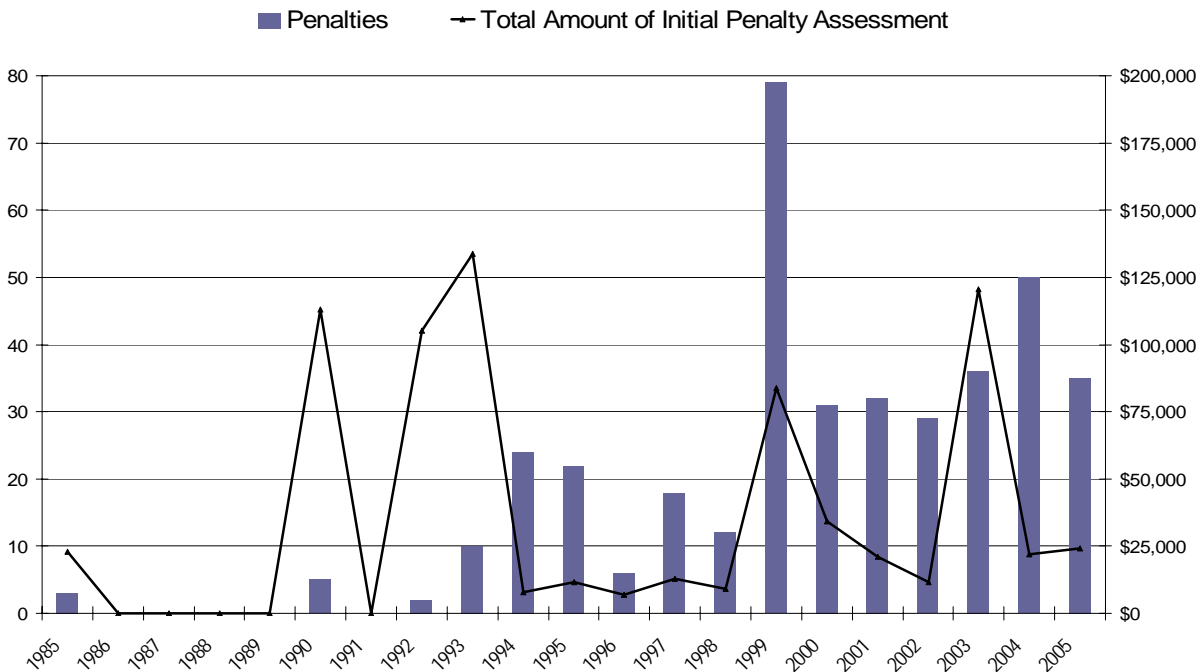
The data in the following charts represent the number of underground storage tank field penalties and formal penalties issued through orders. The spike in 1999 was the result of a major increase in inspection activity to make sure all underground storage tank systems met new state and federal equipment upgrade requirements by December 22, 1998.

Toxics Cleanup Program Notices, Orders & Penalties 1985 - 2005



Compliance with the operation and maintenance requirements on the date of inspection has risen from 35 percent in 2001 to about 45 percent in 2005. Compliance, measured 60 days after an inspection, ranges from 75 to 90 percent.

Toxics Cleanup Program Initial Assessed Penalty Trends 1985 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

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 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 and 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; and
- Clean up polluted waters.

Water Quality Permits

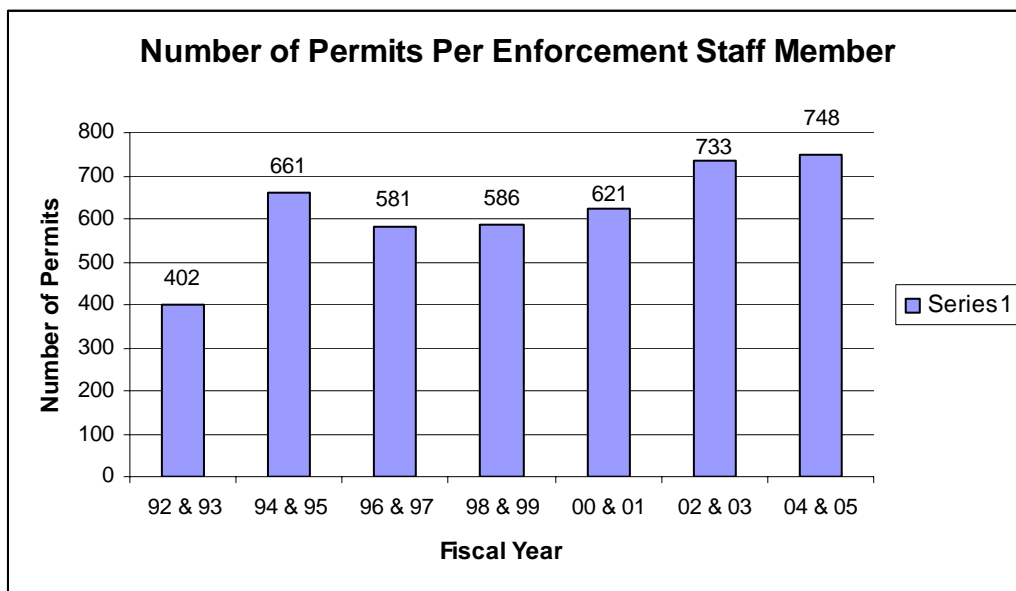
Ecology has authority to investigate and manage water quality through the Federal Clean Water Act and the state Water Pollution Control Act. We issue permits to more than 4,000 industrial and municipal facilities in Washington State to make sure they manage pollution so it may be safely discharged to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

Water Quality Permits as of December 31, 2004*

PERMIT TYPE	TOTAL ACTIVE PERMITS
NPDES Major	79
NPDES Minor	361
State to Ground Water	171
State to POTW (publicly owned treatment works)	170
NPDES Stormwater Construction General Permit	1331
NPDES Industrial Stormwater General Permit	1207
Municipal Stormwater General Permit	7
Boatyard General Permit	106
Dairy General Permit	124
Fish Hatchery General Permit	84
Fresh Fruit Packer General Permit	189
Water Treatment Plant General Permit	31
Sand and Gravel General Permit	922
Aquatic Pesticides General Permit	87

*2005 data not available at time of report printing.

The following chart shows the number of permits Ecology's water quality enforcement officers managed each fiscal year.



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 facilities that operate under a wastewater discharge permit to include, along with their scheduled Discharge Monitoring Report, a list of violations with an explanation of what caused the violation and what actions were taken to stop and prevent further violations.

When Ecology can not 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 a certification program for operators of municipal wastewater treatment facilities. Municipal wastewater treatment operators must undergo an in-training period and pass written tests to become certified to run facilities. In addition, there are continuing education requirements to maintain 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 that 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

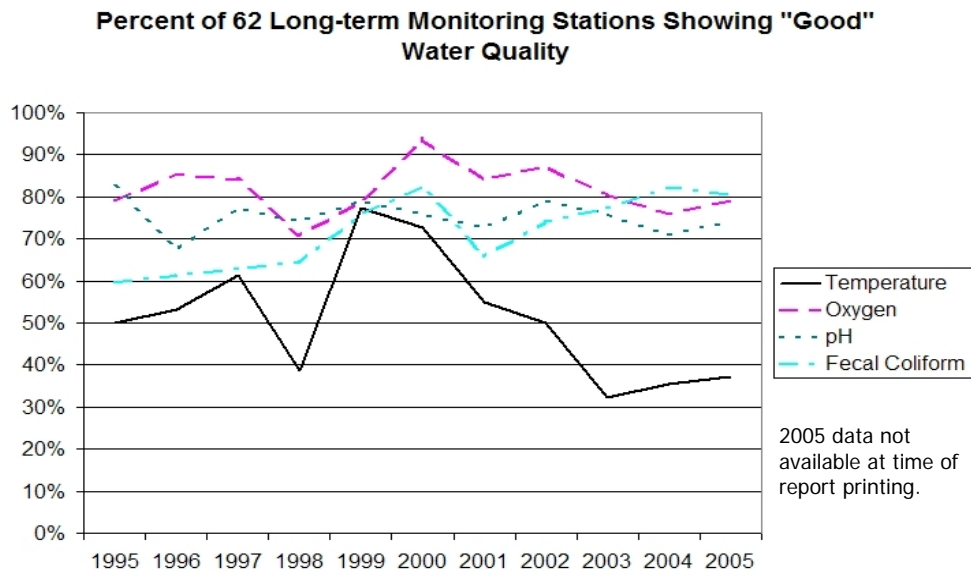
Ecology manages stormwater control through the stormwater general permit programs for municipal, construction and industrial sites. We provide technical assistance to industries and other governmental entities to make sure water quality is protected from stormwater runoff. Ecology has written stormwater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

Nonpoint sources 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 through the installation of best management practices.

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 conservation district programs that provide technical assistance to farm owners or operators to help develop and implement a water quality management plan, or “farm plan.”

Environmental Trends

Ecology does not have enough resources to conduct a full census of conditions by monitoring 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, which generally correspond to the 62 Water Resource Inventory Areas, or watershed planning areas in the state. The graph below indicates the trends over nine years for four main water quality parameters.



Ecology also collects a considerable amount of water quality data generated by many other studies and projects. This data is used to prepare a list of water bodies that do not meet the state’s [water quality standards](#), known as the 303(d) list. The list is used to target the

development and implementation of water cleanup plans, called total maximum daily load (TMDL) plans. The four main pollutants which cause a water body to be listed as polluted are temperature, fecal coliform, oxygen and 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 cause the loss of vegetation along streams, and low water flows in rivers and streams. The fecal coliform trend is not surprising as Ecology and many people across the state have worked hard to reduce the amount of fecal coliform that enters our water. This has been done in large part by the passage and implementation of the Dairy Nutrient Management Act.

Enforcement Trends

Ecology issues permits to more than 4,000 industrial and municipal facilities in Washington State to protect water quality. In 2004, the Water Quality Program took more than 1,873 compliance or enforcement actions on facilities with permits (2005 data not available at time of report printing). The effectiveness of water quality enforcement activity is evaluated using compliance rates and number of facilities with five or more violations per year.

Ecology is closely tracking the number of facilities with five or more violations per year. In 2004, wastewater monitoring reports and Ecology inspections showed that Washington had a compliance rate of 98.6 percent for water quality protection.

The type of enforcement action and amount of penalty depends on the type and seriousness of the violations our inspectors find. 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.

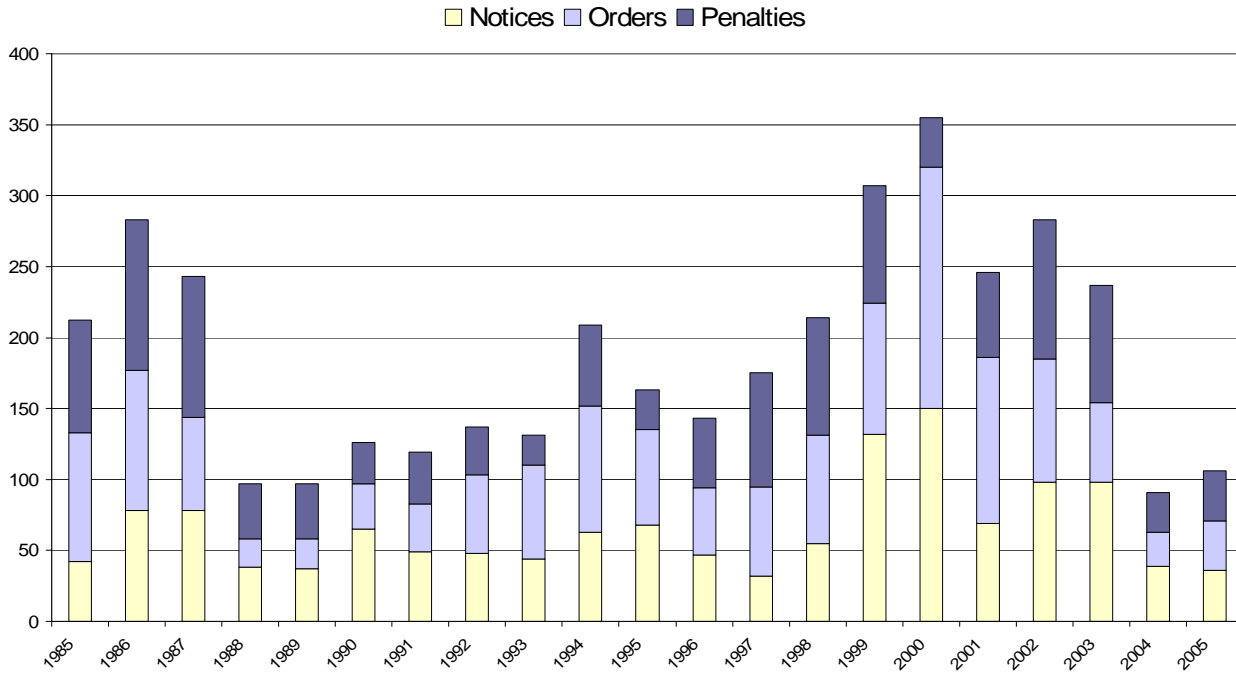
For more information on water quality policy, visit Ecology's web site at:
<http://www.ecy.wa.gov/programs/wq/wqhome.html>.

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

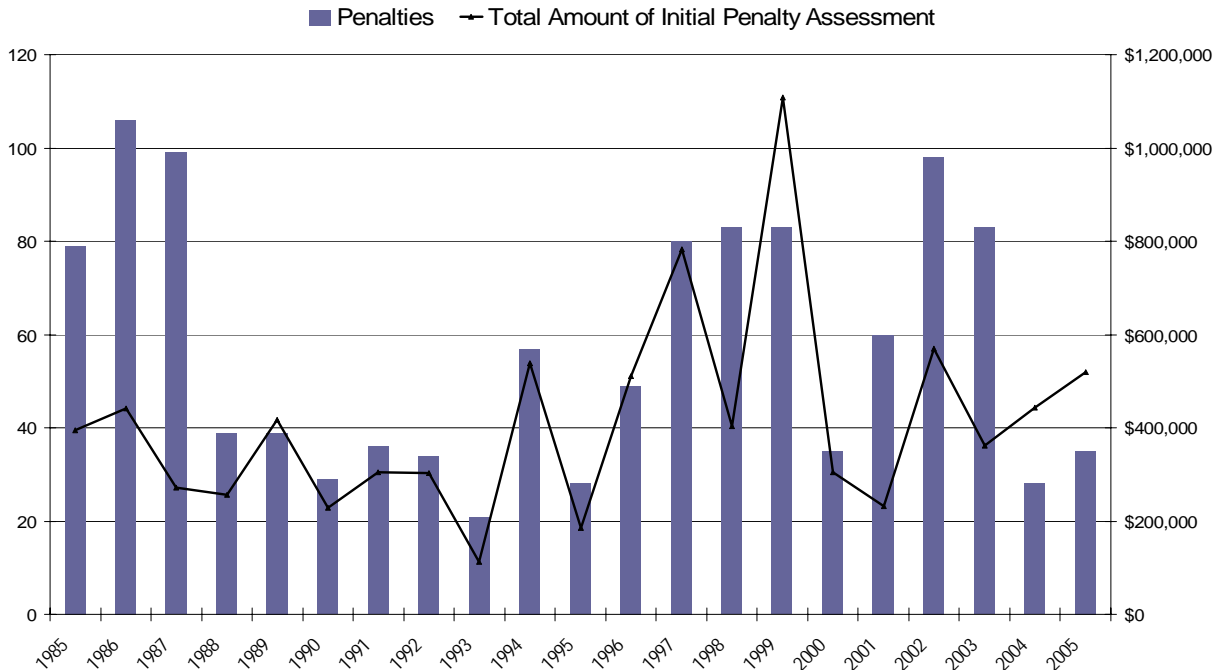
The following chart shows the total number of enforcement actions, by type, per year for water quality violations. This chart includes the initial amount of the penalty assessment.

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

Water Quality Program Notices, Orders & Penalties 1985 -2005



Water Quality Program Initial Assessed Penalty Trends 1985 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

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. The threat of extinction to once abundant fish stocks due to poor water quality and inadequate stream flow plays significantly into the debate about water resources.

Water use and water resources management are regulated by a complex web of statutory 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:

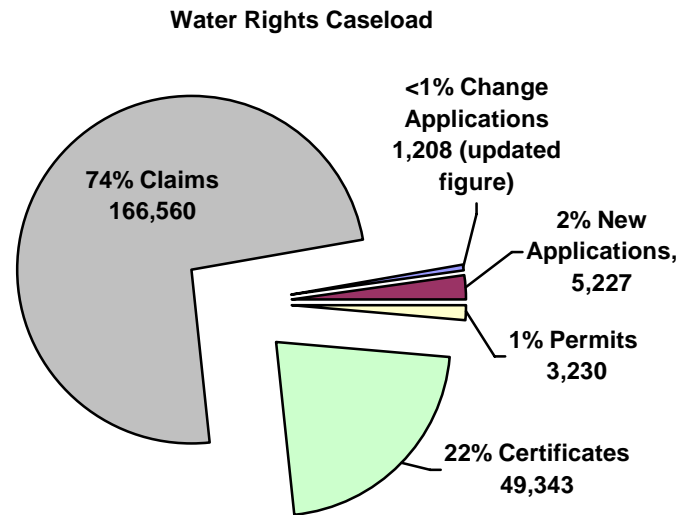
- Manage water rights.
- Prepare for and respond to drought and climate change.
- Assess, set and achieve stream flows.
- Support water use efficiency.
- Regulate well construction.
- Assure dam safety.
- Support local watershed management of water resources.
- Provide water resources data and information.
- Adjudicate water rights.
- Promote compliance with water law.

Water Resources Permits

Water Rights

Ecology allocates water by reviewing applications for new water rights and changes to existing water rights. Before Ecology approves any application they determine whether sufficient water is available and whether existing rights would be impaired. A water right is a legal authorization to use a certain amount of public water for specific purposes. A water right is needed for any diversion of any surface water or underground water, with a few exceptions. 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, and the environment is protected. The caseload for water rights is large and continues to grow and the legal context for water use is both dynamic and complex:



Ecology also licenses and regulates well drillers and investigates 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 ground water from contamination or impairment.

We also reviews and approves the construction of dams in Washington State. We require any person who intends to construct or modify any dam to get a dam safety permit and inspect dams for structural integrity and flood and earthquake safety.

Compliance Assurance

Ecology's goal is to achieve voluntary compliance with water laws. We do this through education, outreach, training and licensing activities. These efforts are geared toward the public, specific sectors of water users and individuals. Enforcement actions are important tools that are used in a limited number of special cases where voluntary or informal compliance efforts are not successful, where risks to safety, health and the environment are high and when we have sufficient resources to use formal enforcement tools.

Current compliance priorities are to:

- Ensure water is metered and reported in 16 basins where fish stocks are depressed, and implement a reporting system for metering data.
- Provide compliance information, assistance and strategic enforcement action in extreme cases, and issue penalties as appropriate.
- Monitor water use (metering, gauging, reporting) and take compliance actions necessary to make sure that trust water rights purchased are protected.

- Regulate water use during periods of low flows to protect senior water users and streams having stream flow limits.
- Begin taking compliance actions to enforce court findings in the Yakima adjudication.
- Communicate compliance actions to achieve broader deterrence.

We limit our response to complaints and pursuit of enforcement so we can focus on our compliance priorities. Following is an example of the progression from voluntary compliance to formal enforcement for a water rights case.

1. Phone contact is made with the person who complained and the alleged violator.
2. Voluntary compliance is pursued through outreach via phone, site visit and/or office meeting.
3. Information on the potential, and process, for a new water right or water right change is provided.
4. Referrals are made to local government for land use and Department of Fish and Wildlife for habitat issues and/or other Ecology programs, as appropriate.
5. Follow up is usually made through a letter to bring formal closure or at least document what efforts will be made to gain compliance.
6. Follow up field meeting is held to verify water is not being used illegally.

When water is being used illegally and Ecology can not get the business or individual to voluntary comply, formal enforcement actions may follow. For formal enforcement, Ecology takes the following steps.

1. Issues a series of escalating letters that explain the formal enforcement process and actions if compliance is not achieved within a certain timeframe.
2. Issues an administrative cease and desist order with penalty notification.
3. Continues with follow up field presence, including interviewing neighbors, collecting complaint statements along with witness statements, photographing property and water source being used, and documenting continued illegal use.
4. Issues penalty orders.

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 and highlighted the growing demand for water. A number of factors underscore this change:

- In many areas water is not available for further allocation without impairing senior water rights, reducing stream flows or depleting aquifers.
- The threat of extinction of once abundant fish stocks.

- Competition and litigation over water.
- Repeated drought conditions resulting in dry streams, withered crops, dead fish, reduced hydropower production and increased wildfires.
- Growing interest and investment in water use efficiency technology, reclaimed water and even desalinization.

An emerging concern is the effect of global warming and climate trends on water availability. A reduction in future water supplies may emerge due to reduced volume of stored water in the mountain snow-pack, and changes in the timing, 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 water users, in those basins, for them to meter their water use. This covers over 1,000 water rights and represents 80 percent of the water volume used in those basins. Ecology has provided funds to help users install meters. The state legislature gave Ecology funds to develop a reporting and data management system. We are now following-up with these water users to make sure they are complying with the metering and reporting requirements.

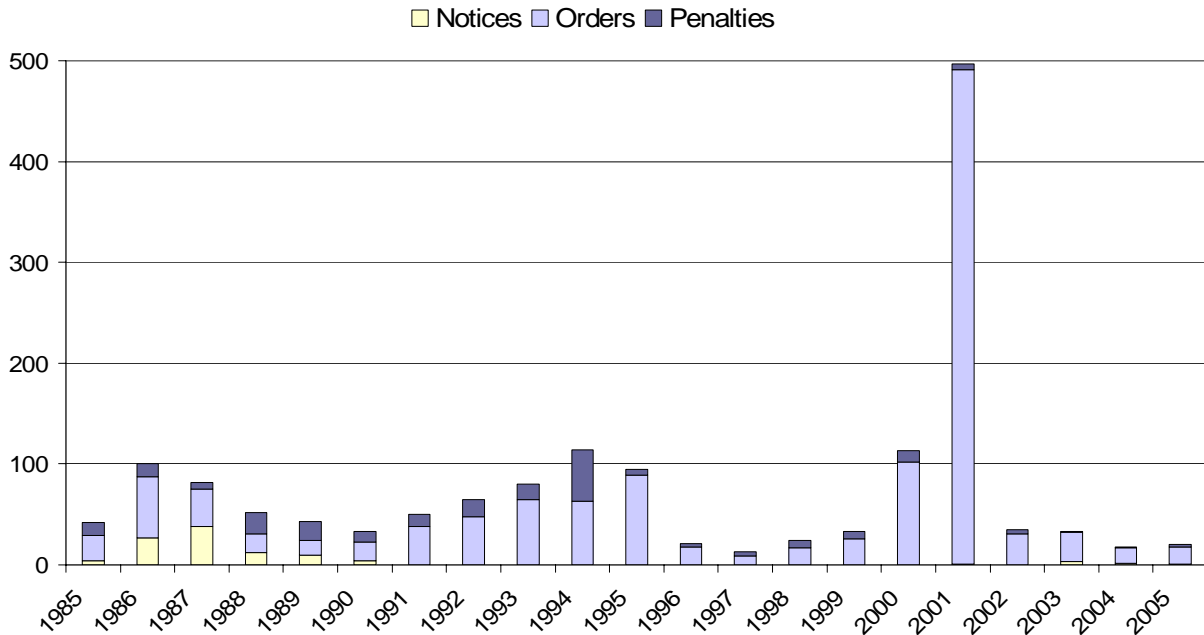
The jump in the number of enforcement orders in 2001 shown in the first chart on the next page was due to a large number of orders Ecology issued to meter water use, as required under a court settlement agreement. The 1994 peak in penalties shown in the second chart resulted from efforts to deal with a large number of well-drilling related violations, including licensure and well sealing.

For more information about water resources and dam safety, visit Ecology's Web site at: <http://www.ecy.wa.gov/programs/wr/wrhome.html>.

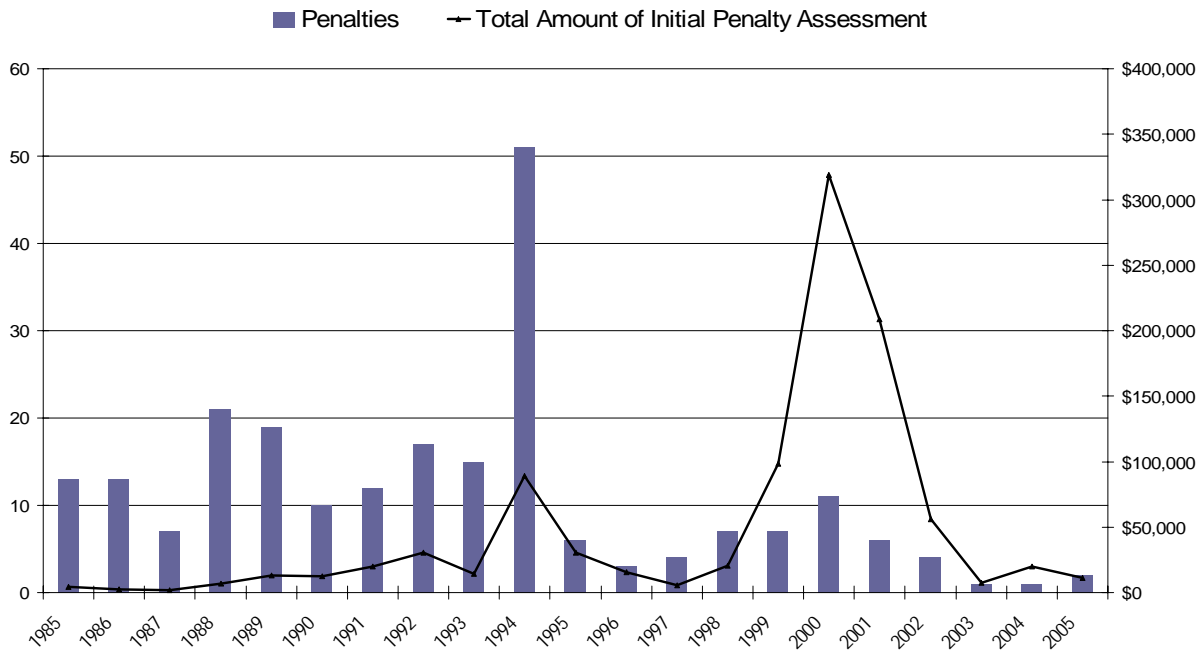
The following chart shows the total number of enforcement actions, by type, per year for water resources violations. This chart includes the initial amount of the penalty assessment.

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

Water Resources Program Notices, Orders & Penalties 1985 - 2005



Water Resources Program Initial Assessed Penalty Trends 1985 - 2005



Note: For Penalty data prior to 2004 issued dates are derived from the date the Docket Number was issued.

Additional Ecology Enforcement Information

Enforcement information is available on the web at:

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

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