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State of Washington

Water Quality Program Annual Compliance Report

Calendar Year 2008

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Water Quality Program Annual Compliance Report

Calendar Year 2008

by

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Water Quality Program
Washington State Department of Ecology
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Acknowledgements

The water quality program's enforcement workgroup was instrumental in drafting parts of the report and checking data for accuracy.

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Executive Summary

This report represents a summary of compliance with water quality laws for calendar year 2008. The Washington State Department of Ecology's (Ecology) Water Quality Program regulates public and private activities discharging to waters of the state that contribute to or cause pollution. The report provides an overview of the Water Quality Program. It describes point source and nonpoint source pollution. It also explains both permit-related activities of the program and activities where Ecology seeks compliance through non-permitting means such as technical assistance, inspections, education, and enforcement.

Ecology hopes that this report informs the agency as well as the public. This report follows the format used for the 2007 report. We look forward to receiving constructive comments from people who use this information in an effort to improve reports in future years.

Ecology issues individual permits that protect water quality to over 748 industrial and municipal facilities in Washington State. Ecology issues the permits to allow the industrial or municipal facilities to manage pollution that they may safely discharge to lakes, rivers, marine, or ground waters. Federal or state regulation requires about half of those facilities to provide monthly, quarterly, or annual Discharge Monitoring Reports (DMRs) about their discharge.

Those DMRs and inspections conducted by Ecology showed that, in 2008, Washington had an approximate 94 percent compliance rate for water quality protection. The compliance rate is similar to recent years.

In 2008, the number of permits managed by staff increased slightly while Ecology's enforcement staffing level decreased slightly.

Between 1997 and 2008, Ecology slightly reduced the average time period measured from the date of a violation to the date Ecology issued an enforcement action in response to the noncompliance.

The compliance rate for industrial facilities submitting DMRs in calendar year 2008 remained close at 98.6 percent. Using DMR data, Ecology closely tracks the number of facilities with five or more violations per year. Ecology documented a compliance or enforcement action for 82 facilities out of the 91 facilities (90 percent) with five or more violations. Ecology improved its performance from 2007 when it documented enforcement or compliance actions for 82 percent of the facilities (17 out of 95) with five or more violations.

Municipal facilities' compliance rate with their DMRs decreased to 97.6 percent from 97.8 percent in 2008. Ecology documented a compliance or enforcement action for 99 out of the 116 municipal facilities (85 percent) that violated their permits five or more times.

The facilities covered by general permits that are required to submit DMRs (1,342 facilities), reported a 92.8 percent compliance rate with permit requirements. For the 169 facilities (7.9 percent) with five or more violations, Ecology documented compliance or took formal or informal enforcement actions at 141 facilities (83 percent).

In summary, for calendar year 2008, the total number of facilities under general permits continued to increase while Ecology dedicated the decreased staff resources to ensuring compliance at these sites. The compliance rate remained high for municipal and industrial facilities with individual permits based on the data in DMRs. The number of industrial facilities with five or more violations decreased. Ecology took more than 1,727 compliance or enforcement actions on facilities with permits.

The Water Quality Program in Washington

Introduction

Water quality in the state of Washington is protected by a number of different government agencies. Federal, state, county, and local city governments all work together to protect our waterways. The U.S. Environmental Protection Agency (EPA) provides oversight to the National Pollutant Discharge Elimination System (NPDES) permit program and is directly responsible for water quality issues on federal and tribal lands. The Washington State Department of Ecology (Ecology) issues permits for discharges that go directly into state surface and ground waters. Ecology also provides various levels of guidance, oversight, and direct enforcement on a wide range of other activities with the potential to harm the state's waterways. County and city governments protect state waters by ensuring the proper planning, design, and construction for land development activities in their own jurisdictions. Frequently, these governments engage in other projects to protect and enhance our lakes, streams, and rivers. Ecology's regulatory role is reviewed below.

Regulatory authority

Authority for Ecology to regulate state and federal water pollution is contained in Chapter 90.48 RCW (Revised Code of Washington). The state of Washington began a formal pollution control program in 1945 with the creation of the Pollution Control Commission and enactment of Chapter 90.48 RCW. Washington adopted a wastewater discharge permit system in 1955. In 1971, Washington passed the Pollution Disclosure Act of 1971 (Chapter 90.52 RCW), which required that all dischargers provide a high level of wastewater treatment regardless of the quality of water to which they discharged (technology-based control). In 1972, the federal government also adopted a similarly principled law called the Water Pollution Control Act Amendments of 1972 (PL 92-500). Despite the name (amendments), it was essentially a new law. Since 1977, these amendments have been popularly called the Clean Water Act (CWA or the Act"). In conjunction with our state laws, the Act forms the basis and framework for our water quality regulatory program today (Appendix Table 1). In 1973, Washington State's Water Pollution Control law (Chapter 90.48 RCW) was amended to enable the state to apply to EPA for authority to administer the NPDES program. In November of 1973, Washington became one of the first states to be delegated by the federal government to administer the NPDES program.

Point source pollution

A wastewater discharge permit is a legal document issued by Ecology to control the discharge of wastewater to surface waters and ground waters. Ecology issues NPDES permits to surface water discharges under Chapter 173-220 WAC and issues state waste discharge permits to groundwater discharges under Chapter 173-216 WAC. Individual permits place limits on the quantity and concentrations of contaminants that a facility may discharge. Individual permits require treatment of wastewater or impose other operating conditions on dischargers to ensure that they meet permit limits and protect water quality. Individual permits may also set other conditions and requirements, including monitoring, reporting, spill prevention planning, and other activities.

One key element of the permit program is the concept of "self monitoring." Permit holders are required to representatively sample, accurately test, and truthfully report the quality of the wastewater they discharge. Ecology oversees permit compliance through its laboratory accreditation program, site inspections, review of submitted monitoring data, and review and approval of other permit-required documents.

Types of wastewater permits

There are two types of wastewater discharge permits. They are "individual permits" and "general permits." Both types of permits satisfy the requirements for discharge permits under both the federal Clean Water Act and the state law governing water pollution control. They differ in how they define and resolve the wastewater issues of dischargers and how Ecology manages a permit. You can find extensive information on the permit writing process and related issues at the Ecology website at www.ecy.wa.gov/programs/wq/permits/index.html

Individual permit

Ecology writes an individual permit for a single facility. In general, municipal wastewater treatment plants and businesses with industrial processes that generate wastewater are issued individual permits. Permit issuance includes writing a description of the individual facility (its processes and discharge characteristics) in a "fact sheet." This evaluation of the facility and legal requirements leads to a permit that specifies discharge limits, monitoring, and reporting requirements tailored to the individual facility. This allows a more precise fit between discharge characteristics and permit requirements, but it can be time consuming and expensive. This approach is best suited to permits for facilities that have little in common with other facilities and facilities that have unique processes and environmental concerns. Individual permits may be NPDES permits or state waste discharge permits. Ecology managed 778 active individual permits in Washington in 2008, and more than half of these were NPDES permits. You can obtain copies of individual permits and fact sheets at the Ecology website at www.ecy.wa.gov/programs/wq/permits/index.html

General permit

Ecology writes a general permit for a group of facilities with similar in processes and wastewater characteristics. When enough facilities with similar production processes generate similar pollutants, Ecology considers establishing a general permit. Ecology writes one fact sheet that describes the group of facilities as a whole and the general characteristics of the wastewater. It also writes a single permit for all facilities that meet the requirements for coverage defined in the general permit. This approach is best suited to a group of facilities that have much in common, in which a standard set of requirements will protect the environment. Ecology believed that general permitting would cost less staff time and resources; however, recent data indicate costs of permit development and implementation are higher than originally envisioned. In developing general permits, Ecology publishes information about the general permit in the state register. In addition, Ecology typically holds public workshops and hearings on new general permits. The table below lists the types of general permits currently in effect, an extended table with permit definitions is in the Appendix.

Water Quality Permits as of December 31, 2008

PERMIT TYPE	TOTAL ACTIVE PERMITS
NPDES Major	78
NPDES Minor	356
State to Ground Water	146
State to POTW (publicly-owned treatment works)	168
NPDES Stormwater Construction General Permit	3,131
NPDES Industrial Stormwater General Permit	1,276
Municipal Stormwater General Permit	152
Boatyard General Permit	83
Dairy General Permit	25
Fish Hatchery General Permit	81
Fresh Fruit Packer General Permit	182
Water Treatment Plant General Permit	33
Sand and Gravel General Permit	963
Aquatic Pesticides General Permit	139

Cruise operations in Washington State

Large cruise ships have been transiting Washington waters since 1999. On April 20, 2004, the Department of Ecology, the Northwest Cruise Ship Association (NWCA), and the Port of Seattle signed a Memorandum of Understanding (MOU). The MOU covers only the large passenger ships that are members of the NWCA. It does not cover ships such as the Alaska Marine Highway ferries, shipping vessels, or any of the small passenger ships or boats. The MOU bans all cruise-ship wastewater discharges (black and gray water), except from vessels with advanced wastewater treatment systems (AWTS). In addition, the MOU provides for other elements:

- Cruise ships may only discharge sludge from any type of wastewater treatment system when it is more than 12 nautical miles from shore, and it must not discharge sludge within the Olympic Coast National Marine Sanctuary.

- The MOU specifies a sampling regimen, testing and reporting requirements, and it requires advanced notification and documentation from ships planning to discharge via an AWTS.

- Cruise ships will comply with Washington's more restrictive hazardous-waste laws and they will not dump garbage into state waters and will discharge oily bilge water per regulation.

The goal of the MOU was to increase protection for Washington's marine waters from cruise-ship waste. The MOU protects water quality by having requirements in place to allow discharges only from advanced wastewater treatment systems, allowing for inspections to verify

compliance, and building communication with the cruise lines and vessel staff on requirements of the MOU.

The majority of the lines and vessels operating under the MOU had a successful season and were in compliance throughout. The sampling results continue to show excellent effluent quality. In 2006, Ecology discovered major non-compliance in regards to the Celebrity Cruises Inc. MERCURY vessel and it issued a fine of $100,000 (paid) for discharges of untreated graywater and partially treated blackwater into waters of the State.

Nonpoint source pollution

Nonpoint source (NPS) pollution is pollution that enters a water body from water-based or land-use activities, including atmospheric deposition; surface water runoff from agricultural lands, urban areas, and forest lands; subsurface or underground sources; and discharges from boats or other marine vessels. Sometimes one can trace NPS pollution to several sources - sometimes one cannot trace it at all. Nonpoint source water pollution is recognized as a growing threat to the environment and public health.

Washington State has been a leader in addressing NPS pollution for many years. We already have many tools to achieve clean water through nonpoint source management. Some are regulatory, while the majority are voluntary programs. Watershed planning efforts have addressed problems in many parts of the state, using innovative approaches to management and funding. These innovative approaches may be hampered by the high cost of remedying existing problems, local land use decisions, the lack of multi-agency coordination and focus, and the lack of information concerning watershed processes and conditions.

You can find more information on NPS pollution and Ecology's efforts to combat it at www.ecy.wa.gov/programs/wq/nonpoint/index.html#Overview.

Enforcement

The CWA and the state Water Pollution Control Act place the responsibility to comply with water quality laws and regulations on the facilities discharging. The Water Quality Program generally uses escalating levels of enforcement to bring facilities into compliance. This escalation may begin with technical assistance and progress through issuance of an order or civil penalty. Formal enforcement is just one of many compliance tools and is often not necessary to achieve compliance. When compliance actions are necessary, the following factors are taken into consideration:

- Seriousness of the violation
- Behavior of the discharger
- Program resources available for compliance
- Threat to environment
- Complexity of the permit
- Compliance history

Water Quality Program staff perform their enforcement and compliance duties in accordance with a variety of federal and state laws and regulations. Ecology's Water Quality Program intends to respond to all permit violations.

Water Quality enforcement guidelines

The Water Quality Program ensures that a consistent statewide approach to compliance and enforcement activities is taken by following Ecology's *Compliance Assurance Manual*. These guidelines detail the principles and procedures followed in addressing violations. The manual describes various formal and informal tools available to staff as well as the proper use of each compliance tool.

Staff members are alerted to violations through a number of mechanisms. As required by the permit, dischargers submit monitoring reports and non compliance notification reports, allowing permit staff to determine compliance. Ecology staff review wastewater monitoring results, usually submitted monthly or quarterly. They also identify violations or other compliance problems during the review of engineering reports, field inspections, complaints, and progress reports related to compliance schedule requirements. Depending on the severity of a violation or series of violations, staff respond by using either informal or formal enforcement tools that are described below.

Informal tools

When a violation is detected, Water Quality staff gather initial information through inspections, documented phone calls, or letters. The violation may result in a warning letter, technical assistance, or both. Permitted dischargers submit their Discharge Monitoring Report (DMR) and a description of the cause of any violation and actions taken to stop and prevent further violations. Both the compliance/enforcement staff and facility managers use these informal tools to gain compliance. Staff may also address compliance problems through the review and approval of engineering reports throughout the five-year permit cycle and during the permit renewal process.

Formal tools

Compliance/enforcement specialists initiate formal enforcement for serious violations. This formal process may begin with the issuance of a Notice of Violation (NOV). The NOV requires the violator to provide Ecology with information on the steps that the discharger has taken to resolve a compliance problem. Upon learning more about a violation and the follow-up actions taken by the violator, Ecology may issue an administrative order directing the violator to take specific actions to protect water quality. Ecology may issue a penalty of up to $10,000 per day, per violation based upon environmental and human health impacts, past compliance with water quality law, and other factors. Ecology may also consider criminal actions against violators.

The appeal process

Dischargers may appeal administrative orders and penalties to the state Pollution Control Hearings Board (PCHB) for adjudication. The PCHB is a quasi-judicial hearings board established in 1970 to provide a more efficient procedure to handle appeals (Chapter 43.21B RCW). You can learn more about the PCHB at www.eho.wa.gov/Boards_PCHB.aspx Individuals receiving a penalty can petition Ecology directly within 30 days to eliminate, reduce, or mitigate the size of the penalty.

Certification programs to protect the environment

Washington State recognizes the importance of having good scientific data on which to base environmental decisions as well as the need for trained treatment plant operators in key positions that protect the environment. To accomplish this, Ecology established an accreditation program for environmental laboratories and a certification program for operators of municipal wastewater treatment facilities. These two efforts contribute significantly to the state's environmental compliance efforts by assuring that operators are qualified to run facilities and that data generated by these laboratories are accurate and defensible, consistent, and meet the data quality objectives.

Operator certification

Municipal wastewater treatment operators must undergo an in-training period and pass written tests to become certified to operate facilities. Operators must obtain continuing education credits to maintain certification. The certification program has an external advisory board comprised of 11 members.

Environmental laboratory accreditation

Ecology regularly inspects environmental laboratories through Ecology's Environmental Laboratory Accreditation Program. All laboratories performing tests to meet state permit requirements must participate in a program of laboratory performance inspections and regular testing of performance evaluation samples to cross-check the accuracy of their laboratory analyses. If a discharger's laboratory cannot pass Ecology's accreditation process then the discharger must use accredited or certified laboratories. You can find more information on the accreditation program and a list of approved laboratories at Ecology's website: www.ecy.wa.gov/programs/eap/labs/labs_main.html.

Technical assistance

Water Quality Program staff offer technical assistance to permitted dischargers and others in the regulated community as an important function shared by all program staff. Staff members

frequently work with dischargers to prevent violations through the proper design of facilities and the development of corrective action strategies.

Municipal roving operators

Ecology's Water Quality Program has entered into a partnership with the EPA to provide direct assistance to smaller municipal wastewater treatment plants through the use of two roving outreach specialists. These specialists travel from plant to plant in response to facility requests for assistance. They help ensure compliance with water quality laws and more effective plant operations. One outreach specialist serves facilities located on the west side of the Cascade Mountains and one serves facilities on the east side of the mountains. In 2008, we only had one municipal roving operator for the west side of the state.

Facility managers

Ecology facility managers have a number of important responsibilities, including writing wastewater discharge permits, helping municipal facilities with questions regarding state grant and loan programs, reviewing reports, and performing facility inspections. Facility managers answer questions regarding water quality regulations via telephone, e-mail, and during in-person site inspections. They meet with permit holders providing valuable assistance in their daily interactions with the discharger and community stakeholders.

Monitoring water quality compliance

Effluent limits

Ecology establishes effluent limits and monitoring requirements in permits it issues to point source dischargers. Effluent limits cap the amount of a particular pollutant that can be legally discharged by a regulated facility. Permit writers derive effluent limits in two ways: (1) technology-based effluent limits are based on the reasonable achievable level of wastewater treatment, and (2) water quality-based effluent limits are derived to prevent exceedance of water quality standards in the receiving water. Ecology expects full compliance with the effluent limits in the permits it issues.

Understanding compliance rates

A compliance rate represents the number of effluent limits in compliance, as a percent of the total "opportunities" for compliance. Opportunities are the number of effluent limits multiplied by the number of days reported within a given time frame. The compliance rate used in this report represents only one measure of environmental compliance, and the measure has its limitations. For instance, a higher compliance rate may not reflect the severity of environmental damage caused by the violations. In addition, this compliance rate does not take into account violations of the permit that are not permit limits, for example spill or narrative requirements.

Enforcement resources vs. duties

In the early 1990s, Ecology changed the manner in which it performed compliance and enforcement by creating positions solely responsible for performing formal enforcement. Previously, permit writers and inspectors were responsible for all aspects of permit management, including compliance and enforcement. In order to effectively manage workloads and provide an objective analysis, Ecology dedicated 5.3 enforcement staff members in the four regions.

Ecology recently gained stormwater inspectors who performed compliance and enforcement functions (Figure 1). As a result, other nonpoint source staff occasionally perform enforcement as part of their job.

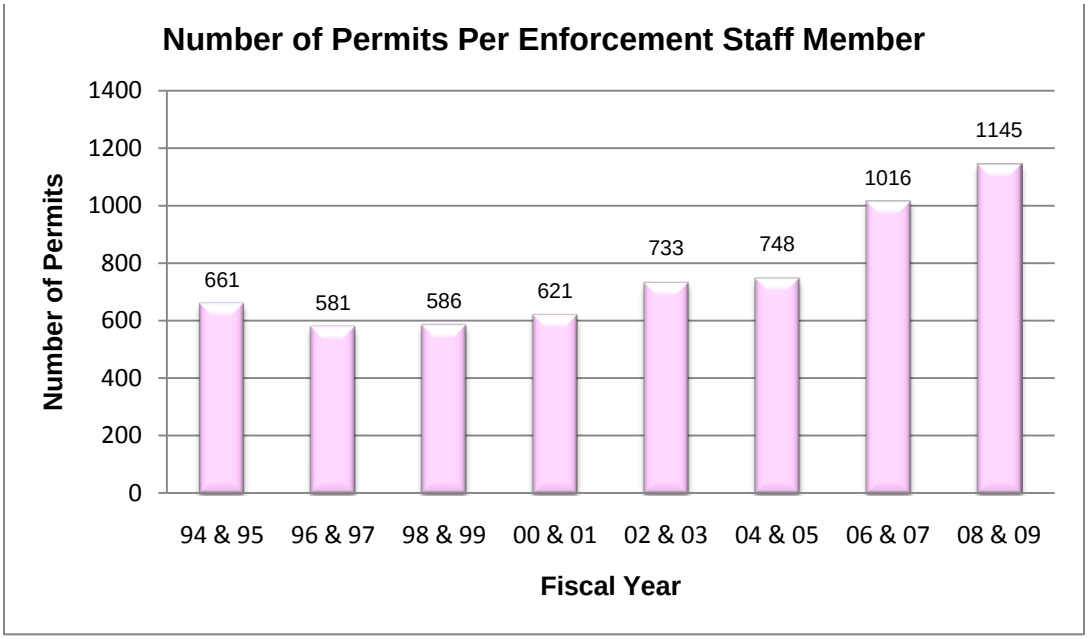

Figure 1

How the program is delivered

The Water Quality Program delivers its services through Ecology's four regional offices (northwest, southwest, central, and eastern regions) and through the Industrial Section of the Solid Waste Program. The Industrial Section is located at Ecology's headquarters offices.

The Industrial Section manages environmental permitting and compliance for the large industrial facilities of the state. These facilities include the oil, aluminum, and pulp and paper industries; several chemical manufacturers; and a variety of small industries associated with these larger industries, such as co-generation facilities. Although the Industrial Section is not within the Water Quality Program, it uses the guidelines that are developed for water quality permits. The industrial section not only writes the water quality permits but, depending on the type of facility, also prepares permits for air emission units and hazardous and solid waste facilities.

Ecology's four regional offices deliver all other water quality services for point and nonpoint sources within the state. The four regions are identified in the front cover of this report. The work is further divided within each region into municipal and industrial dischargers. In most cases, Ecology headquarters issues a general permit; however, the regions are responsible for compliance and enforcement for these sites.

How timely is the program

One measure of program effectiveness is the time required to issue an enforcement action after detection of a violation. Generally, enforcement actions or compliance responses should be taken within 45 days of the date of detection of the violations. Initial formal enforcement action (including penalties and administrative orders) should be taken as soon as possible, but no later than 90 days from the date of violation detection, unless adequate justification for delay exists. For significant violations, Ecology takes a formal enforcement response as expeditiously as possible, but no later than 30 days from date of detection. Ecology has found it difficult to measure the timeliness of enforcement action because it often takes action following a pattern of recurring behavior and after it has provided technical assistance. Ecology staff will continue to

work to develop performance measures that will more accurately reflect the effectiveness of the program.

Industrial Facility Compliance

Permit universe/complexity

A wide variety of industries and businesses that discharge pollutants to state waters are required to obtain a wastewater discharge permit. This includes large industries such as oil refineries, aluminum smelters, and pulp and paper processors. Smaller industries such as food processors, metal finishers, and circuit board manufacturers may also need individual permits. Businesses whose waste is essentially the same character and strength of household waste that discharge to a wastewater treatment plant (WWTP) do not need a permit. Figure 2 identifies the number of facilities with individual permits managed by each region and the industrial section between 2004 and 2008.

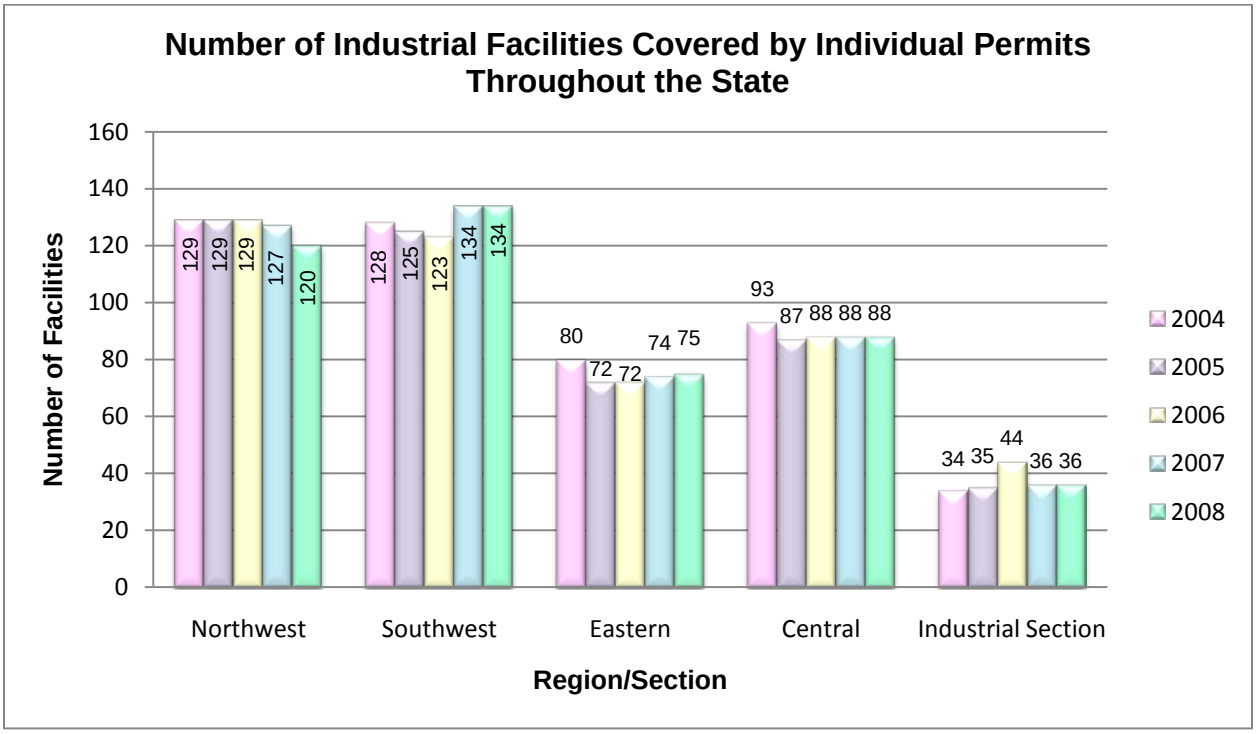

Figure 2

Effluent testing varies greatly among industrial facilities. The scope and frequency of testing is based largely upon the size and complexity of an industry and its potential to harm the environment. Some facilities may conduct only quarterly testing, whereas more complex facilities have daily monitoring requirements. Unlike operators at municipal wastewater treatment plants, the operators of treatment equipment at industrial facilities are not required to be certified by the state.

Ecology facility managers ensure compliance at the permitted facilities they manage by working collaboratively with regional enforcement staff. Facility managers may use the various

enforcement tools such as those available under Chapter 90.48 RCW, as well as "informal" enforcement tools consisting of technical assistance calls and visits, warning letters, and Notices of Correction.

What violations occurred

Figure 3 shows that there were 23,009 more compliance opportunities in 2008 than in 2004. Even so, only 2 more violations exceeded 20 percent of the permitted effluent limit in 2008 than in 2007.

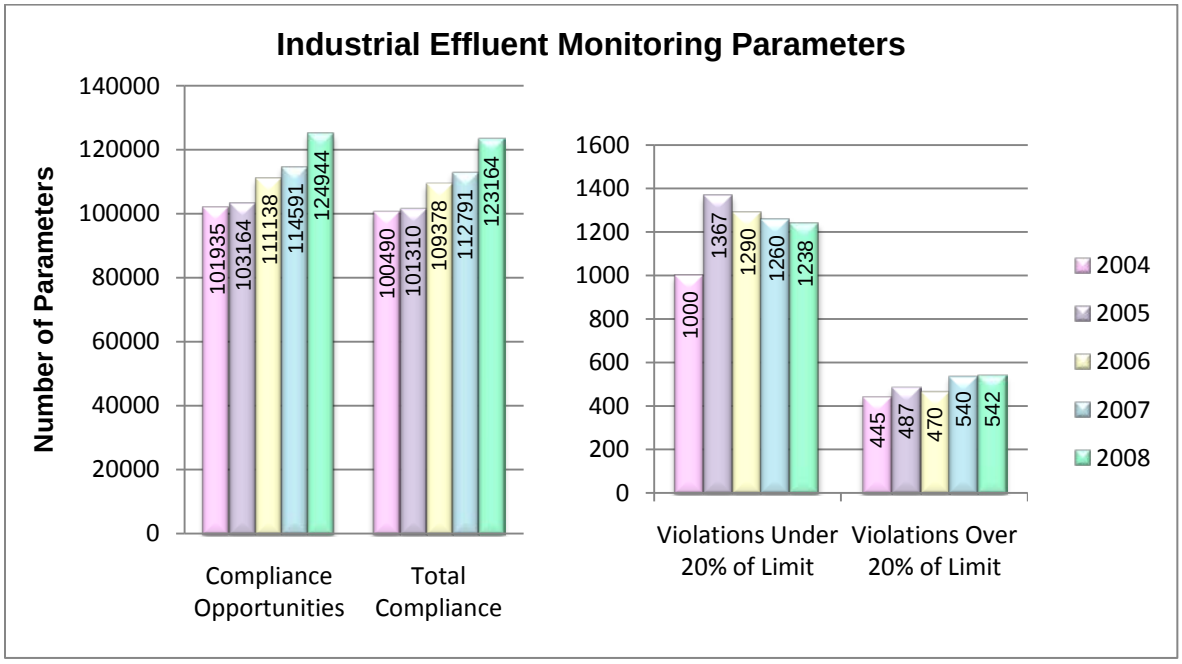

Figure 3

The eastern region had the lowest industrial compliance rate at 97.3 percent (Figure 4).

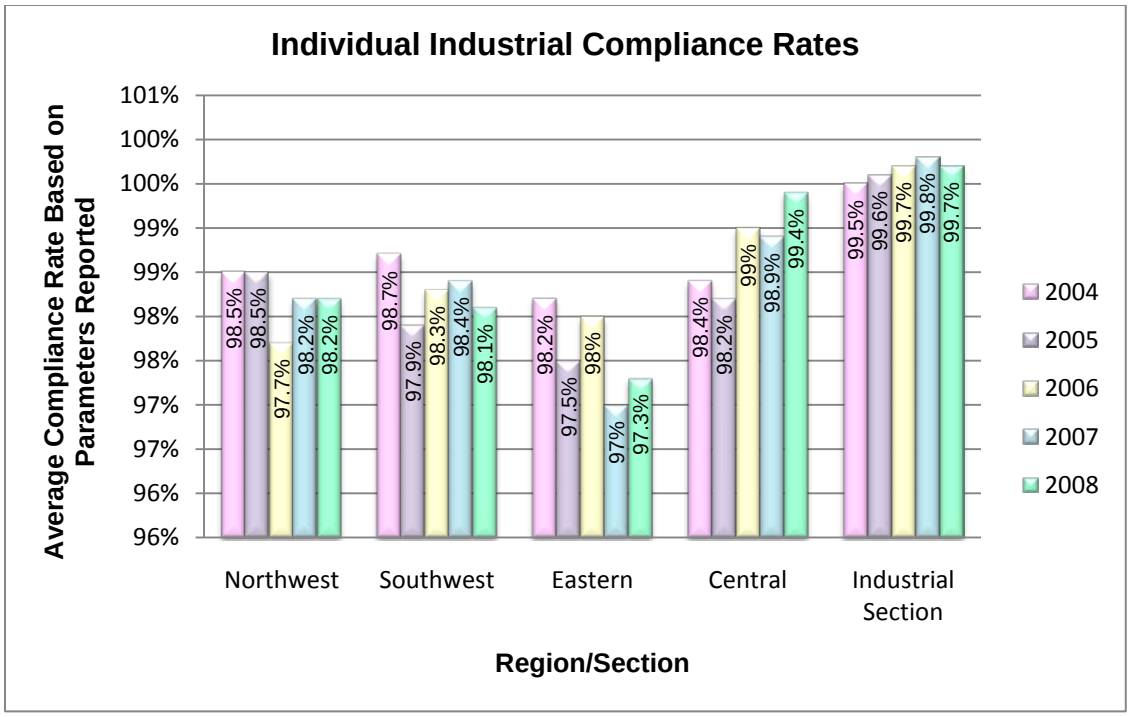

Figure 4

Statewide the compliance rate has remained consistently high over the last five years (see Figure 5). In 1995, the industrial compliance rate was 89.5 percent compared to the 2008 compliance rate of 98.6 percent, an increase of 9 percent in compliance over thirteen years.

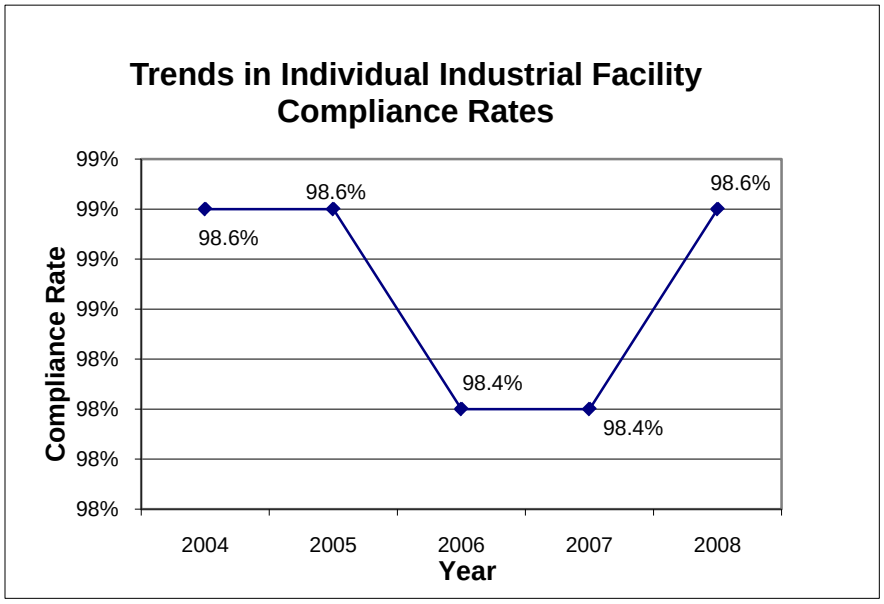

Figure 5

Figure 6 shows that 298 industrial facilities were required to submit DMRs in 2008, a decrease of 127 facilities from 2004. The total numbers of facilities with five or more violations has fluctuated since 2004 but was at its lowest total of 72 in 2008. The number of facilities with less than 5 violations has dropped significantly since 2004.

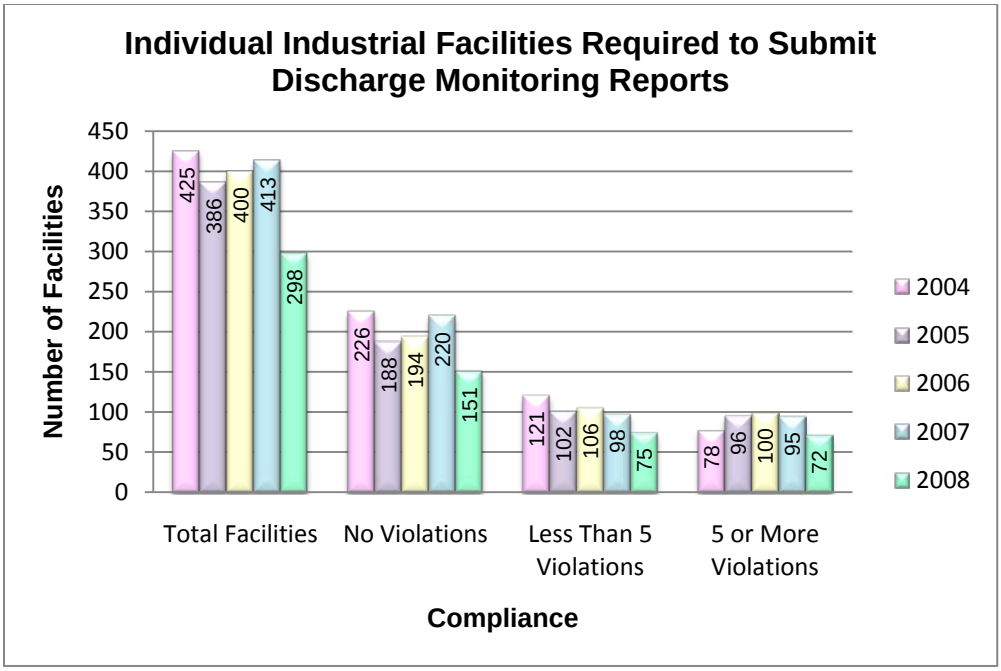
Individual Industrial Facilities Required to Submit Discharge Monitoring Reports
Number of Facilities
450
400
350
300
250
200
150
100
50
0
425
386
400
413
298
226
188
194
220
151
121
102
106
98
75
78
96
100
95
72
Total Facilities
No Violations
Less Than 5 Violations
5 or More Violations
Compliance
2004
2005
2006
2007
2008

Figure 6

Ecology focuses on facilities with five or more violations as one indicator of repeat violators, with a goal of decreasing the number of these facilities. The Southwest Regional Office had the greatest number of individually-permitted industrial facilities. Of these, 21 percent had five or more discharge violations during the calendar year 2008. Of the 78 industrial facilities required to submit DMRs in the eastern region, 38 percent had five or more discharge violations (Figure 7). The percentage of facilities with five or more violations in the central regional office decreased from 32 percent in 2004 to 26 percent in 2008.

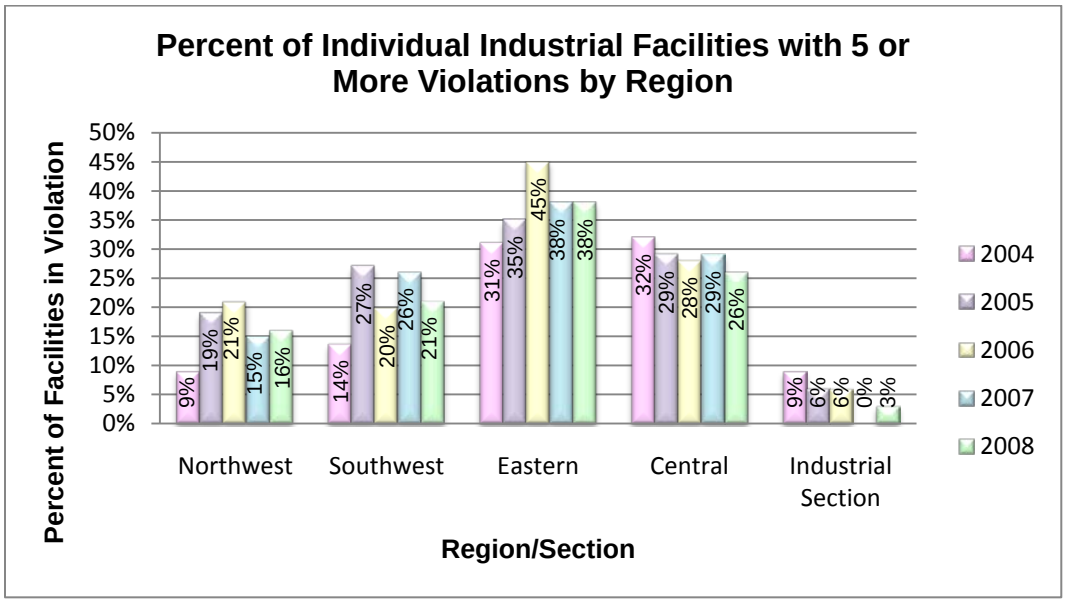

Figure 7

What actions were taken

In 2008, Ecology took 472 formal and informal enforcement actions to improve industrial facility compliance.

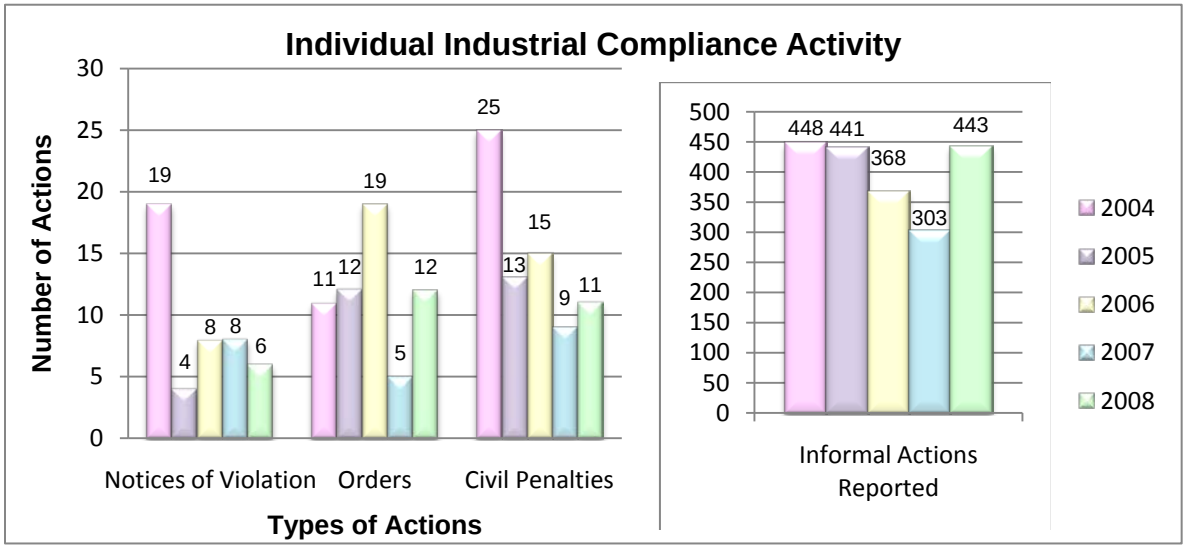

Figure 8

Of the 72 facilities that reported five or more violations Ecology took the following action:

- 13 formal actions
- 276 informal actions
- No enforcement action on 9 facilities (see Figure 9).

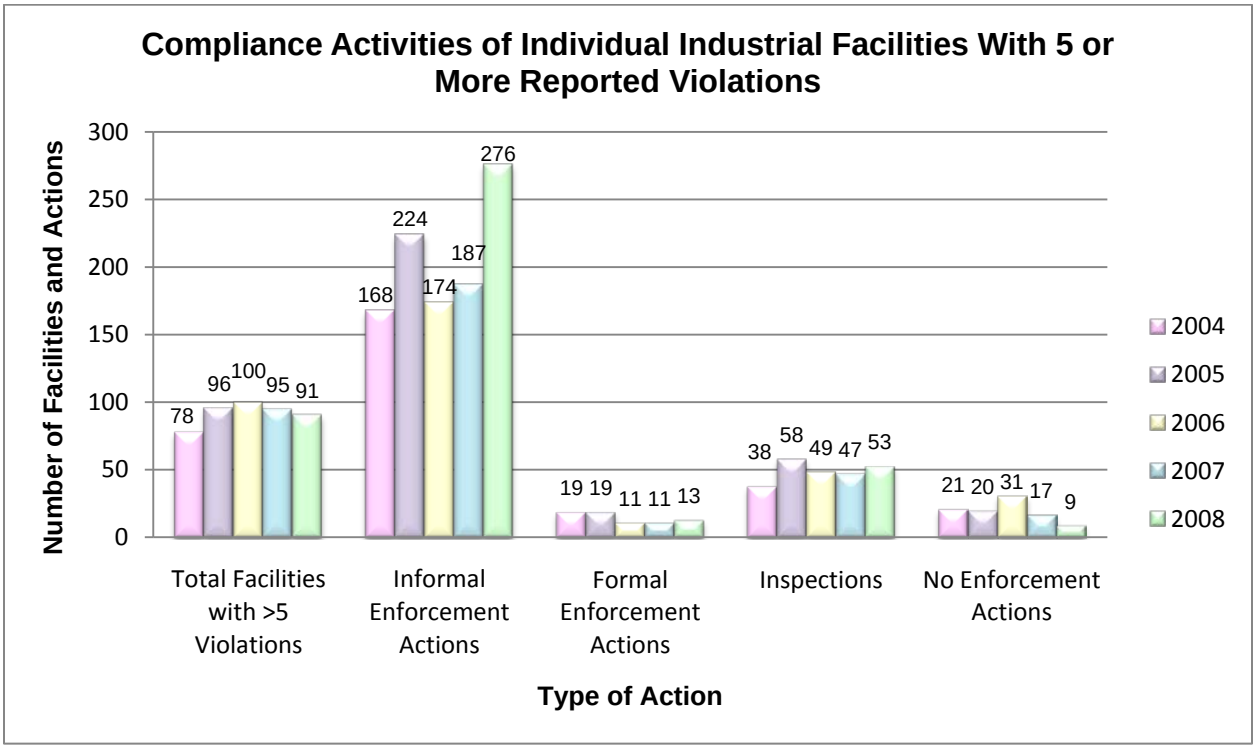

Figure 9

Municipal Facility Compliance

Permit universe/complexity

Municipal wastewater treatment plants (WWTPs) that discharge to surface waters, apply wastewater to land, or discharge more than 14,500 gallons per day (gpd) to subsurface waters are required to have a permit to discharge. As of July 1, 2009, the legislature transferred the authority to regulate all large on-site sewerage systems that treat only domestic sources of wastewater and with a design flow up to 100,000 gallons per day to the Department of Health (Health). Ecology will continue to regulate its current permits, which will transfer to Health upon expiration. This statute change affects fewer than 25 systems statewide. The number of permitted facilities shown in the table below will drop in the next five years as Ecology transfers those facilities to Health.

WWTPs use a combination of biological, physical, and chemical processes to treat the wastewater generated in homes and businesses. The size of WWTPs varies from small communities to large cities. Washington State has a total of 325 WWTPs that are designed to treat from 1,200 to more than 215 million gallons per day (mgd). The greatest numbers of municipal facilities are located in the eastern and southwest regions (see Figure 10).

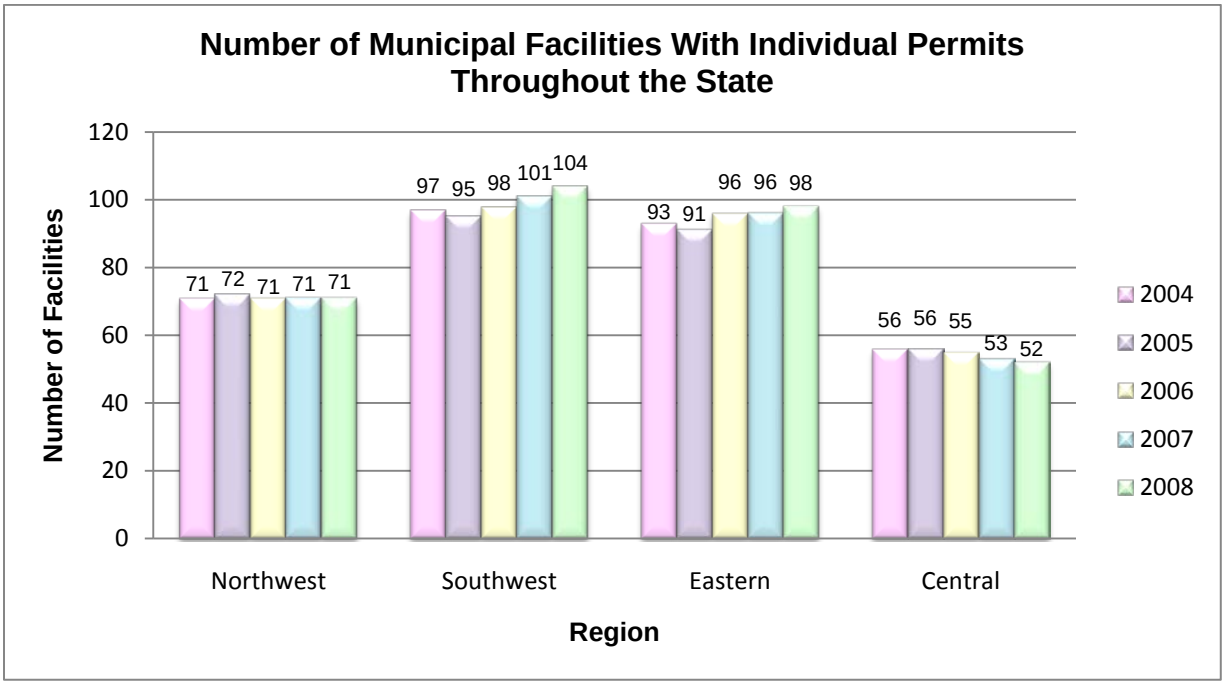

Figure 10

On average, each person generates between 70 and 100 gallons of wastewater per day. Local government (for example, city, county, or local sewer district) operates most municipal WWTPs. Smaller numbers of plants are operated by state agencies (for example, correction centers, and state parks), private communities, and private businesses.

WWTPs vary in complexity based on differences in the number and type of mechanical components and processes at each facility. However, due to the similar nature of the wastes, the types of monitoring conducted at facilities are generally the same. Small facilities typically perform a minimum of 60 laboratory tests per month on the treated wastewater, whereas a larger facility may perform well over 120 analyses per month. In addition, these WWTPs must also perform internal process control tests and may perform biological studies to ensure their discharges comply with state laws and regulations. For most facilities, Ecology's compliance and enforcement staff and permit managers review data on a monthly basis and conduct periodic inspections.

Two dedicated Ecology positions provide technical assistance statewide to small facilities on request. Although these staff persons do not recommend enforcement actions, they are required to report any compliance problems they observe during their technical assistance visits. As with other permitted facilities, the majority of compliance activities involve phone calls, e-mails, warning letters, technical assistance, engineering review and assistance, and inspections.

Ecology may impose sewer moratoria on overloaded wastewater treatment plants that are unable to comply with permit requirements. Moratoria, or sewer connection bans, prevent or limit hookups to a sewer system when the system exceeds its capacity or receives more waste than it was designed to treat. During 2008, there were 7 moratoria in place statewide.

What violations occurred

For individual municipal facilities the number of compliance opportunities increased from 2004 to 2008 by 15,624. Compliance increased proportionally. The number of violations that exceeded 20 percent of the permitted limits decreased in 2008, however the number of violations under 20 percent of the limit increased (Figure 11).

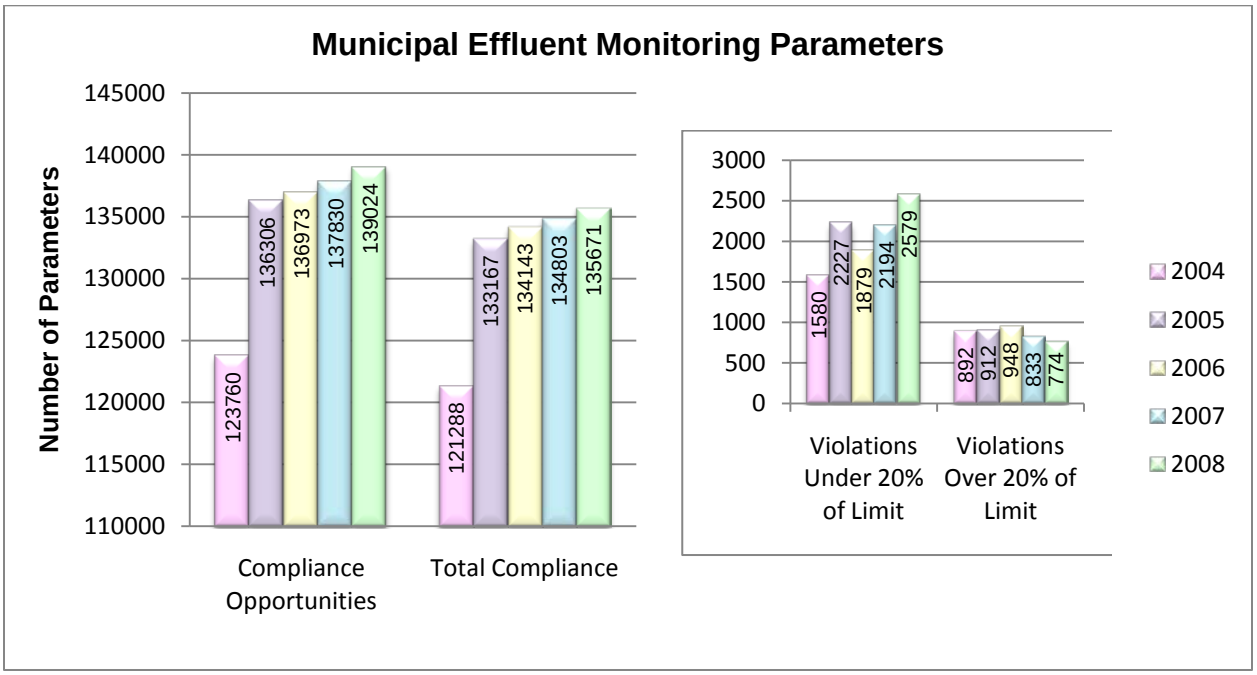

Figure 11

The highest compliance rate (99.7 percent) occurred for facilities in the Central Regional Office. The eastern region had the lowest municipal compliance rate at 94.4 percent (Figure 12).

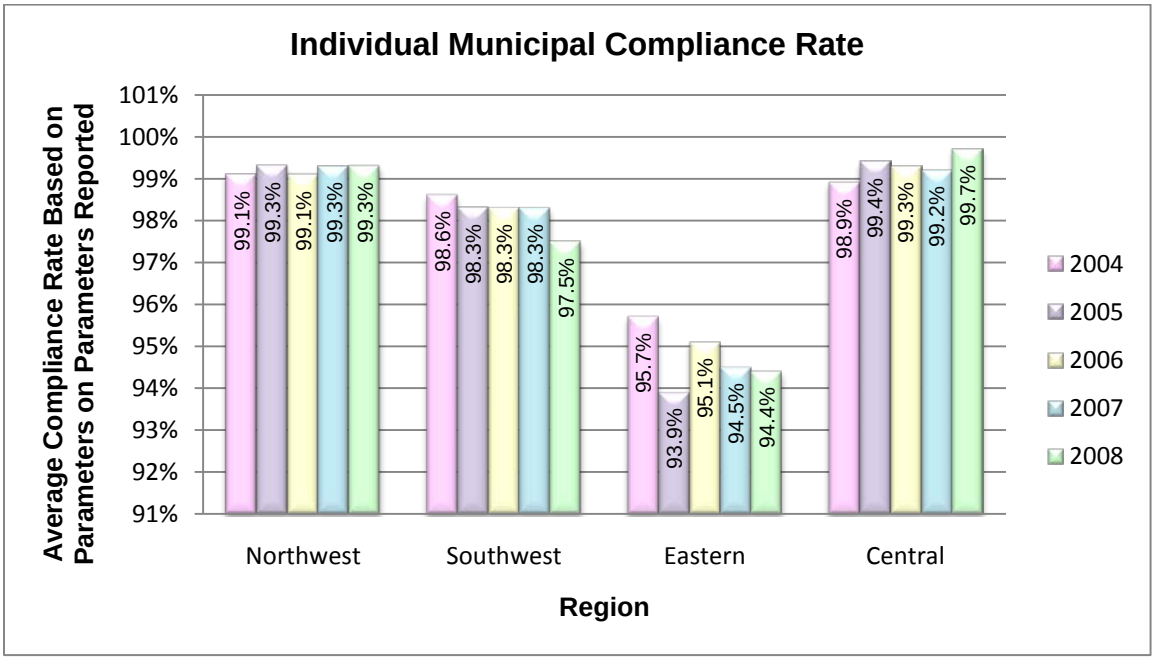

Figure 12

Generally, the statewide compliance rate for individual municipal facilities has decreased slightly from 2006. The municipal compliance rate increased from 92.7 percent in 1996 to 97.6 percent in 2008, an increase of 7.9 percent in compliance over ten years (Figure 13).

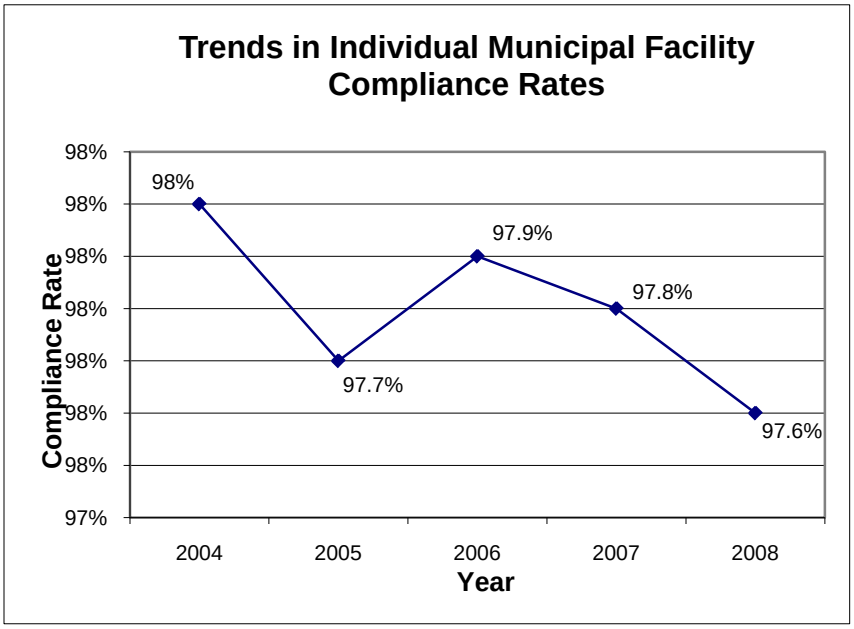

Figure 13

Ecology focuses resources on facilities with five or more violations per year as one way to improve compliance. The number of facilities with five or more violations or more increased slightly from 109 in 2004 to 116 in 2008 (Figure 14).

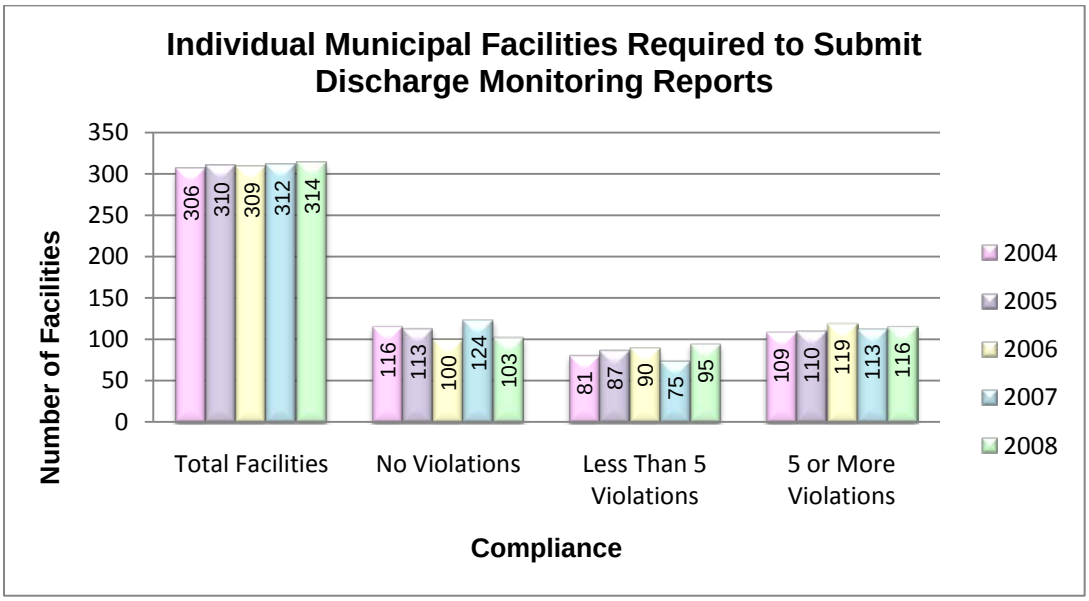

Figure 14

The highest percentage of violating municipal facilities occurred in Ecology's Eastern Region (Figure 15). Of the 98 municipal facilities required to submit DMRs in 2008 in the Eastern Region, 67 percent had five or more discharge violations. Only 15 percent of the Central Region's 52 facilities violated their permit five or more times, a decrease of 17 percent since 2004.

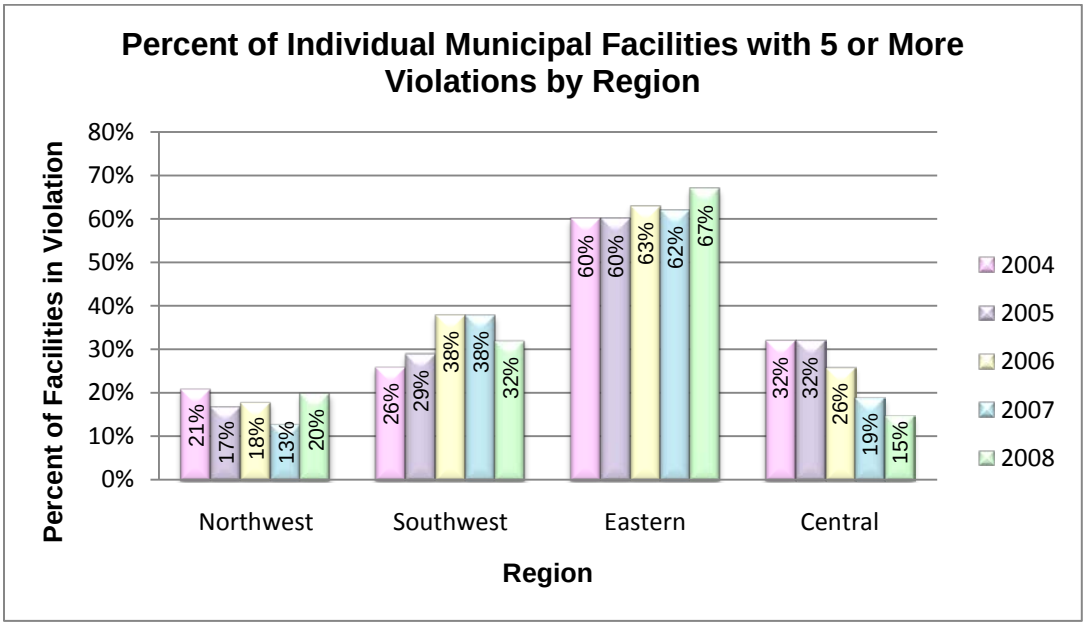

Figure 15

What actions were taken

In 2008, Ecology took 490 enforcement actions to improve municipal compliance. In addition, 7 moratoria were in place, down 1 from 2007. (Figure 16)

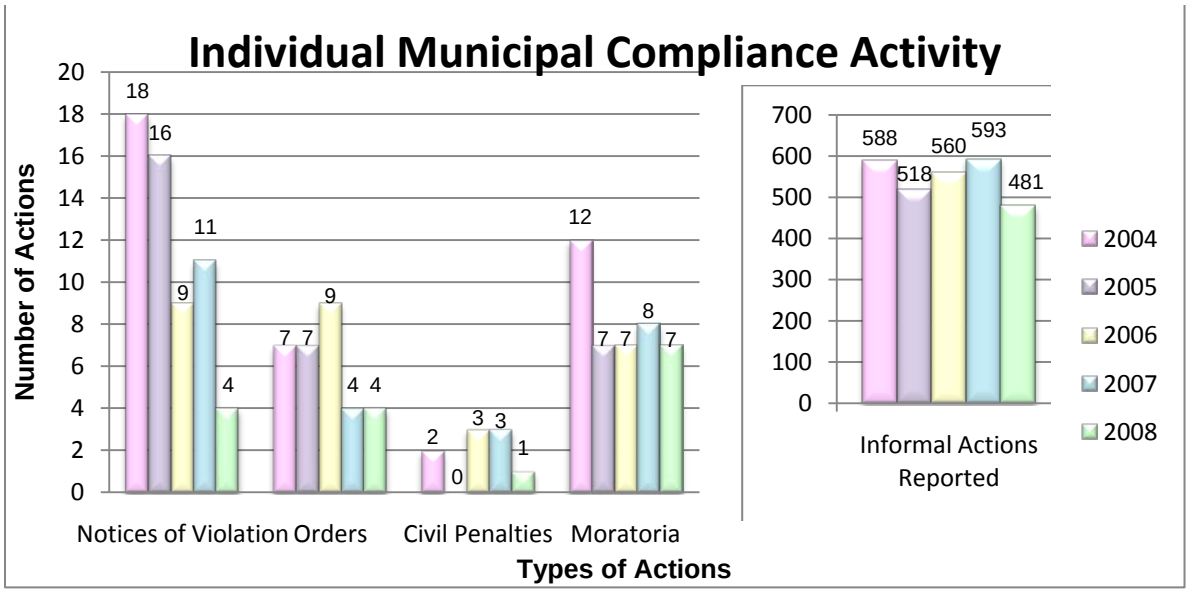

Figure 16

A total of 116 municipal facilities reported five or more violations in 2008. Ecology took enforcement actions on 99 facilities and took no action on 17 facilities (Figure 17).

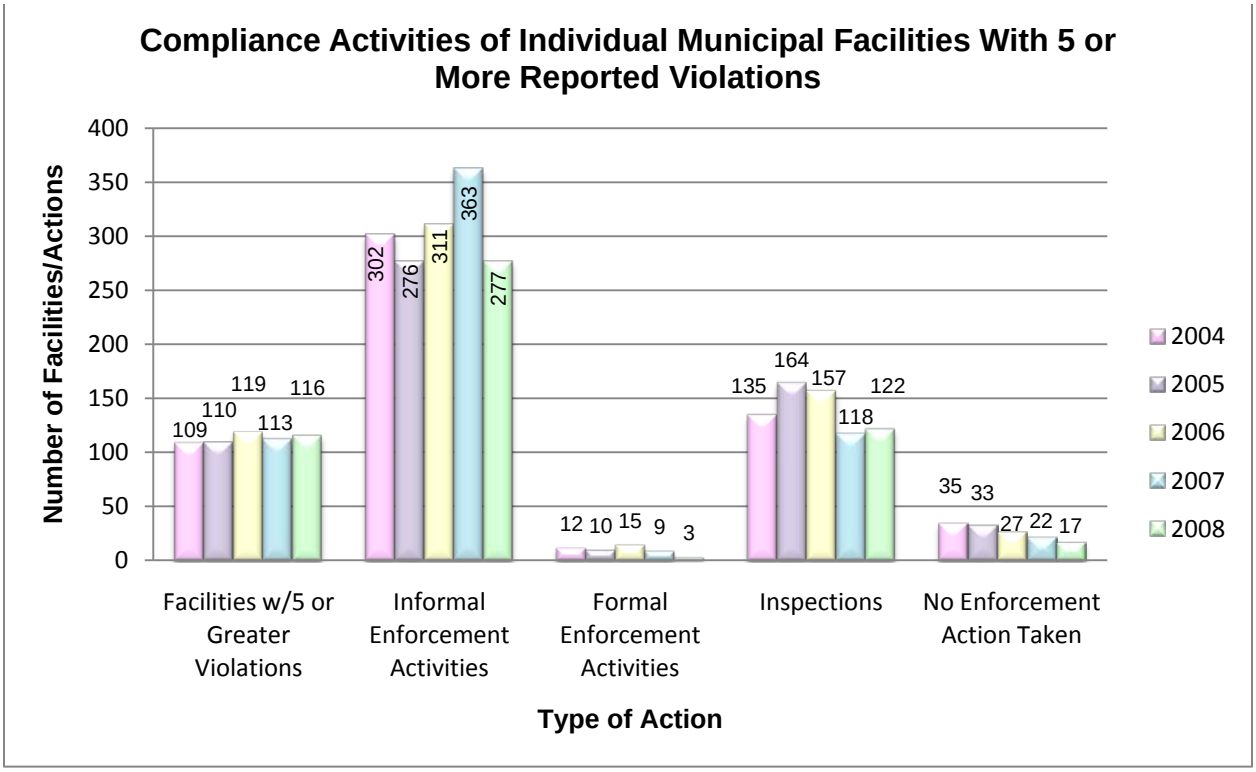

Figure 17

General Permit Compliance

Permit universe/complexity

Ecology develops general permits (NPDES and/or state wastewater discharge permits) for an entire category of discharger. Facilities covered by general permits typically have simple manufacturing processes, a limited number of pollutants, and pollution controls that often use best management practices (BMPs) rather than a complex treatment process. General permit holders may submit monitoring data on a monthly or quarterly basis. These include:

- Boatyards
- Construction stormwater
- Fish hatcheries
- Fruit packer plants
- Industrial stormwater
- Municipal stormwater
- Sand and gravel facilities
- Water treatment plants

Boatyards

All boatyards, as defined by this permit, in the state of Washington are required to obtain coverage under this general permit. A boatyard is defined as a commercial business primarily engaged in new construction and repair of small vessels 65 feet or less in length. Services typically provided include, but are not limited to: pressure washing; bottom and side painting; engine, prop, shaft, and rudder repair system and replacement; hull repair, joinery, bilge cleaning; fuel and lubrication system repair and replacement; welding and grinding on the hull; buffing and waxing; marine sanitation device repair and replacement; and other activities necessary to maintain a vessel. If a facility conducts all activities indoors, under cover, with no outside activities or exposure except haul out, it may not need coverage under this permit. Certain boatyard repair activities generally conducted in marinas are exempted from coverage under this permit, but could be subject to the Industrial Stormwater General Permit.

This general permit establishes technology-based effluent limits for pollutants of concern. These include wastes generated by boatyard activities such as: spent abrasive grits, spent solvent, spent oils, pressure wash wastewater, paint over-spray, paint drips, various cleaners and anti-corrosive compounds, paint chips, scrap metal, welding rods, wood, plastic, resins, glass fibers, and miscellaneous trash such as paper and glass. The two main wastewater streams are pressure wash wastewater and stormwater runoff. Other potential sources are cooling water, pump testing, gray water, sanitary waste, wash-down of the work area, and engine bilge water.

Monitoring, sampling, and reporting are required for stormwater and pressure wash wastewater. Stormwater sampling is required in January, April, May, September, and October for oil/grease (O&G), total recoverable copper, and total suspended solids (TSS). Ecology has proposed to modify the permit to eliminate monitoring for TSS and O&G based on the data submitted by the boatyards. You can find more information at Ecology's website: http://www.ecy.wa.gov/programs/wq/permits/boatyard/index.html . If a permitted boatyard

discharges treated pressure wash wastewater to a non-delegated POTW, pressure wash wastewater sampling is required in June, July, August, and September for total recoverable copper, zinc, lead, and pH.

Ecology permit managers are responsible for ensuring compliance at the permitted boatyards. It is achieved using both informal and formal tools. Informal tools include technical assistance calls, visits, or e-mails; warning letters; and Notices of Correction. Formal enforcement tools can include Administrative Orders, Notices of Violation, and penalties.

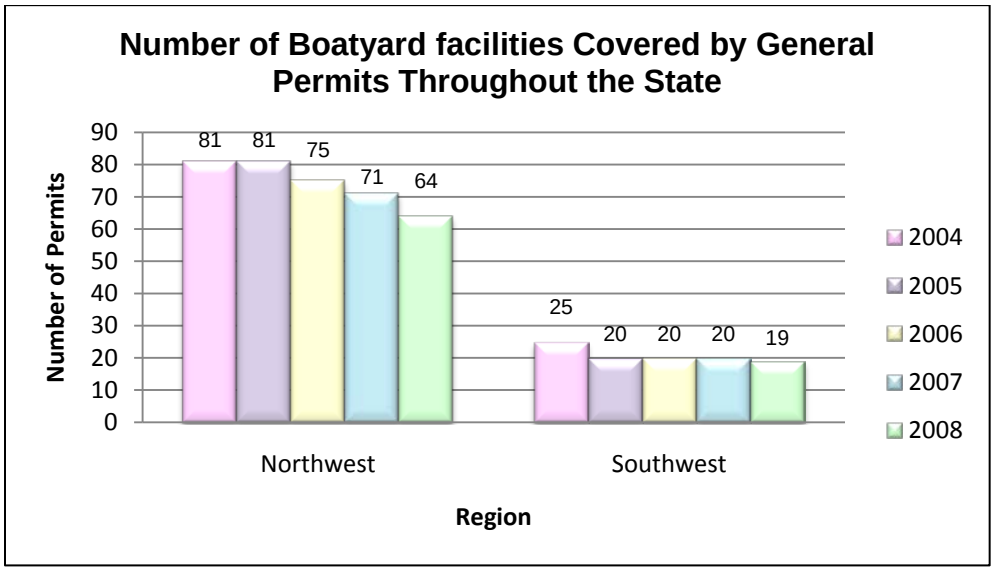

Figure 18

What violations occurred

For general boatyard facilities the number of compliance opportunities increased from 2004 to 2008 by 1,503. Compliance increased proportionally. The number of violations that exceeded 20 percent of the permitted limits decreased by 25 in 2008 (Figure 19).

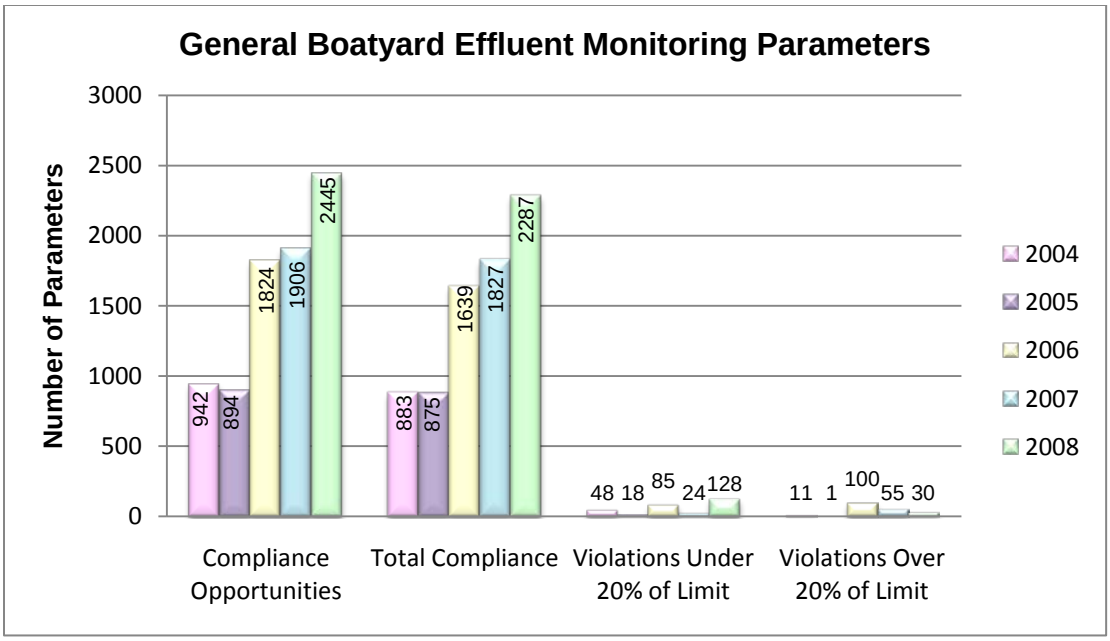

Figure 19

The compliance rate for the Northwest Regional Office has fluctuated between 2004 and 2008 and is 1.6 percent lower than in 2004. The compliance rate for the Southwest Regional Office has fluctuated between 2004 and 2008 and is 3.4 percent higher as compared to 2004 (Figure 20).

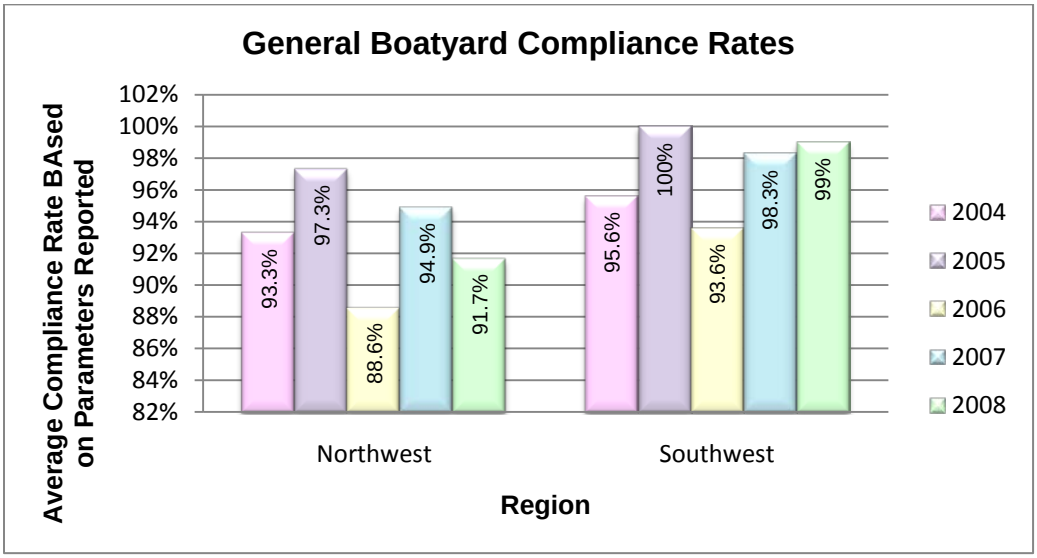

Figure 20

Generally, the statewide compliance rate for general boatyard facilities has decreased slightly. The boatyard compliance rate decreased from 93.7 percent in 2004 to 93.5 percent in 2008, a decrease of 0.2 percent in compliance over five years (Figure 21).

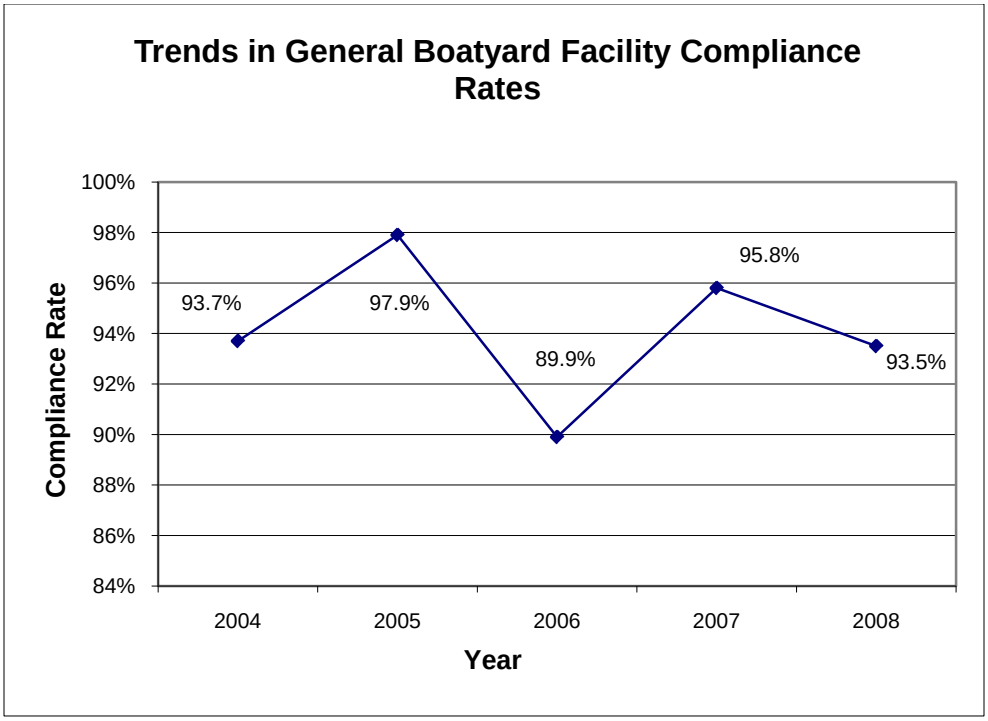

Figure 21

Ecology focuses resources on facilities with five or more violations per year as one way to improve compliance. The number of facilities with five or more violations or more increased from 5 in 2004 to 13 in 2008 (Figure 22).

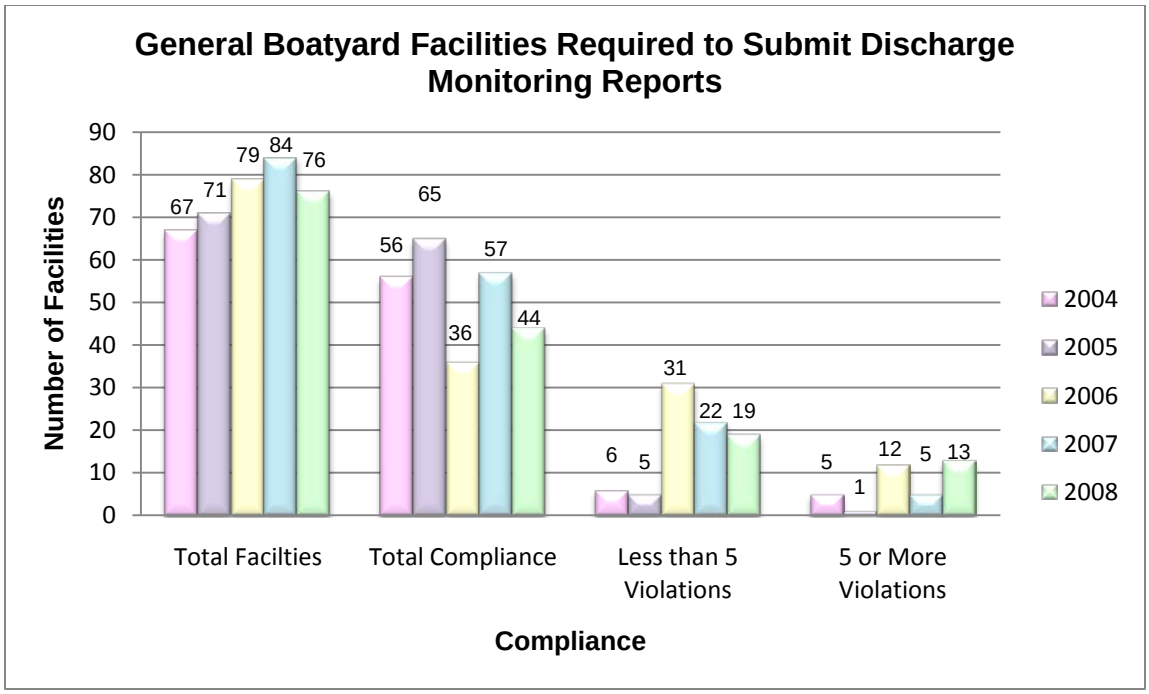

Figure 22

The highest percentage (21 percent) of violating boatyard facilities occurred in Ecology's northwest region (Figure 23) which also regulates the highest number of boatyards permitted under the general permit.

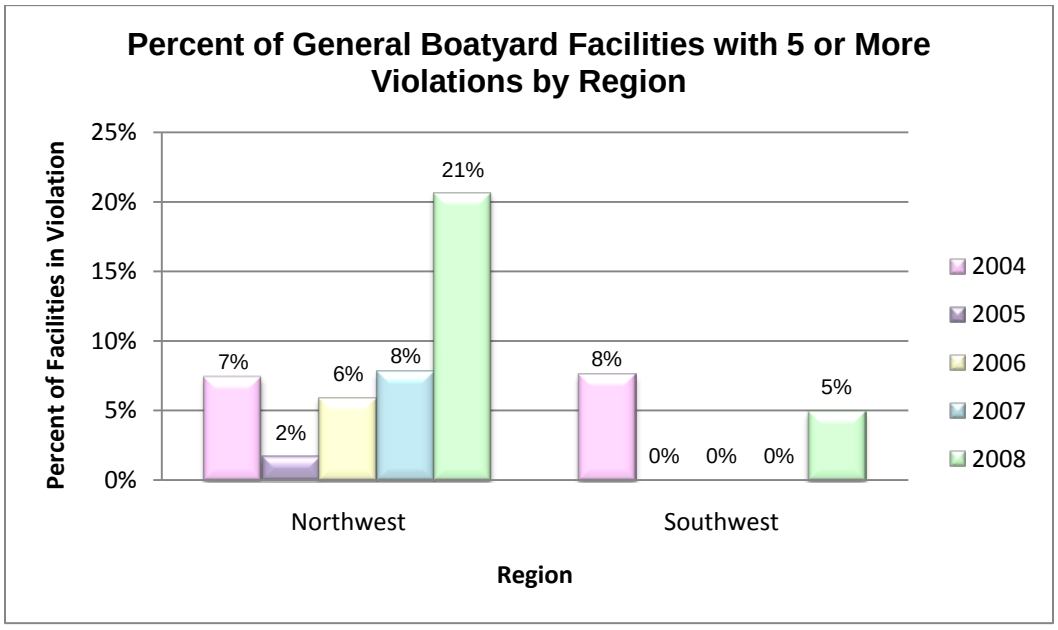

Figure 23

What actions were taken

In 2008, Ecology took 63 enforcement actions to improve boatyard compliance (Figure 24).

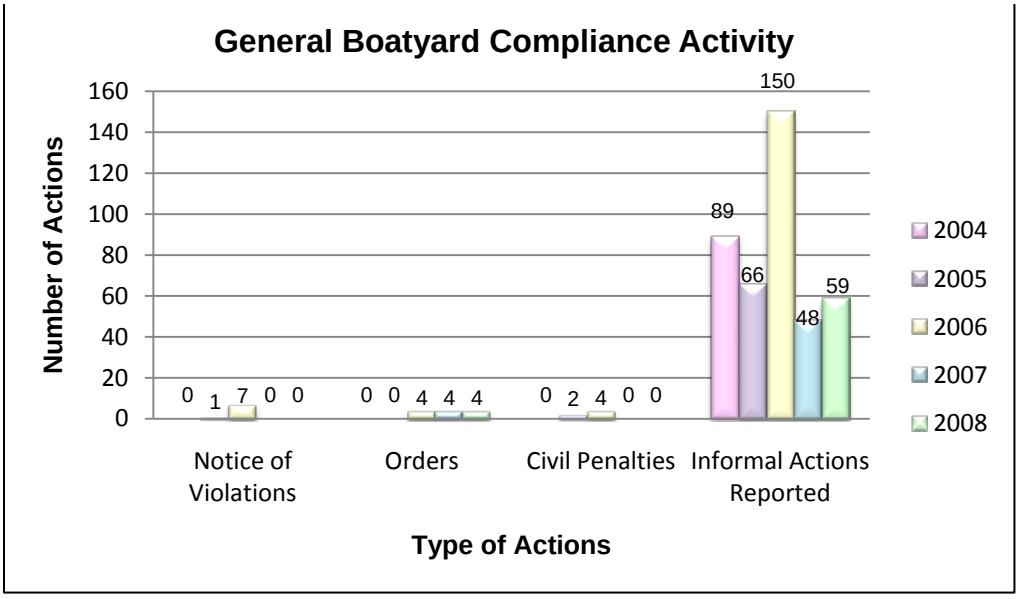

Figure 24

There were 7 facilities (40 percent) with more than five violations that did not receive any enforcement actions in 2008 (Figure 25).

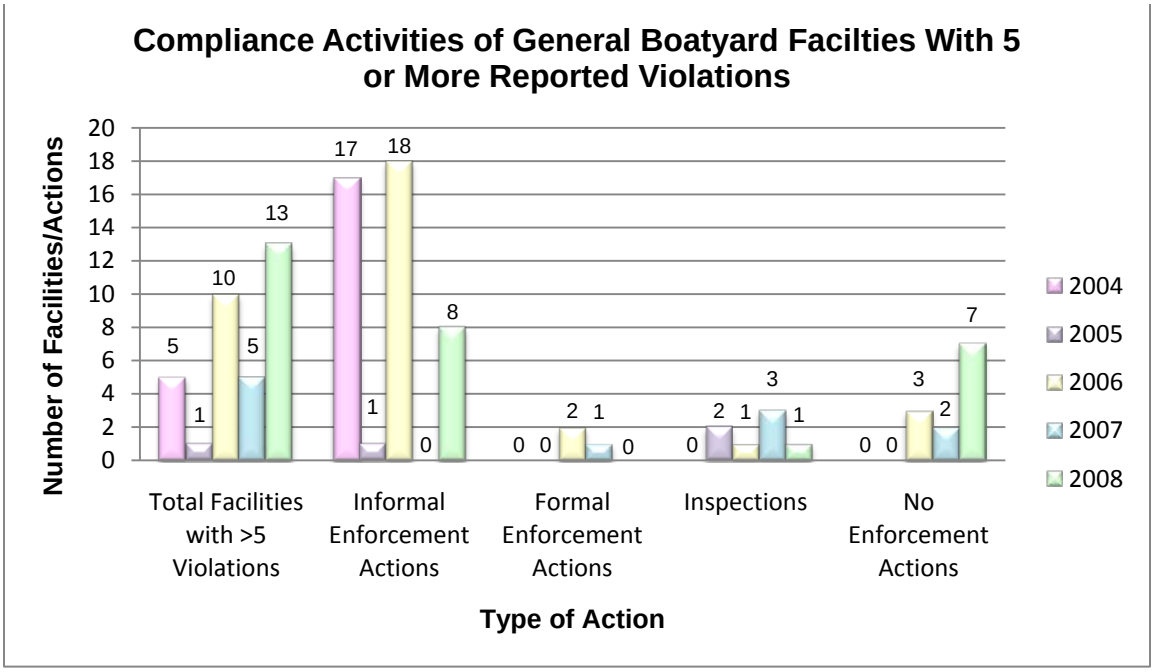

Figure 25

Fish hatcheries

Upland fin-fish hatching and rearing facilities as defined in Chapter 173-221A WAC are required to obtain coverage under this general permit. Facilities include hatcheries, rearing ponds, spawning channels, and similarly constructed or fabricated public or private facilities. Activities include hatching, feeding, nurturing, holding, maintaining, and rearing to reach the size of release or for market sale. The permit covers facilities that discharge at least thirty (30) days a calendar year and produce more than 20,000 pounds of fish per year, or feed more than 5,000 pounds of fish food during any calendar month. Fish rearing and hatching operations on federal or tribal land are not covered under this permit.

This general permit establishes both technology-based and water-quality based effluent limits for pollutants of concern. The pollutants of concern in hatchery and rearing pond wastewater are the waste food and fish feces. The chemical constituents of concern in both are primarily nitrogen and phosphorus. Disease control chemicals used to treat both internal and external fish diseases and to prevent the spread of disease at or between facilities are also pollutants of concern. Each facility annually submits a comprehensive list of chemicals used to Ecology. Permitted facilities are required to routinely monitor and sample at rearing ponds or raceway discharges and offline settling basins. The facilities measure total suspended solids and settleable solids and report the information monthly.

Ecology permit managers are responsible for ensuring compliance at the upland fin-fish and rearing facilities, using both informal and formal enforcement tools. Informal tools include technical assistance calls, visits, or e-mails; warning letters; and Notices of Correction. Formal enforcement tools can include Administrative Orders, Notices of Violation, and penalties.

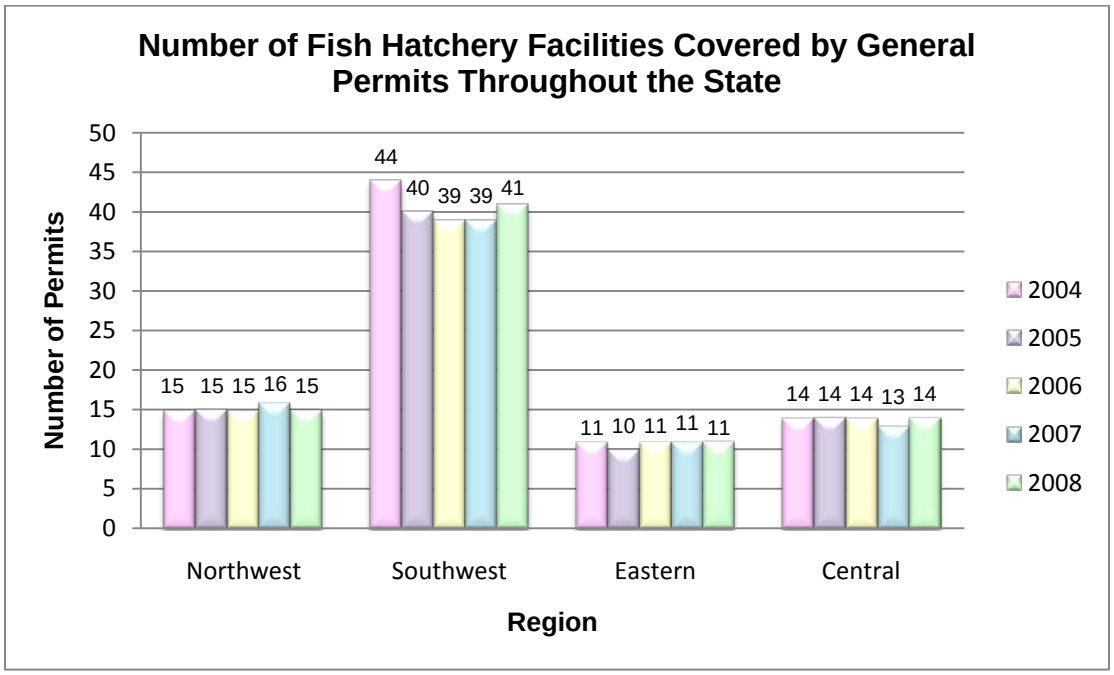

Figure 26

What violations occurred

For general fish hatchery facilities the number of compliance opportunities increased from 2004 to 2008 by 6,471. Compliance increased proportionally. The number of times facilities violated their permit limits has remained consistently low since 2004. This applies to both violations that are less than 20 percent of the permitted limit as well as violations that exceeded 20 percent of the permitted limits (Figure 27).

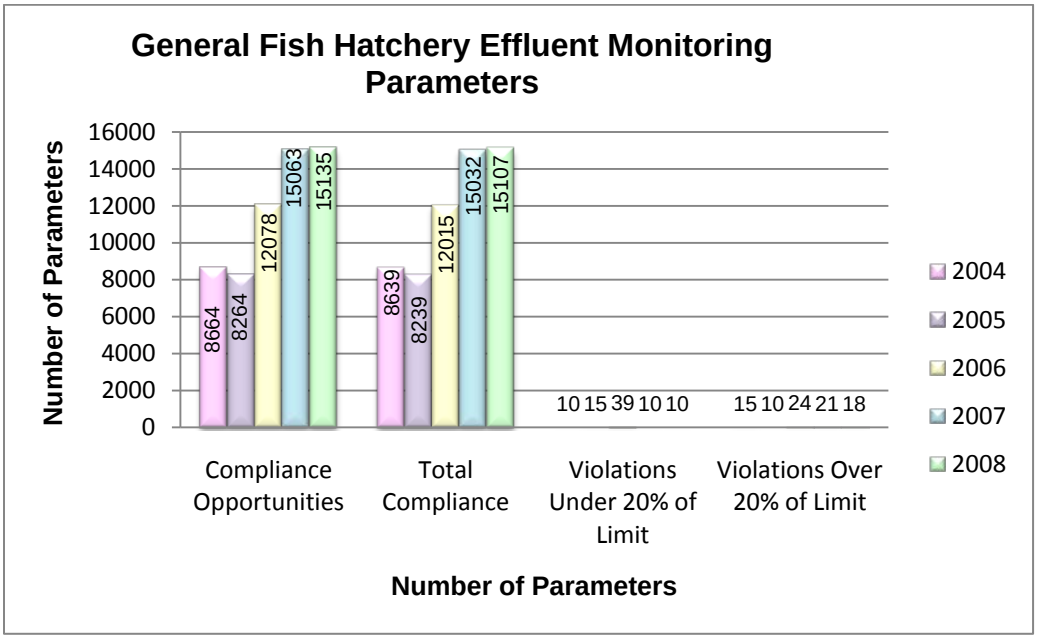

Figure 27

Statewide the facilities complied with permits limits 99.8 percent of the time (compliance rate). Figure 28 shows the compliance rate in each region.

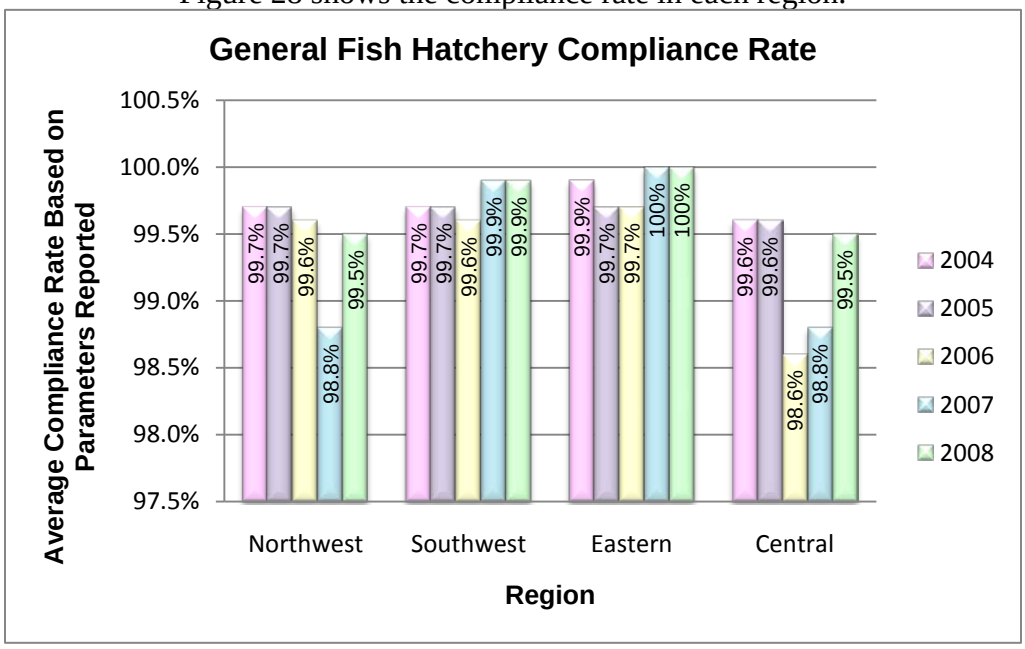

Figure 28

Water Quality Program Annual Compliance Report
Calendar Year 2008

The statewide compliance rate for general fish hatchery facilities has remained consistently high as noted in Figure 29.

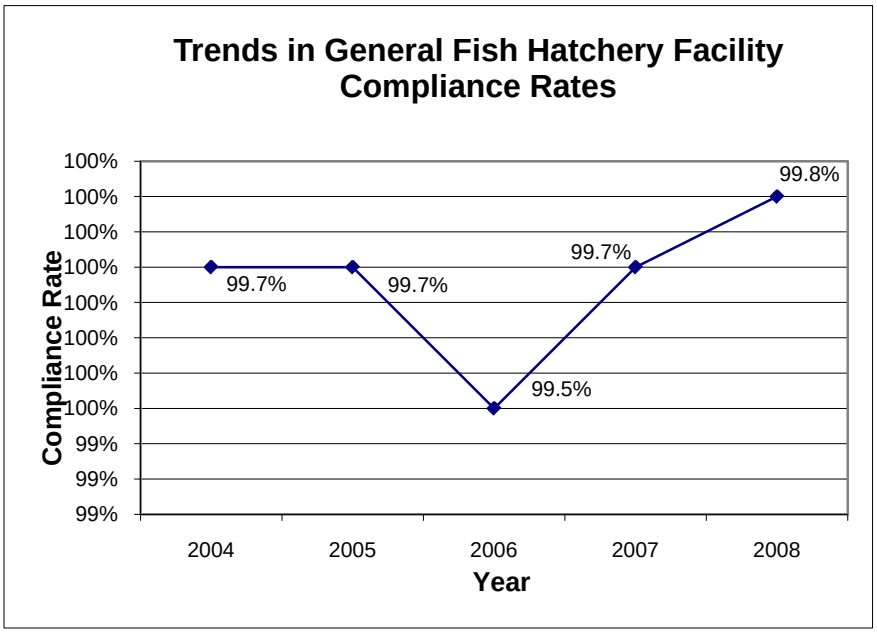

Figure 29

Ecology focuses resources on facilities with five or more violations per year as one way to improve compliance. In 2008, only one facility located in the central regional office violated its permit limits more than 5 times.

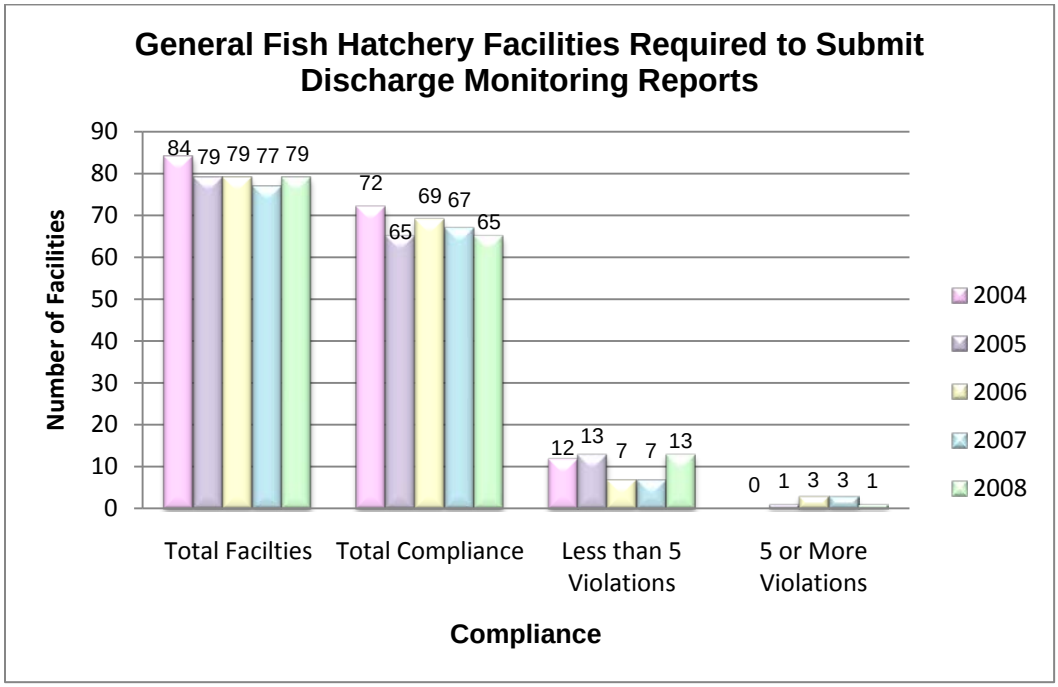

Figure 30

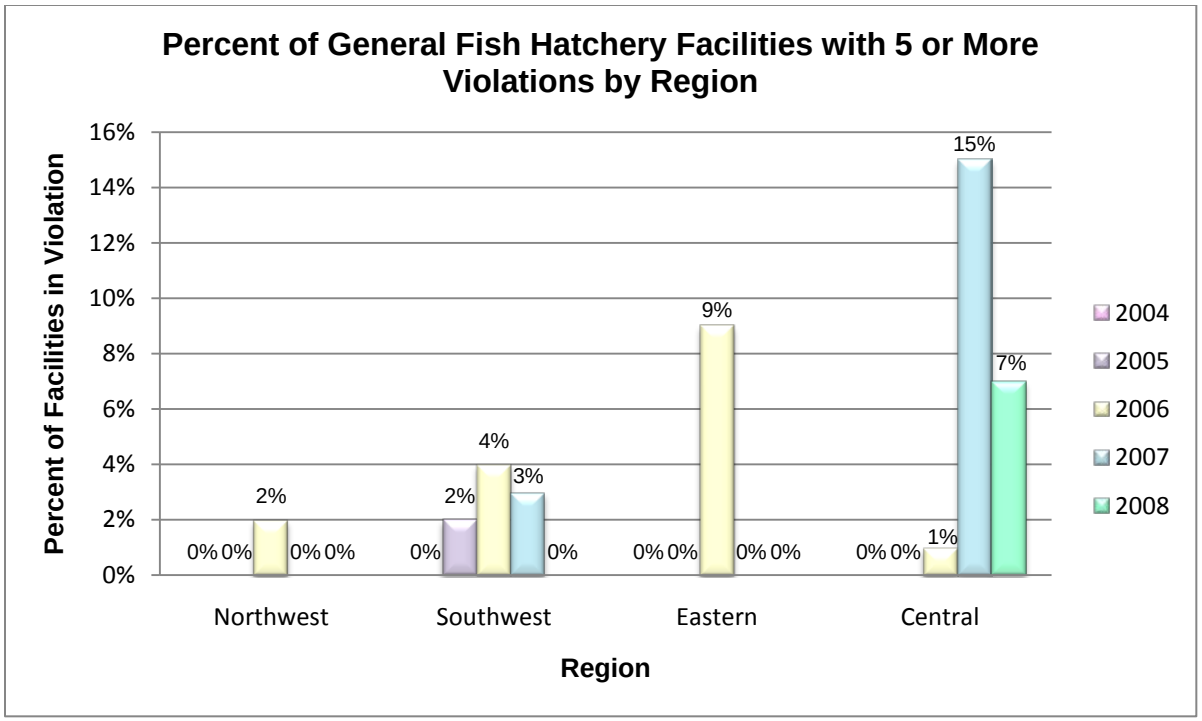

Figure 31

What actions were taken

In 2008, Ecology took 14 informal enforcement actions to improve fish hatchery compliance (Figure 32).

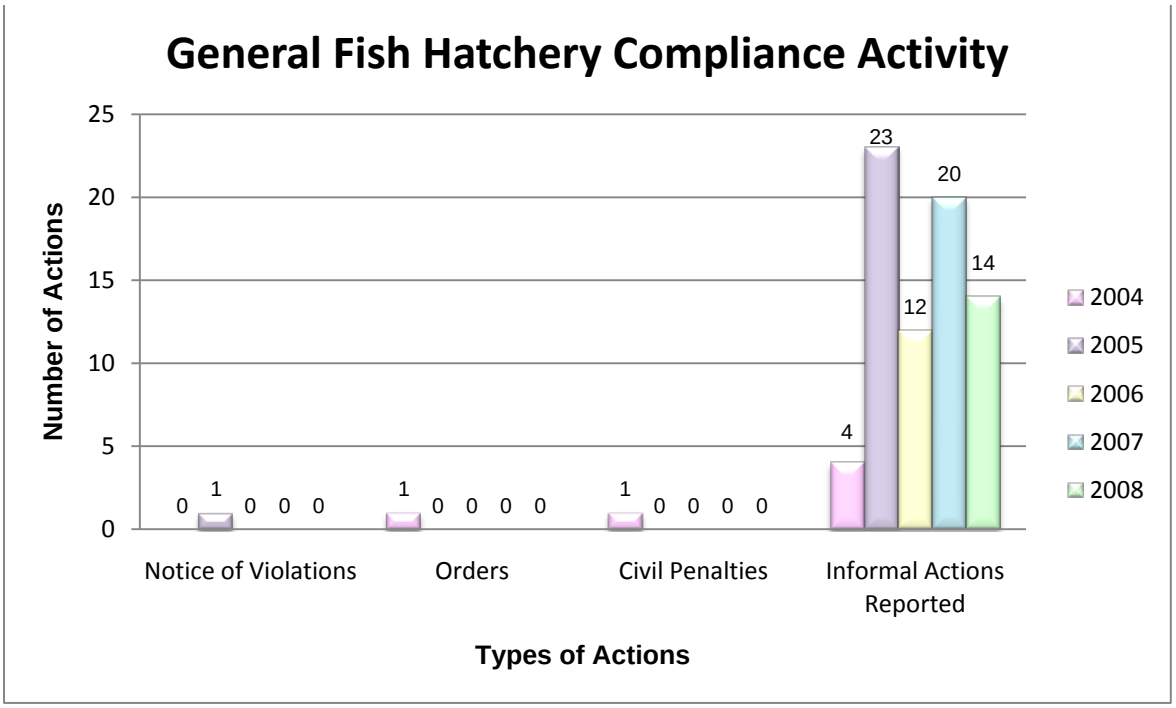

Figure 32

Ecology took informal action against the one facility with more than five violations in 2008 (Figure 33).

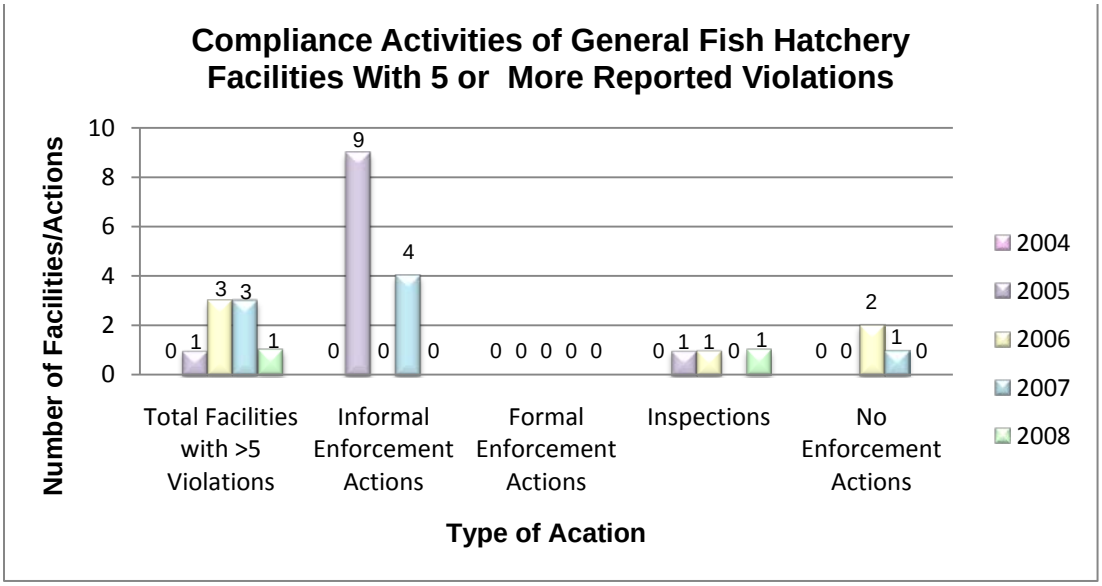

Figure 33

Fresh fruit packers

Every new or existing fresh fruit packing facility which receives, packs, stores, and/or ships either hard or soft fruit, and discharges wastewater (with the exception of discharges of only domestic wastewater or discharges only to a delegated pretreatment POTW) , shall be required to apply for and obtain coverage under this general permit. These facilities are generally located in the central and eastern regions of Washington State.

This general permit establishes technology-based effluent limits for pollutants of concern. These include wastes generated by the fresh fruit packer industry such as total dissolved solids, chlorine, turbidity, oxygen demand, high temperature, high or low pH, or toxic materials.

Ecology permit managers are responsible for ensuring compliance at the permitted fresh fruit packers. It achieves compliance using both informal and formal tools. Informal tools include technical assistance calls, visits, or e-mails; warning letters; and Notices of Correction. Formal enforcement tools can include Administrative Orders, Notices of Violation, and penalties.

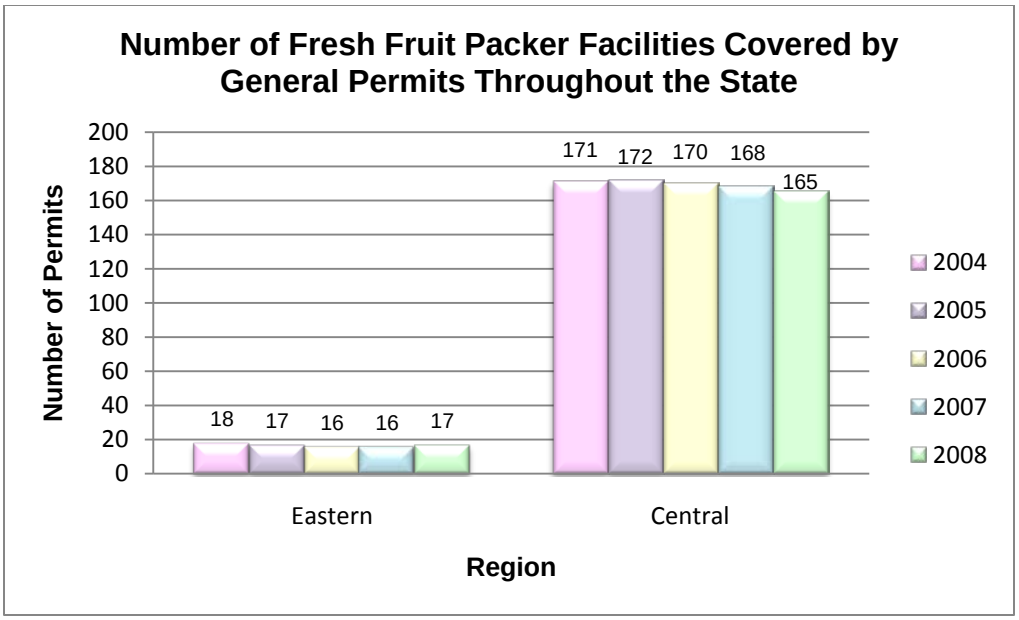

Figure 34

What violations occurred

For general fruit packer facilities, the number of compliance opportunities decreased from 2004 to 2008 by 1,476. The number of violations that exceeded 20 percent of the permitted limits decreased by 43 from 2004 to 2008 (Figure 35).

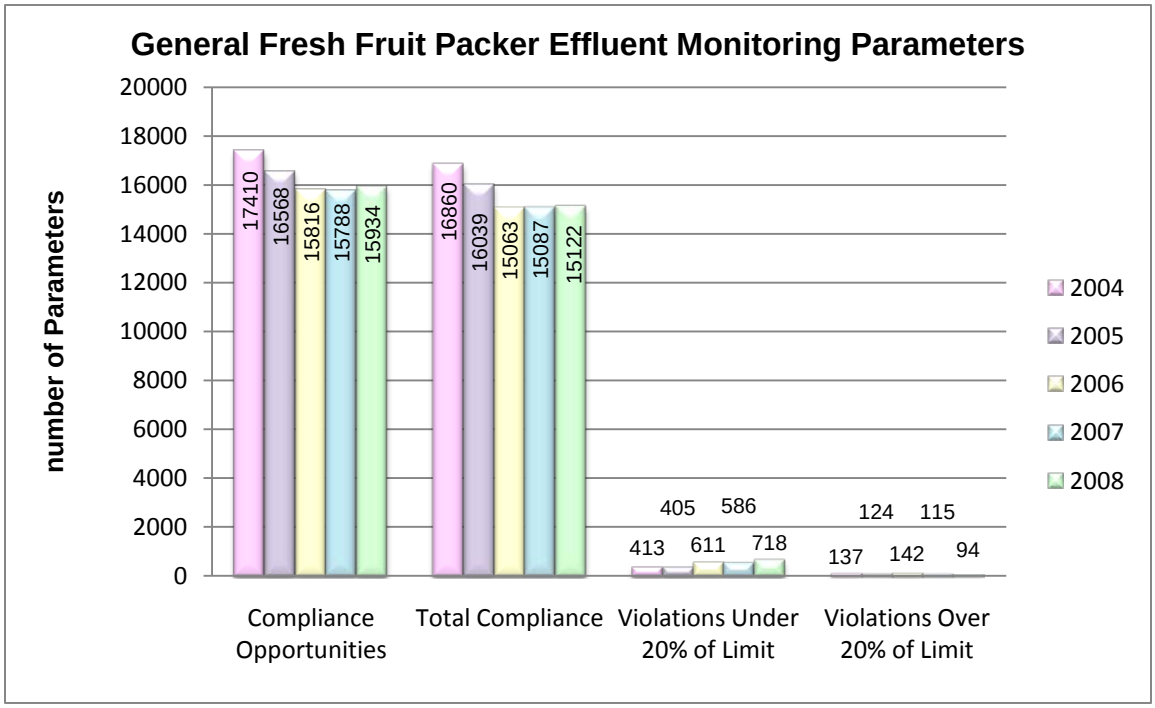

Figure 35

Statewide the fruit packers complied with their permit limits almost 95 percent of the time (Figure 36).

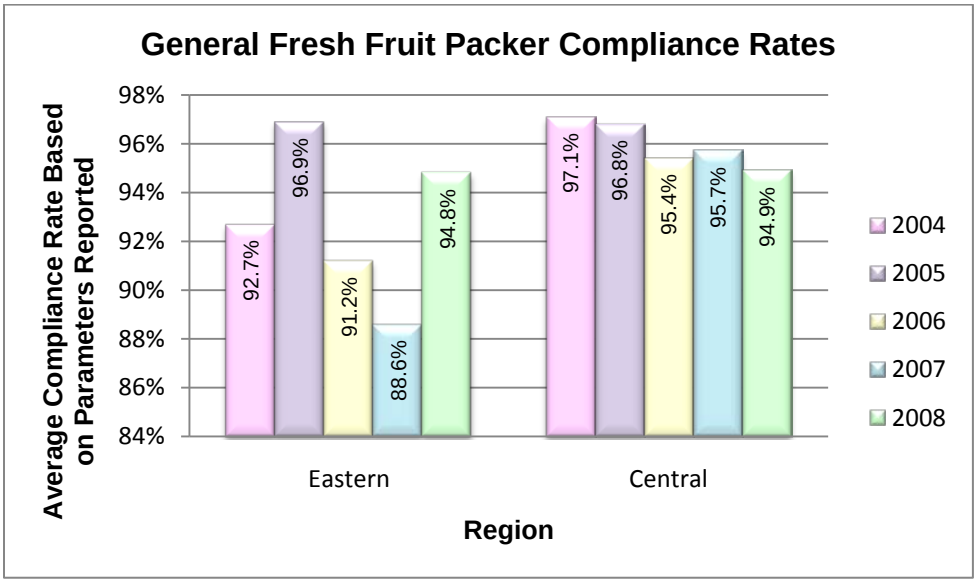

Figure 36

Generally, the statewide compliance rate for general fruit packer facilities has decreased slightly. The fruit packer compliance rate decreased from 96.8 percent in 2004 to 94.9 percent in 2008, a decrease of 1.9 percent in compliance over five years (Figure 37).

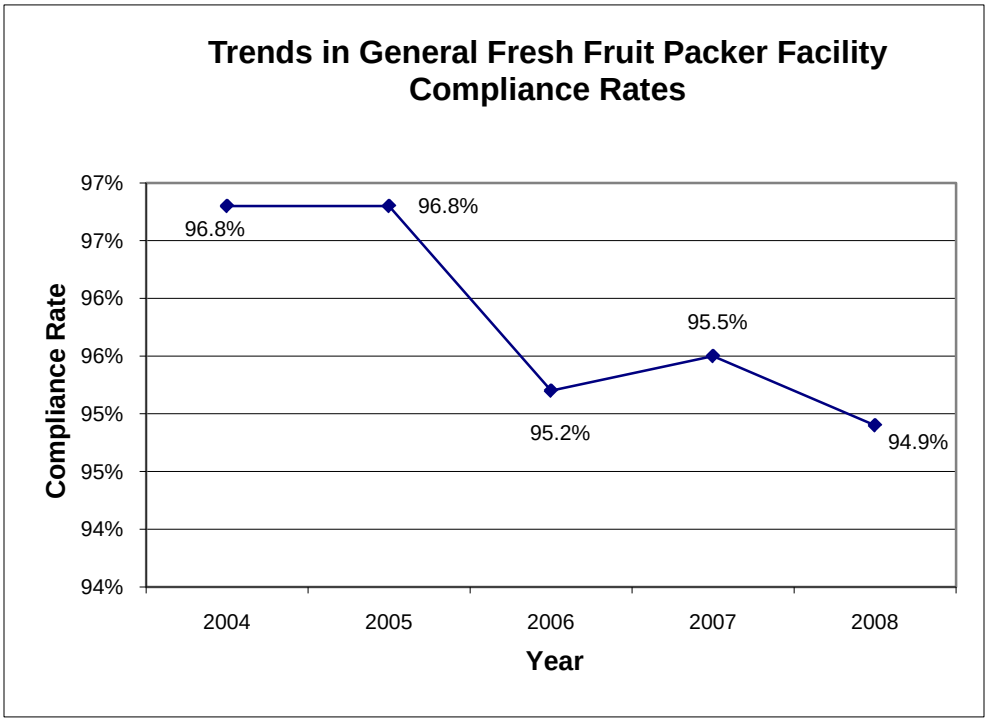

Figure 37

Ecology focuses resources on facilities with five or more violations per year as one way to improve compliance. The number of facilities with five or more violations has remained fairly consistent but has slightly increased from 33 in 2004 to 39 in 2008 (Figure 38).

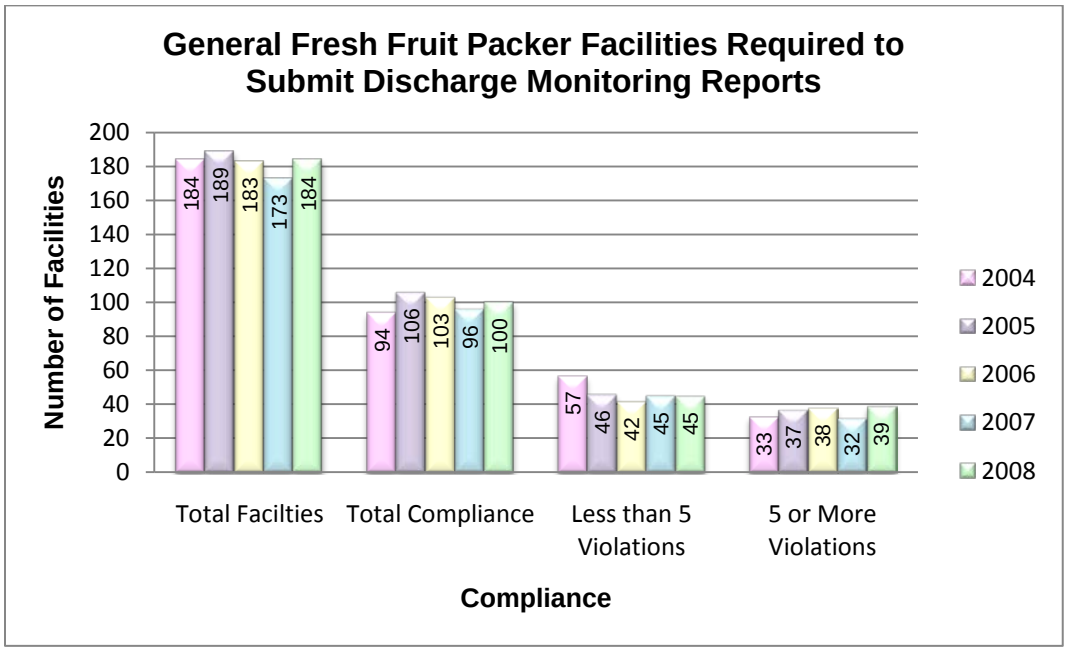

Figure 38

The highest percentage (21.6 percent) of violating fruit packer facilities occurred in Ecology's central region (Figure 39) which manages 91 percent of the fruit packers in the state.

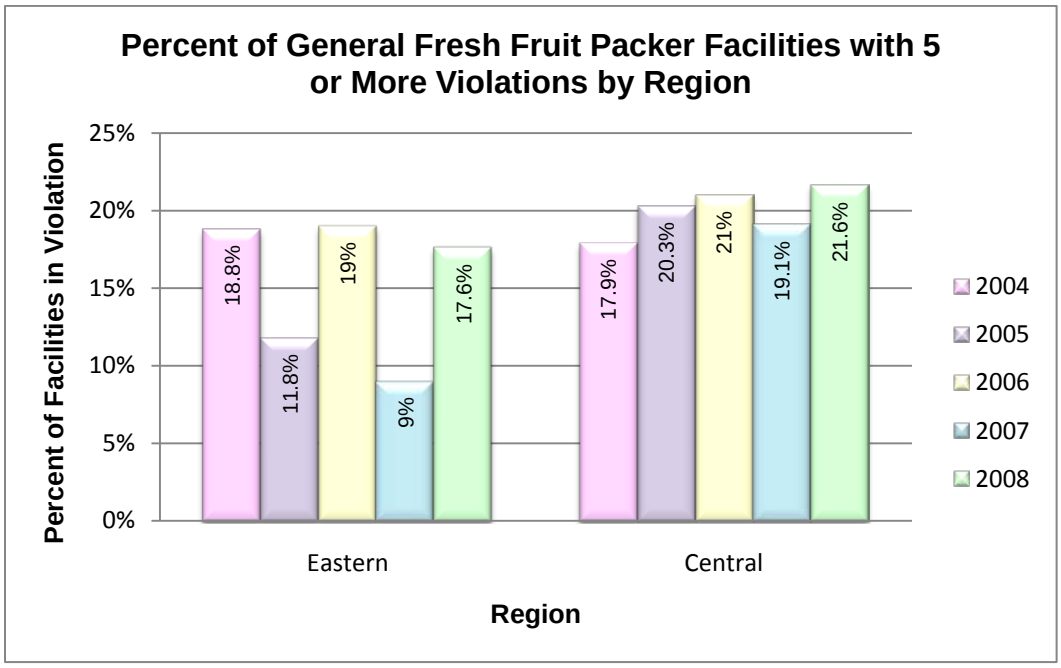

Figure 39

What actions were taken

In 2008, Ecology took 81 enforcement actions to improve fruit packer compliance in 2008 (Figure 40).

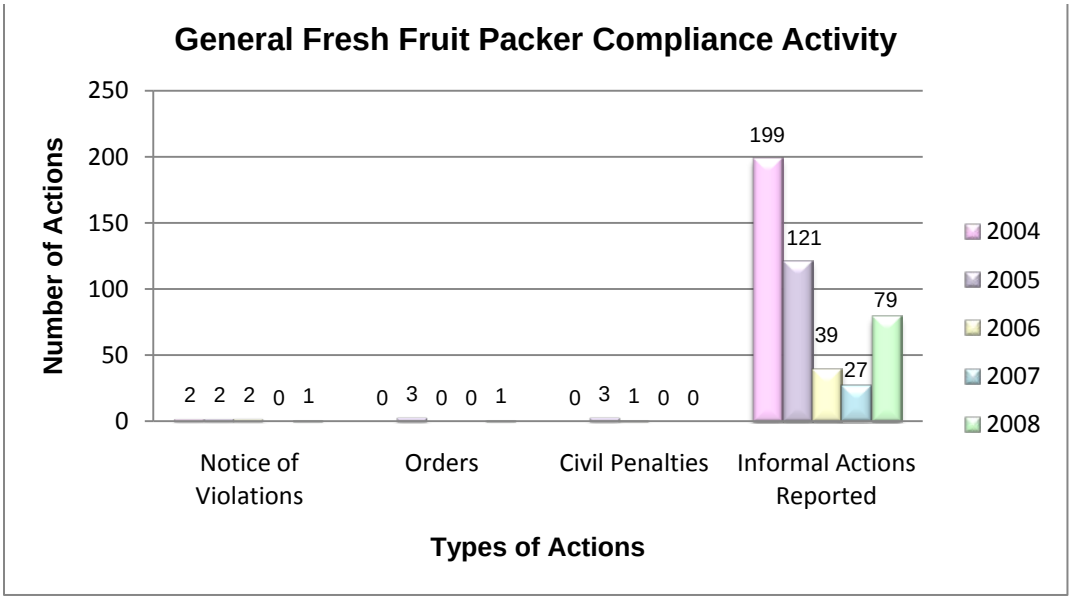

Figure 40

Ecology took enforcement actions on 26 facilities with five or more reported violations and took no action on 13 facilities with five or more violations in 2008 (Figure 41).

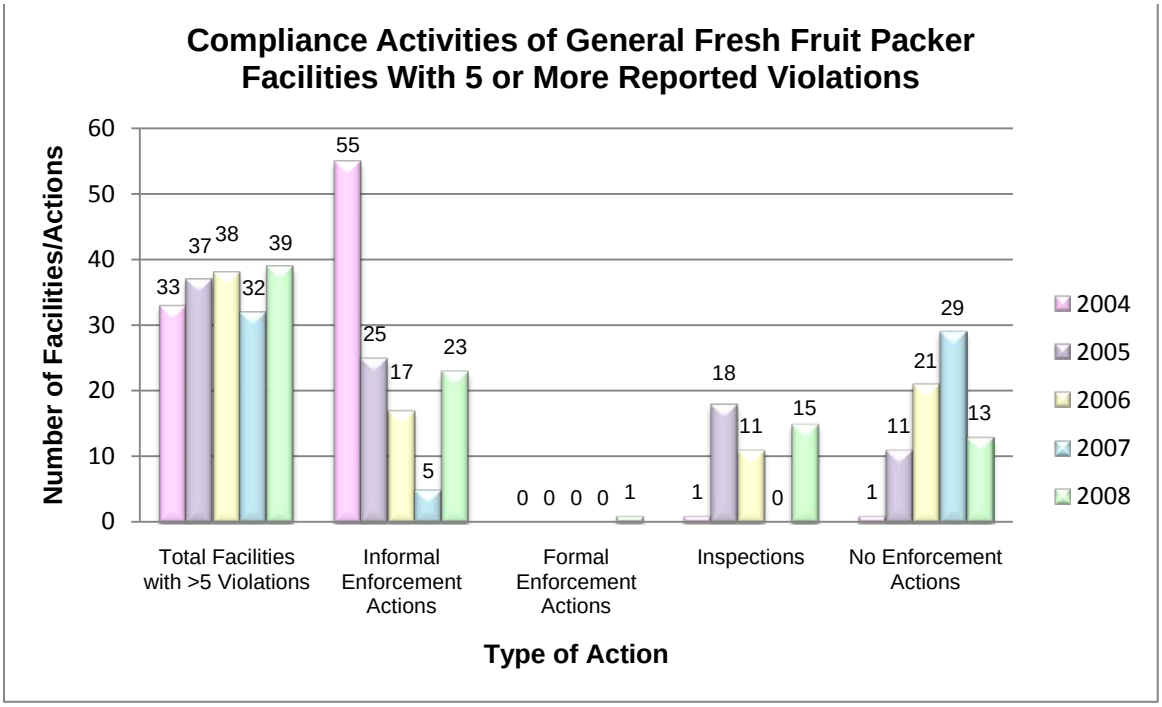

Figure 41

Sand and gravel

The sand and gravel general permit provides coverage for discharges of process water, stormwater, and mine dewatering water associated with sand and gravel operations, rock quarries, and similar mining operations, including stockpiles of mined materials. It also provides coverage for concrete batch operations and hot mix asphalt operations. Operations covered under this permit are authorized to discharge wastewater to waters of the state of Washington subject to the conditions contained in the general permit.

This sand and gravel general permit establishes technology-based effluent limits for pollutants of concern. These include wastes generated by the industries included in this permit such as: total dissolved solids, total suspended solids, turbidity, temperature, pH, and visual oil sheen.

Ecology reissued the sand and gravel general permit in February 2005. Several of the permitted facilities did not understand when they were to use the new Discharge Monitoring Report (DMR) forms since Ecology issued the permit mid-quarter and the facilities report monitored parameters quarterly. Several permitted facilities did not use the newly issued DMR forms enclosed with the new permit, therefore, they did not report the visual oil sheen that was newly added to the latest permit. The majority of the violations for 2005 for the sand and gravel general permit were due to the non reporting of the visual oil sheen. Ecology resolved these issues by sending warning letters and providing technical assistance.

Ecology permit managers and compliance officers are responsible for ensuring compliance at the permitted sand and gravel facilities. Staff use both informal and formal tools. Informal tools include technical assistance calls, visits, or e-mails; warning letters; and Notices of Correction. Formal enforcement tools can include Administrative Orders, Notices of Violation, and penalties.

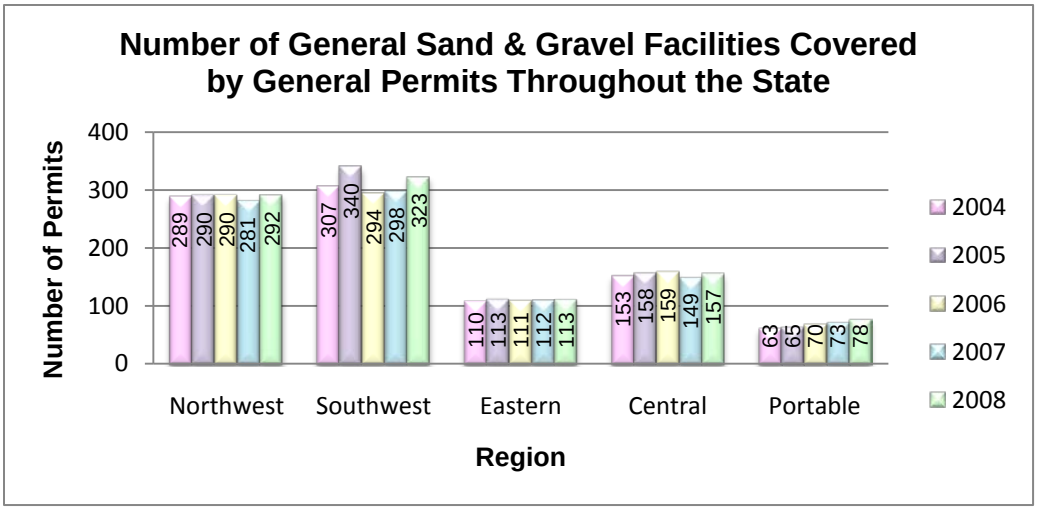

Figure 42

What violations occurred

For general sand and gravel facilities, the number of compliance opportunities increased from 2004 to 2008 by 10,467. The number of violations that exceeded 20 percent of the permitted limits increased by 45 from 2004 to 2008, however the number of violations under 20 percent of the limit decreased (Figure 43).

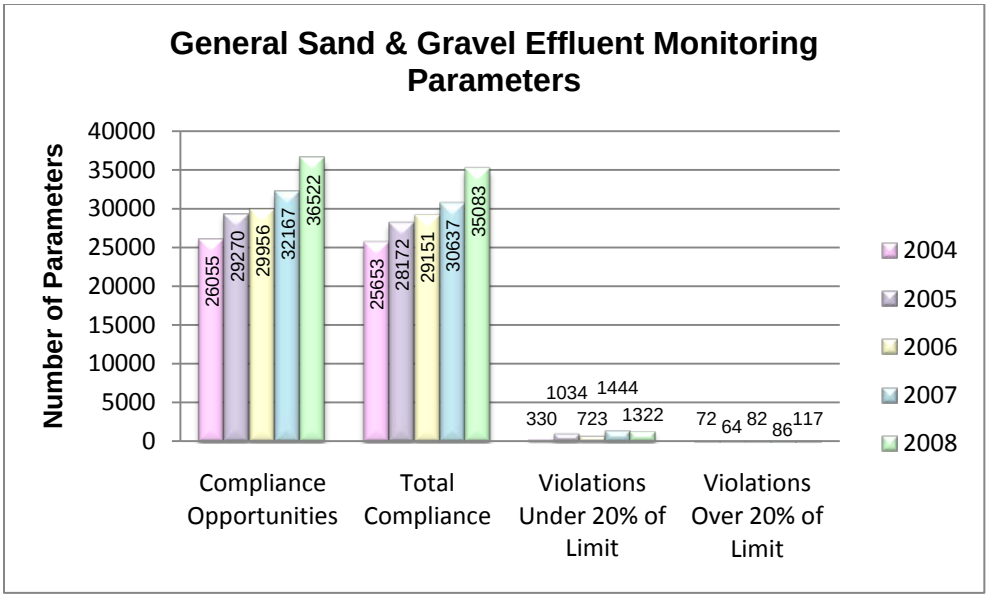

Figure 43

The compliance rate generally increased from 2007 to 2008 for sand and gravel facilities throughout the state. The southwest region had the lowest compliance rate at 93.8 percent (Figure 44).

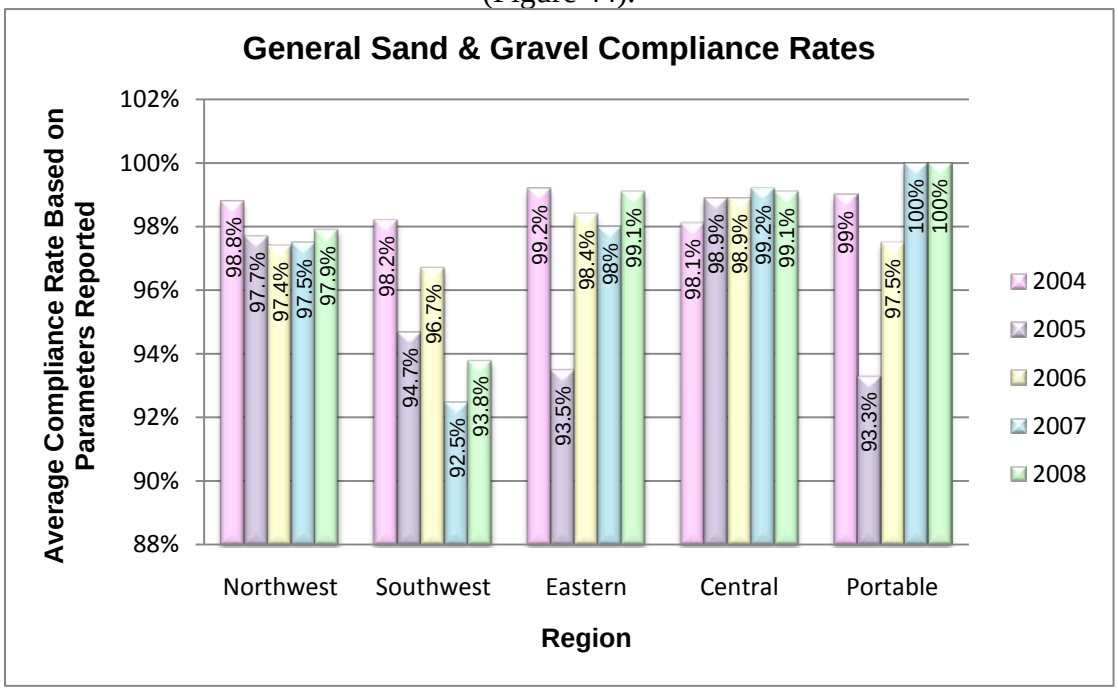

Figure 44

The statewide compliance rate for general sand and gravel facilities has decreased by 2.4 percent in 2008 as compared to 2004 (Figure 45).

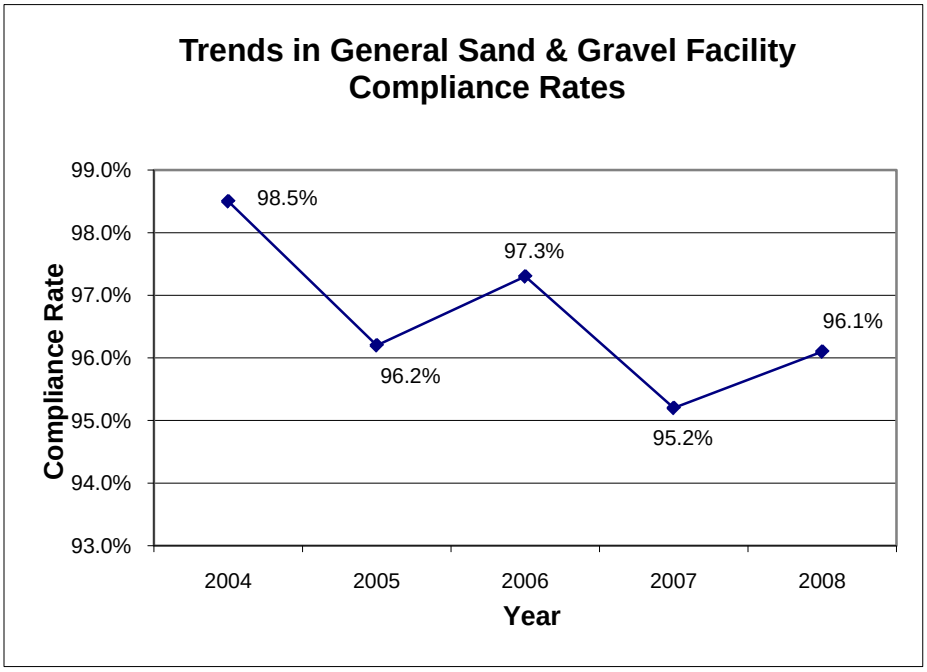

Figure 45

Ecology focuses resources on facilities with five or more violations per year as one way to improve compliance. The number of facilities with five or more violations increased from 27 in 2004 to 58 in 2008 (Figure 46).

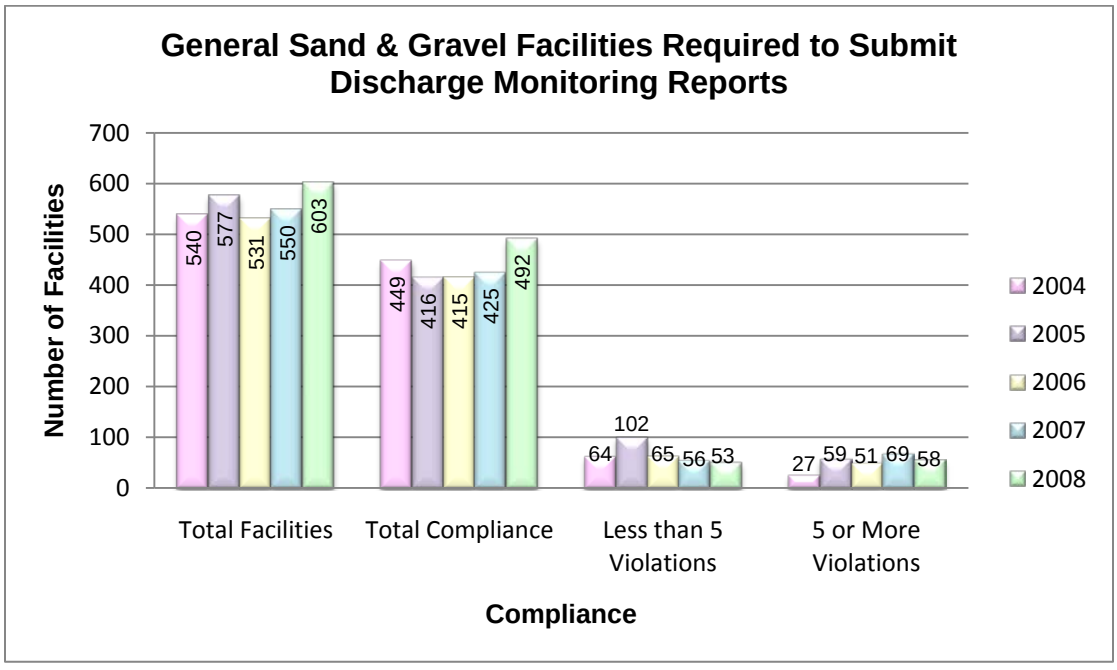

Figure 46

The highest percentage (19 percent) of violating sand and gravel facilities occurred in Ecology's southwest region (Figure 47).

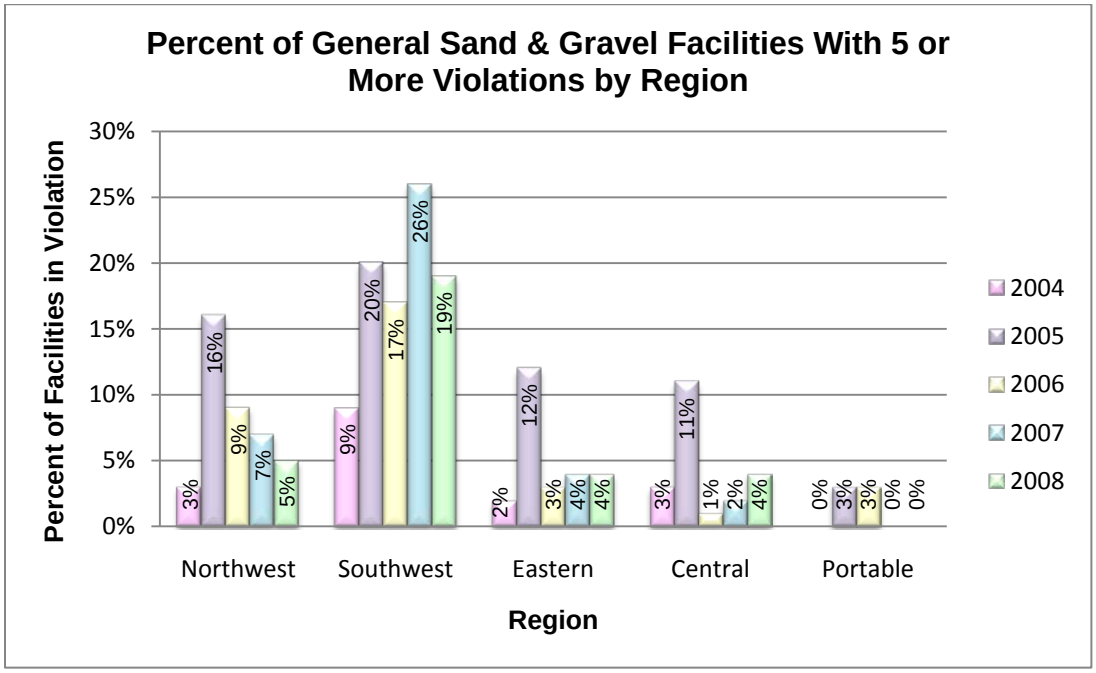

Figure 47

What actions were taken

In 2008, Ecology took 571 enforcement actions to improve sand and gravel compliance (Figure 48).

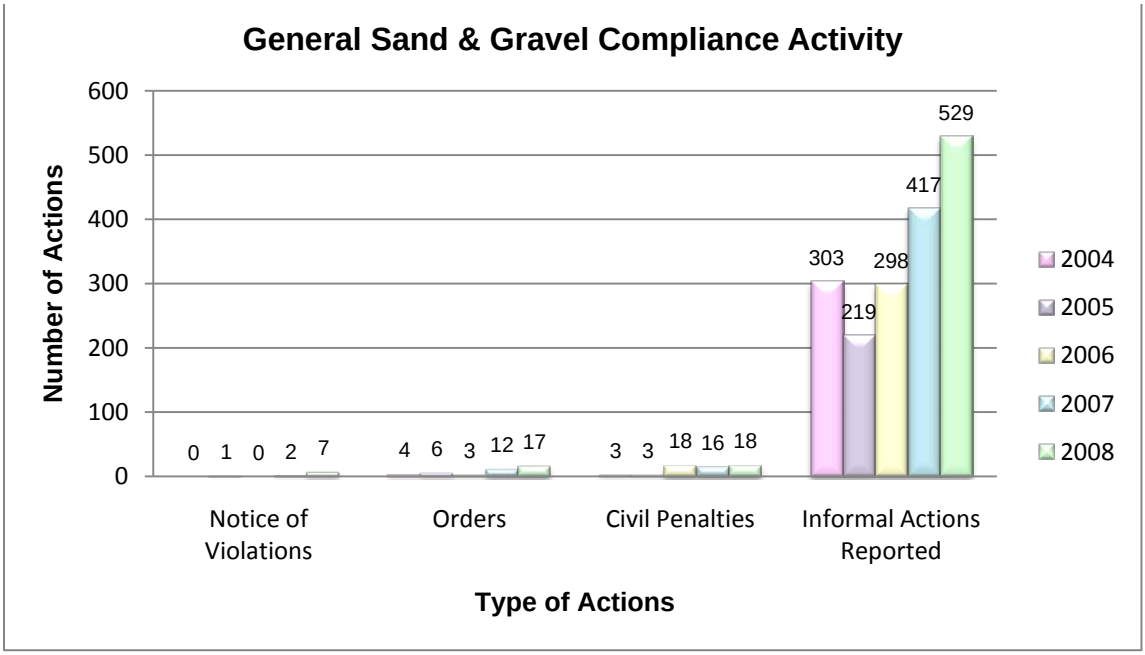

Figure 48

Ecology took enforcement actions on 50 facilities with five or more permit violations and did not take action against 8 facilities with five or more violations in 2008. Ecology took substantially more informal actions against violating facilities, as shown in Figure 49.

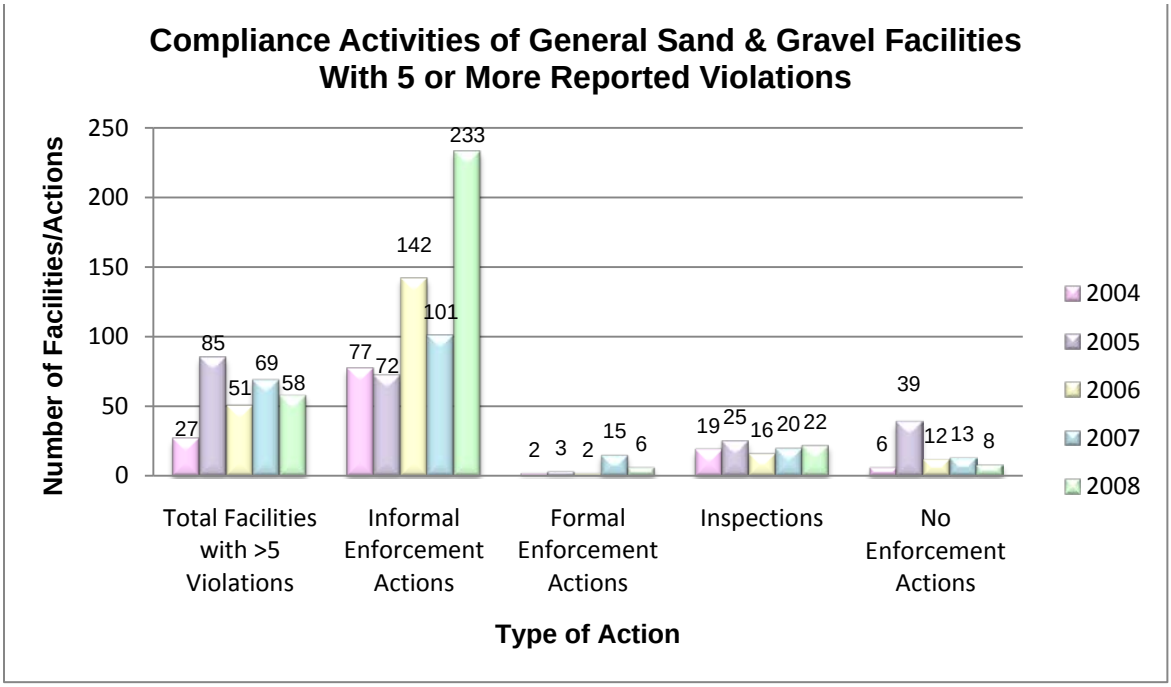

Figure 49

Water treatment plant

Ecology issues the water treatment plant general permit to the water treatment plant industry operating in the state of Washington for the discharge of wastewater resulting from the production of potable water. Ecology issues coverage to water treatment plants that provide primary treatment and produce "industrial water" if water treatment is the primary function of the facility. The general permit provides coverage for water treatment plants that discharge filter backwash and sedimentation basin waste to surface waters of the state and that can *produce* up to 50,000 gallons per day. The general permit does not provide coverage for wastewater resulting from ion exchange or reverse osmosis, nor for water treatment plants with a maximum production capacity of less than 50,000 gallons a day.

The general water treatment plant permit establishes technology-based effluent limits for pollutants of concern. These include wastes from the filtered backwash water that the industry generates, such as: pH and settleable solids. The permit includes a water quality-based limit for chlorine for all new plants and a compliance schedule for implementing treatment if it is required for all existing plants.

Ecology permit managers are responsible for ensuring compliance at the permitted water treatment plants. It is achieved using both informal and formal tools. Informal tools include technical assistance calls, visits, or e-mails; warning letters; and Notices of Correction. Formal enforcement tools can include Administrative Orders, Notices of Violation, and penalties.

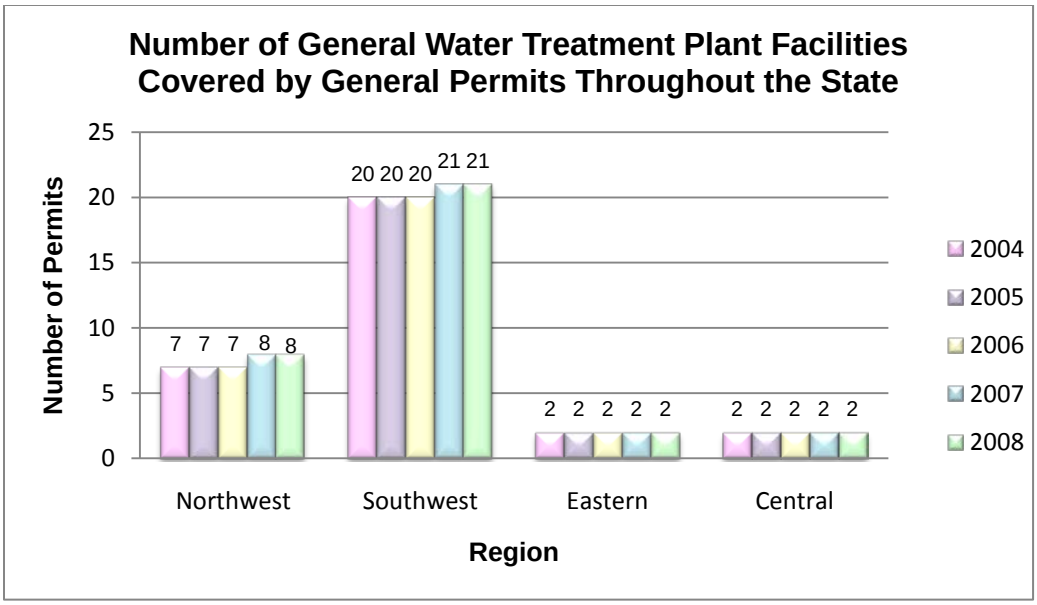

Figure 50

What violations occurred

For general water treatment plant facilities the number of compliance opportunities decreased from 2004 to 2008 by 93. The number of violations that exceeded 20 percent of the permitted limits decreased by 9 from 2004 to 2008 (Figure 51).

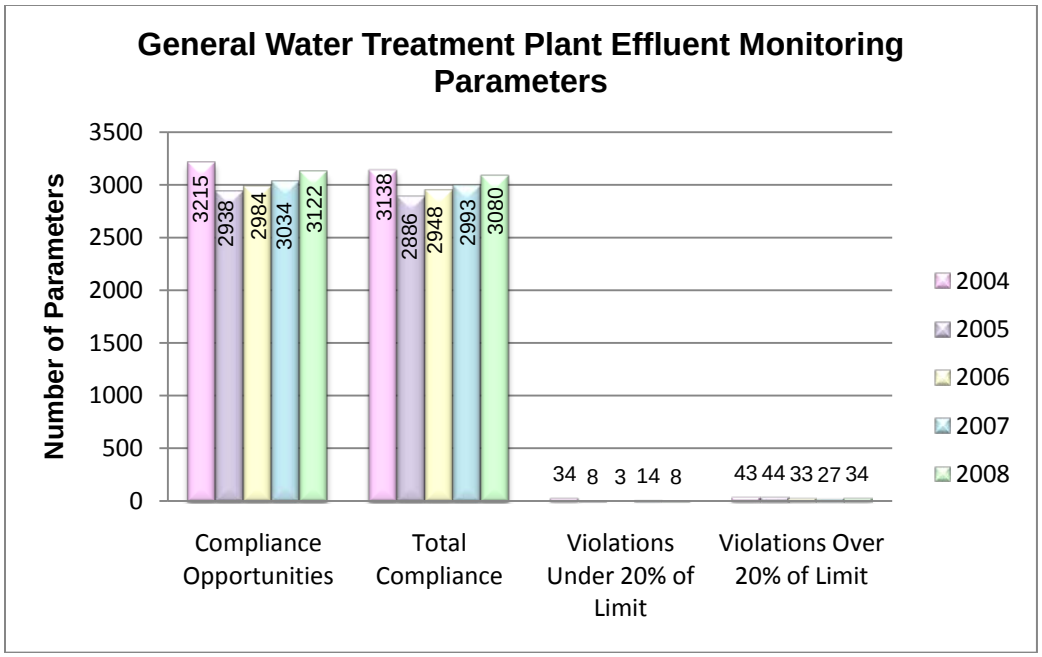

Figure 51

The statewide compliance rate increased for water treatment plant facilities. The southwest region had the lowest compliance rate at 98 percent (Figure 52).

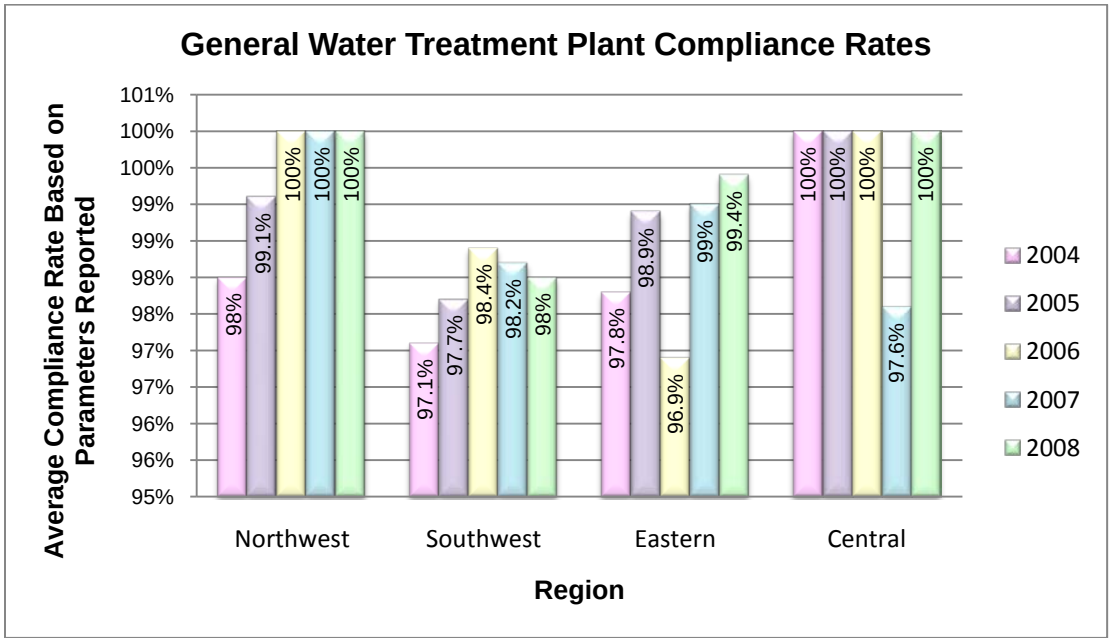

Figure 52

The statewide compliance rate for general water treatment plant facilities has increased by 1.1 percent from 2004 (Figure 53).

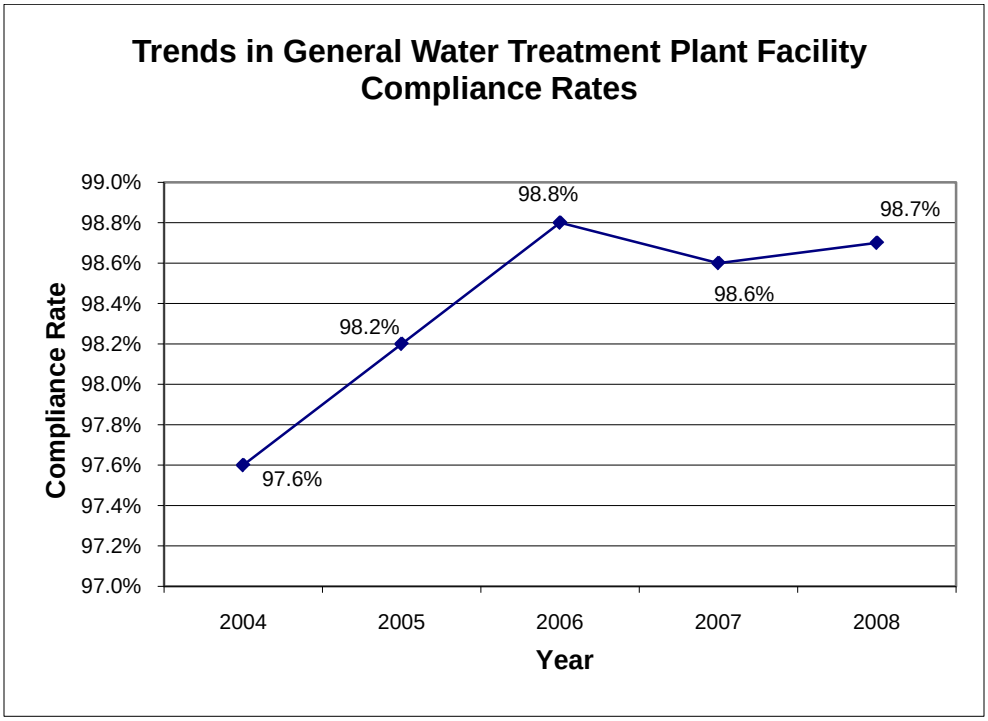

Figure 53

Ecology focuses resources on facilities with five or more violations per year as one way to improve compliance. The number of facilities with five or more violations increased from 2 in 2007 to 3 in 2008 (Figure 54).

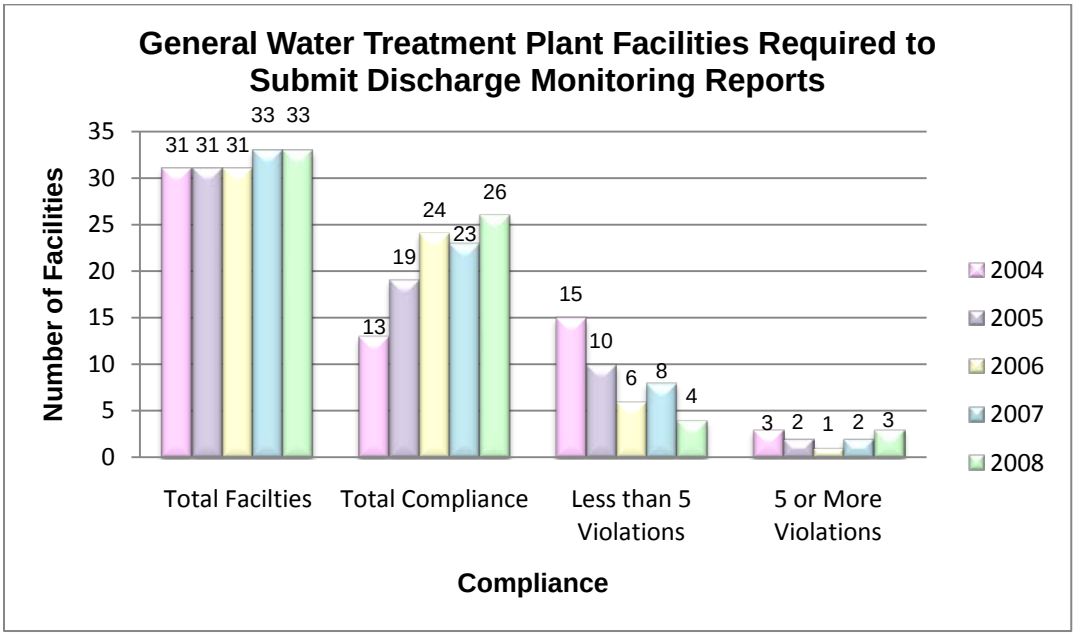

Figure 54

The southwest region, which permits 21 of the 33 statewide facilities, had the only water treatment plant facilities (3) that violated their permit limits five or more times in the state in 2008 (Figure 55).

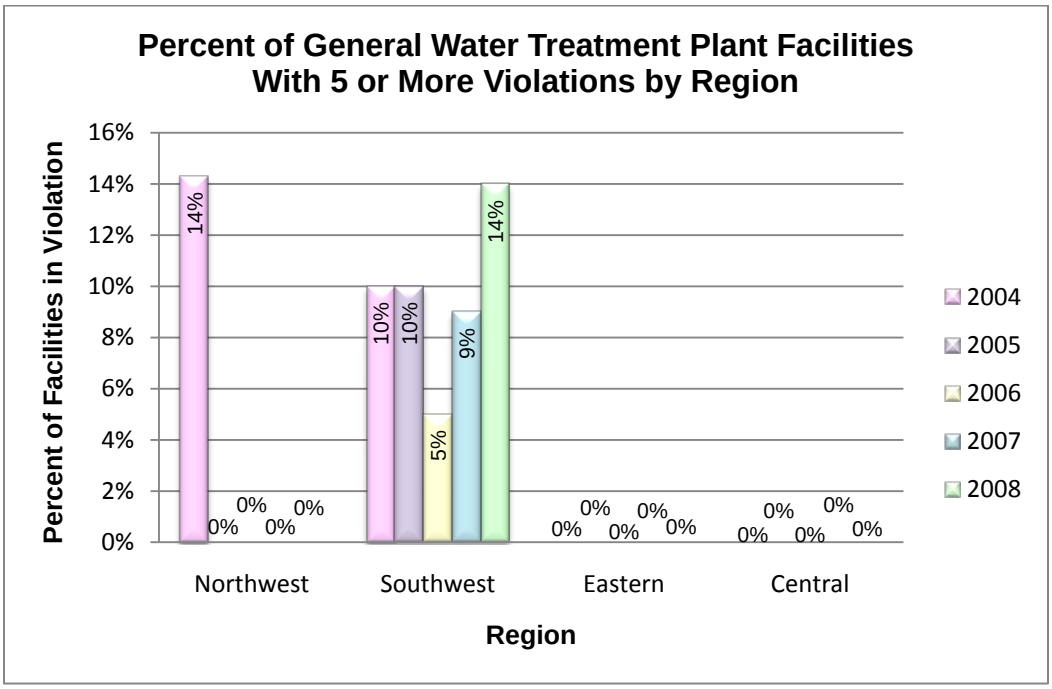

Figure 55

What actions were taken

In 2008, Ecology took 36 enforcement actions to improve water treatment plant compliance (Figure 56).

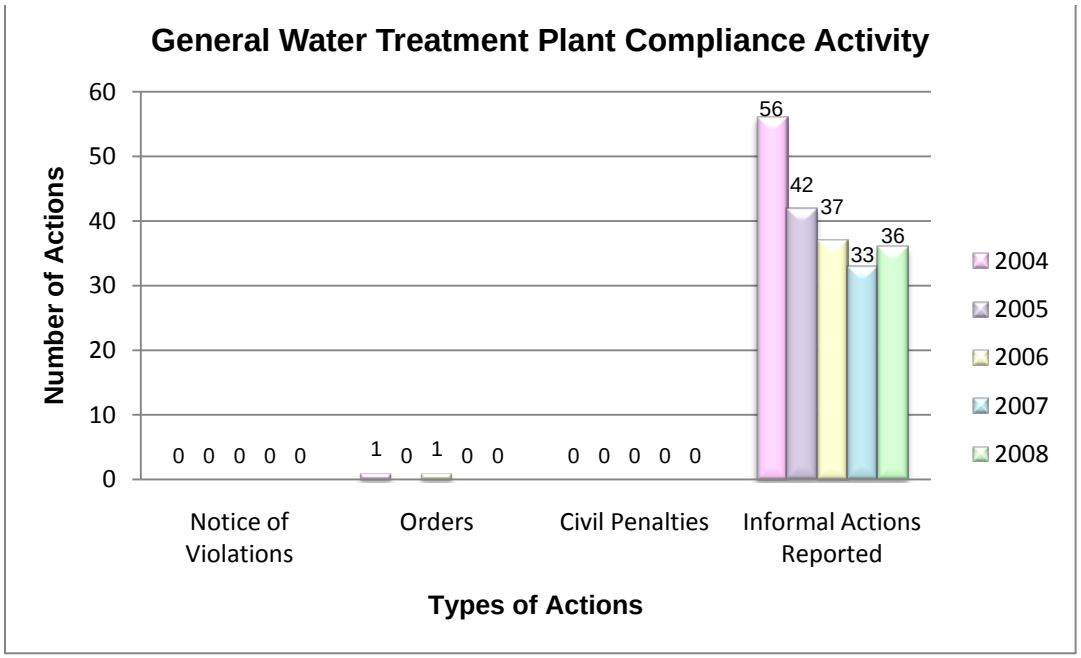

Figure 56

Ecology took enforcement action on all of the facilities with five or more violations in 2008 (Figure 57).

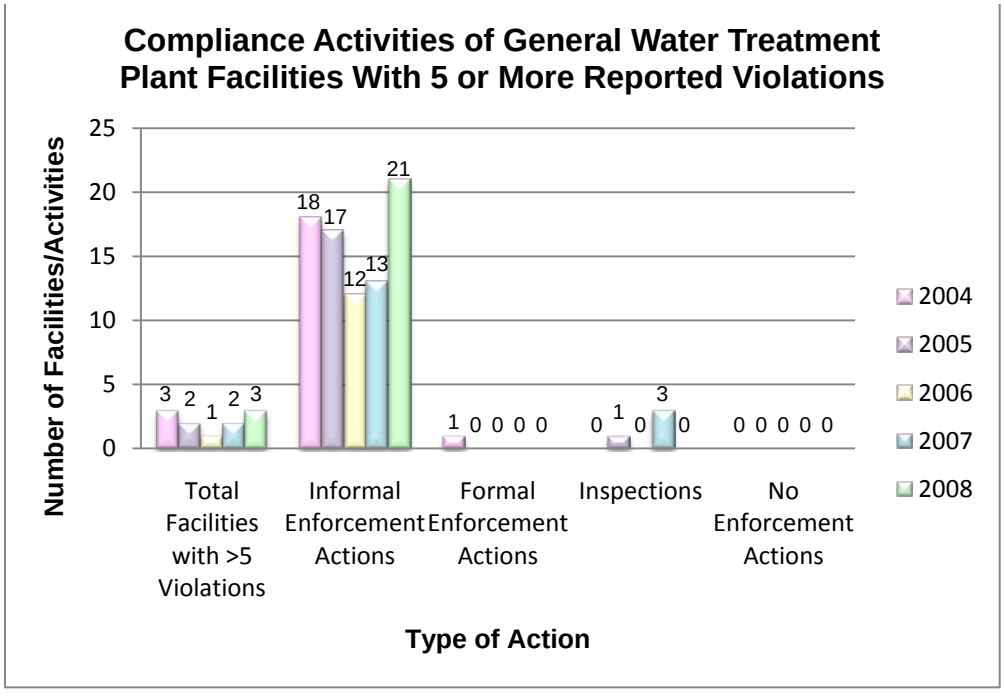

Figure 57

Stormwater

Stormwater is rain and snow melt that runs off surfaces such as rooftops, paved streets, highways, and parking lots. As water runs off these surfaces, it can pick up pollution such as: oil, fertilizers, pesticides, soil, trash, and animal waste. From here, the water might flow directly into a local stream, bay, or lake. It may also go into a storm drain and continue through storm pipes until it is released *untreated* into a local waterway.

Stormwater NPDES permits cover stormwater discharges from certain industries, construction activities disturbing one or more acres, and municipalities with a population of more than 100,000.

Ecology regulates stormwater discharges from industries and construction sites under separate general permits. These permits require the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP for construction sites is primarily a temporary erosion and sediment control plan. The SWPPP for industrial facilities is a documented plan to identify, prevent, and control the contamination of stormwater discharges.

The municipal stormwater permits require the implementation of a **stormwater management program.** The stormwater management program is a plan to reduce the discharge of pollutants, reduce impacts to receiving waters, eliminate illegal discharges, and make progress towards meeting surface water, groundwater and sediment standards. Ecology issued new municipal stormwater permits for Phase I and Phase II facilities.

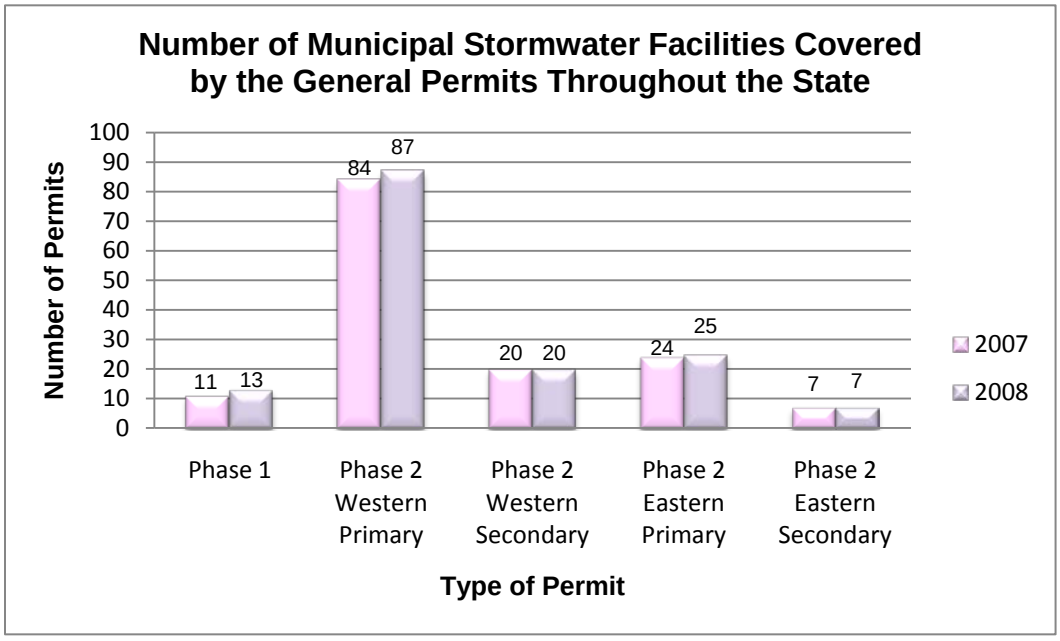

Figure 58

Figure 59 shows the number of general stormwater permits by type (excluding municipal stormwater). The monitoring data for the industrial and construction stormwater is incomplete at this time, but Ecology will provide it in future reports.

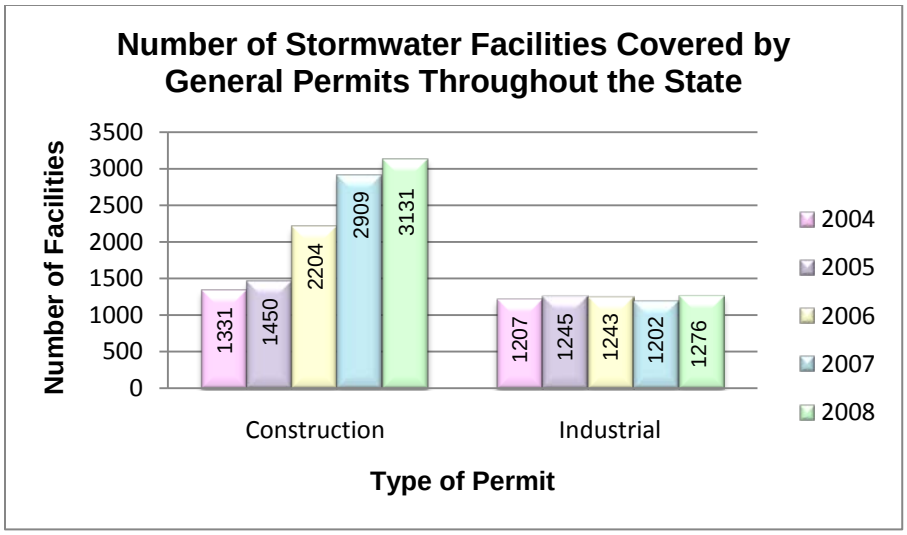

Figure 59

Concentrated Animal Feeding Operations (CAFO)

Ecology regulated dairies under the Dairy General Permit until July 1, 2003, when the legislature transferred part of the function pertaining to the regulation of dairies and Animal Feeding Operations to the Department of Agriculture (WSDA), creating the Dairy Waste Management Program. The original intent of this legislative action was for WSDA to pursue full CAFO NPDES delegation from US EPA. Delegation to WSDA of NPDES authority for CAFOs never occurred, splitting the state livestock program between two agencies. The NPDES regulatory (permitting and enforcement) responsibility for CAFOs remains with Ecology. Ecology and WSDA are working to update the Memorandum of Agreement between the two agencies to define how they will make the split livestock program work in Washington.

Currently, WSDA regulates un-permitted dairy facilities only under chapter 90.64 RCW. WSDA also provides technical assistance to Ecology for the review of CAFO nutrient management plans (NMP), provides inspections for CAFO permitted facilities (dairy and non-dairy) and responds to complaints through the ERTs system as work time allows. WSDA formal enforcement authority is limited to dairies only. WSDA agreed at the end of 2008 to provide documentation of all discharges to waters of the state found during inspections and complaint response to Ecology.

Ecology retains NPDES administrative functions and enforcement authority over all livestock point sources of pollution in Washington. In addition to administering the CAFO NPDES General Permit, Ecology enforces the duty to apply for permit coverage due to a discharge and

other permitted livestock facility violations. Ecology is required to review Nutrient Management Plans (NMPs) to determine if they meet the minimum permit requirements.

You can find more information about the Ecology CAFO permit at: http://www.ecy.wa.gov/programs/wq/permits/cafo/index.html while information about WSDA Dairy Program may be found at: http://agr.wa.gov/FoodAnimal/Livestock-Nutrient/.

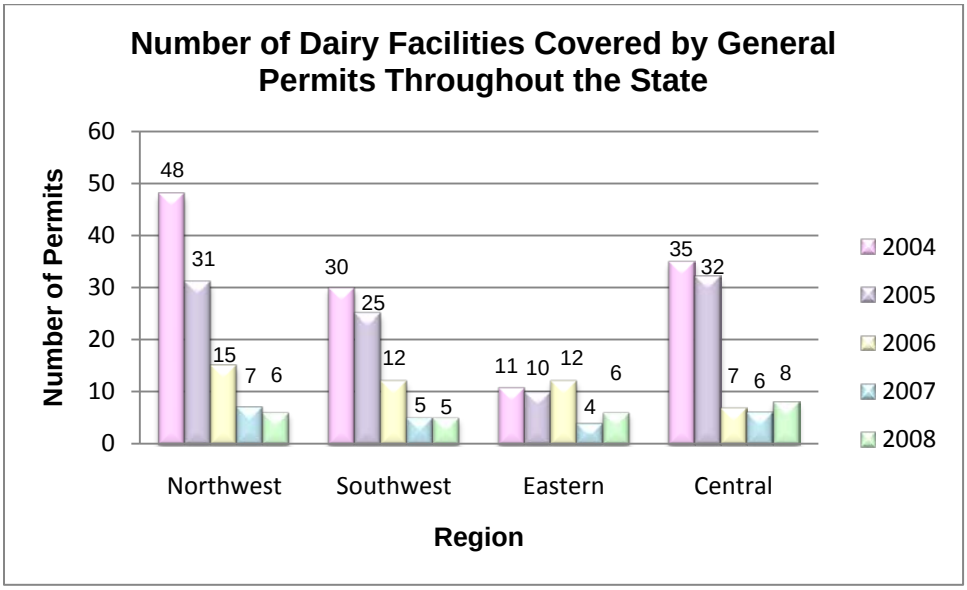

Figure 60

Nonpoint Compliance

Introduction

Nonpoint water pollution is defined as "pollution that enters any waters of the state from any dispersed land-based or water-based activities …not otherwise regulated under the National Pollutant Discharge Elimination System program (NPDES)." (Chapter 173-201A-020 WAC) Forty-four separate state laws apply to nonpoint water pollution and are administered by 13 separate agencies. Most county and municipal jurisdictions also have ordinances that control nonpoint source pollution.

The inclusion of the municipal stormwater program and use of NPDES general permits for boatyards, sand and gravel operations, construction sites, and dairies have reduced the size of the nonpoint universe. The forest practices program and non-permitted aquatic pesticide control continue to control nonpoint source pollution. Specific strategies to reduce nonpoint pollution often include developing total maximum daily loads (TMDLs) for nonpoint parameters. TMDLS require work with local basin groups to identify strategies for implementing nonpoint controls. The primary thrust for compliance is pollution prevention through technical assistance and information for landowners.

When efforts to prevent pollution fail, Ecology approaches the local authority or jurisdiction and works with their staff to settle the matter at the lowest level of enforcement. Developing and fostering these relationships is key to preventing and minimizing pollution problems. For violations causing significant environmental harm that is not pursued by a local authority, Ecology may take formal enforcement action.

Nondairy agricultural compliance

Nonpoint sources are the leading cause of water pollution across the nation and in Washington. Water Quality staff offer technical assistance to agricultural operations, stormwater, forestry, and aquatic pesticide activities. These operations generally address pollution through the use of best management practices (BMPs).

Technical studies in our state show that farms (producing crops and raising 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 (CDs), and Ecology entered into the Agricultural Compliance Memorandum of Agreement in 1988. The agreement defines steps that coordinate Ecology's water pollution control responsibilities with CD programs that provide technical assistance to landowners and farm operators. Through the local CD office, a farm owner or operator may receive technical assistance to help develop and implement a water quality management plan, or "farm plan."

Nonpoint compliance associated with the Governor's Salmon Recovery Plan

The Governor's Salmon Recovery Plan seeks to ensure compliance with water quality laws and protect fish through a balanced program of education, technical assistance, and cost sharing

within a regulatory framework. To put this strategy in place, the Legislature initially funded three Full Time Employees (FTEs) at Ecology for water quality compliance on behalf of salmon recovery. These positions were subsequently lost to budget reductions.

For agricultural activities the state provides millions of dollars for conservation districts and the Natural Resource Conservation Service for technical assistance. Nearly $200 million are also provided for cost sharing under the Conservation Reserve Enhancement Program (CREP) and other financial assistance programs.

A balanced program consists of enforcement where voluntary efforts alone do not achieve compliance. Enforcement does not necessarily mean a penalty. Ecology's policy uses the mildest enforcement necessary to achieve compliance. In many cases, this can consist of a Notice of Violation or an Administrative Order.

Ecology works with local watershed groups to identify areas where enforcement may be necessary. It may be an element of a TMDL, or triggered by a shellfish closure, or by lack of voluntary compliance. Limiting factors analysis for salmon restoration may also indicate where enforcement may be appropriate. Actions that would trigger enforcement include:

- Repeat violations
- Follow-up to an initial inspection
- Referrals from local governments and conservation districts

When viewed in the context of programs like CREP, the cost of enforcement represents a very small percentage of the overall strategy. At the same time, it serves as a backstop to encourage people to move forward in a voluntary manner.

Timber, Fish, and Wildlife (TFW) compliance

The Department of Natural Resources (DNR) assumes the lead agency role for enforcement of forest practices. Ecology approves the water quality rules that are adopted by the Forest Practices Board. Ecology provides the DNR and landowners with assistance on water quality issues as forest practices are proposed.

Ecology may take independent action under its enforcement authority in Chapter 90.48 RCW. However, this occurs only after consultation with the DNR, and only if the non-compliance with water quality standards occurred as a result of violations of the forest practices rules and any forest practice permits or enforcement orders.

Under the Forest Practices Act, Chapter 76.09.100 RCW, if Ecology determines that a person has failed to comply with the forest practices rules relating to water quality protection and the DNR has not issued a notice to comply or stop work order, Ecology informs the DNR. If the DNR does not take action within 24 hours, then Ecology may petition the chair of the Forest Practices Appeals Board to require the DNR to take action.

Aquatic Pesticide Permits

Before 2001, Ecology issued short-term water quality modifications in place of permits under state authority using administrative orders. The Ninth Circuit Court decided in 2001; during the *Headwaters v. Talent Irrigation District appeal* (Talent), that a permit is needed when

application of pesticides to waters of the state leaves a residue. During the 2002 *League of Wilderness Defenders v. United States Forest Service* appeal (Forsgren) the Ninth Circuit reaffirmed the decision that permits are necessary for pesticide applications to waters of the state because applications leave a residue.

Ecology has issued NPDES permits covering the major uses of pesticides in waters of the state. These permits include the general permits and individual permits listed below.

General NPDES Permits:

- Aquatic Plant and Algae Management
- Aquatic Noxious Weed Control
- Aquatic Mosquito Control
- Irrigation Systems Aquatic Weed Control

Individual NPDES Permits:

- Fish Management (Rotenone)
- Invasive Moth Control (Gypsy Moth)
- Oyster Growers (Burrowing Shrimp)

Two subsequent court cases have also reaffirmed Ecology's decision to issue NPDES permits for the use of pesticides in and around waters of the state. In 2005, the Ninth Circuit issued its opinion in *Fairhurst v. Hagener*. The court's final opinion is that a permit is necessary for pesticide applications to waters of the state that leave behind a residue.

The 2009 Sixth Circuit Court *National Cotton Council et al v. EPA* is the major case determining that permits are necessary for applications to waters of the state. Prior to this ruling, EPA's rule was that pesticide applications to waters of the state that follow FIFRA label requirements do not require an NPDES permit. This ruling overturned that rule, requiring EPA to develop NPDES permits for applications of pesticides to waters of the state. Currently, EPA has a two-year stay on implementing this ruling to develop permits for aquatic pesticides.

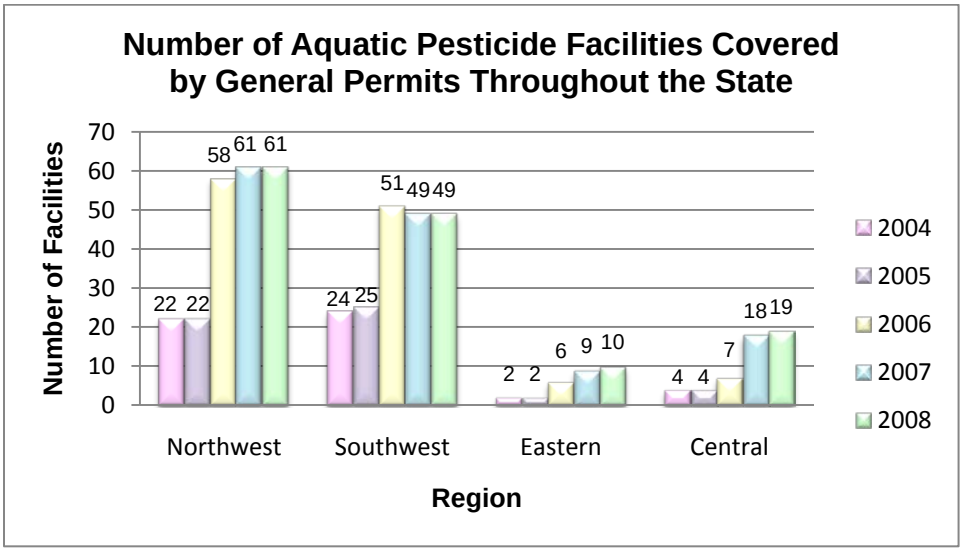

Figure 61

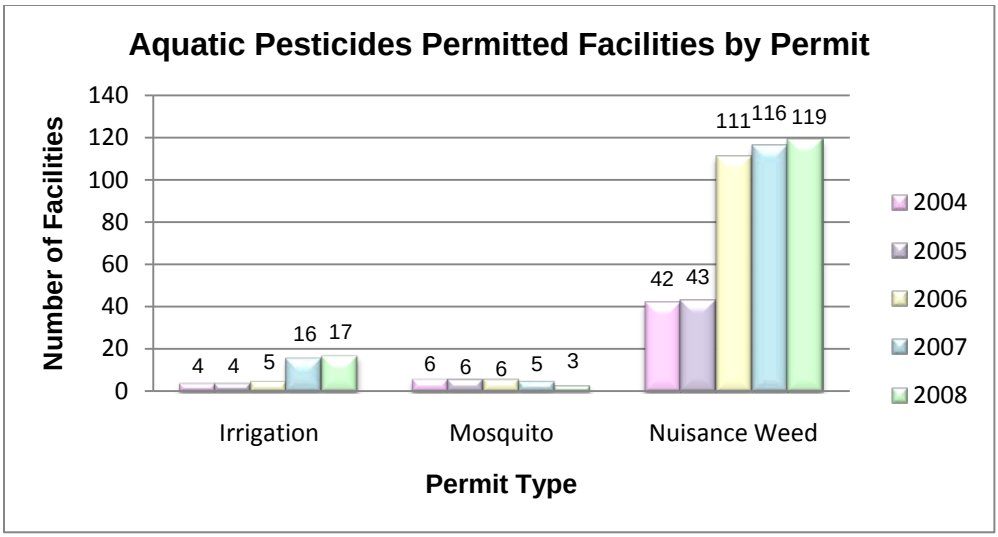
Aquatic Pesticides Permitted Facilities by Permit
Number of Facilities
140
120
100
80
60
40
20
0
4 4 5 16 17
6 6 6 5 3
42 43 111 116 119
Irrigation
Mosquito
Nuisance Weed
Permit Type
2004
2005
2006
2007
2008

Figure 62

Summary

The total number of permits that Ecology issues, continues to increase despite the fact that the number of staff conducting enforcement has remained the same. This continues to force the agency to prioritize which of many compliance problems are most harmful to the environment.

The compliance rate remains high for individually permitted municipal and industrial facilities based on the number of parameters each facility must report through the DMRs. The number of municipal and industrial facilities with five or more violations has decreased. The number of industrial facilities has increased; however, the number of parameters monitored by these facilities has decreased in the last two years.

Ecology hopes this report will inform the Department as well as the public. We would appreciate receiving constructive comments from users of this information, so that we can improve next year's report.

Appendix

Table 1. Expanded Major Laws and Regulations Administered by the Water Quality Program.

TITLE	STATE LAW	STATE RULE	FEDERAL RULE
Water Pollution Control	Chapter 90.48 RCW		
Technical Assistance Programs	Chapter 43.05 RCW		
Pollution Control Hearings Board	Chapter 43.21B RCW		
Forest Practices Act	Chapter 76.09 RCW		
Dairy Nutrient Management Act	Chapter 90.64 RCW		
Protection of the Environment			CFR Title 40
Water Quality Standards for Ground Water		Chapter 173-200 WAC	
Water Quality Standards for Surface Waters		Chapter 173-201A WAC	
Forest Practices Rules and Regulations to Protect Water Quality		Chapter 173-202 WAC	
Whole Effluent Toxicity Rule		Chapter 173-205 WAC	
State Waste Discharge Permit System		Chapter 173-216 WAC	
National Pollutant Discharge Elimination System Permit Program		Chapter 173-220 WAC	
Discharge Standards and Limitations for Domestic Wastewater Facilities		Chapter 173-221 WAC	
Certification of Operators of Wastewater Treatment Plants		Chapter 173-230 WAC	
Submission of Plans and Reports for Construction of Wastewater Facilities (CSO Facilities)		Chapter 173-240 WAC Chapter 173-245 WAC	

Revised Code of Washington (RCW)
Washington Administrative Code (WAC)
Code of Federal Regulations (CFR)

Table 2. Types of General Permits Issued by the Department of Ecology

PERMIT TYPE	# OF ACTIVE PERMITS AS OF 12/31/2008	DISCHARGE DESCRIPTION
NPDES Major	78	A wastewater discharge permit issued to a facility that discharges wastewater to surface water and is deemed to be a "major" discharger by the EPA and the state of Washington. A "major discharger" is a facility discharging to surface water that scores 80 or more points on the EPA NPDES permit rating work sheet. The criteria evaluated include toxic pollutant potential, wastewater flow and stream flow volumes, conventional pollutant loading, potential for public health impact, potential for water quality impact, proximity to near coastal waters.
NPDES Minor	356	A wastewater discharge permit issued to a facility that discharges wastewater to surface water and is deemed to be a "minor" discharger by the EPA. A "minor discharger" is a facility discharging to surface water that scores less than 80 points on the EPA NPDES permit rating work sheet.
State to Ground Water	146	A wastewater discharge permit issued to a facility that discharges wastewater by land application to underground water.
State to POTW	168	A wastewater discharge permit issued to a commercial or industrial facility that discharges wastewater to a municipal sanitary sewerage system.
NPDES Stormwater Construction General Permit	3,131	All building construction activities clearing five or more acres of land.
NPDES Industrial Stormwater General Permit	1,276	All industries with a surface water discharge that has a potential to pollute state waters.
Municipal Stormwater General Permit	152	Stormwater discharge is the runoff from roofs, pavement, and compacted surfaces in urban areas that have the potential to pollute state waters.
Boatyard General Permit	83	Commercial business engaged in the construction, repair, and maintenance of small vessels, 85 percent of which are 65 feet or less in length or which constitute less than 85 percent of gross receipts.
Dairy General Permit	25	Commercial dairy farms meeting the definition of a concentrated animal feeding operation (CAFO) are required to apply for permit coverage and develop and implement a dairy nutrient management plan to strictly limit the discharge of manure and contaminated runoff to surface or ground water.
Fish Hatchery General Permit	81	All upland fin-fish hatching or rearing facilities that discharge at least 30 days a year to surface waters of the state which: produce more than 20,000 lbs. of fish per year, or feed more than 5,000 lbs. of fish food in any one calendar month, or are considered to be a significant contributor of pollution as determined by Ecology.
Fresh Fruit Packer General Permit	182	All new and existing fresh fruit packing facilities that receive, pack, store, and/or ship either hard or soft fruit.
Water Treatment Plant General Permit	33	Discharges of wastewater from the production of potable water at facilities with a maximum production capability of 50,000 gallons per day. Plants producing industrial water are also included if water treatment is their primary function.
Sand and Gravel General Permit	963	Discharges of process water, mine dewatering water, and stormwater associated with sand and gravel operations, rock quarries, and similar mining operations, including stockpiles of mined materials. It also covers concrete batch operations and hot mix asphalt production.