WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

Water Quality Program
Annual
Compliance Report

Calendar Year 2000

August 2001
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Water Quality Program
Annual
Compliance Report

Calendar Year 2000

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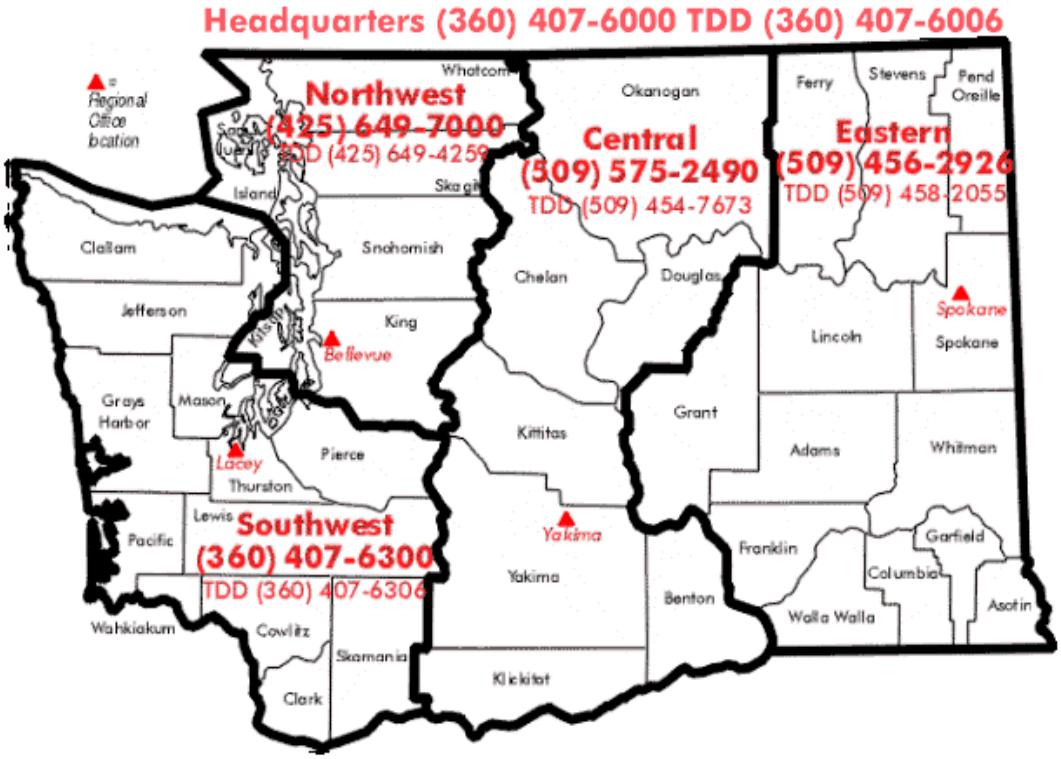

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Executive Summary

This report represents a summary of compliance with water-quality laws for calendar year 2000. The Washington Department of Ecology's Water Quality Program regulates any public or private activity that discharges to waters of the state that contributes to or causes pollution. The report provides an overview of the Water Quality Program. It discusses point source and nonpoint source pollution. It also explains both permitted activities of the program and activities where compliance is sought through non-permitting means such as technical assistance, inspections, education, and enforcement.

This year's report is based on a new format that was influenced by the recommendations from the Water Quality Enforcement Review – Report of the Enforcement Subcommittee of the Water Quality Partnership in July of 1999 (Publication No. 99-18). Ecology is hoping that this report will be more informative both internally to the agency as well as to the public. We look forward to receiving constructive comments from people who use this information, in an effort to improve reports in future years.

Washington State has over 4,000 industrial and municipal facilities that are permitted to protect water quality. The Department of Ecology (Ecology) issues the permits to allow the industrial or municipal facilities to manage pollution that may be safely discharged to lakes, rivers, marine, or ground waters. Federal or state regulation requires about half of those facilities to provide monthly or quarterly reports (discharge monitoring reports or DMRs) about their discharge.

Those reports and inspections by Ecology showed that in 2000 Washington had an approximate 97 percent compliance rate for water-quality protection. The compliance rate is similar to recent years.

In 2000 the overall number of permits managed by staff continued to increase. There was a slight increase in the total number of permits, while our staffing level remained the same. Between 1996 and 2000, there was a reduction in the time from the date of a violation to the date when Ecology issued a civil penalty in response to the noncompliance.

The industrial compliance rate for 2000 remained higher than 97 percent for discharge monitoring reports. However, even though there were fewer industrial facilities under permit in 2000, there was an increase of almost 10 percent in the number of facilities with five or more violations. Ecology is closely tracking the number of facilities with five or more violations per year. Out of the 136 facilities with five or more violations, only eight (or six percent) did not have some form of documented compliance action or enforcement.

Municipal facilities improved in their compliance with their discharge monitoring reports, to a 97 percent compliance level. The number of municipal facilities under permit was down by five. However, almost half the number of facilities had five or more violations. Similar to industrial facilities, Ecology took formal or informal enforcement. Of the 141 municipal facilities that violated their permits, only 25 (or 18 percent) did not receive some form of documented compliance action or enforcement.

Of the facilities covered by general permits that are required to submit discharge monitoring reports, 97 percent were in compliance. For the 30% of facilities with 5 or more violations 257 documented compliance or formal enforcement actions were taken.

In summary, the total number of facilities under permit continues to incrementally increase in the general permit category with the same overall number of staff resources. The compliance rate remains high for municipal and industrial facilities based on the number of discharge monitoring reports. There are fewer industrial and municipal facilities. Industrial facilities with five or more violations have increased. Ecology took almost 600 compliance or enforcement actions on permitted facilities.

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 on that National Pollution Discharge Elimination System (NPDES) permit program and is directly responsible for water quality issues on federal and tribal lands. Ecology administers a broad permit issuance program for discharges that go directly into state surface and ground waters, and provides various levels of guidance, oversight, and direct enforcement on a wide range of other activities that occur in the state that have the potential to harm our waterways. County and local city governments protect state waters by ensuring the proper planning, design, and construction of building and other land development activities in their respective jurisdictions. Frequently, these governments engage in a number of other projects to protect and enhance our lakes, streams, and rivers. Ecology's regulating role is reviewed below.

Regulatory Authority

Authority for Ecology to regulate state and federal water pollution control laws 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) 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 Federal Water Pollution Control Act Amendments of 1972 (PL 92-500). Despite the name of the law, 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 Clean Water Act forms the basis and framework for our water quality regulatory program today. 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 the NPDES program; see Appendix Table 1.

Point Source Pollution

A wastewater discharge permit is a legal document issued by Ecology to control the discharge of wastewater to surface waters and groundwaters. Surface water discharges are permitted under Chapter 173-220 WAC. Groundwater discharges are permitted under the Chapter 173-216 WAC. Permits place limits on the quantity and concentrations of contaminants that may be discharged. When necessary, permits require treatment of wastewater or impose other operating conditions on dischargers to ensure that permit limits are met and water quality is protected. Permits may also set other conditions including monitoring and reporting requirements, spill prevention planning, and other activities.

A 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. As noted earlier, Ecology oversees permit compliance through its laboratory accreditation program, on-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 approaches are designed to satisfy the requirements for discharge permits under both the federal Water Pollution Control Act and the state law governing water pollution control. They differ in how they define and resolve the wastewater issues of individual dischargers and how much time, effort, and money it takes to manage a permit. Extensive information on the permit writing process and related issues can be found at the Ecology website at http://www.ecy.wa.gov/programs/wq/permits/index.html.

Individual Permit

An individual permit is written for a single facility. In general, municipal wastewater treatment plants and businesses with industrial processes that generate wastewater are issued individual permits. This 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 very precise fit between the discharge characteristics and permit requirements but it can be the most time consuming and expensive of the two approaches. 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 federal permits delegated to Washington State (NPDES permits) or state waste discharge permits. There were 832 individual permits in Washington in 2000, and of these more than half are federal NPDES permits.

General Permit

A general permit is written for a group of facilities that are very similar in processes and wastewater characteristics. When there are enough facilities with similar production processes and which generate similar pollutants, Ecology considers establishing a general permit. There is one fact sheet that describes the group of facilities as a whole and the general characteristics of the wastewater. There is a single permit that looks the same for all facilities that meet the requirements for coverage under the general permit. This approach is best suited to a group of facilities that have much in common and a standard set of requirements will achieve environmental protection. This is the least expensive and time-consuming approach when there are a number of facilities that are acceptable candidates for the general permit. In developing general permits Ecology conducts a small business economic impact analysis and publishes information about the general permit in the state register. In addition, Ecology typically holds public workshops and hearings on new general permits. The types of general permits currently in effect are noted in Table 2, an extended table with permit definitions is in Appendix 1.

PERMIT TYPE	NUMBER OF CURRENTLY ACTIVE PERMITS
NPDES Major	81
NPDES Minor	378
State to Groundwater	179
State to POTW	194
NPDES Stormwater Construction General Permit	722
NPDES Industrial Stormwater General Permit	1116
Municipal Stormwater General Permit	7
Boatyard General Permit	106
Dairy General Permit	105
Fish Hatchery General Permit	83
Fresh Fruit Packer General Permit	220
Water Treatment Plant General Permit	28
Sand and Gravel General Permit	876

Nonpoint Source Pollution

Nonpoint source 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 nonpoint pollution can be traced to several sources; sometimes it cannot be traced at all. Nonpoint source (NPS) water pollution is 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 cleaner water through nonpoint source management. Some are regulatory while the majority of them are voluntary programs. Watershed efforts have addressed problems in most parts of the state. There are numerous examples of innovative approaches to management and funding. Though many innovative approaches are available in Washington State, several factors limit their success: the high cost of fixing old problems, local land use decisions, the lack of agency coordination and focus, and the lack of information concerning watershed processes and conditions.

More information on the nonpoint pollution sources and Ecology's overall efforts to combat it can be found a http://www.ecy.wa.gov/programs/wq/nonpoint/index.html#Overview.

Enforcement

The Federal Clean Water Act and the State Water Pollution Control Act declare it is the responsibility of all facilities and entities to comply with water quality laws and regulations. The Water Quality Program generally uses escalating levels of enforcement to bring facilities into compliance if they are in violation. This escalation may begin with technical assistance and progress through issuance of an order or civil penalty to gain compliance. Formal enforcement is one of the many compliance tools and is often not necessary to achieve compliance. When compliance actions are necessary the following considerations are taken:

- The seriousness of the violation;
- The behavior of the discharger; and
- The Program resources available for compliance.

Water Quality Program staff perform their enforcement and compliance duties in accordance with a variety of federal and state laws and regulations. It is the objective of the Water Quality Program to acknowledge 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 the Department of Ecology's Compliance Assurance Manual, Publication # 97-437. These guidelines detail the principles and procedures to be taken when staff addresses violations. The various formal and informal tools available to staff are described along with the proper usage of each compliance tool. The tools available to gain compliance are discussed below.

Staff members are alerted to violations through a number of mechanisms. Permittees are required to submit monitoring reports and other studies to allow the staff to determine compliance. Wastewater monitoring results are usually submitted monthly or quarterly and are reviewed by Ecology staff. Violations or other compliance problems are also detected during the review of engineering reports, field inspections, and complaints. Depending on the severity of a violation or series of violations, staff responds using either formal enforcement tools or informal tools, which are described below.

Informal Tools

When a violation is detected, Water Quality staff gathers initial information. This is accomplished through inspections, documented phone calls, or letters. It could result in a warning letter, technical assistance, or both. Dischargers operating under a wastewater discharge permit are required to include, along with their DMR, a discussion of the cause of any violation that occurs and what actions were taken to stop and prevent further violations. An additional informal tool is the Notice of Correction (NOC), which instructs the violator of the laws and regulations broken, the steps needed to resolve the problem and prevent the possibility of a penalty, and the timeframe during which the corrective actions must be taken. Both the compliance/enforcement staff and facility managers use these informal tools to gain compliance. Many compliance problems are addressed through the review and approval of engineering reports throughout the 5-year permit cycle and during the permit renewal process.

Formal Tools

Compliance/Enforcement Specialists primarily initiate formal enforcement for serious violations. This process may begin with the issuance of a Notice of Violation (NOV), which is meant to notify the violator of the violation and requires the violator to provide Ecology with information on the steps being taken to resolve a compliance problem. Upon learning more about a violation and the follow up actions taken by the violator, an Administrative Order is issued that directs the violator to take specified actions that Ecology has determined are required to protect water quality. Based upon the effect on the environment and human health, consideration of past compliance with water quality law, and other factors, Ecology may issue a penalty of up to $10,000 per day per violation. Ecology may consider criminal actions against violators. Administrative Orders and Penalties may be appealed to the Washington State Pollution Control Hearings Board (PCHB) for adjudication.

The Appeal Process

Individuals feeling aggrieved by an administrative order or Notice of Penalty have several legal remedies. Anyone receiving a penalty can directly petition Ecology within 15 days to eliminate, or reduce the size the penalty. Ecology permits, penalties and administrative orders can also be appealed to the Pollution Control Hearings Board (PCHB). The PCHB is a civil court established in 1970 to provide a faster, more efficient procedure to handle appeals made by Ecology and all regional air authorities (Chapter 43.21B RCW). You can learn more about the PCHB at http://www.eho.wa.gov/PCHB.htm.

Certification Programs to Protect the Environment

Washington State recognizes the importance of having good scientific data on which to base its environmental decisions as well as the need for trained operators in key positions that protect the environment. This was accomplished be establishing 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 samples processed by labs are accurate and consistent.

Operator Certification

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. The certification program has an external advisory board composed of 11 members.

Lab Accreditation

Environmental laboratories are regularly inspected by Ecology's Laboratory Accreditation Program. All laboratories performing tests to meet state permit requirements must participate in a program of state inspections and regular testing that cross checks the accuracy of their analyses. More information on the accreditation program as well as a list of approved laboratories can be accessed at Ecology's web site:
http://www.ecy.wa.gov/programs/eap/labs/labs_main.html.

Technical Assistance

Technical assistance to permitted discharges and others in the regulated community is an important function of the Water Quality Program and is shared by all program staff. Water quality staff is frequently working with permittees to prevent violations through the proper design of facilities and the development of corrective action strategies.

Nonpoint Technical Assistance

Nonpoint sources are the leading cause of water pollution across the nation and in Washington. Technical assistance is given to both dairy and non-dairy livestock operations regarding best management practices, construction stormwater pollution prevention, erosion control as well as aquatic pesticide permitting. 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 combine 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 (Agreement) in 1988. The Agreement defines a consistent series of 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."

Municipal Roving Operators

Ecology's Water Quality Program has also entered into a partnership with EPA to provide direct assistance to the smaller municipal wastewater treatment plants through the use of two roving Outreach Specialists. These specialists are constantly travelling from plant to plant in response to facility requests for help to ensure compliance with water quality laws. 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.

Facility Manager Role

Ecology Facility Managers have a number of important responsibilities including writing wastewater discharge permits, helping municipal permittees with questions regarding state of Washington grant and loan programs, reviewing and commenting on a variety of reports, and performing facility inspections. In addition to being available for phone calls and meetings to answer questions regarding water quality regulations, they provide valuable assistance to permit holders as the facility managers interact with the regulated community every day.

Monitoring Water Quality Compliance

Effluent Limits

Effluent limits are the maximum or minimum permitted levels of a particular pollutant that can be legally discharged in waters of the state by a regulated facility. Effluent limits are derived two ways. Technology-based effluent limits are based on the expected level of treatment available from treatment systems used by various categories of industry and municipalities.

Water Quality-based effluent limits are derived using mathematical models that calculate the level of treatment needed to prevent water quality standards violations and degradation of receiving water quality.

Understanding Compliance Rates

A compliance rate is a percentage of the number of effluent limits in compliance, based on a total "opportunities" for noncompliance. Opportunities are the number of effluent limits times the number of days reported within a given time frame. The compliance rate is often misinterpreted, based on the fact that a facility with a greater compliance rate may have fewer, yet more significantly damaging, violations than a facility that often narrowly misses it's permitted effluent limits.

What is an Acceptable Level of Compliance?

The effluent limits established in permits are derived considering the treatment technology used at the facility, receiving water quality, the environmental impacts of the discharge, and statistical reliability associated with sampling and laboratory procedures. The Department expects full compliance with the permits it issues.

Enforcement Resources vs. Duties

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

Other personnel in the program perform enforcement in the nonpoint sectors. Because most nonpoint sources are not permitted, there isn't a clear method for measuring workload. However, what can be said is that anyone in the diary or non-dairy nonpoint sectors is not only performing site inspections, but also when necessary doing enforcement as part of their jobs, particularly in the west side regions. Currently there are three FTEs committed to nonpoint compliance in the state for salmon recovery. In addition, there are seven dairy inspectors whom also do compliance and enforcement.

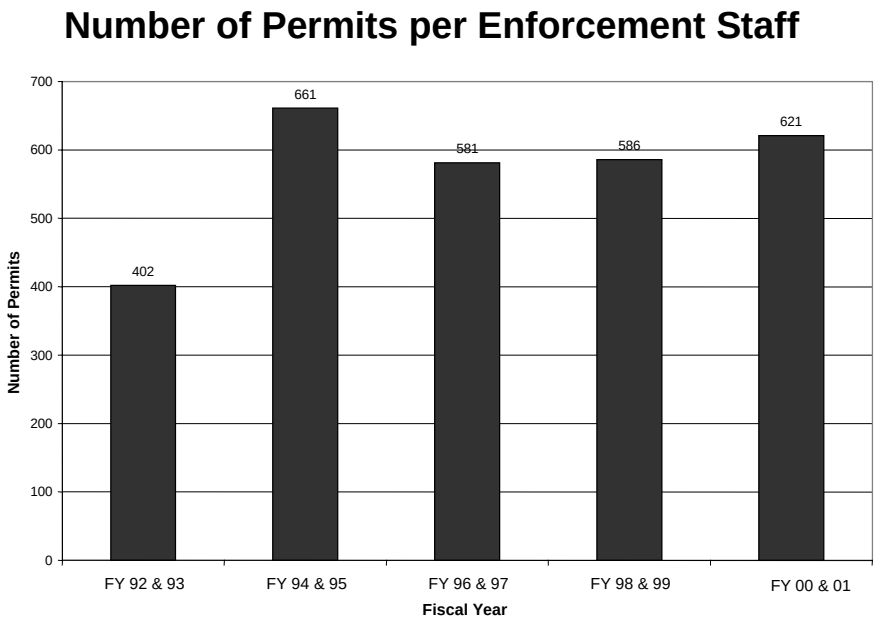


Figure 1

How Timely is the Program?

One way to measure the effectiveness of the program is through the median action time. This is the period of time it takes for the program to serve an enforcement action after detection of a violation. As a general objective and guideline, enforcement actions or compliance responses should be taken in 45 days or less from the date of detection of the violations. Initial formal enforcement actions [including penalties and administrative orders] should be taken as soon as possible, but not later than 90 days from the date of detection of the violation, unless adequate justification for delay exists. Significant violations must result in formal enforcement response as expeditiously as possible, but not later than 30 days from date of detection. Figure 2 demonstrates the various enforcement actions and the median response time associated with them. The 90-day response timeframe has been met consistently since 1997 however; the overall three year trend shows the median enforcement action response time to be increasing. The only exception to this trend is the civil penalty, which has decreased by 24 days from 1997.

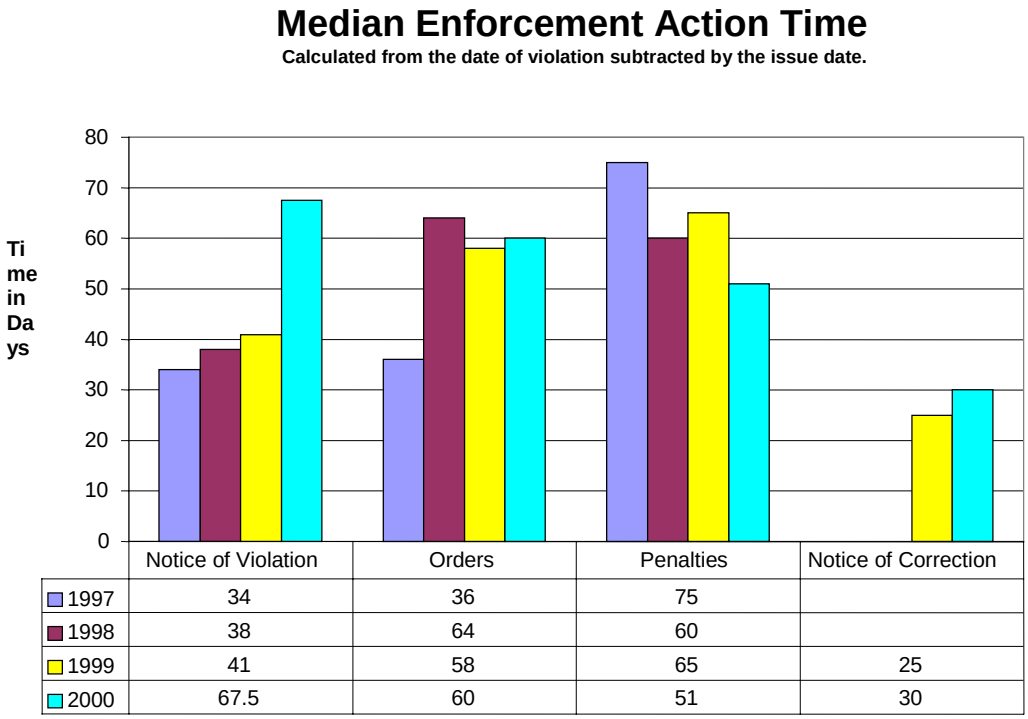


Figure 2

How the program is delivered on the ground?

The water quality program delivers its services through the four regional offices and the industrial section of the Solid Waste Program.

The industrial section has a staff that deals with the large industrial facilities in the state where it is more efficient to do all the environmental permitting from Ecology in a multi-media context. In other words, this staff not only does the water quality permitting, but also the air quality permits and any other permits that are needed from Ecology for these facilities. These facilities include the oil, aluminum, and the pulp and paper industries. Although the industrial section is not within the water quality program, it follows the guidelines that are developed for water quality.

The four regional offices deliver all other water quality services to point and nonpoint sectors of the state. The four regions are identified in the front cover of this report. In some cases, a general permit may be issued from the headquarters of Ecology, however compliance and enforcement are the responsibility of the region the facility is located in.

Industrial Facility Compliance

Permit Universe/Complexity

Industries and businesses with the potential to pollute state waters are required to obtain a wastewater discharge permit. Ecology issues both individual and general permits to industry. This helps ensure the environment is protected while simplifying the process for both businesses and the state. Industries issued general permits are discussed on page 21 of this document. Industries that are permitted individually are discussed below.

The wide variety of industries under individual permit include both large industries such as oil refineries, aluminum smelters, and pulp and paper processors, and smaller ones such as food processors, metal finishers, and circuit board manufacturers. A special unit in Ecology Headquarters carries out the permitting and compliance/enforcement of the very largest industries and is responsible for overseeing not only discharges to land, but air emissions and hazardous waste as well. Most businesses discharge to land or to a WWTP and are permitted through Ecology's regional offices. Businesses who's waste is essentially the same character and strength of household wastes do not need a permit.

Number of Industrial Facilities throughout the State

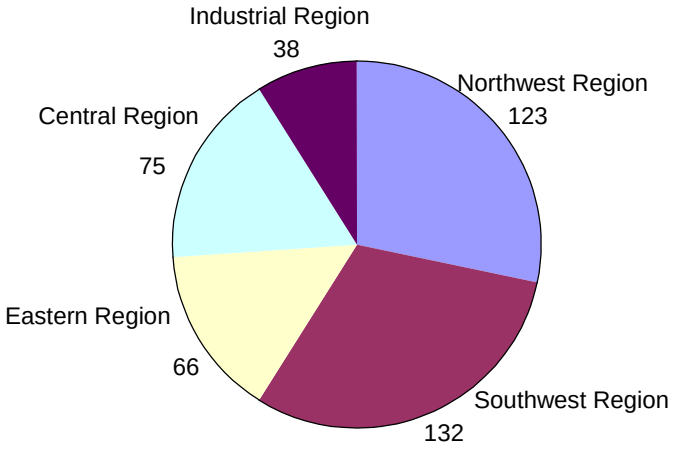


Figure 3

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

Facility Managers are responsible for ensuring compliance at the permitted facilities that they manage and work closely with regional enforcement staff. Essential to continued compliance are the various enforcement tools available under Chapter 90.48 RCW, as well as "informal" enforcement tools of consisting of warning letters, technical assistance calls and visits, and Notices of Correction.

What Violations Occurred

The Southwest region has the greatest number of permitted industrial facilities with a total of 132, of that total 18 percent had five or more discharge violations over the year 2000. Out of the 66 industrial facilities required to submit discharge reports in the eastern region, 39 percent of them had five or more discharge violations. The highest average number of violations per facility are also in the Eastern region which had the lowest industrial compliance rate at 92 percent and an average of nine violations per facility see Figure 4.

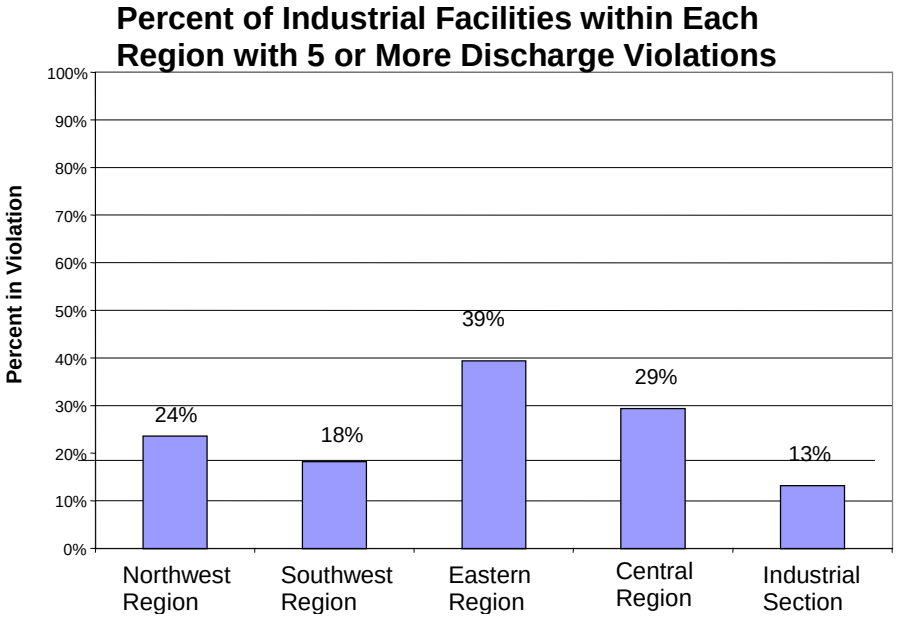


Figure 4

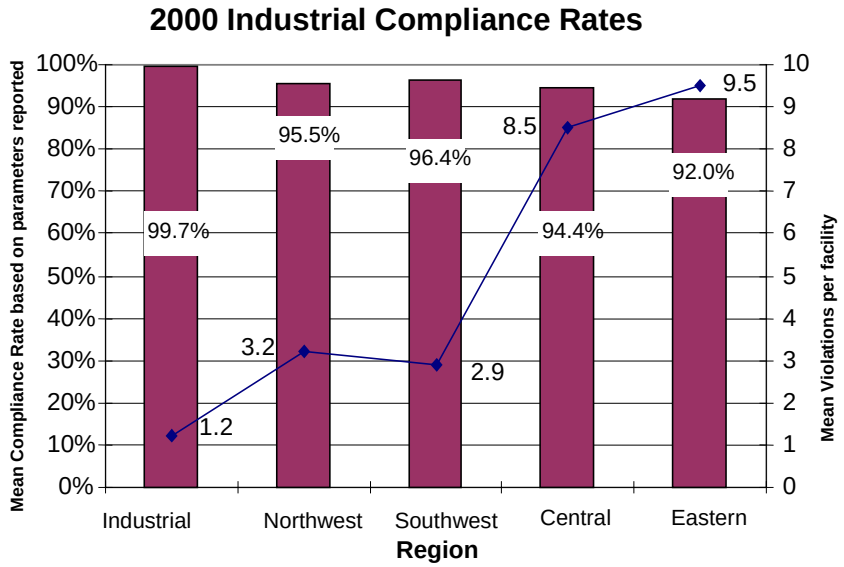


Figure 5

Ecology focuses on facilities with five or more violations in order to improve compliance with significant violators. In Figure 6, there were 434 industrial facilities that were required to submit discharge monitoring reports in the year 2000, compared to 480 facilities in 1999. However there was a significant increase in facilities with five or more violations; 71 in 1999 to 106 in 2000. This is a significant increase due to the fact that there were 46 fewer facilities in 2000 than in 1999, and 35 more facilities with five or more violations in 2000.

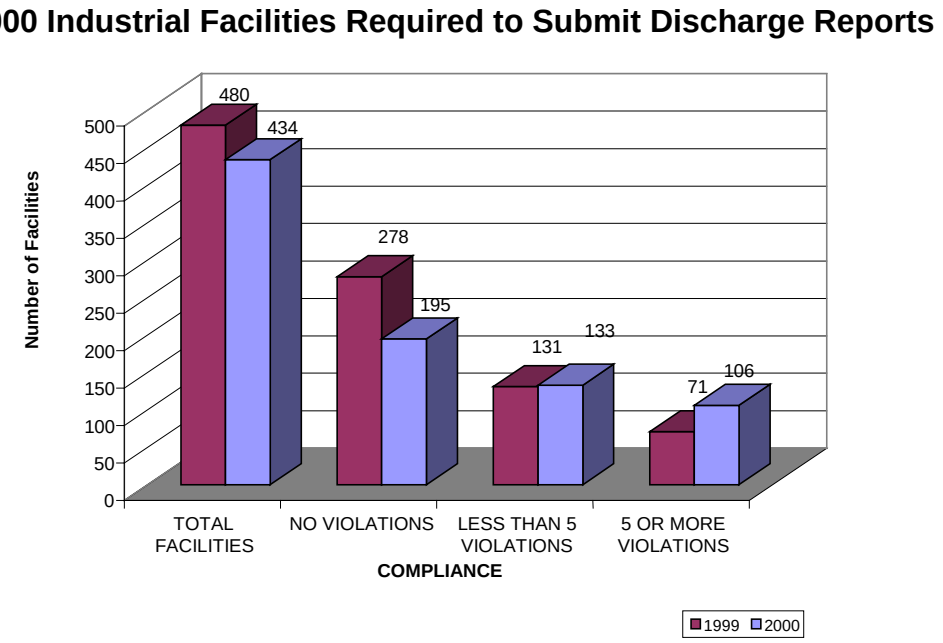


Figure 6

In contrast, Figure 7 shows that overall there were 8077 more compliance opportunities in 2000, and there were 7626 more successful compliance opportunities in 2000 compared to 1999. Furthermore, there were 280 less violations that were exceeded 20 percent of the permitted effluent limit in 2000 than there were in 1999.

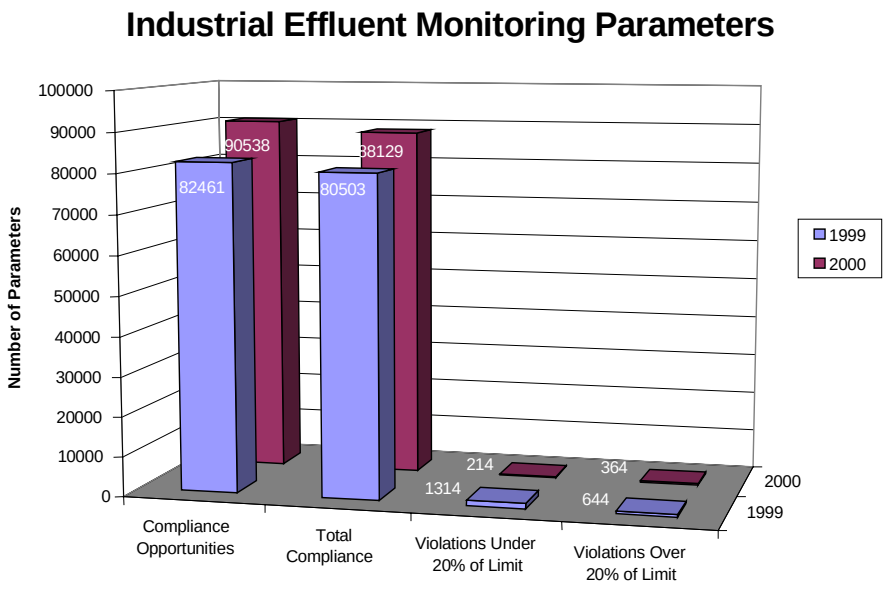


Figure 7

The statewide trend of the mean compliance rate has generally increased over the last five years, with the exception of 1998 and 1999, which showed a 1.1 percent reduction. In 1995 the industrial compliance rate was 89.6 percent compared to the 2000 compliance rate of 97.three percent, an increase of nearly eight percent in compliance over five years.

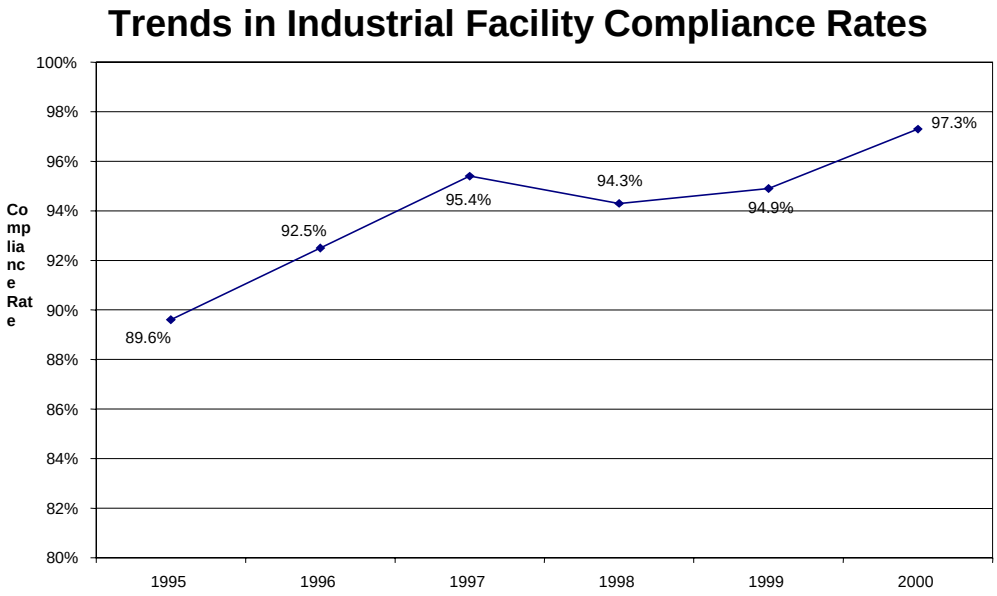


Figure 8

What Actions Were Taken

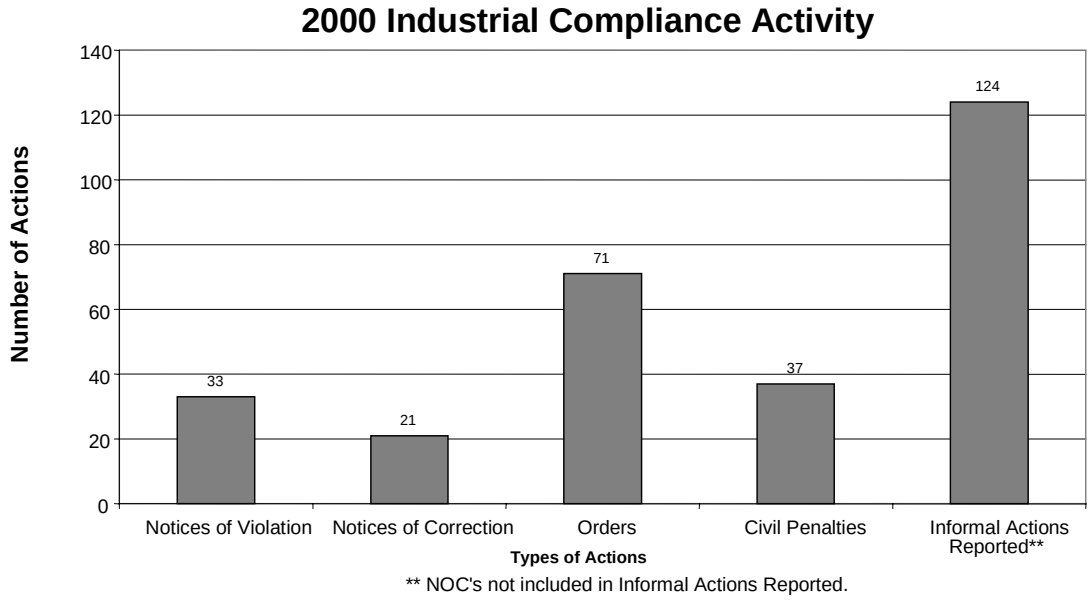


Figure 9

A total of 161 enforcement actions were documented by Ecology to improve industrial facility compliance in 2000. These actions were comprised of 33 notices of violation, 71 orders, 37 civil penalties, and 21 notices of correction see Figure 9. Of the 136 facilities that reported five or more violations, one formal action, along with 124 informal actions were taken in response to these facilities, leaving eight facilities without receiving any enforcement action see Figure 10.

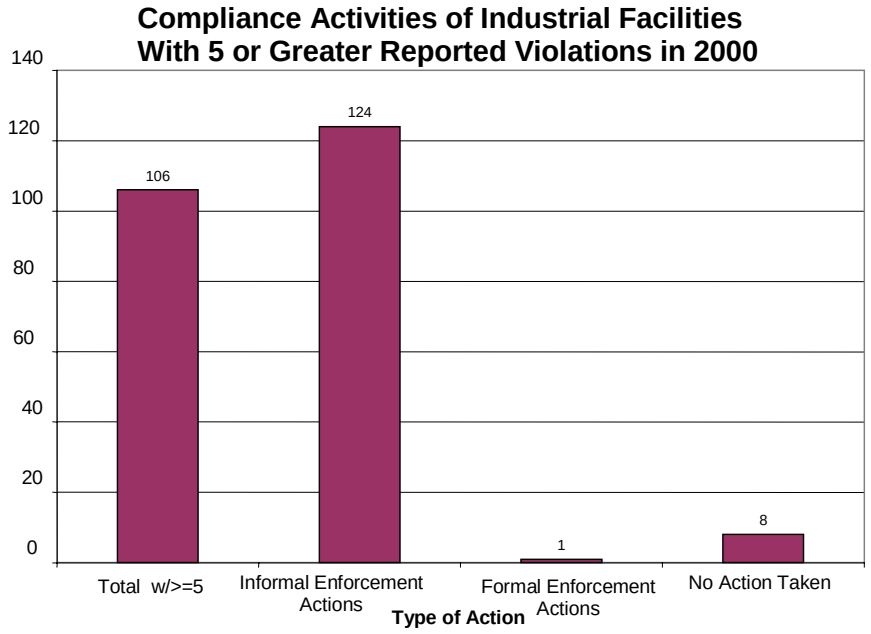


Figure 10

An Example of Success

Each section of this report discussing permit types will have examples of success stories based on the appropriate use of the Water Quality program's compliance and enforcement methods.

Compliance Narrative for Foster Farms, 1700 S. 13th Avenue, Kelso, WA 98626

Discharge Monitoring Reports received by the Department of Ecology (Department) show that, between May 1998 and May 2000, Foster Farms exceeded its permit limits for Dissolved Oxygen, Total Suspended Solids, Oil and Grease, and pH.

Between November 18, 1998 and July 25, 2000, the Department sent Foster Farms eight noncompliance notification letters for exceeding the permit limits described above. Since February 28, 1998 the Department issued Foster Farms one Notice of Violation, two Notices of Correction, and two Administrative Orders with one amendment to address additional non-compliance with the Environmental Laws and Regulations of the state.

On August 25, 2000 the Department issued Foster Farms Notice of Correction DE 00WQSR-1492. The Notice of Correction required Foster Farms to come into full compliance with the effluent limits, monitoring requirements, reporting requirements, terms and conditions of State Waste Discharge Permit number ST 6171 no later than the September 2000 monitoring and reporting period. The Notice of Correction advised Foster Farms that any permit noncompliance reported for the September 2000 monitoring and reporting period, or any monitoring and reporting period for two (2) years after September 2000, would result in a penalty assessment of not more than $10,000.00 per day, per violation. Repeat violations will result in assessment of an escalated penalty three times the amount of the previous penalty. Since the Notice of Correction was issued Foster Farms has had one permit violation regarding a low pH discharge and received a $1,000.00 penalty.

Municipal Facility Compliance

Permit Universe/Complexity

Municipal wastewater treatment plants (WWTPs) that discharge to surface waters, apply treated wastewater to land, or discharge greater than 14,500 gpd subsurface are required to have a wastewater discharge permit.

WWTPs use a combination of biological, physical, and chemical processes to treat the wastewater generated in our homes and businesses. The size of WWTPs, however, varies greatly between small communities and large cities. Washington State has a total of 312 WWTPs that are designed to treat from 1200 gallons per day to 183+ million gallons per day. On average, everyone sends about 70 gallons per day of wastewater to their local sewage treatment plant. Some form of local government (e.g., a city, a county, or a local sewer district) operate most municipal WWTPs. A smaller number of plants are operated by state agencies (e.g., correction centers, state parks), private communities, and private businesses.

Number of Municipal Facilities throughout the State

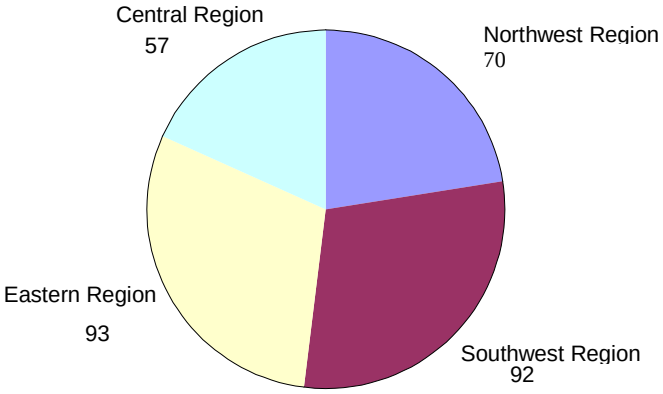


Chart 11

WWTPs vary in complexity and difficulty of operation due to the great differences in the amount and type of mechanical components and processes at each facility. But due to the relatively similar nature of the wastes they treat, the types of monitoring done at each facility are generally the same. Small facilities generally perform a minimum of 60 laboratory tests per month on the treated water they discharge whereas a larger facility may be performing well over twice that amount. In addition, these plants must also perform many internal tests and may have requirements for performing other biological studies to ensure their discharges comply with state laws and regulations.

Both compliance/enforcement and permit management staff review testing information on a monthly basis for most facilities and conduct inspections. Two staff positions are dedicated to providing technical assistance statewide to small and midsize facilities that request assistance –

although these staff cannot perform enforcement, 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, warning letters, technical assistance, engineering review and assistance, and inspections. Ecology can also impose sewer moratoria on overloaded plants that were unable to comply with permit requirements. Moratoriums, or sewer connection bans, prevent or limit hookups to sewer systems when the systems are over-capacity or are receiving more waste than the system was designed to treat. As a result the systems cannot prevent pollution, and therefore cause water quality problems.

What Violations Occurred

The greatest numbers of municipal facilities reside in the Eastern and Southwestern Regions with 93 and 92 respectively; see Figure 11. The highest percentage of violating municipal facilities amongst the Ecology regions occurred in the Eastern and Central regions; see Figure 12. Out of the five municipal facilities required to submit discharge reports in the central region, 67 percent of them had five or more discharge violations for the year 2000, while only 26 percent of Northwest's 70 facilities had five or more violations.

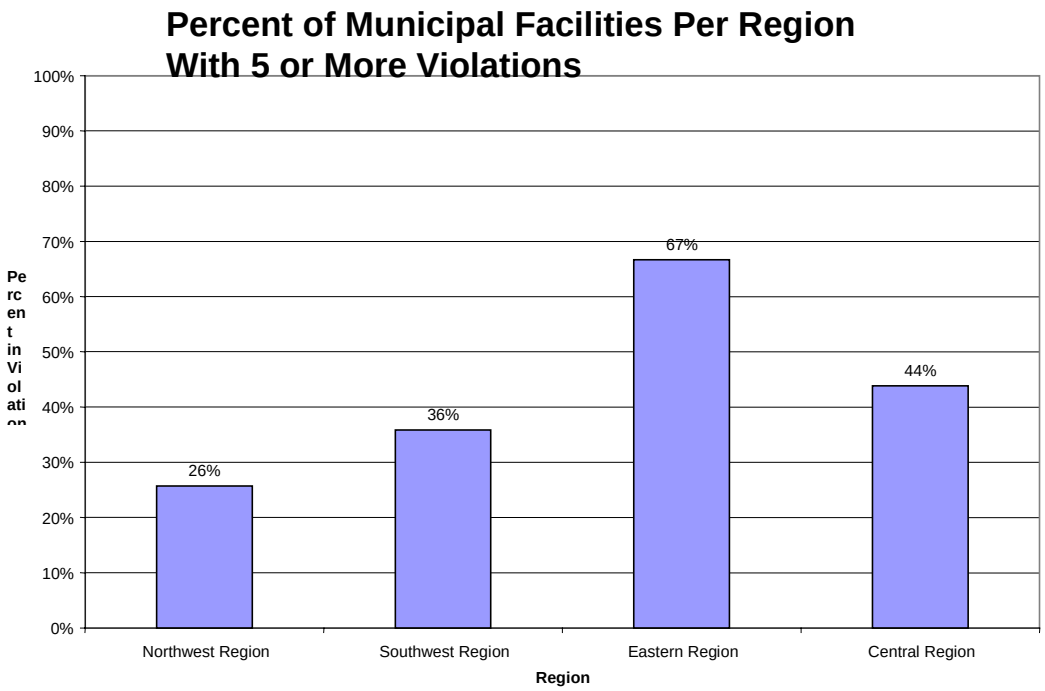


Figure 12

The highest compliance rate 97 percent, was held by the Central region along with the average number of violations per facility 11.4, second to the Eastern region which has the most facilities and the lowest municipal compliance rate at 87 percent and an average of 14.9 violations per facility; see Figure 13.

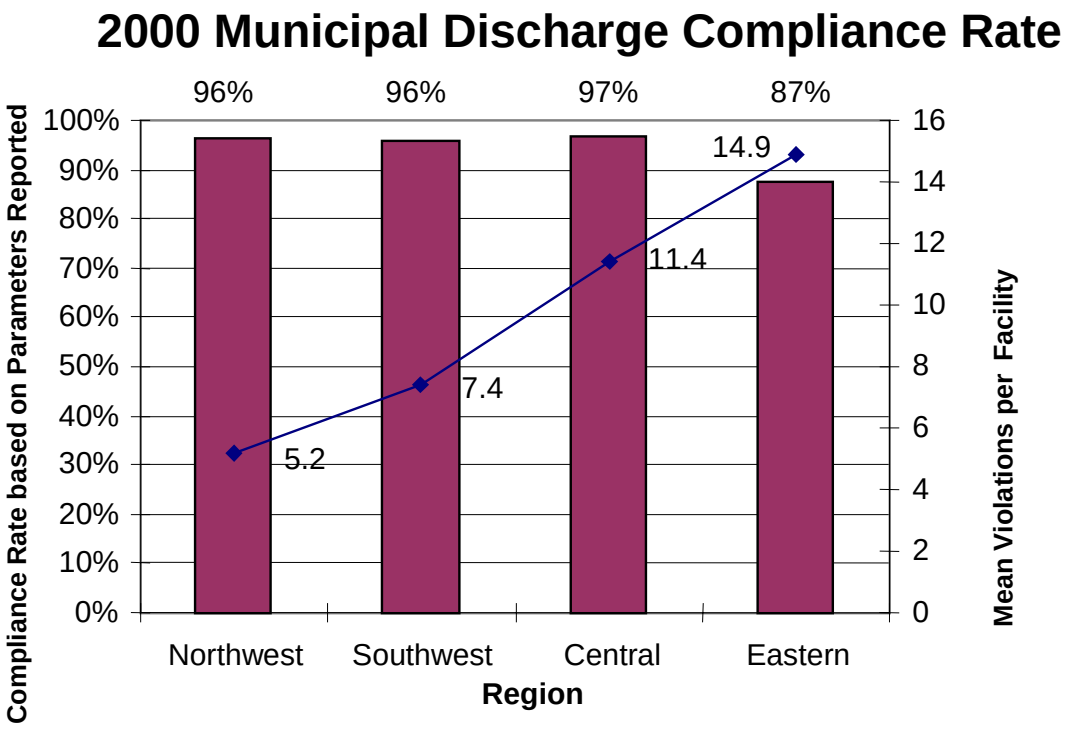


Figure 13

Facilities that report five or more violations per year are targeted by Ecology in order to increase compliance with significant violators. The number of municipal facilities dropped by five from 1999 to 2000, for a total of 312 facilities. While the facilities that were in total compliance increased slightly, the number of infrequent violators (< five violations) increased by 60 facilities to 141 in 2000. However, the number of facilities with greater than or equal to five violations decreased from 1999 by 68 down to 76 facilities in 2000; see Figure 14.

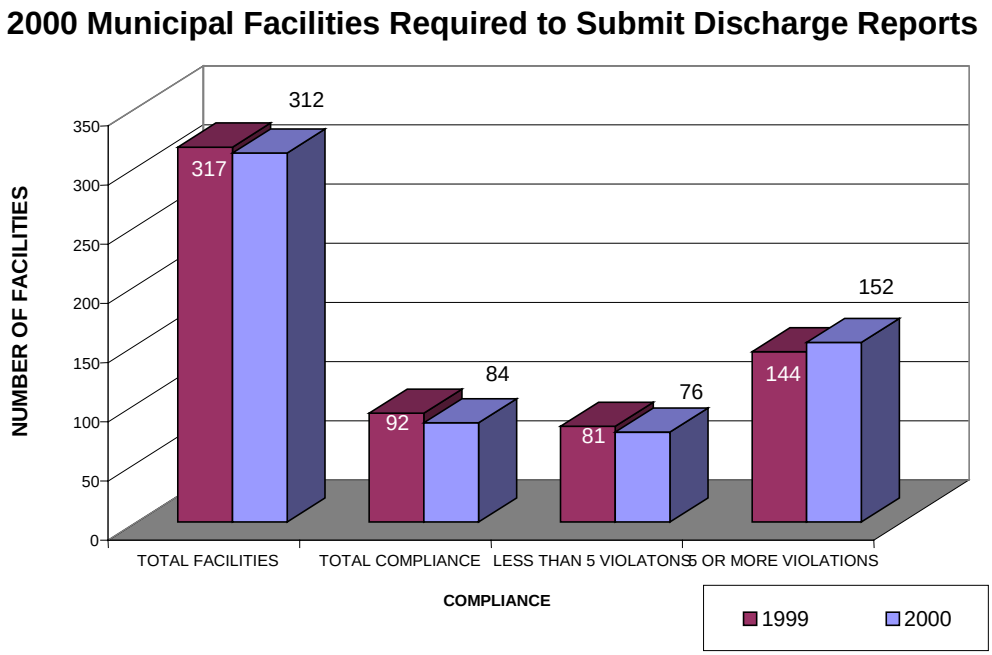


Figure 14

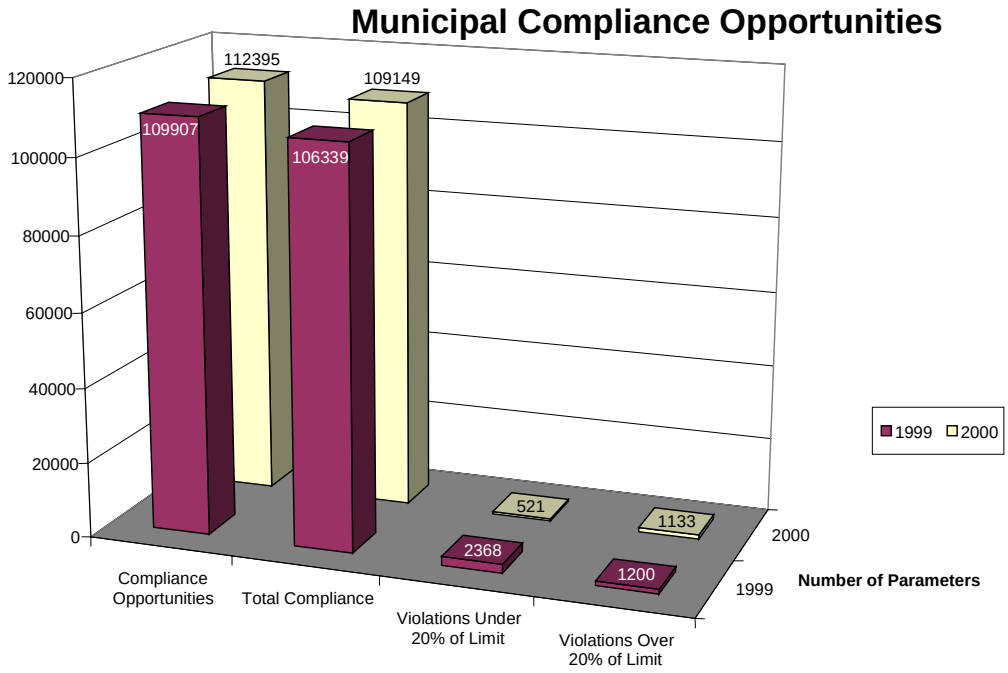


Figure 15

The number of total compliance opportunities increased, as did the number of successful compliance opportunities in the year 2000. There was a drastic reduction in 2000, with 1847 less violations that were within 20 percent of the permitted effluent limit, while only a slight decrease of 67 violations that exceeded 20 percent of the permitted limits; see Figure 15.

The statewide trend of the mean compliance rate has been generally increasing over the last five years, with the exception of 1998, which showed a one percent reduction. In 1995 the municipal compliance rate was 92.7 percent compared to the 2000 compliance rate of 97.1 percent, an increase of approximately four percent in compliance over five years; see Figure 16.

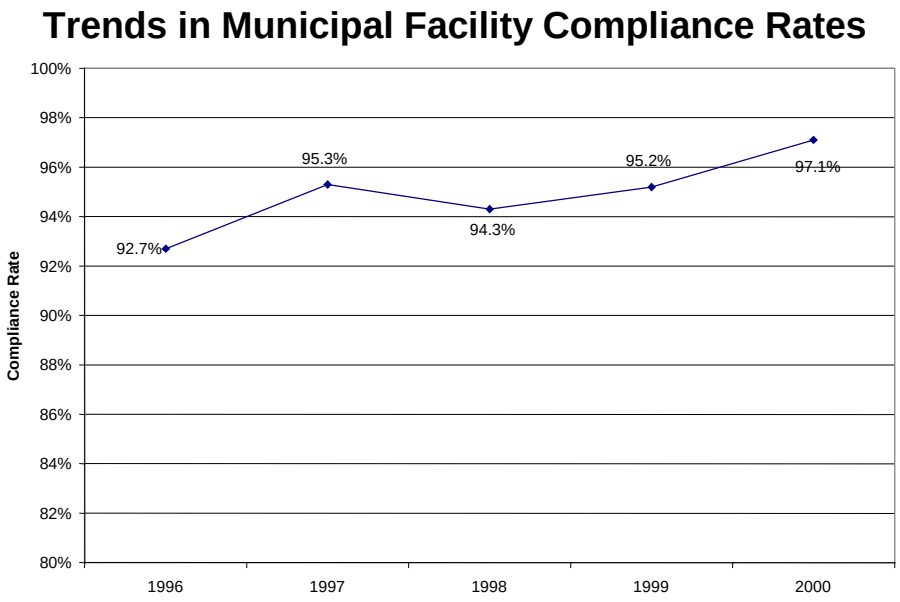


Figure 16

What Actions Were Taken

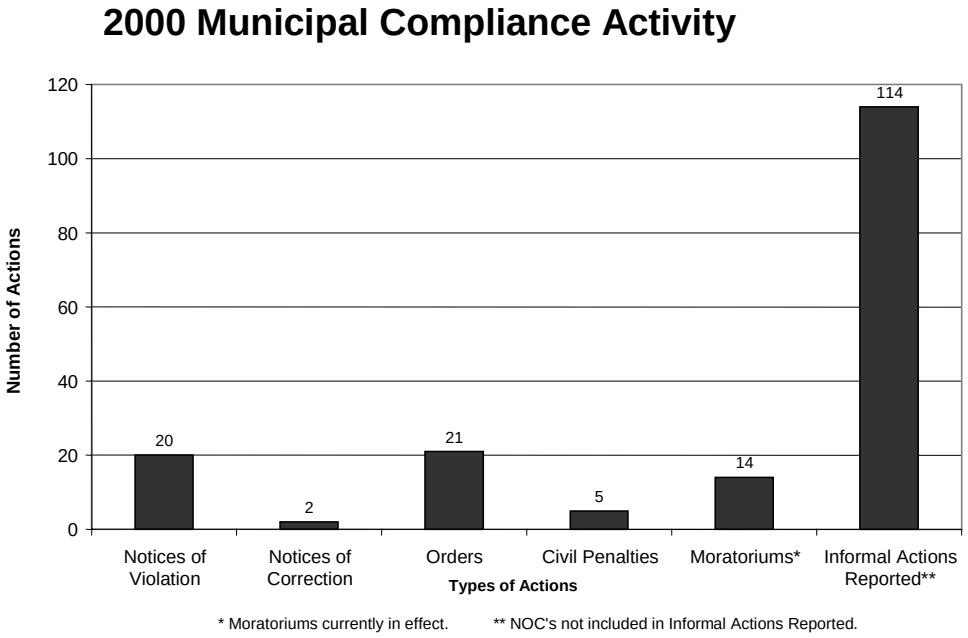


Figure 17

In 2000, 176 enforcement actions were taken to improve municipal compliance. Orders were the most common formal enforcement reported at 21 actions, followed by 20 notices of violation, 14 sewer moratoriums, five civil penalties, and 2 notices of correction. The majority of enforcement action is informal, with a reported total of 114 actions; see Figure 17. A total of 152 municipal facilities reported five or more violations in 2000. There were only six formal enforcement actions taken in response to these violators, while in contrast 114 informal actions were taken. There were 25 facilities in violation that did not receive any enforcement actions; see Figure 18.

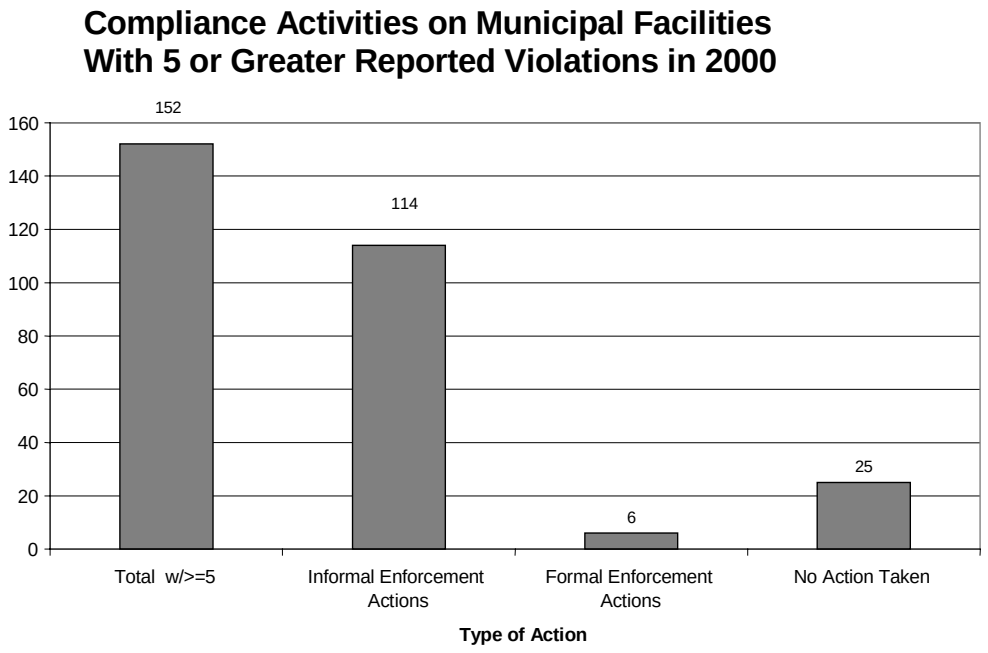


Figure 18

An Example of Success

Compliance Narrative for the Department of Corrections

Municipal facilities vary in method of treatment, size of facility and amount of skill and labor needed of to operate. Larger treatment plants generally have more resources available to them than smaller facilities. Smaller facilities rely on Ecology's technical assistance to help guide them through issues that may cause the facility to be out of compliance.

Administrative orders are very effective in gaining compliance. Ecology is able to direct the facility as to what they believe needs to be done to achieve to compliance, and in return the facility has a document that gives them a clear direction.

The Department of Corrections had five facilities that were in need of compliance guidance. The order directed Corrections to initiate the following:

- Grease traps were installed to capture the grease before it had a chance to cause problems at the plant. Grease trap maintenance programs for pumping and monitoring were developed.
- Best management practices in the laundry were developed and automatic dry chemical feed system installed to prevent over dosing of the detergents and bleach.
- Low flow shower heads were installed to reduce flow to the treatment plants.

- Improvements at Washington Corrections required an operator up grade from a class II to a class III.
- Larch Correction Center upgraded their treatment system from aerated lagoon to activated sludge with filtration and ultraviolet protection.
- Callam Bay Correction Center installed a fine mechanical screen at the head works.

Corrections agreed to the order and completed all aspects of the order. As a result of the order the Department of Corrections has achieved pollution source reduction and developed a better working relationship with Ecology municipal staff in the Southwest region.

General Permit Compliance

Permit Universe/Complexity

As noted earlier, general permits are NPDES/state or state wastewater discharge permits that are developed for a category of discharger instead of an individual facility. Facilities covered by general permits generally have simple manufacturing processes, a limited number of pollutants, and pollutant control is often by best management practices (BMPs) rather than a complex treatment process. The general permit holders that submit monitoring data, usually on a monthly or quarterly basis, are fish hatcheries, water treatment plants, sand and gravel permits, boat yards, and fruit packing plants. The other types of general permits, storm water and dairies, are monitored by site inspections. For instance, compliance by construction and industrial stormwater permit holders can only be verified through site inspections. The number of general permits by type can be seen in Figure 19.

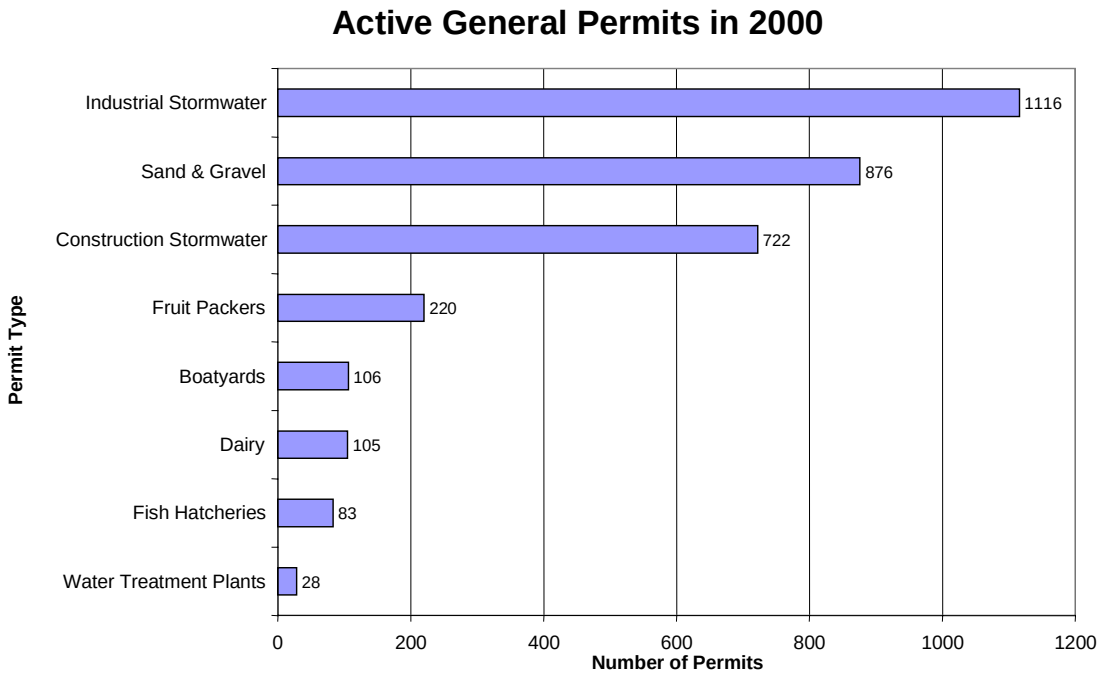


Figure 19

What Violations Occurred

The percent of violation within the general permitted facilities that submit discharge monitoring reports is much lower than the individual permits discussed earlier. Examining these general permits by region in Figure 20, Ecology's goal of total compliance was nearly met.

All regions have a compliance rate of 96 percent or greater, and the highest mean of total violations was 2.5 from the Central region. Out of the 584 permitted discharges, 404 maintained total compliance. Only 64 permitted facilities had five or more violations in 2000, see Figure 21.

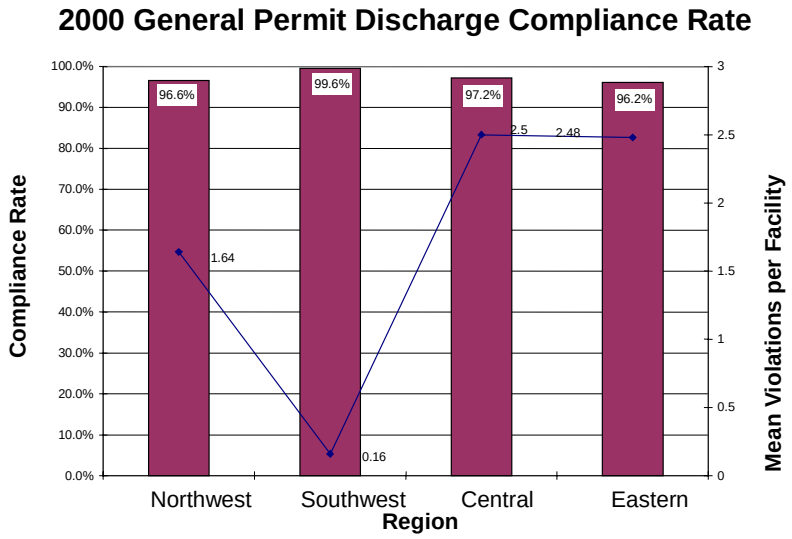
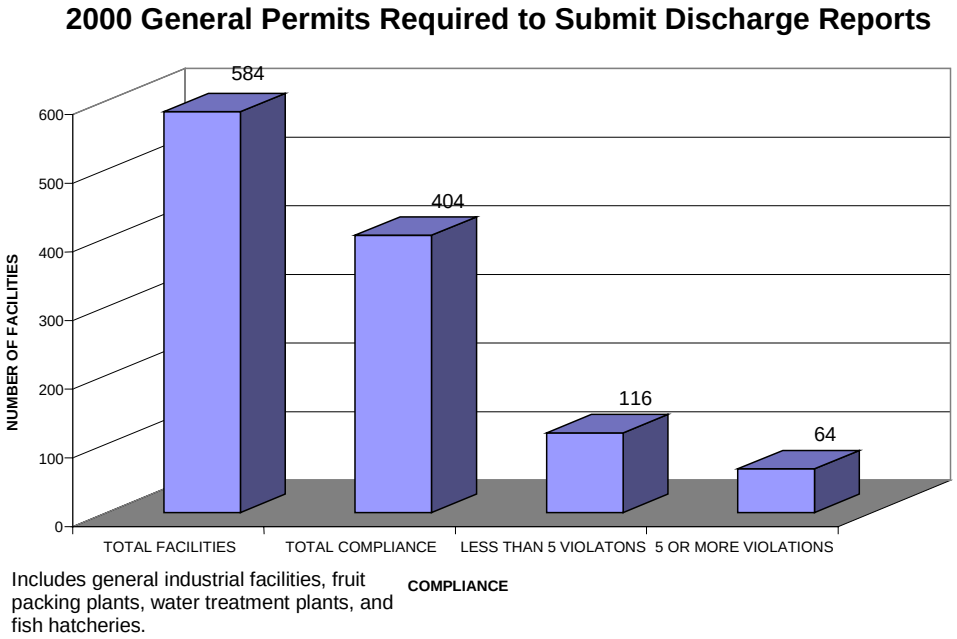


Figure 20



Includes general industrial facilities, fruit packing plants, water treatment plants, and fish hatcheries.

Figure 21

What Actions Were Taken

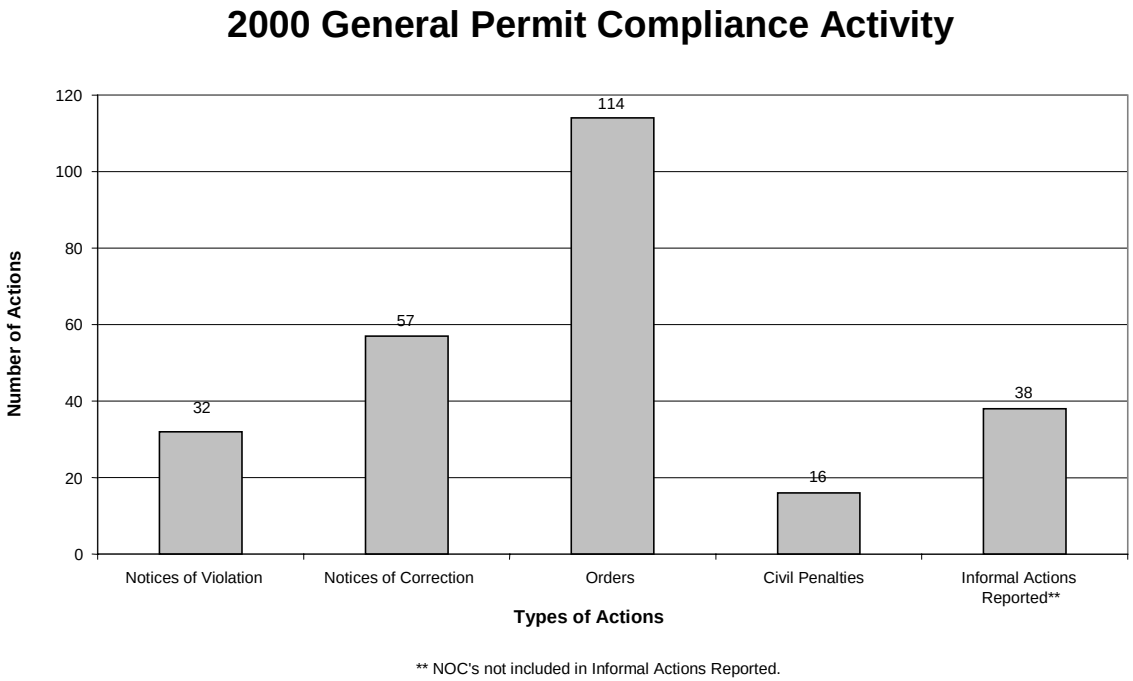


Figure 22

A total of 257 enforcement actions were documented by Ecology to improve general permit compliance in 2000. These actions were comprised of 32 notices of violation, 114 orders, 16 civil penalties, 57 notices of correction, and 38 informal compliance actions; see Figure 22.

An Example of Success

Compliance Narrative for Department of Transportation Sand and Gravel State-Wide Enforcement Coordination

Permit enforcement involves more than compliance with permit limit and submittal requirements, but also includes bringing unpermitted facilities under permit. This is fairly straightforward with large facilities that need individual permits, but is more difficult for General Permits. General Permits like Ecology's Sand and Gravel General Permit cover a wide variety of facilities with permit coverage requirements dependent both on the type of operation and the discharge. Large active facilities are easily found and permit coverage needs quickly determined. There are also numerous small, temporary and/ historic sites that are difficult to find in order to determine if they meet the requirements for permit coverage. In many cases the owner of the property didn't even know about them or the need for permit coverage.

Early in 2000 we discovered that the Washington State Department of Transportation (WSDOT) owned approximately 600 "pit sites" statewide that had been tested as possible source of rock that might need coverage under the Sand and Gravel General Permit. After meeting with WSDOT we determined that a number of these sites had never been mined or had been part of a highway construction project and were now part of the highway. We then prioritized our efforts

on a list WSDOT provided of 161 WSDOT "pits" that were covered by Department of Natural Resources surface mining permits. Many of these were already covered under the Sand & Gravel General Permit. Joint Ecology/WSDOT inspections help determine the permitting need for the others. A secondary benefit to this project has been an increased effort by WSDOT in assuring that contractor source materials are from pits covered by the Sand and Gravel General Permit.

Dairy Compliance

Permit Universe/Complexity

Commercial dairy farms are managed through a program of inspections and targeted permitting. In order to conduct these inspections there are a total of sevenFTEs assigned throughout Washington. The Bellingham Field Office has two inspectors, the Northwest and Southwest regions have two and the Central and Eastern regions split one FTE for dairy inspections and permitting. Ecology inspects each of the approximately 670 commercial dairy farms in Washington State. Each adult cow produces bodily waste each day equivalent to 20 human beings. That means that a 1,000 cow dairy produces as much waste as 20,000 people do each day. Generally, proper waste management involves containing manure and contaminated runoff in an above-ground earthen storage pond in the winter and applying the waste during the spring and summer growing seasons at agronomic rates as a beneficial source of nutrients for crops. Currently there is a trend towards fewer but larger farms. It is expected the number of dairy farms will continue to decrease as their herd sizes continue to increase.

All dairy farms must have a Dairy Nutrient Management Plan (DNMP) in accordance with the 1998 Dairy Nutrient Management Act, Chapter 90.64 RCW. All commercial dairy farms are required to have their DNMP approved by their local conservation district by July 1, 2002. Both the dairy farm and conservation district must certify the DNMP is fully implemented by December 31, 2002. Failure to meet these statutory deadlines may result in penalties being issued under Chapter 90.64 RCW. The plan is normally developed in cooperation with the local Conservation District. The status of dairies that have DNMPs and certification is charted below:

Dairy Farm Total	DNMP Approved	Conservation District Certified	Producer Certified	Fully Certified
670	137	23	24	17

If Ecology inspectors discover the discharge of dairy wastes to waters of the state, a permit is issued. Thus, all dairy farms do not require permit coverage. Only those dairies that discharge more frequently than during a 24 hr/25 year rainfall event are required to obtain a Dairy Operation NPDES and State Waste Discharge General Permit. Facilities that comply with their permit for five years can request their permit be cancelled. Ecology will make the final determination if the permit can be cancelled. If cancelled, the dairy can exit the permit program and return to “inspection-only” oversight for adherence with state water quality law.

Of the dairies that are required to obtain a permit, frequently permits are accompanied by an administrative order with a specific timeline for corrective action to ensure the problem is resolved promptly. Dairy inspectors also use informal enforcement tools such as warning letters to gain compliance in lieu of a permit.

Ecology recently completed an initial inspection of all 670 dairy farms in June 2000 and at the time of inspection found that about 73 percent of farms are in compliance with major recommended water quality protections. Currently, about 105 farms statewide have coverage under the Dairy Operation NPDES/State General Discharge Permit. The number of permitted facilities is steadily increasing. From October 1998 to June 2000, an informal or formal enforcement action was taken at over 180 different dairy farms. A total of about $450,000 in civil water quality violation penalties were also issued. Formal enforcement actions have been taken for both permit violations and for unauthorized discharges from non-permitted facilities. Continuing inspections of all dairy farms by Ecology will be needed to maintain and increase the current rate of compliance with water quality protections. See Figure 23 for the number of formal and informal enforcement actions.

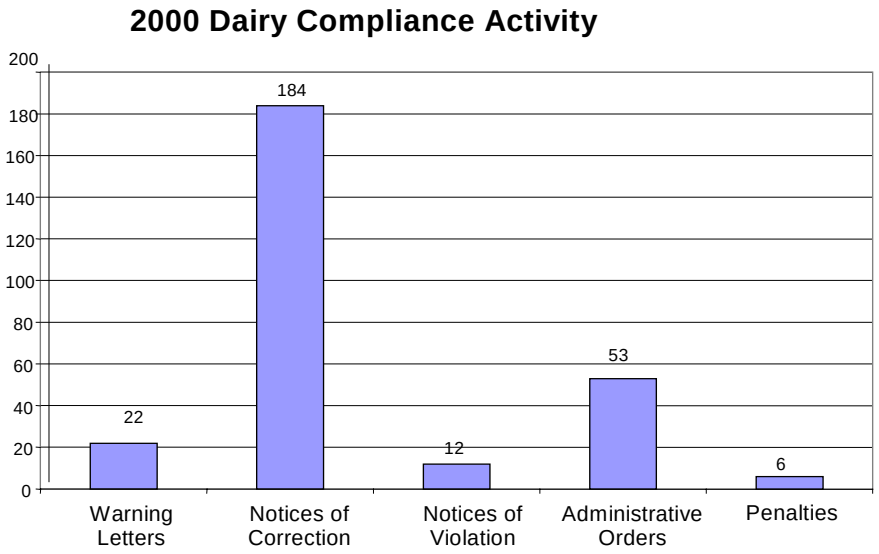


Figure 23

A legislatively-chaired Dairy Task Force oversees implementation of the dairy inspection and compliance program.

In certain areas of the state water quality problems can be attributed to one industry's practices. In response to closed commercial shellfish beds in Portage Bay (the marine receiving waters of the Nooksack River), Ecology has initiated a TMDL for fecal coliform bacteria on the Nooksack River, and the local governments created a Shellfish Protection District.

Ecology's fecal coliform monitoring data initially indicated that manure from animal feeding operations was the primary cause of the fecal coliform loading in the Nooksack River. Since some initial work on a TMDL had begun and the shellfish beds were closed due contamination

from fecal coliform bacteria, the local and county governments were required by law to initiate a Shellfish Protection District to address the fecal coliform problems.

The Shellfish Protection District worked in close conjunction with the public and coordinated with other local governments such as the Whatcom Conservation District, the Northwest Indian College and Washington State and Whatcom County Departments of Health as well as Department of Ecology to provide an overall solution to the problem.

The Northwest Indian College applied for and were granted Centennial Clean Water Funds from the Department of Ecology to institute a bacterial monitoring program to track the effectiveness of Ecology's TMDL implementation efforts. An additional advantage of this monitoring program has been its ability to provide immediate high quality information about Ecology's dairy inspection and enforcement program in this watershed.

Ecology's dairy inspectors have used the monitoring data to prioritize their inspection efforts on sub-basins of the Nooksack River that were identified as having high levels of fecal coliform bacteria.

After this coordinated program was instituted, Ecology has begun to track the environmental performance of the enforcement program in terms of lowering fecal coliform loads as well as tracking the upgrades on dairy farms in the watershed. An agreement was reached between Ecology and Governor Gary Locke's office to reduce fecal coliform loads by 15 percent per year for five years, for a total reduction of 75 percent. Much work remains to be accomplished, but the overall trends of lowered fecal coliform loads suggest that the tributaries of the Nooksack River are well on their way to meeting the targets set forth in the TMDL goals and the Governor's agreement.

Importance of Follow-Up Inspections

During the course of inspecting dairies in Whatcom County, actual, as well as potential discharges to surface waters of the state are occasionally detected. In these cases Ecology has found that communicating to the farmers the urgency of correcting these situations by immediately halting the discharges is important.

The nature of nonpoint source discharges as opposed to point source discharges, is that there usually isn't a valve to turn to halt the discharge. The nature of nonpoint discharges is often manure flowing off of a field in several different areas into ditches or creeks. This is often a result of over-application of manure prior to a rain event. Our experience has been that when immediate corrective actions are required to stop discharges compliance is most often quickly achieved and sustained over time when appropriate follow-up inspections occur on a timely basis. A lack of follow-up inspections can result in corrective actions being only partially implemented or not sustained over time.

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 apply. The situations are as varied as our climate and economy, dry land agriculture in eastern Washington, marine sewage complaints on the Puget Sound or bulldozing by a neighbor near a trout stream.

The inclusion of the Municipal Stormwater program, Boatyard, Sand and Gravel operations and portions of the Dairy program into the NPDES permit program has reduced the size of the Nonpoint universe. Forest Practices and Aquatic Pesticide control are two formal efforts to control nonpoint pollution. Specific strategies to develop Total Maximum Daily Loads (TMDLs) for nonpoint parameters have been developed. The primary thrust for compliance is to provide technical assistance and information to the operation to prevent pollution.

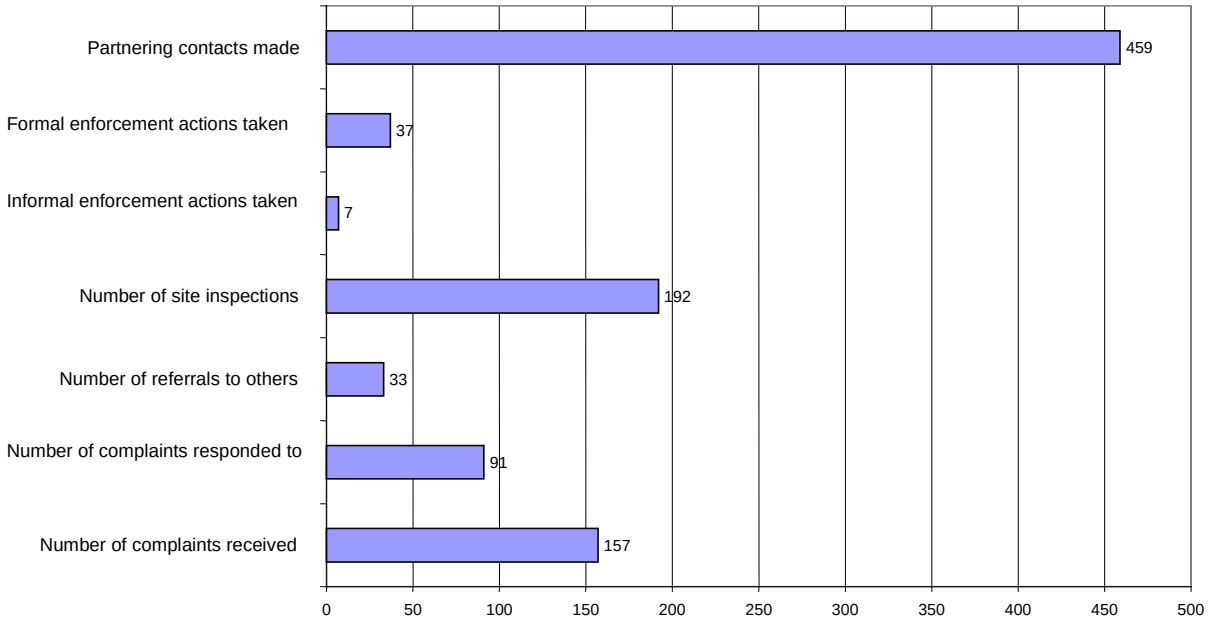
When the effort to prevent pollution is not successful, the general approach is to try to identify the local authority or jurisdiction and work with them to settle the matter at the lowest level of enforcement. Developing and utilizing these relationships are key to preventing and minimizing the pollution problems. When the violation causes significant environmental harm, is not pursued by a local authority, or is significant due to it's scope of operation, Ecology may take formal enforcement action.

Nondairy Agricultural Compliance

Nonpoint sources are the leading cause of water pollution across the nation and in Washington State. 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 combine 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 (Agreement) in 1988.

The Agreement defines a consistent series of 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." Farm plans identify reasonable and economical ways to manage the farm to prevent or correct water pollution problems. See Figure 24 below regarding the number of compliance and enforcement activities between July and December 2000.

Nonpoint Source Compliance Actions from July to December 2000



This chart does not represent any Salmon Recovery Plan data.

Figure 24

Nonpoint Compliance Associated with the Governor's Salmon Recovery Plan

The nonpoint strategy seeks to achieve compliance with water quality laws and protection for fish through a balanced program of education, technical assistance, and cost sharing with a regulatory back up. In the case of agriculture this consists of millions of dollars for conservation district and Natural Resource Conservation Service for technical assistance. It also includes nearly $200 million for cost sharing under the Conservation Reserve Enhancement Program (CREP) as well as a number of other financial assistance programs.

Part of a balanced program also consists of enforcement where voluntary efforts alone do not achieve compliance. Even where enforcement may be necessary these other incentives would be in place and it would be used to compliment those efforts.

Enforcement does not necessarily mean a penalty. Ecology's policy is to use the least amount of enforcement necessary to achieve compliance. In many cases this could be a notice of correction or violation or an administrative order. Ecology would work with local watershed groups to identify areas where enforcement may be necessary such as for a bad actor. It may be called for as an element of a TMDL, or triggered by a shell fish closure and lack of voluntary compliance. Limiting factors analysis for salmon restoration may also indicate where enforcement may be appropriate. Actions that would trigger enforcement would include repeat violations, follow up

to an initial inspection, and 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 is the backstop necessary to encourage people to move forward in a voluntary manner.

In order to put this strategy in place, the Legislature gave Ecology six FTEs, three of which are for water quality compliance for salmon recovery. The data below indicates the work that these FTE's have been doing in the last six months; see Figure 25.

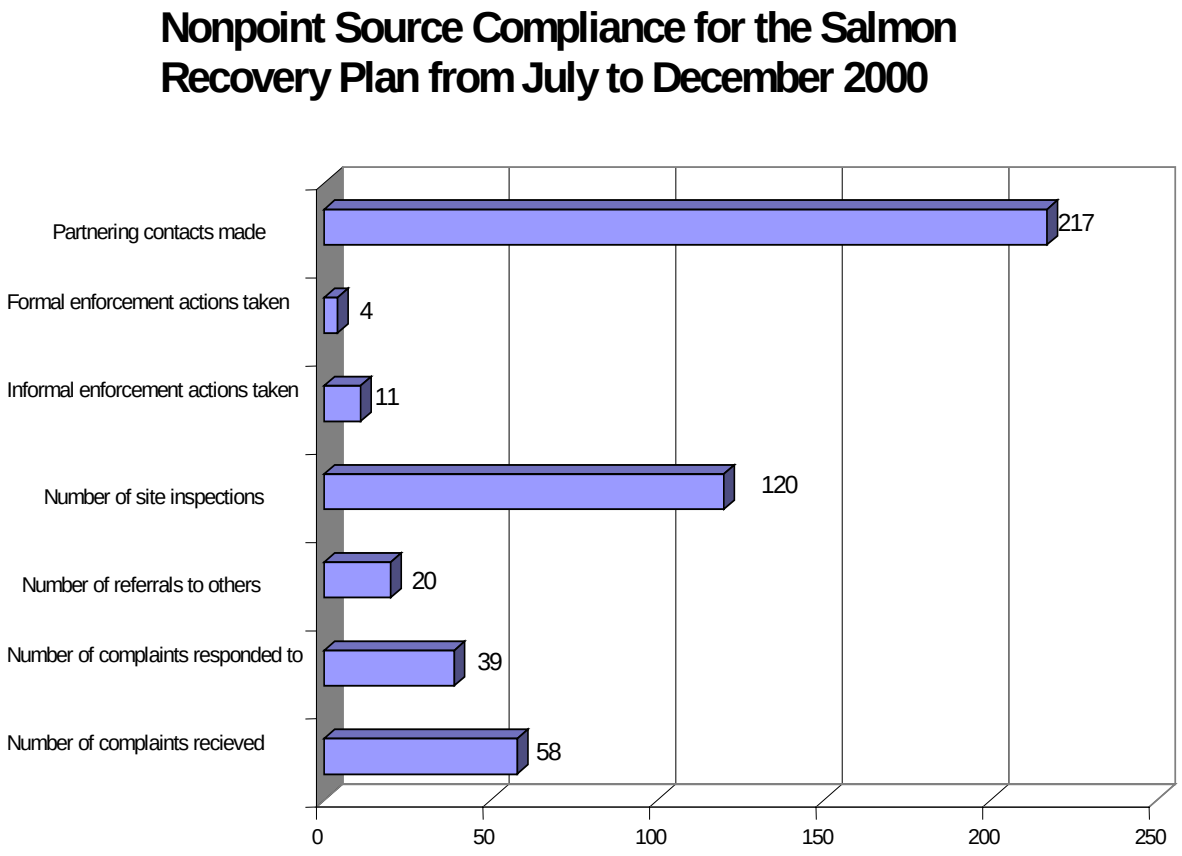


Figure 25

Timber, Fish, and Wildlife (TFW) Compliance

Ecology approves of the rules (in a water quality context) that are adopted by the Forest Practices Board for forest practices. As a result the department of natural resources is the lead agency for enforcement of forest practices. Ecology provides DNR and landowners assistance as needed to deal with water quality issues as forest practices are proposed.

DOE may take independent action under its enforcement authority in Chapter 90.48 RCW. However, this can only occur after consultation with DNR, and if the non-compliance with water

quality standards occurred as a result of violations with 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 DNR has not issued a notice to comply or stop work order Ecology can inform DNR. If DNR does not take action within 24 hours, then DOE may petition the chair of the forest practices appeals board to require DNR to take action.

Pesticide Compliance

Use of Aquatic Pesticides

Each year the water quality regional programs issue about 100 short-term water quality modifications allowing for the direct application of aquatic pesticides to waters of the state. The majority of the short-term water quality modifications are issued for the control of noxious and non-noxious submersed plants in lakes, streams and rivers. The short-term modifications are also issued for the control of mosquito larvae, the control of two species of noxious, invasive cordgrass (spartina) in marine tidelands and the control of nonindigenous fish, Gypsy moths and ghost shrimp.

In addition, the headquarters section issues three general permits to the Departments of Agriculture and Transportation for the control of noxious and non-noxious emergent aquatic weeds.

The only documented enforcement action for aquatic pesticides for the year 2000 was a penalty issued for non-compliance of an order. Allied Aquatics received a $32,000 penalty nearly a month after herbicides were applied to Olympia's to Long Lake in violation of the terms of the short-term modification.

Examples of Success

Department of Corrections/ Stafford Creek Corrections Center

On May 26, 1999, Ecology issued a $44,000 penalty to Department of Corrections (DOC) for failing to adequately implement their Stormwater Pollution Prevention Plan and for numerous discharges during construction. The Companion Order that went with the Penalty required a substantial investment in identifying the long and short-term impacts from the violations, as well as their restoration. The Penalty and Order were successful in addressing site specific actions, but the bigger and far more significant result occurred in the year 2000. Due to the previous enforcement actions, DOC has implemented two new strategies to ensure environmental compliance *statewide*!

1) They have hired a full-time environmental compliance person at Stafford Creek (the first such position in the agency), and will hire environmental compliance inspectors at all new facilities.

2) They have revised all of their project contracts associated with NPDES permits requiring contractors to be fully accountable for environmental compliance. DOC will fine the contractor every day that the project is not in compliance, require the contractor to take immediate (within 24 hours) corrective actions when problems are identified, and if unresponsive, the contractor will pay all DOC costs for correction and compliance.

Reducing Aquatic Pesticides/ Herbicides in Lakes

The issuance of Orders and Penalties for aquatic pesticide/ herbicide treatment of lakes has resulted in a higher degree of applicator performance, reduced amount of pesticide/ herbicide in waters, higher public awareness, and lake management plans that minimize chemical use. In 2000, lake Orders were issued without the allowance to treat speculative acreage and included lake sponsor signatures. The other significant feature was that many lakes received Orders requiring the development of an Integrated Vegetation Management Plan prior to the approval of chemical use in 2001. These lake management plans address source controls, mechanical harvesting and other management tools for aquatic vegetation control that eliminate or minimize the use of pesticides/ herbicides.

US Forest Service/ Ecology Agreement

The US Forest Service and Ecology signed a landmark agreement to improve water quality by repairing, maintaining or closing roads on national forests in Washington State. The new pact will ensure proper management of roads across multiple ownership and is patterned after the Forests and Fish legislation applicable to state and private forestlands. When roads fail or wash out, water quality problems cascade throughout the watershed, sending dirt, rocks and mud into streams, where they cover up salmon-spawning areas, cause floods and increase water temperature, which makes rivers unhealthy for fish. Within the next 15 years, the agreement directs the USFS to stabilize all national forest roads in Washington to keep pollution out of the water. The USFS owns 26,000 miles of road in Washington State and there is a maintenance backlog of $350 million. The agreement is enforceable. Ecology has made it clear that appropriate enforcement actions under state or federal laws will be taken if necessary to ensure compliance. That said, the commitment on behalf of the USFS provides a high level of certainty that the agreement will succeed cooperatively and without legal action.

USFS Regional Forester Harv Forsgren said, “This agreement affirms our belief in collaborating with other partners to insure strong and healthy watersheds provide quality water and aquatic habitat.” Highlighting Ecology’s interest, Tom Fitzsimmons said, “Forest roads need to be repaired and maintained just as much as our roads and highways do. If they deteriorate, they pose not only a safety risk, but also a threat to our environment and water quality.”

Reduced fecal coliform contamination from Dairies

Numerous enforcement actions have been taken to eliminate or minimize fecal coliform problems originating on commercial dairies. In 2000, two significant contributors of pollution were penalized and ordered to remedy long-term water quality problems. High visibility dairy enforcement actions, such as these, have served as deterrents to other operators resulting in a greater level of compliance across the dairy industry.

Clean Stormwater in Clark County

Active permit oversight and field presence have resulted in significant construction stormwater penalties that have generated public interest and media, and also resulted in a higher level of compliance amongst others in the neighborhood. Visible and highly publicized enforcement actions have had positive affects on the performance of other developers and contractors in the area. Clark County now requires all licensed contractors to show proof of completing an erosion and sediment control class. Classes are being offered by the Clark County Home Builders Association.

Other Strategies Encouraging Compliance

Industry Sweeps

In some instances, Ecology detects a trend within a given industry that seems to be the cause of many similar pollution violations being detected from many members of that industry. In certain instances Ecology initiates what is often referred to as an "industry sweep." This refers to Ecology temporarily shifting some of its field inspectors from other industries to temporarily focus inspection and enforcement efforts on a given industry. Ecology has had a great deal of success with some of these efforts. The effects of these concentrated inspection efforts are that public attention is drawn to the pollution problems common to the entire industry sector.

After analyzing the fecal coliform bacterial, dissolved oxygen and temperature data collected from some initial water quality sampling of the upper Chehalis River; Ecology's Southwest Regional Office identified manure contaminated discharges from dairy farms located along the river as one of the primary contributors to these water quality impairments. As a result Ecology trained several inspectors to work closely with the regions existing dairy inspector, whose specialty was working with the dairy industry. In the spring of 1998 Ecology's inspectors quickly inspected 50 dairy farms for compliance with Washington State's Water Pollution Control Act (Chapter 90.48 RCW). Results of these inspections were that:

- seventeen were found to be in compliance at the time of the inspection;
- sixteen were issued Notices of Correction;
- nine were placed under the NPDES Dairy General Permit;
- four required additional monitoring and follow-up;
- three were already under permit; and
- one that would have been put under permit got out of the dairy business.

Since passage of the Dairy Nutrient Management Act in 1998, the SWRO has pursued additional sweeps with a focus on eliminating or reducing fecal coliform contamination from non-dairy livestock sites. These sweeps have been conducted on the upper Chehalis, are currently in progress in the Dungeness River Basin and McAllister Creek Basin, and will be done in the Skokomish River and Gibbons Creek watershed before September 2001. The results of the sweep of 42 non-dairy livestock sites in the upper Chehalis in 2000 resulted in the following actions:

- ten had completed the actions recommended during Ecology's initial visits two years earlier;
- five had taken voluntarily steps toward fixing problems;
- five were referred to the local conservation district for assistance in preparing farm management plans;
- six required follow-up visits for various reasons (vacations, no animals until spring, etc.);
- fourteen either no longer had animals or had no problems that needed correction; and
- two were referred to the federal Environmental Protection Agency, which had previous involvement with the landowners.

Summary

The total number of permits continues to incrementally increase, with the same number of staff to conduct enforcement. This continues to force the agency to prioritize which of the compliance issues are the most harmful to the environment.

The compliance rate remains high for municipal and industrial facilities with individual permits based on the number of parameters each facility has to report through the discharge monitoring report system. Both the number of municipal and industrial facilities has decreased. However, the total number of parameters monitored by the facilities has increased. In the case municipal facilities, the number of facilities with five or more violations has reduced, but in the case of industrial facilities the number of facilities with five or more violations has increased.

Nonpoint compliance is occurring as shown by the activities tracked in the last six months of the calendar year. As the Department of Ecology attains more data over several years determining compliance will be much easier.

Ecology is hoping that this report will be more informative both internally to the department as well as to the public. We look forward to receiving constructive comments from users of this information, so that next years report can be improved.

Appendix 1

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		
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			Code of Federal Regulations Title 40
Water Quality Standards for Groundwater		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)	

Table 2. Types of general permits issued by the Department of Ecology.

PERMIT TYPE	# OF CURRENTLY ACTIVE PERMITS	DISCHARGE DESCRIPTION
NPDES Major	81	A Wastewater Discharge Permit issued to a facility, which discharges wastewater to surface water and is deemed to be a "major" discharger by 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	378	A Wastewater Discharge Permit issued to a facility, which discharges wastewater to surface water and is deemed to be a "minor" discharger by 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 Groundwater	179	A Wastewater Discharge Permit issued to a facility, which discharges wastewater by land application to underground water.
State to POTW	194	A Wastewater Discharge Permit issued to a commercial or industrial facility, which discharges wastewater to a municipal sanitary sewerage system.
NPDES Stormwater Construction General Permit	722	All building construction activities clearing $\geq$ five acres of land.
NPDES Industrial Stormwater General Permit	1116	All industries with a surface water discharge that have a potential to pollute state waters.
Municipal Stormwater General Permit	7	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	106	Commercial business engaged in the construction, repair, and maintenance of small vessels, 85 percent of which are 65 ft or less in length or from which constitute less than 85 percent of gross receipts.
Dairy General Permit	105	Commercial dairy farms meeting the definition of a Concentrated Animal Feeding Operation 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 groundwater.
Fish Hatchery General Permit	83	All upland fin-fish hatching or rearing facilities that discharge at least 30 days a year to surface waters of the state and which: 1) produce more than 20,000 lbs. of fish per year, or feeds more than 5,000 lbs. of fish food in any one calendar month, or is considered to be a significant contributor of pollution as determined by Ecology.
Fresh Fruit Packer General Permit	220	All new and existing fresh fruit packing facilities that receive, pack, store, and/or ships either hard or soft fruit.
Water Treatment Plant General Permit	28	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	876	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. Also covers concrete batch operations and hot mix asphalt production.