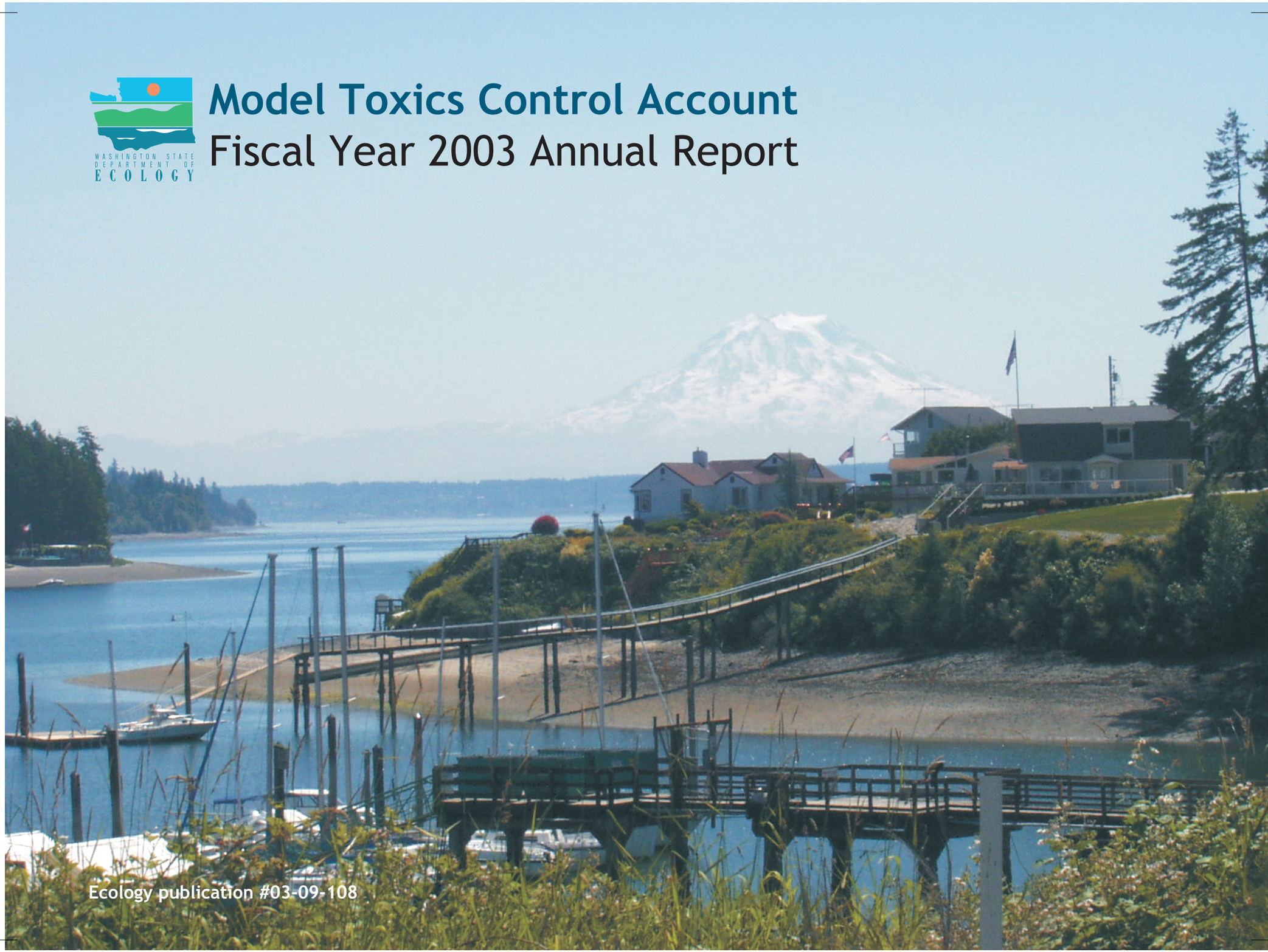
Model Toxics Control Account
Fiscal Year 2003 Annual Report



Ecology publication #03-09-108

Table of Contents

Washington State Department of Ecology's Mission

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

Purpose of this Report

The purpose of this report is to provide a review of the last fiscal year's accomplishments by state agencies and programs that rely upon funding from the State Toxics Control Account and Local Toxics Control Account. The fiscal year period of review is July 1, 2002, through June 30, 2003. Specifically, this report will show:

- How much revenue was generated;
- Which governmental entities received funding;
- What results were achieved as a result of expenditures.

Message from the Director

This report signals 15 years of progress in cleaning up hazardous substances that have been released into the environment. In 1988, citizens began collecting signatures for an initiative, known as the Model Toxics Control Act , which eventually was adopted by voters in 1989. This pioneering, visionary action created the means to clean up thousands of contaminated sites in our state.

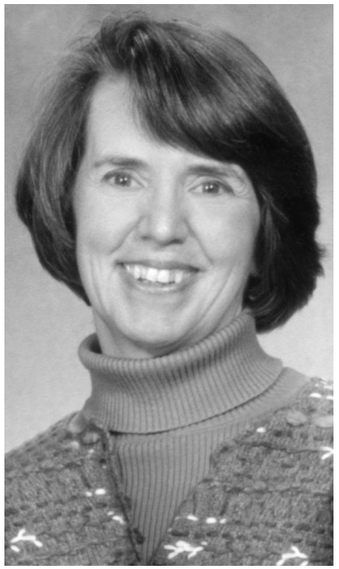
The Model Toxics Control Act functions in a complementary manner with the federal Superfund law to protect public health and the environment. The Model Toxics Control Act authorizes funding for two accounts: the State Toxics Control Account and the Local Toxics Control Account. This annual report provides a snapshot of the cleanup projects and program activities supported by these accounts for the period ending June 30, 2003.

The past 15 years have shown that toxic contamination of land and water is more common, and more expensive to clean up, than was thought in 1988. At the same time, we have challenged ourselves to become more effective and efficient at developing and carrying out cleanup programs so our available funds stretch as far as possible. Through innovation, collaboration, and a commitment to sound investment practices, we will continue to invest in environmental projects and activities that are in the best interests of Washington's communities.

This year's annual report is presented as a collective response from many agencies and programs on many projects and activities. We are building on the lessons learned over the years and the experience of people working toward mutual commitments, goals and objectives. The common mission among state agencies that receive funding from the Toxics Control Accounts is to get contaminants out of the environment, keep them out, and support sustainable communities and economic development. Together, we are seeing a cleaner environment unfold for generations to come.

Ecology is Washington's principal environmental management agency. Our **mission** is to protect, preserve, and enhance Washington's environment, and promote the wise management of our air, land, and water for the benefit of current and future generations. Our **goals** are to prevent pollution, clean up pollution, and support sustainable communities and natural resources.

We are *working for you* for a better Washington.



Linda Hoffman

Linda Hoffman, Director
Washington State Department of Ecology

History of the Toxics Control Account

The Model Toxics Control Act (hereafter "Act") became law in 1988 following voter's acceptance of Initiative 97. The purpose of the Act is to:

- Clean up contaminated sites;
- Improve management of hazardous wastes;
- Prevent future contamination through pollution prevention.

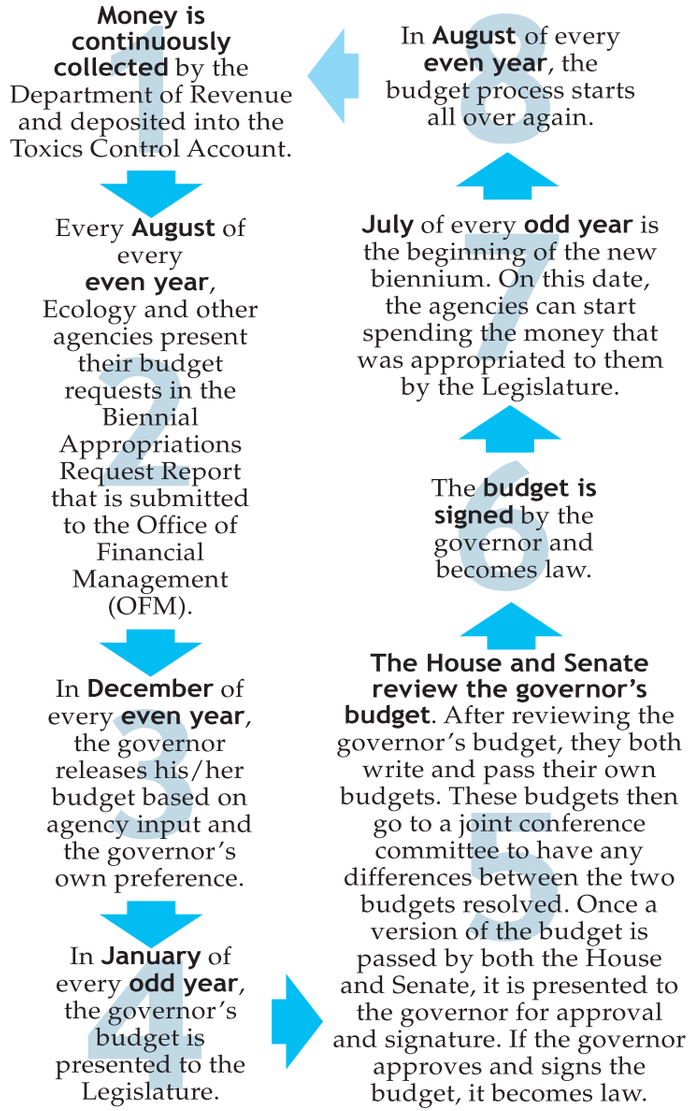
The Act authorized the creation of two accounts: (1) the State Toxics Control Account; and (2) the Local Toxics Control Account. The primary source of money into the accounts is through a hazardous substance tax on petroleum products, pesticides, and certain chemicals.

By statute, 47 percent of the tax collected is deposited into the State Toxics Control Account and 53 percent is deposited into the Local Toxics Control Account. With respect to the State Toxics Control Account, other sources of revenue include the costs of remedial actions that are recovered by the State; penalties that are collected or recovered; and fees collected under the Act.

The Hazardous Substance Tax

The Hazardous Substance Tax is a tax imposed on petroleum products, pesticides, and certain chemicals. The tax is calculated at a rate equal to seventy one-hundredths of one percent (0.70%) or $7 per $1,000 of the wholesale value of the hazardous substance. This tax is imposed on the first in-state possessor of the hazardous substance. There are currently 8,000 different hazardous substances subject to the tax. More than eighty-five percent (85%) of the revenue is based on petroleum products.

Figure 1: How agencies receive appropriations from the Toxics Control Account



Toxics Control Accounts: Revenue and Expenditures – Fiscal Year 2003

State Toxics Control Account

The State Toxics Control Account provides funds to state agencies whose mission is to clean up contaminated sites; improve the management of hazardous wastes; and prevent future contamination from hazardous substances. In Fiscal Year 2003, the departments of Ecology, Health, Agriculture, Revenue, and Washington State Patrol received funds from the State Toxics Control Account.

In addition to revenue generated by the Hazardous Substance Tax, the State Toxics Control Account received revenue through the following sources:

- Cost Recovery: Ecology recovers its costs for the clean up of contamination.
- Fines & Penalties: Ecology issues fines and penalties to liable parties that do not comply with the law.
- Technical Assistance Fees: Ecology reviews a liable party's planned and completed remedial actions.
- Mixed Waste Fees: Ecology collects fees from facilities that manage mixed waste.

Starting on page 4, this report contains a brief narrative by each agency or program that received State Toxics moneys in fiscal year 2003. Details on how the funds were spent are provided.

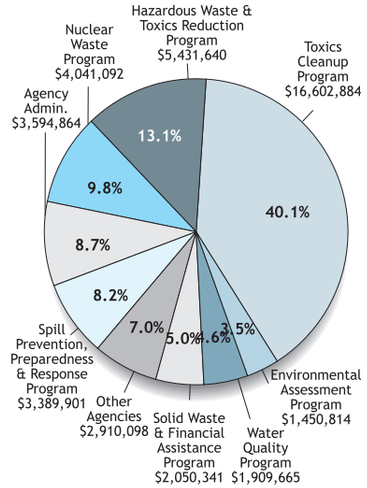
State Toxics Control Account Revenue

Hazardous Substance Tax	$21,125,976
Mixed Waste Fees	$4,341,475
Cost Recovery	$2,272,139
Miscellaneous	$23,208
Voluntary Cleanup Program Fees	$297,940
Fines & Penalties	$59,685
Total Revenue	*$28,120,423*

Table 1: State and Local Toxics Control Accounts Revenue and Expenditures – Fiscal Year 2003

Toxics Control Account Revenue	Local Toxics	State Toxics
Hazardous Substance Tax	24,800,545	21,125,976
Mixed Waste Fees		4,341,475
Cost Recovery		2,272,139
Miscellaneous		23,208
Voluntary Cleanup Program Fees		297,940
Fines & Penalties		59,685
Total Revenue	*24,800,545*	*28,120,423*
Ecology Expenditures		
Toxics Cleanup Program	545,181	16,602,884
Hazardous Waste & Toxics Reduction Program	104,643	5,431,640
Agency Administration, Facility, & Related Costs	262,592	3,594,864
Nuclear Waste Program		4,041,092
Solid Waste & Financial Assistance Program	1,545,456	2,050,341
Spill Prevention, Preparedness, & Response Program		3,389,901
Environmental Assessment Program	120,782	1,450,814
Water Quality Program		1,909,665
Total Ecology Expenditures	*2,578,654*	*38,471,201*
Other Agency Expenditures		
Agriculture		1,432,922
Health		1,183,635
State Patrol		268,305
Revenue		25,236
Total Other Agency Expenditures		2,910,098
Total All Agency Expenditures	*2,578,654*	*41,381,299*

Figure 2: State Toxics Control Account Expenditures

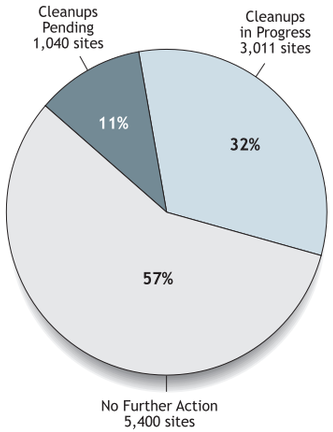


Total Ecology Expenditures
$38,471,201

Department of Ecology: Toxics Cleanup Program

In Fiscal Year 2003, the Toxics Cleanup Program was appropriated more than one-third of the funds in the State Toxics Control Account. The program was also responsible for generating a substantial amount of money for the account. Through cost recovery and technical assistance and review, the Toxics Cleanup Program generated nearly $2,500,000 for the State Toxics Control Account. The top twenty (20) cost recovery sites by invoice amount were:

Figure 3: Known and suspected contaminated sites (as of July 15, 2003)



9,451 total sites

Table 2: Top 20 Cost Recovery Sites by Total Invoiced Amount for FY03

Site Name	Paid	TOTAL
Everett Smelter/Slag	N	842,199.54
Lower Duwamish Waterway	Y	203,331.14
BNR-Skykomish Maintenance	Y	190,999.76
Holden Mine - Wentachee	Y	78,477.98
Dupont Weyerhaeuser	Y	53,023.78
Boeing Everett	Y	41,716.00
BEI Phillip Georgetown	N	39,486.42
Lilyblad Petroleum	Y	34,933.18
Pacific Wood Treating	Y	34,680.30
Hansville Landfill	Y	31,248.62
Yakima Valley Spray	N	31,098.12
North Market Street	Y	28,733.83
Boeing Plant 2	Y	28,513.41
Cadet Manufacturing Company	N	27,470.22
GE Spokane	Y	27,431.95
BEI/Phillip-Georgetown	N	25,911.93
Olympic View Landfill	Y	24,036.62
Unocal-Edmonds	Y	23,587.58
Tiger Oil Corp.	N	23,093.84
Trailer Village	Y	22,261.05
Total		*1,812,235.27*

During Fiscal Year 2003, the Toxics Cleanup Program's budget from the State Toxics Control Account was distributed amongst several of the following activities:

- Cleaning up high-priority contaminated sites (rank 1, 2, or Superfund);
- Cleaning up lower-priority contaminated sites (rank 3, 4, or 5);
- Providing technical assistance to those cleaning up contaminated sites;
- Providing technical assistance on contaminated sediments;
- Investigating, and if necessary, ranking new sites;
- Providing program support to staff that work on the above activities.

Cleaning up High-Priority Contaminated Sites

High-priority sites are comprised of Superfund sites and sites Ecology has ranked 1 or 2. Due to greater health and environmental concerns, Ecology primarily works on high-priority sites. All of these sites are on Ecology's Hazardous Sites List.

"High-priority" is determined by the amount and kind of contaminants and how easily they can come into contact with people and the environment. Public concern and a need for immediate response may also affect which sites get top priority attention.

There are currently four hundred and ninety six (496) high-priority sites in the state of Washington. Three hundred and thirty (330) of these sites are undergoing a cleanup; eighty-eight (88) sites have a cleanup action that is pending; and seventy-eight (78) sites have received a "No Further Action" determination from Ecology. The Toxics Cleanup Program cost recovers about seventy five percent (75%) of the expenditures for these sites.

Hazardous Sites List

The Hazardous Sites List is a list of sites that have been assessed and ranked using the Washington Ranking Method. Sites are ranked on a scale of one to five, with one representing the highest level of concern and five the lowest. When ranking a site, the primary exposure routes that could pose a risk to the public and the environment are taken into consideration. These are air, surface water, and ground water.

The list, which is a requirement of the Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC, helps Ecology target where to spend cleanup funds. It is updated twice a year and is available on the Internet at: *http://www.ecy.wa.gov/program/tcp/cleanup.html*.

The six high-priority sites listed in Table 3 are considered cleaned up and were removed from the Hazardous Sites List during Fiscal Year 2003.

Table 3: Six High Priority Sites Considered Cleaned Up and Removed from the Hazardous Sites List during Fiscal Year 2003

Site Name	City	County	Rank
WA WSU Smith Tract	East Wenatchee	Douglas	1
Inland Empire Plating	Spokane	Spokane	1
Allied Battery Co. Inc.	Tacoma	Pierce	0
Robert Rosch Property	Roy	Pierce	1
Lacey Plywood Co Ply	Lacey	Thurston	2
Industrial Petroleum Distributors	Olympia	Thurston	1

Natural Resource Damage Assessments (NRDA)

A site becomes involved in the Natural Resource Damage Assessments process when its natural resources (such as fish and shellfish) or services provided (edible fish or recreational fishing days) become damaged or lost as a result of contamination. The state, along with federal and tribal trustees, can require compensation for the injury caused, from the time of release to the time of full recovery. Compensation is used to restore, replace, or acquire equivalent habitat. To date, sites with natural resources damage assessment activities have been mainly in marine areas and are often federal Superfund sites.

During Fiscal Year 2003, public comments were incorporated into the Final Allocation Report for the Hylebos Waterway of Commencement Bay. Release of the final report and negotiations for settlements with potentially responsible parties will begin in September 2003. Allocation reports are used to distribute damages at sites where multiple responsible parties exist. The Hylebos Report is unique because nationally, it was the first time public comments were solicited for such a document.

In addition to ongoing projects in Commencement Bay, restoration opportunities and partnerships are continuously being pursued at the Tulalip site in Marysville. The Duwamish River in Seattle and the Spokane River in Spokane are in the discovery and planning phases.

Cleaning up Lower-Priority Contaminated Sites

The Toxics Cleanup Program oversees six hundred and fifteen (615) contaminated sites with a state ranking of 3, 4, or 5. Two-hundred and twenty three (223) of these sites are in the cleanup process; fifty five (55) sites have received a "No Further Action" determination from Ecology; with three hundred and thirty seven (337) sites with a cleanup that is pending. In Fiscal Year 2003, twelve (12) lower-priority sites were removed from the Hazardous Sites list.

Providing Technical Assistance

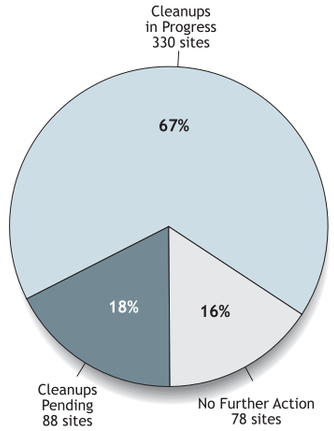
The Voluntary Cleanup Program allows staff to provide assistance to liable parties on sites that are generally of low environmental priority to the agency, but are a high priority to be cleaned up by the liable party or by a prospective purchaser of the property. This Program allows staff to advise liable parties or prospective purchasers before, during, or after cleanup.

The Voluntary Cleanup Program is made up of three components: prospective purchaser agreements, Ecology consultations, and prepayment agreements.

Prospective Purchaser Agreement

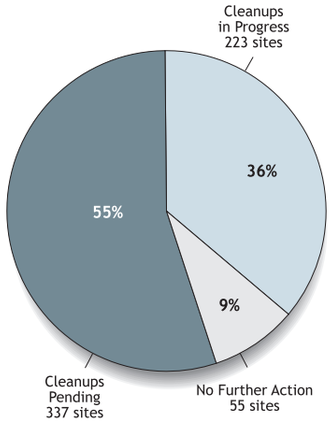
These agreements are settlements entered into by the state and a person, company or agency that wants to purchase, redevelop or reuse contaminated property. These properties are often referred to as brownfields. Brownfields are properties that are abandoned or underused because of environmental contamination from past industrial or commercial practices.

Figure 4: Status of Superfund & State Ranked 1 or 2 (as of July 15, 2003)



496 total sites

Figure 5: Status of State Ranked 3, 4 or 5 Sites (as of July 15, 2003)



615 total sites

Ecology Consultation

Ecology consultations are usually best for routine cleanups where a cleanup technology is easily identified, such as a leaking underground storage tank site. However, that is starting to change as more high-priority sites are entering the program. In Fiscal Year 2003, thirteen (13) of the eighteen (18) sites that were removed from the Hazardous Sites List participated in the Voluntary Cleanup Program.

One may enter the Voluntary Cleanup Program by submitting a cleanup report to Ecology. For a fee, staff will review the report and provide a site determination, such as no further action or future action pending. Since October 1997, one thousand seven hundred and fifty one (1,751) sites have entered the program. Nine hundred and ninety one (991) sites received a no further action determination, and another seven hundred and fifty seven (757) are in the review process.

Prepayment Agreement

A prepayment agreement is an agreement whereby an individual agrees to pay Ecology in advance for its oversight. It can be negotiated in the form of an agreed order or a consent decree. A consent decree protects a party from future liability. Unlike most Ecology consultations, prepayment agreements are used on larger, more complex sites.

Sediment Management Activities

Staff is involved in a broad range of activities designed to prevent contamination to sediments, clean-up contamination at sediment sites, and determine disposal options for contaminated sediments and dredged material. This includes:

- Ensuring that discharge permits adequately address sediment quality to minimize the impact of discharges into our waterways;
- Identifying water bodies impaired due to sediment contamination for listing under Section 303(d) of the federal Clean Water Act;
- Overseeing the cleanup of contaminated sediments underway in the lower Duwamish River, Spokane River, Lake Roosevelt, Lake Union, and numerous locations throughout Puget Sound;
- Identifying the quality of dredged material for appropriate disposal or beneficial use.

Staff is also engaged in ongoing scientific investigations and research to better understand and address contamination in these very unique marine and freshwater environments. This includes the recent identification of new freshwater sediment quality values for use in the State of Washington.

Investigating, and if Necessary, Ranking New Sites

Initial Investigations

The first step in the cleanup process is to investigate a site. Once Ecology receives a complaint about a piece of property or the practices of an owner or operator, a program inspector will go to the site and conduct an initial investigation. This involves looking at the site for signs of possible spills and the use and storage of hazardous waste. Some sampling may be involved.

Site Hazard Assessments

If it is determined that further work is required at a site after the initial investigation, a site hazard assessment may be conducted. A site hazard assessment provides staff with basic environmental characteristics about a site. The program then uses the Washington Ranking Method to estimate the potential threat the site poses, if not cleaned up, to human health and the environment. A score of one represents the highest level of concern relative to other sites on the list, and a score of five represents the lowest.

Hazard ranking helps the Toxics Cleanup Program target where to spend State Toxics dollars. During Fiscal Year 2003, one hundred and seventeen (117) site hazard assessments were completed. Of those, fifty nine (59) new sites were added to the states Hazardous Sites List and seventeen (17) sites were referred to the Voluntary Cleanup Program. The remaining forty one (41) sites received a "No Further Action" determination from Ecology.

Program Support

There are many individuals working behind the scenes to get sites cleaned up. Computer staff, budget and planning staff, policy staff, public involvement staff, attorney general staff, and administrative staff all work in support of those managing the cleanup of contaminated sites. All of these positions are funded in whole or in part by money from the State Toxics Control Account. Some support costs are cost recovered from liable parties.

Supplemental Budget from the State Toxics Control Account

In January 2002, the Toxics Cleanup Program proposed and received a budget increase of $12.6 million from the State Toxics Control Account to support three initiatives:

- Investigate area-wide contamination problems;
- Provide state match for Superfund sites in the State;
- Reduce the backlog of contaminated sites needing cleanup.

Area-wide Contamination

Ecology is increasingly finding large areas with low-to-moderate levels of soil contamination caused by a range of historical activities. As Washington's population has grown and economic conditions have changed, many of these areas are being developed into residential areas, schools, and parks. These activities have created pressures for cleanup and have raised a variety of health, educational, and marketplace concerns.

In January 2002, the Washington Departments of Agriculture, Ecology, Health, and Community, Trade and Economic Development chartered the Area-Wide Soil Contamination Task Force and asked them to provide recommendations on steps to more effectively address low-to-moderate level arsenic and lead soil contamination in Washington State. The Task Force submitted their final report to the four agencies on June 30, 2003. The report contains findings and recommendations that:

- Improve our understanding of the nature and extent of lead and arsenic soil contamination in Washington state;
- Identify approaches for protecting the health of people who live and work in contaminated areas; and
- Identify changes in current laws, institutions, and regulatory and land-use planning processes to improve efforts at preventing threats to public health and the environment.

Ecology has started to work with the other chartering agencies to implement the Task Force recommendations. Those efforts will focus on actions to (1) improve public awareness and understanding of area-wide soil contamination concerns and solutions; (2) collect and evaluate information needed to support decisions about reducing the potential for exposure to arsenic and lead in soils; (3) reduce the potential for exposure to arsenic and lead in soils at developed properties (e.g. schools, neighborhoods, etc.); (4) reduce the potential for exposure to arsenic and lead in soils at properties under development; and (5) improve institutional capabilities for responding to area-wide soil contamination.

Superfund Match

Ecology has an agreement with the Environmental Protection Agency (EPA) to pay for (or match) ten percent (10%) of the costs EPA spends on Superfund cleanups and one hundred percent (100%) of the operation and maintenance costs associated with these cleanups. Funds from the supplemental budget were needed to meet these ongoing commitments and obligations of the State's cleanup program.

Reduce the Backlog of Contaminated Sites (Clean Sites Initiative)

Dollars from the clean sites fund ($9.4 million) were used to cleanup contaminated sites where the party responsible for the cleanup is either unwilling or unable to pay. These are high priority sites that Ecology would not normally have the money to clean up. Throughout Fiscal Year 2003, the Toxics Cleanup Program contracted with public works firms to begin the cleanup work at the sites shown below:

The cleanup process to remove petroleum contaminated soils at the Longbranch Mercantile site.

Clean Sites Initiative Projects – Public Works Contracts

American Plating – The site occupies approximately 1.4 acres on the edge of the Thea Foss Waterway. Between 1955 and 1986 the site was occupied by firms that performed metal electroplating, including brass, cadmium, chromium, copper, nickel, and zinc plating. American Plating which was the last operator, ceased operations in January 1986. The site includes two abandoned buildings and a concrete loading pad. A contractor was hired for the demolition and loading of materials into containers.

ASARCO Everett – This is an ongoing project at the former Everett Smelter site located in Northeast Everett. A lead, gold, silver, and arsenic smelter was operated in the area from 1894 to 1912. The goal of the cleanup is to reduce the potential exposure to arsenic and lead by physically removing soil above action levels to the extent practicable.

Child Use Sampling – Airborne emissions from the former Asarco Smelter in Ruston affected several hundred square miles with heavy metals in Pierce and King County. This project focused on levels of arsenic and lead in soils of King County as a result of contamination levels at child use areas (developed areas where children are likely to be exposed to soil). A total of two thousand five hundred and thirty two (2,532) soil samples were collected and analyzed from ninety seven (97) child use areas from December 2002 to April 2003.

Cathy Frey, site manager, supervises a Department of Ecology cleanup under the Clean Sites Initiative.

City Parcel – The site, located in Spokane, Washington, is a former transformer repair and recycling facility. Early investigations showed high concentrations of polychlorinated biphenyls in soil and a detection in ground water. The project involved the performance of a remedial investigation to determine the extent of contamination in soils and ground water. The investigation consisted of soil sampling, installation of monitoring wells, and ground water sampling.

Derelict Vessel Removal Program - Ecology provided $100,000 to the Derelict Vessel Removal Program administered by the Department of Natural Resources for the removal of derelict vessels of mutual priority to the agencies. With this financial assistance, ten vessels were removed: one in Budd Inlet, two in Bellingham Bay, one in Bremerton, two barges in Vancouver, and two barges and two boats in Tacoma, helping the Department of Natural Resources to reserve its funds for additional removals beyond June 30, 2003. More than thirty (30) derelict vessels around the state have been identified so far with more cropping up all the time.

Dorman Tire Site –This site is located in the Roy area. The project consisted of the removal of contaminated soil, ash and burned tires generated during a tire fire that occurred at the site in 1982. The chemical analysis of the soil samples indicated that cadmium, chromium, diesel and heavy oil-range hydrocarbon concentrations were above the MTCA Method A cleanup levels for soil. Approximately six thousand (6,000) tons of material was removed from the site.

Duc Phouc H. Site (Pacific Auto Store) - The site is located at 824 Pacific Highway North in Kelso. The contract work included a complete site assessment, the removal and disposal of four 2,000-gallon tanks that contained unleaded gasoline and a 500-gallon waste oil tank. After the tanks had been excavated and removed, the contaminated soil was excavated and taken off site for disposal.

General Electric –This site is on the National Priorities List, categorized as "Construction Complete" by the Environmental Protection Agency in 1999. A polychlorinated biphenyls (PCB) plume in ground water extends off the property towards the Spokane River. The project consisted of a contractor splitting samples with General Electric Company and conducting new sensitive chemical analytical procedures to see if PCB chemical constituents are being discharged from the site to the Spokane River. Sample results indicated such chemical constituents are not being discharged from the site.

Lincoln School - This project involved the purchase of landscape materials to prevent the contact by children with arsenic and lead contaminated soil in the playground areas.

Longbranch Mercantile – The site is located at 5210 Key Peninsula HWY South, in Longbranch. The project included the removal of two tanks. During the excavation process, three hundred and eighty (380) tons of contaminated soil was removed from the site and monitoring wells installed.

Lower Duamish Source Control – Located in Seattle, the site is found along the five-mile long Lower Duwamish Waterway (upstream of Harbor Island). A wide range of contaminants are present in site sediments, including polychlorinated biphenyls, polycyclic aromatic hydrocarbons, and metals. The Phase 1 Remedial Investigation and identification of candidates for early-action cleanup was completed in the summer of 2003, and discussions for a Phase 2 work plan have begun.

Mixed Funding Sites in Northwest Region – This project involved five separate sites: Circle K Station in Seattle; BP Oil Station in Bothell; Country Junction Store in Port Orchard; Hansville General Store in Hansville; and Cornet Bay Marina in Oak Harbor. The work consisted of sampling, analysis and repair of existing monitoring wells, geoprobe soil and groundwater sampling, groundwater flow determination and source location.

North Omak Elementary – This project involved the purchase of landscape materials to prevent the exposure to children from arsenic and lead contaminated soil.

Pacific Wood Treatment, – This site is located at the Port of Ridgefield. A wood treating company formerly occupied the site. The chemicals used to treat the wood have impacted the soil and groundwater beneath the site. A steam remediation system which consists of equipment to heat the groundwater and to extract the chemicals was installed and should be operating by the end of the year.

Pit Stop Grocery –The site is located at 1734 Boulevard Road SE in Olympia. The project consisted of the removal and disposal of a 6,000, 8,000 and 10,000-gallon undergroung storage tanks along with a canopy. The contaminated area was larger than had been first expected. A total of seven hundred and seventy five (775) tons of contaminated soil was removed and hauled off site for disposal.

Pugnetti Park – This project occurred in downtown Tacoma and is near the intersection of SR509 and SR 705. Direct-push monitoring wells were installed; water and soil samples were obtained; and the area was surveyed to determine the groundwater flow.

Red Lion Tavern – The site is located in the City of Anacortes and is part of the program that targets cleanups of abandoned tanks in which responsible parties often cannot be found. At this site, Ecology removed several underground storage tanks and approximately six hundred and fifty (650) cubic yards of highly contaminated soil.

Red Shirt Mill - The site is located in Okanogan County in the north-central part of Washington near the Town of Twisp. The mill operated for approximately two years in the late 1930's and processed ore (primarily gold and silver) from the nearby Red Shirt Mine. The work involved the demolition of the wooden mill structure; the cleanup of contaminated surface soils near the structure; and the restoration of the land.

Roderick Timber – The project took place in Aberdeen at the Former Roderick Timber Site, which is now used by the Grays Harbor Historical Seaport Authority. There were three 20,000 gallon steel underground storage tanks along the fence line on the southern side of the property and three others located under the storage shed that were closed in place and two unknown 250 gallon tanks that were discovered and removed during the excavation process. A total of one thousand five hundred and twenty five (1,525) tons of contaminated soil was excavated and removed from the site.

Photographs of the original gasoline pumps at the Rosalia site; a cleanup site under the Clean Sites Initiative

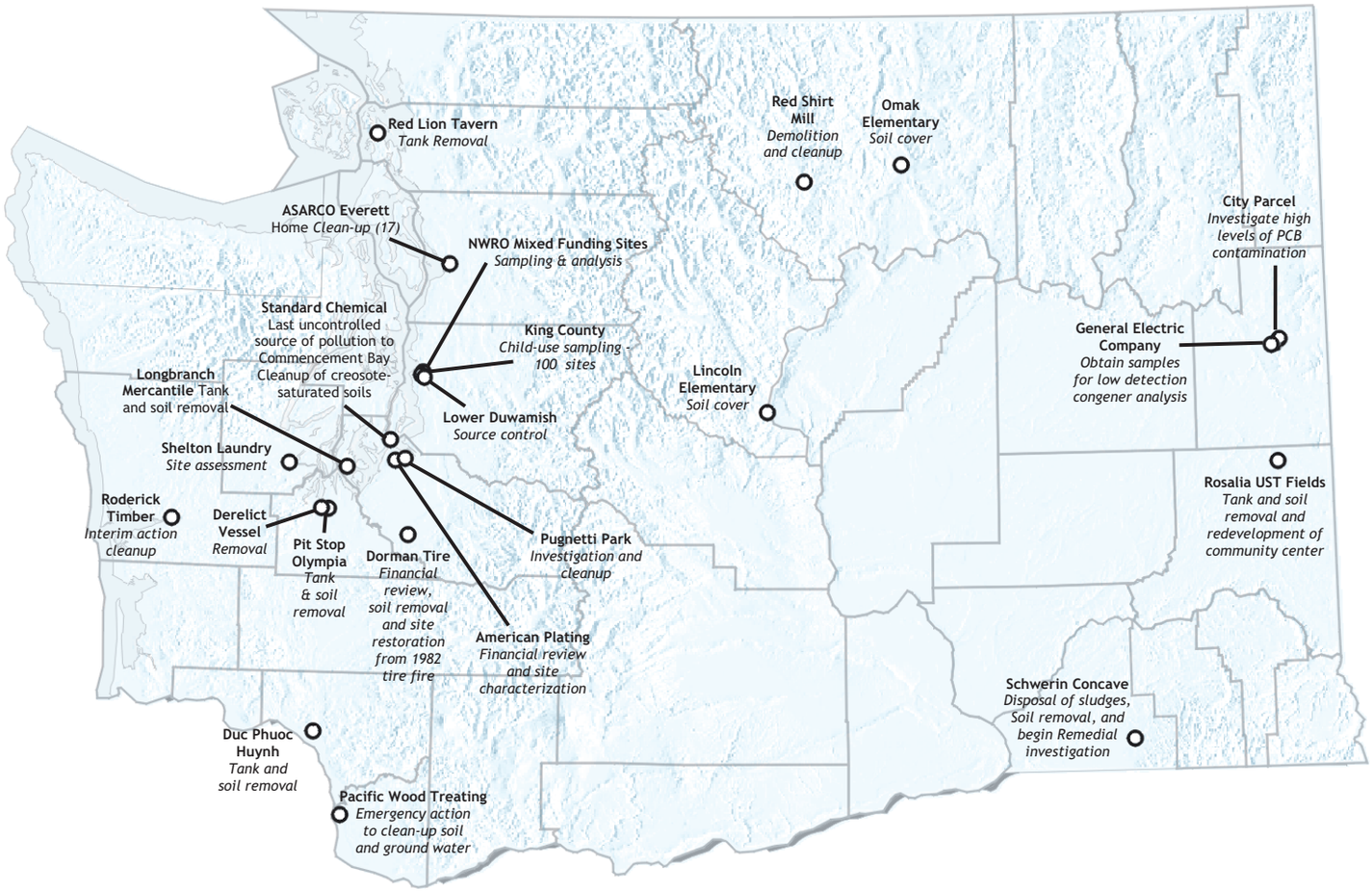
Rosalia UST Removal - This project involved two distinct parts. The first was the removal and disposal of underground storage tanks that were used for gasoline. These tanks, along with additional contaminated soil were removed from the site. The second part of the project involved the removal and disposal of a building that was used for automotive repairs.

Schwerin Concave – The site is located three (3) miles northeast of the City of Walla Walla. The property was once a hard chrome plating facility that electroplated internal combine components called concaves that remove husks from grain kernels. The work consisted of excavation, removal and disposal of two thousand and fifty (2,050) tons soil contaminated with hexavalent and trivalent chromium and lead and one thousand six hundred (1,600) tons of dangerous waste.

Shelton Laundry – A drilling contractor was hired to install monitoring wells to determine the extent of contamination and direction of the groundwater flow.

Standard Chemical – This site is located at the east end of the City of Tacoma's central business district on the west bank of the Thea Foss Waterway. The project consisted of the excavation, transportation, and disposal of contaminated soil from two separate locations.

Figure 6: Sites Cleaned Up by the Clean Sites Initiative



Department of Ecology: Hazardous Waste and Toxics Reduction Program

The Hazardous Waste and Toxics Reduction Program's vision is to foster sustainability, prevent pollution, and ensure safe waste management. Its two primary objectives are to reduce the amount of hazardous waste generated and to prevent hazards due to improper management or disposal of hazardous wastes into the state's air, land, and waters. There are several major activities designed to accomplish these objectives.

Visiting Facilities that Generate Hazardous Waste

The Hazardous Waste and Toxics Reduction Program provides technical assistance to businesses and governmental entities through a variety of ways. One of the primary methods is face-to-face visits. During these visits, staff provides assistance on reducing and safely managing hazardous waste. Last year, program staff conducted one thousand nine hundred and forty four (1,944) visits.

Staff also provide technical assistance through special projects such as Increased Generator Contact visits. These visits are conducted to provide technical assistance to a large number of small and medium quantity generators in a selected geographic area. Businesses are helped to identify ways to improve their environmental practices related to hazardous waste management. These visits, generally lasting less than an hour, are intended to provide helpful information to businesses. If problems are noted, the business owner will be advised of changes that are needed, but penalties are not issued. This year staff in the Eastern Regional Office conducted visits in Spokane and in the smaller communities and less-populated counties in the region. Hundreds of visits were conducted at small and medium quantity generators such as, automotive service, auto body shops, printers and the rental equipment industry.

Promoting Pollution Prevention

It is a state law that businesses that produce more than two thousand six hundred and forty (2,640) pounds of hazardous waste complete an annual pollution prevention plan. The purpose of the plan is to determine if a business can reduce its waste and chemical use. Staff provides technical assistance to businesses preparing plans. Some five hundred and ninety one (591) businesses in Washington State currently participate in the program.

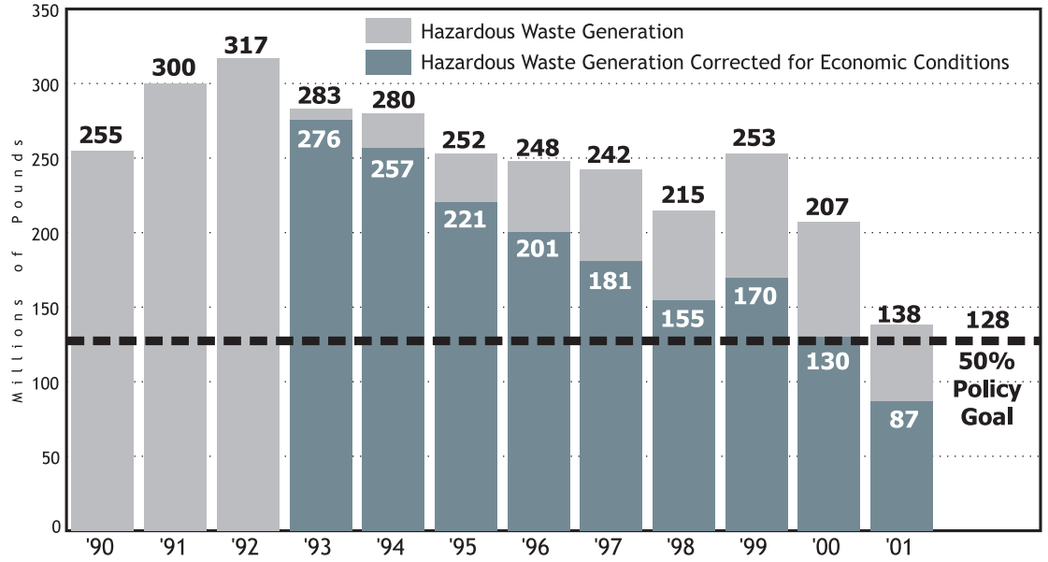
Conducting Enforcement When Necessary

Maintaining a credible enforcement capability is essential to keeping technical assistance effective. In most cases, unless there is an immediate threat to human health and/or the environment, assistance is offered to help a business correct the problem before resorting to an enforcement action. During Fiscal Year 2003, the program issued three hazardous waste enforcement actions totaling $89,480.

Permitting Facilities that Treat, Store, or Dispose of Hazardous Waste

Staff issue and/or modify permits to facilities that treat, store, and/or dispose of hazardous waste and operate in a manner protective of human health and the environment. In Fiscal Year 2003, staff worked on eight (8) modifications to five (5) existing permits. No new permits were issued.

Figure 7: Progress Toward the 50 Percent Hazardous Waste Reduction Goal



Progress towards waste reduction is displayed in the above chart. The amounts shown are from all generating facilities, except commercial treatment and storage and disposal facilities, which manage waste generated from others. The graph also shows the data adjusted for the changing economy. The adjustments show estimated levels of waste generation, assuming the economy remained constant. This process, called "normalizing" data, makes waste totals more comparable from year to year.

Conducting Cleanups at Treatment, Storage, or Disposal Sites

This activity involves the cleanup of treatment, storage, and/or disposal facilities that are contaminated with hazardous wastes. In Fiscal Year 2003, on average, the nineteen (19) high priority sites the program manages advanced from fifty eight percent (58%) complete to fifty nine percent (59%) complete, and the seventeen (17) medium priority sites it manages advanced from thirty six percent (36%) to forty nine percent (49%) complete. In terms of the four-step cleanup process, this means that nearly three-quarters of the high-priority sites are in the third step of cleanup.

Sediments contaminated site undergoing cleanup.

Making Common Sense Hazardous Waste Management Decisions

The Hazardous Waste and Toxics Reduction Program prepared and submitted a report to the legislature on the financial and environmental conditions of the current hazardous waste management system. This action was prompted because the closure of several facilities led to substantial economic liabilities for public agencies, former customers, and property owners. Significant problems and risks associated with the current system were found and the Hazardous Waste and Toxics Reduction Program is working with hazardous waste management facilities, used oil processors, and recyclers to consider options for reducing the long-term liability and moving toward a more stable and healthy hazardous waste management system.

Keeping the Public Informed

The Hazardous Waste and Toxics Reduction Program has several efforts underway to provide information to the public. During Fiscal Year 2003, staff responded to more than sixteen thousand three hundred and sixteen (16,316) telephone calls on hazardous waste issues, conducted fifty one (51) workshops on safe waste management and pollution prevention that were attended by two thousand nine hundred and ten (2,910) people, and prepared a quarterly newsletter called *Shoptalk* to provide the public with current tips on reducing and safely managing hazardous waste.

The program has also placed much effort into collecting data for public use. It collects hazardous waste generation/management data from six thousand seven hundred (6,700) businesses, hazardous substance use and storage data from three thousand four hundred and twenty (3,420) businesses, and pollution prevention planning data from five hundred and ninety one (591) businesses. Data is also collected from about three hundred and fifty (350) businesses that release toxic chemicals, as required under the federal community right-to-know law. The public can use this information to monitor hazardous waste in their communities.

Department of Ecology:
Environmental Assessment Program

The Environmental Assessment Program provides objective, reliable information about environmental conditions that can be used to measure agency effectiveness, inform public policy, and help focus the use of agency resources. The program is responsible for monitoring and reporting environmental status, trends, and results, and ensuring that Ecology staff, citizens, governments, tribes, and businesses have access to environmental information.

Program activities include environmental studies of toxic pollutants in priority water bodies and technical review and investigations dealing with toxic chemical contamination of marine and freshwater aquatic organisms, sediments, and groundwater. Staff also conduct total maximum daily load (TMDL) evaluations designed to identify sources of toxic substances in priority watersheds and recommend pollutant load reductions necessary to achieve compliance with state water quality standards. Activities conducted during Fiscal Year 2003 include:

- Screening survey in the State. In conjunction with the state Department of Health, conducting a screening survey for mercury concentrations in fish tissue from eighteen lakes and two rivers across Washington State. The project was conducted in support of the goals of the Washington State Mercury Chemical Action Plan to continually reduce the use and release of anthropogenic mercury, and to minimize human exposure to mercury.
- Long-term effectiveness monitoring at toxics cleanup sites. Groundwater data are collected quarterly at multiple sites statewide to determine if cleanup standards have been met, or if additional remedial actions are needed.
- Toxics monitoring. Continued implementation of the Washington State Toxics Monitoring Program, an ongoing program designed to evaluate concentrations of a variety of toxic chemicals in edible fish tissue and pesticide concentrations in water.

Department of Ecology:
Nuclear Waste Program

The Nuclear Waste Program regulates the storage, treatment, and disposal of dangerous waste and mixed waste at Hanford and certain non-Hanford facilities. Mixed waste contains both a hazardous and radioactive component.

The Nuclear Waste Program collects fees from facilities that manage mixed waste in the state. This money goes into the State Toxics Control Account where it is appropriated to the Nuclear Waste Program.

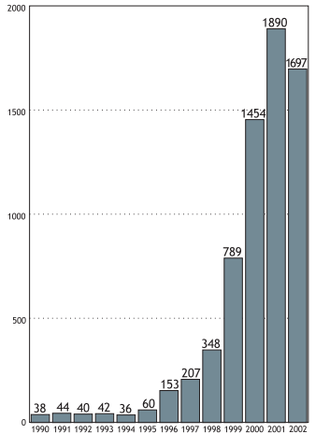
In Fiscal Year 2003, State Toxics Control Account dollars helped pay for compliance inspections, regulatory oversight, technical assistance, and review and approval of permit applications at regulated mixed waste facilities.

Department of Ecology:
Program Administration

State and Local Toxics Control Account funds help pay for program administration. These services provide the foundation from which Ecology is able to address the goals of the Model Toxics Control Act. The services are:

- Executive management oversees the Department's mission, goals, and policies;
- Regional directors represent the director in local communities and provide coordination on complex local issues;
- Legislative and intergovernmental relation staff coordinates legislative activities, represent agency policy to other governments, and coordinate rule development;
- Education and public information staff provide primary leadership in environmental education, community outreach, public involvement, and media relations;
- Additional costs include computer support, employee services, telecommunications, budget and central planning, accounting and fiscal services, records management, mail handling, facility planning and maintenance, warehousing, and motor pool services.

Figure 8: Statewide Reported Drug Labs



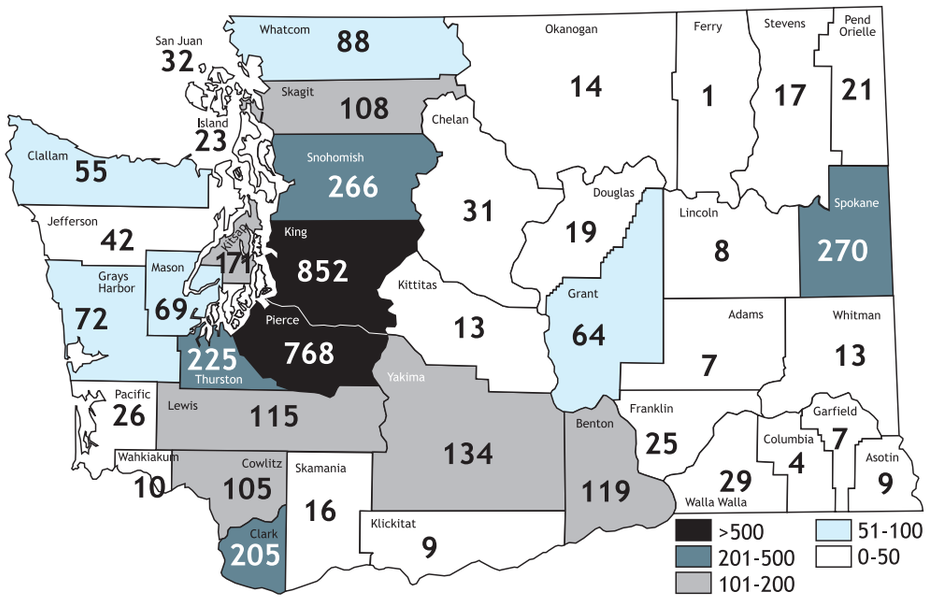
Department of Ecology: Spill Prevention, Preparedness and Response Program

The Spill Prevention, Preparedness and Response Program utilizes State Toxics Control Account Funds to protect public health, public safety, and the environment by responding to and cleaning-up oil and hazardous material spills. These activities include overseeing the cleanup of spills where a responsible party is taking appropriate action to manage the incident. The program also cleans up "orphan" spills where the owner is unknown, unwilling, or unable to fund the necessary removal. Ecology acts as the State's on-scene coordinator and collaborates with the responsible party and other government entities to manage incidents.

Other related activities conducted by the program include:

- participation in oil spill drills;
- technical assistance;
- incident investigation;
- enforcement when appropriate; and
- emergency cleanup at hazardous waste generation facilities.

Figure 9: Spill Reports by County for 2002



The program works to recover its costs whenever a responsible party is identified.

In 2002, the Spills Program received reports of four thousand one hundred and fifty five (4,155) oil and hazardous material spills. Staff completed two thousand three hundred and ninety (2,390) field responses to cleanup and investigate the incidents.

The program also uses State Toxics Control Account funds to remove and dispose of hazardous wastes found at methamphetamine drug labs. The number of illicit drug labs and associated abandoned dump sites in Washington rose dramatically throughout the mid 1990's. In 2002 Ecology cleaned-up one thousand six hundred and ninety seven (1,697) drug labs. Based upon the continuing trend during the first half of 2003, it appears that the number of responses has begun to gradually decline. The Spills Program continues to refine its award winning effort to control and reduce the costs associated with this activity. The program has become a national model for other states and is promoted and supported by federal law enforcement agencies.

Department of Ecology: Solid Waste and Financial Assistance Program

Ecology's Solid Waste and Financial Assistance Program provides three main services funded by the State Toxics Control Account:

- *Technical assistance* and support to local governments on solid waste management issues;
- *Regulation of large industrial facilities* (such as pulp and paper, petroleum refining, and aluminum smelting);
- *Regulation and enforcement on remedial actions* related to closed landfills.

Technical Assistance

The Solid Waste and Financial Assistance Program supports and supplements the work of local governments to reduce production of and properly manage the reuse, recycling, and disposal of solid waste. The program:

- approves local plans;
- reviews local permits;
- provides technical assistance to local jurisdictions;
- establishes statewide regulations; and
- addresses statewide issues.

This partnership helps to protect the environment and human health, while making the best possible use of resources.

In Fiscal Year 2003, the program provided professional engineering and hydrogeology support to local health departments. This included:

- *Training*. Staff organized, funded, and coordinated two significant training classes for local governments, one was Social Marketing and the other was How to Measure the effectiveness of Public Education. Both training classes were intended to further local government's understanding of performance based programs and to implement recommendations of the Joint Legislative Audit and Review Committee.

- *Technical innovation and research*. Staff coordinated the development of a pilot program that evaluated using non-toxic dredge sediments for bioreactor operation at the Roosevelt Regional Landfill. Staff also provided geotechnical engineering assistance in designing the closure of the abandoned Dryden Landfill, which is located on an unstable landslide. Staff designed and implemented a study to evaluate the efficacy of alternative, lower cost pad liners for composting facilities to help make composting more cost effective in the arid portions of Washington. Staff also worked cooperatively with the Chelan-Douglas Health District to evaluate the benefits and economics of applying waste apples as a soil amendment in dry land wheat fields.

- *Environmental protection through technical assistance*. The Revised Solid Waste Regulations were adopted in February 2003. Staff organized and conducted training workshops for local jurisdictional health departments, public works staff and private consultants. In addition, staff are organizing and conducting compliance audits of solid waste facilities as a form of technical assistance with the new rules. The audits are being conducted with local health department staff. Staff also provided technical assistance to Klickitat County in developing an emergency response plan in case of a tire fire at the Tire Shredders, Inc. facility.

- *Addressing emerging issues*. Staff actively facilitate and support public-private partnerships in developing composting facilities and in introducing anaerobic digestion technology. Staff has also issued four beneficial use determinations implementing the permit exemption program established under the new Solid Waste Regulations. Staff also tested and evaluated the presence of Clopyralid residues (a herbicide) in representative compost samples and worked with the Department of Agriculture to develop strategies and regulations to assure consumers have sources of clean compost.

- *Waste reduction research and information*. Staff is conducting waste composition studies to supplement existing data for solid waste planning purposes and to help rural counties develop targeted waste management programs. Staff is also researching sources and quantities of solid waste generated as part of the State Solid Waste Plan effort. This work is to identify target waste streams where waste reduction activities have the greatest potential for immediate impacts (the built environment, chemical manufacturing, and compostable materials), selecting potential tools to accomplish this, and developing performance measures to track success.

Industrial Regulation

Funds from the State Toxics Control Account support regulation of hazardous wastes and oversight of cleanup activities at some of the states largest industries. Specifically, the oil refineries, the pulp and paper mills, and the aluminum smelters all use, generate, and in some cases, dispose of a variety of hazardous wastes. Funding from the account supports regular inspections, enforcement activities, and permitting at these facilities and is also used to require cleanup of historical contamination.

In the last year, staff oversaw the cleanup of spent potliner at Kaiser Aluminum Mead works. All wastes are now contained in accordance with regulatory standards, a Cleanup Action Plan is in place, and a Consent Decree is under negotiation to implement the plan. Other major cleanups at industrial facilities include: polychlorinated biphenyls in the Columbia River from an old Alcoa facility in Vancouver, total petroleum hydrocarbon cleanup in sediments at the Weyerhaeuser Plywood Mill site, cleanup of polychlorinated biphenyls at a beach landfill at Intalco, mercury contamination at the chlor-alkali plant at Georgia-Pacific in Bellingham, and trichloroethelene contamination at the Alcoa Vancouver Landfill.

Remedial Action

The Solid Waste and Financial Assistance Program has been the lead on several remedial actions at landfills. These have included the Olympic View Landfill in Port Orchard, ITT Rayonier Landfill in Port Angeles, Horn Rapids Landfill in Richland, and the Greater Wenatchee Landfill in East Wenatchee.

Department of Ecology: Water Quality Program

The Water Quality Program received State Toxics Control Account funds to pay for activities that help protect Washington's water from contaminants.

Lower Columbia River National Estuary Program

The National Estuary Program was established by Congress in 1987 to identify nationally significant estuaries that are threatened by overuse, development, and pollution and to aid in the development of local management plans to protect and preserve these estuaries. The lower Columbia River has been part of the National Estuary Program since 1995.

The State Toxics Control Account provides funding for staff to assist the Lower Columbia National Estuary Program management team. The management team consists of representatives from Ecology, the Oregon Department of Environmental Quality, the U.S. Environmental Protection Agency, and citizens.

The management team has identified seven priority issues and is in the process of identifying goals and objectives for solving the problems associated with each issue. Toxic contaminants in sediments and fish are among the priorities. Oregon, the U.S. Environmental Protection Agency, local governments, and industry also contribute funding for this cooperative project.

Cleanup activities that help protect the state's water from contaminants.

Aquatic Pesticide Program

This program is aimed at reducing the risk to public health and aquatic life from pesticides used to manage aquatic weeds, invasive plants, and pests. Water Quality staff develop and interpret rules that pertain to aquatic pesticides and provide technical assistance to pesticide applicators, lake associations, and others to ensure the wise use of aquatic pesticides. Staff also assists chemical manufacturers and pesticide applicators and their clients with permit information. Lastly, they provide educational materials on specific pesticides and aquatic pest control methods.

Implementation and Development of Water Quality Standards for Toxics

Staff provides technical support in the development and implementation of water quality standards for toxic substances. They work on risk assessment issues related to toxics and provide technical assistance to wastewater discharge permit writers using water quality standards to set effluent limits. In addition, staff led workgroups that addressed the reduction of toxic substances, including the interagency committee that is developing Ecology's strategy on persistent bioaccumulative toxic chemicals and the interagency marine toxics work group.

Contaminated Sediment Runoff

Water quality in the Yakima River is heavily impacted by return flows from irrigated agriculture. These water flows are high in turbidity and contain pesticides and other toxic substances associated with suspended sediment. The goal of this project is to provide in-the-field education and technical assistance to irrigators about the impacts to water quality resulting from improper irrigation practices and provide assistance to reduce those impacts.

Staff also provides outreach support for Total Maximum Daily Loads on the Yakima River.

Stormwater Program

The Clean Water Act and state law require that approximately 2,000 businesses and 100 local governments have a National Pollutant Discharge Elimination System permit for the stormwater they discharge. State Toxics Control Act dollars allow staff to:

- Provide technical assistance and support to permit holders;
- Develop and maintain tools for permit holders and others to use;
- Develop new permits to provide a compliance pathway for industry and local governments.

State Toxics Control Account
Department of Health

The Department of Health receives funds from the State Toxics Control Account to perform environmental health protection and education, monitoring, and assessment activities. These activities are aimed at protecting the public from exposure to toxic substances released into the environment. These activities are carried out within the Division of Environmental Health. The following is a brief description of some of the agency's accomplishments in Fiscal Year 2003.

Chemical Monitoring of Drinking Water

Staff provided technical assistance and oversight to over 4200 public water systems statewide regarding water quality monitoring requirements (over 100 analytes must be sampled) primarily associated with national and state primary drinking water standards. A focused effort in the area of nitrate monitoring resulted in an increased compliance with quarterly sampling from forty five percent (45%) to seventy eight percent (78%) by years end. For this same time period, only two percent (2%) of public water systems were out of compliance with the nitrate standard of ten parts per million.

Six informational meetings were held statewide with affected communities, water utilities, and local health personnel regarding the new federal standard for arsenic in drinking water of ten parts per billion. Staff sought to educate these stakeholders about the new standard and the treatment technologies that are available to help with compliance.

Clandestine Drug Lab Program

Educational outreach activities have been highlighted during the past year. The program developed two brochures for property owners and guidelines for hiring decontamination contractors. These materials and other information regarding drug lab cleanup were presented to various stakeholders including community organizations, landlords, motel owners, government agencies and local health jurisdictions. Emphasis was placed on proactive actions to prevent drug labs, health risks associated with labs, and local health's role in remediation of contaminated properties. Four decontamination certification trainings were conducted, resulting in certification of thirty four (34) supervisors, forty two (42) workers and eighteen (18) contractors. Other activities included collaboration with national and state agencies to begin developing protocols that will aid drug-endangered children.

Environmental Health and Student Illness Reporting System

Department of Health began work with the Washington State Office of Superintendent of Public Instruction to develop an electronic student illness and school environmental health reporting system as part of Department of Health's development of an Environmental Public Health Tracking System. This pilot system will enable Department of Health to engage in student illness surveillance and to investigate links between student illnesses and exposure to environmental contaminants such as pesticide applications. A data collection system was initiated and will continue through next year.

Department of Health staff also collaborated with local health agencies and property owners to investigate the efficacy of methamphetamine residential drug laboratory cleaning performed by commercial cleanup enterprises in Washington State. Preliminary results suggest that current cleaning methods or application of those methods is insufficient to meet current cleanup criteria in Washington State. Based on the results of this study, sample collection protocols are being modified.

Indoor Air

Staff provided hundreds of indoor air phone consultations this year and conducted several site visits to schools with indoor air quality problems. Site visits focus on possible toxic exposures to children, including asbestos, volatile organic compounds, dusts, molds, and other common indoor air contaminants. This last year staff worked with the Office of the Superintendent of Public Instruction on their Environmental Health Initiative to develop a proactive protocol for response to indoor air quality issues.

Oeser Company National Priorities List Site

Epidemiology staff responded to health concerns expressed by a resident living near the Oeser Company wood treatment plant (Oeser) located in Bellingham. An evaluation of concerns regarding increased incidence of disease showed no common pattern or a clear environmental link. This assessment was provided in a detailed response letter along with requested health and regulatory information regarding air emissions. A subsequent complaint about diesel exhaust fumes coming from Oeser resulted in a call from staff to the Northwest Air Pollution Authority. An investigation of the odor by Northwest Air Pollution Authority led to a citation of the company.

Area-Wide Soil Contamination

Area-Wide Soil Contamination Task Force

It is estimated that several hundred square miles of land in Washington has been contaminated with arsenic and lead due to emissions from smelters and application of lead arsenate pesticide on agricultural crops. Most of the lead and arsenic from these sources remains in the top six inches of soil where people who live and work in these areas can be exposed to the contamination. To get input from a broad range of stakeholders on possible ways to respond to area-wide contamination, four Washington state agencies (Departments of Agriculture; Health; Ecology; and Community, Trade and Economic Development) chartered the Area-Wide Soil Contamination Task Force. As an *ex-officio* member, Department of Health provided information and guidance to the Task Force as well as to the smaller workgroups that discussed specific issues in depth. The Task Force presented its recommendations to the four agencies in June 2003.

Soil Contamination in Schoolyards

Soil sampling by local health districts in central and eastern Washington has shown that several schools may have been built on former orchard lands where lead arsenate pesticide had been used. The Department of Health has been working with Ecology and local health districts to advise schools on ways to reduce children's exposure to the contamination and provide information to parents about the associated health issues.

Tacoma Smelter Plume

Soil in many areas of King and Pierce Counties has been contaminated with arsenic and lead as a result of past emissions from the Tacoma Smelter. Since the emissions were spread over many square miles of land with a large number of residents, the contaminated area, called the Tacoma Smelter Plume site, is a significant public health concern. Department of Health has worked closely with the Department of Ecology, Public Health-Seattle and King County, and the Tacoma-Pierce County Health Department to assess the health hazard; to plan further investigations of the contamination; and to develop health information to help people living and working in areas affected by the Tacoma Smelter Plume understand the potential hazards and how to reduce their risk. These messages have been incorporated into both printed and internet-based educational materials.

Department of Health has attended numerous public meetings to provide information and answer questions about health issues related to Tacoma Smelter Plume contamination. The Department of Health staff has also participated in sessions to help local citizens answer questions that arise in their neighborhoods.

Site Assessments

Staff from the Site Assessment Section, using funds provided primarily by the Agency for Toxic Substances and Disease Registry, work closely with personnel from Ecology's Toxic Cleanup Program. The section assesses exposure to hazardous substances in the environment released from both Model Toxics Control Act and federal Superfund hazardous waste sites. During FY 2003, staff completed an assessment of exposure to volatiles moving from groundwater into the indoor air of homes located near the Cadet Manufacturing facility. The assessment prompted Cadet to take remedial measures for those homes with elevated concentrations of contaminants in indoor air. Educational activities continued for communities along the Lower Duwamish Waterway with educational presentations on ways to prepare and cook fish in order to reduce levels of polychlorinated biphenyls and fat-soluble contaminants.

Aquatic Herbicides

Staff continue to responded to inquiries from the Ecology on the use of herbicides for controlling aquatic and wetland invasive plant species. In addition to review of permit applications, the Department of Health commented on a Supplemental Environmental Impact Statement on for use of aquatic herbicides. Staff provided detailed technical information on human health toxicity for aquatic herbicides for the Aquatic Plant Management Plan. Input was also given on treatments for specific lakes, such as fluridone treatment of Piper Lake, and aluminum sulfate treatment of Newman Lake. Staff presented information on aquatic herbicides at an open house meeting about Capitol Lake in Olympia.

Toxic Cyanobacteria

The Department of Health continues to respond to numerous requests for information on cyanobacteria blooms. Counties with reported blooms this year included Kitsap, Pierce, Clark, Skagit, King, and Lewis. Citizens from Lake Steilacoom, Lakewood, and government agencies in other states requested the Department of Health reports on Washington's toxic cyanobacteria program.

Fish Consumption Advisories

Evaluation of exposure to contaminants in fish was the primary activity for the Department of Health with respect to the use of State Toxics Control Account money. Below are some highlights of Fiscal Year 2003 activities regarding fish consumption advisories.

Development of Outreach and Education Strategies

The Department of Health renewed its effort to improve outreach and education with respect to fish consumption advisories. The process involved first reviewing published literature on fish consumption, behavior change models, and existing state programs, including the Department of Health's outreach program. Staff from selected local health jurisdictions were then surveyed to better understand their needs and resources pertaining to fish consumption health education. Educational materials (e.g. signs) and strategies were piloted with angler clubs, ethnic minority populations, and schools. Procedures were drafted regarding the need and strategies for outreach in response to technical assessments of fish tissue data. The details of this effort has been documented in a report, "*Strategies for Fish Consumption Advisory Communication: Communicating to Change Behavior*".

Inter-Agency Fish Advisory Meeting

The Department of Health hosted an inter-agency fish advisory meeting in April 2003 to bring together an array of professionals from various government agencies including local health departments, the Department of Ecology, the Department of Fish and Wildlife, the Puget Sound Action Team, the Environmental Protection Agency and the Agency for Toxic Substances and Disease Registry. The goal of the meeting was to build collaboration and find common goals around the issue of fish consumption advisories. The meeting resulted in a series of recommendations and a follow-up needs assessment. It also served as a mechanism to initiate fish advisory working groups and a stakeholder's list.

Assessment of Mercury Exposure in High Fish Consuming Populations

The Department of Health obtained a grant from the U.S. Environmental Protection Agency to determine if certain individuals or populations within local Asian or Pacific Islander communities are overexposed to mercury found in finfish and shellfish consumed from Puget Sound and other sources. The Department of Health will work with various Asian communities, Environmental Protection Agency, the Department of Ecology, the Department of Fish & Wildlife, King County Department of Natural Resources and Parks and the University of Washington to determine if consumption patterns of finfish and shellfish result in possible overexposure to mercury. The Department of Health will use a survey instrument and collect hair and blood samples to assess exposure. Data assessment will look for associations between consumption patterns and actual exposure levels.

Statewide Fish Consumption Advisory for Bass

Ecology and the Department of Health developed the Mercury Chemical Action Plan to reduce exposure to mercury as part of a statewide effort to mitigate exposure to persistent bioaccumulative toxins. The plan is designed to virtually eliminate the use and release of human-caused mercury in Washington State and takes steps to further minimize human exposure to mercury. As part of this plan, the Department of Ecology conducted the first statewide survey for mercury in freshwater fish tissue and sediments finding elevated levels mercury in largemouth and smallmouth bass.

In response to these findings, the Department of Health conducted a health assessment to evaluate the potential risks associated with exposure to mercury through the consumption of smallmouth and largemouth bass. This assessment was then used to develop statewide recommendations on the amount of freshwater bass that can be safely consumed. This advisory provides critical information and possible risk reduction strategies to the citizens of Washington State so they can make informed decisions about the consumption of bass caught from lakes and rivers within Washington.

A health advisory sign posted by the Department of Health

Lake Chelan

The Department of Health is evaluating fish tissue collected from Lake Chelan. The insecticide, dichlorodiphenyltrichloroethane (hereafter "DDT"), was detected in lake fish in a screening survey conducted by the Environmental Protection Agency. Preliminary results indicate that these concentrations are among the highest in the United States. The Department of Health, along with the Departments of Ecology and Fish and Wildlife developed a sampling plan to test lake trout for various contaminants including DDT. Approximately fifty (50) lake trout are currently being analyzed. Upon completion, the Department of Health will review the data to determine if possible human health concerns exist. The Department of Health developed a pamphlet that provided preliminary information on DDT in Lake Chelan fish along with general information on the risks and benefits of fish consumption. The pamphlet was provided to the Chelan-Douglas Health District for distribution to the public.

Staff of hazardous waste contractor prepares pesticide containers for transport to a permitted disposal facility.

City of Vancouver Solid Waste Treatment Plant

The Department of Health helped the City of Vancouver develop educational materials related to the hazards of mercury to be displayed at the opening of the City's new solid waste treatment facility. The Department of Health was involved in the development and review of an interactive display used to teach individuals about the mercury in fish and actions they can take to reduce exposure. This effort was in collaboration with Ecology as part of the persistent bioaccumulative toxics program.

Asian and Pacific Islander Outreach and Education Project

Acknowledging the vital need for outreach and education among high fish consuming populations, the Department of Health provided state toxics funds to the Indocultural and Chinese Service Center to augment staff effort in this area. In cooperation with the Korean Women's Association and the Holy Family of Jesus Community Services, the Center conducted outreach and education activities for Asian and Pacific Islander communities regarding exposure to mercury in fish. By utilizing the Center and their valuable community contacts, health messages about mercury exposure reached a wider audience.

Ongoing Assessments

Staff are involved in ongoing assessments of fish sampling data from the Walla Walla River, Okanogan River, Long Lake, and Puget Sound. Contaminants of primary concern at these sites are polychlorinated biphenyls, commonly known as PCBs, and dichlorodiphenyltrichloroethane, commonly called DDT.

State Toxics Control Account
Department of Agriculture

Waste Pesticide Identification and Disposal Program

The Washington State Department of Agriculture's Waste Pesticide Identification and Disposal Program has two primary goals. One is to significantly reduce and eventually eliminate the backlog of prohibited and otherwise unusable pesticides stored by users, especially those stored on farms and other similar rural locations. The other is to prevent future accumulations of unusable pesticides through education focused in the areas of product storage and handling, as well as improved planning before purchase.

Many of the pesticides have become unusable due to government actions that prohibited most or all of their uses. As of June 2003, the program has collected and properly disposed of over two hundred and fifty thousand (250,000) pounds of Dinoseb, polychlorinated biphenyls and dichlorodiphenyltrichloroethane, (commonly referred to as DDT), Endrin and Parathion alone. The program has now collected one million four hundred and eight thousand nine hundred and eighty seven (1,408,987) pounds of unusable pesticides from four thousand four hundred and ninety four (4,494) customers. Two hundred fifty nine thousand one hundred and fifty eight (259,158) pounds were collected and properly disposed during the 2001-2003 biennium. One hundred and sixty two thousand five hundred and sixty five (162,565) pounds in FY 2002 and ninety six thousand five hundred and ninety three (96,593) pounds in FY 2003. Other states that have implemented similar programs are also finding that a tremendous amount of old pesticides remain in storage in their states. In addition to rural areas, these old pesticides are found in suburban locations as housing developments expand into traditional agricultural areas.

Implementation of the Federal Food Quality Protection Act of 1996 has increased the amount of pesticide products that are unusable. Several widely used pesticides have had use restrictions or prohibitions and phase out periods placed on them as a result of the Act. The first restrictions directly affected the tree fruit industry in Washington State. Now it is also affecting pesticide use in non-farm situations. Many uses of common organophosphate pesticides such as chlorpyrifos and diazinon are being phased out due to the Act.

It has created many additional containers of unusable pesticides throughout the U.S. and is having an impact on the Waste Pesticide Program. The Program is encouraging pesticide users to limit the amount of pesticides purchased at one time so that they may be used entirely during a specific application or season.

Table 4: Waste Pesticide Disposal Projects, Fiscal Year 2003

Collection Event	When	Customers	Pounds	Disposal Cost	per pound
Coupeville Regional	9/16/02	7	1,491	$4,665.84	$3.13
Mount Vernon Regional	9/17/02	22	12,210	$16,390.79	$1.34
Seattle Regional	9/18/02	25	9,537	$13,534.14	$1.42
Enumclaw Regional	9/19/02	7	933	$4,024.94	$4.31
Longview Regional	9/20/02	13	7,106	$10,961.59	$1.54
Prosser Regional	10/15/02	28	20,434	$26,361.85	$1.29
Orondo Regional	10/17/02	22	8,227	$12,521.20	$1.52
Puyallup Regional	4/29/03	26	10,377	$15,091.85	$1.45
Yakima Regional	5/6/03	35	5,894	$12,426.12	$2.11
Colbert (Spokane) Regional	5/8/03	9	3,187	$7,946.26	$2.49
Regional total FY 2003	10 events	194	79,396	$123,924.58	$1.56
Chelan Co. Special Site	10/5/02	15	761	$1,729.05	$2.27
Yakima Special Site	10/14/02	6	5,894	$10,374.05	$1.76
Harrington Special Site	10/18/02	1	3,065	$5,880.65	$1.92
Pomeroy Special Site	1/9/03	1	809	$1,134.20	$1.40
Lynden Special Site	1/22/03	1	623	$4,030.00	$6.47
Bellingham Special Site	1/23/03	2	6,045	$8,665.25	$1.43
Special site total FY 2003	6 events	26	17,197	$31,813.20	$1.85
Total FY 2003	16 events	220	96,593	$155,737.78	$1.61

** Pressurized pesticide cylinders were collected as a part of this project. Special handling and disposal was required.*
The average amount collected per customer during fiscal year 2003 is approximately 439 pounds.
Since the program began in 1988, it has collected and properly disposed of 1,408,987 pounds of pesticides from 4,494 customers.
The average amount collected per customer for the entire program (1988 - June 2003) is approximately 314 pounds.

Unusable pesticides are collected at two types of events: *regional* and *special site*. The majority of pesticides are collected at regional events. These events are held around the state and are similar to household hazardous waste collections in that the customer transports their unusable pesticides to a collection site where a hazardous waste contractor packages them into hazardous waste disposal containers. Since the pesticides brought to these sites are fully regulated, the Department prepares and sends a specific bill-of-lading to each of the customers - based upon an inventory they submit before the event. This document must be in the customer's vehicle while on a public road and available to emergency personnel in case of a spill or accident. The Department also assists the customers with packaging materials to enhance safe transportation, and with chemical analysis of unlabeled containers. The remaining pesticides are collected at special site events. These events are usually held at the customer's pesticide storage locations due to numerous containers of unknown chemicals, transportation hazards due to poor container condition, and types of pesticides that could pose a risk to other customer's if brought to a regional event.

Examples of pesticides found in a few products.

After the contractor packages the pesticides, they transport them to a permitted disposal facility. Most of the pesticides are disposed of by thermal destruction. Only pesticides containing metallic ingredients that cannot be destroyed by heat (such as arsenic, lead and mercury) are disposed of at a hazardous waste landfill. Many pesticides, such as dichlorodiphenyltrichloroethane or "DDT", are "land ban" chemicals and are prohibited from disposal at a hazardous waste landfill. The program's 3.6 full time equivalent staff are funded by the State Toxics Control Account.

Endangered Species Program

The Washington State Department of Agriculture's Endangered Species Program was created to ensure that pesticide use is in compliance with the Endangered Species Act of 1973.

There is an extensive overlap of agriculture production areas and salmonid habitat in many areas of Washington State. The Department's program has been mapping agricultural production areas to accurately document where and when pesticides are applied. All data have been incorporated into a geo-database that is tied to other geospatial layers, including, fish habitat, pesticide detections, etc.

In addition to mapping, the program is just finishing its first year of a new surface water monitoring program. The Department of Ecology's Environmental Assessment Program is conducting the monitoring through an Interagency Agreement. The first annual report from the monitoring study will be released in January 2004.

The Department of Agriculture's Endangered Species Program has been working with the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, Fisheries, and stakeholders to develop a formal plan that gives the authority to implement a 'State-Initiated Plan' for pesticides and endangered species protection in Washington State. The Department of Agriculture is anticipating submitting this plan to the Environmental Protection Agency by the end of 2003.

The ultimate goal of this program is to reduce the potential transport of pesticides to salmonid habitat by working cooperatively with agricultural and environmental stakeholders.

Compliance Services Program

The State Toxics Control Account funds one position located in the Columbia Basin area (Moses Lake) within the Pesticide Management Compliance Services Program. This position covers all irrigated areas of the state and provides technical assistance to chemigators (commercial and private), irrigation equipment distributors and manufacturers, irrigation districts, farm chemical distributors, consultants, aerial applicators, ground applicators, growers, lawn care businesses, government agencies, and other public facilities at the user, consultant and distributor level.

This position works to carry out the Department's Chemigation Fertigation Technical Assistance Program with an emphasis on system inspections. The fundamental basis for this program is the protection of state ground and surface waters against improper injection of toxic materials into irrigation waters. While the total number of statewide systems that inject into irrigation water is unknown, it is estimated that they number more than twelve thousand (12,000) and less than twenty percent (20%) are fully compliant with state rule.

Through the activities of this position, the Compliance Services Program has seen an increase in voluntary compliance, enhanced service, additional licenses issued, and in turn a reduction in complaints and need for enforcement actions.

Pesticide Registration

The State Toxics Control Account funds two positions within the Pesticide Registration Program. This program is responsible for the review and registration of approximately nine thousand five hundred (9,500) federally registered pesticide products distributed in Washington. In addition, it is responsible for the review and approval or denial of the following:

1. Special local needs registrations;
2. Experimental use permits;
3. Section 18 emergency exemptions from registration.

Staff is also involved in other pesticide-related issues, such as ground water, endangered species, worker protection, and the Food Quality Protection Act.

State Toxics Control Account
Washington State Patrol

The Washington State Patrol Fire Protection Bureau uses funds from the State Toxics Control Account to prepare firefighters in Washington State to respond to incidents involving hazardous materials. Their mission is to provide the means for firefighters to receive live-fire training that meets or exceeds the minimum standards required by federal and state regulations governing firefighter training. Additionally, firefighters are provided with the technical knowledge and training needed to recognize and contain hazardous material incidents which threaten our citizens and environment. The training firefighters receive reduces risk to both the firefighter and the property they protect. Funds received from the State Toxics Control Account are dedicated to the delivery of live-fire training in several of the following areas:

Flammable Liquids

Level 1 provides firefighters with the basic knowledge necessary to identify, control, and recover various flammable liquid emergencies. Instruction includes the behavior of flammable liquids in bulk, fire extinguishing agents, safety, and environmental concerns. Students practice their skills while extinguishing a live, flammable liquid fire on an overturned tanker.

Level 2 provides additional tactical and fire-ground training and experience with problems involving flammable liquids, including handling a team leader position during a flammable liquid casualty. The course provides live fire training using a simulated fuel-loading dock, fuel under pressure (broken flange), and a bulk fuel storage container.

Liquid Petroleum Gas

Students learn the basic property of liquid petroleum gas, issues surrounding liquid petroleum gas powered vehicle fuel systems and storage tanks, and their built-in safety features, leak detection, product identification, and basic tactics for emergencies. Students practice attacking, controlling, and recovering liquid petroleum gas fires on a simulated storage tank, overhead piping, and a fill station.

Portable Fire Extinguishers

Students gain experience in fire-ground problems using standard stored pressure water extinguishers, stored pressure foam extinguishers, cartridge-operated dry chemical extinguishers, and carbon dioxide extinguishers.

Airport Rescue Firefighting

This unique training prop was constructed to provide hands-on live firefighting training for aircraft incidents. This training experience enhances the public safety of all flight operations in and out of airports in the state.

Marine Firefighting

This program is designed to include academic and live hands-on firefighting for those personnel working within the marine industry. The training is designed to meet the current Code of Federal Regulations, National Fire Protection Association and International Maritime Organization requirements. In addition, several governmental agencies participate in this program including the U.S Coast Guard, Navy and Army.

Waste Management

Funds from the State Toxics Control Account are utilized to provide for the removal, transportation and disposal of hazardous waste products manufactured as a result of live fire training and for the treatment of contaminated waste water from the aircraft rescue training.

Firefighters training in public safety for the transportation of hazardous materials.

Hazardous Material Training

The Hazardous Materials Training program is designed to include academic and hands-on training for first responders to meet the current Washington Industrial Safety and Health Act; Occupational Safety and Health Administration; Department of Transportation; and National Fire Protection Association requirements. In addition, it is an invaluable tool in providing training scenarios for those personnel that respond to clandestine drug labs, terrorism, weapons of mass destruction, confined space rescue, spills response, and issues relating to the transportation of hazardous chemicals and waste.

Required Training

The need and impact of specialized hazardous materials training continues to be significant in our state. The Washington Industrial Safety and Health Act standards place requirements for training on emergency responders. Initial training and retraining is mandated for firefighters who respond to hazardous materials incidents. The State Toxics Control Account is the most significant source of funding for hazardous materials training in the state and without this continued support the Washington State Patrol's Hazardous Materials Program will not be able to meet the mandated training requirements for the state's twenty five thousand (25,000) firefighters. Additionally, the frequency is increasing for the transportation of hazardous chemicals and other environmental conditions promoting chemical disasters. Firefighters need specialized training in hazardous materials in order to safely handle these life-threatening incidents.

State Toxics Control Account
Department of Revenue

The Department of Revenue oversees the collection of the Hazardous Substance Tax.

Local Toxics Control Account

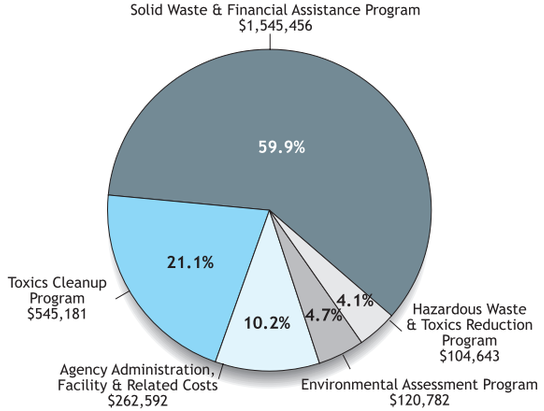
Local Toxics Control Account Revenue

Local Toxics Control Account Revenue Total	$24,800,545

Local Toxics Control Account Expenditures

Toxics Cleanup Program	$545,181
Hazardous Waste & Toxics Reduction Program	$104,643
Agency Administration	$262,592
Solid Waste & Financial Assistance Program	$1,545,456
Environmental Assessment Program	$120,782
Total All Agency Expenditures	*$2,578,654*

Figure 10: Local Toxics Control Account Expenditures



Department of Ecology: Solid Waste and Financial Assistance Program

The Local Toxics Control Account is used to fund grants to local governments. The Solid Waste and Financial Assistance Program administers the grants program. Local governments may use grants to clean up contaminated sites, manage solid and hazardous waste, or provide drinking water to those whose wells have been contaminated as a result of a contaminated site. Grants are also offered to not-for-profit organizations and citizen groups for participation in cleanup actions and promotion of waste management priorities.

Rehab the Lab Grants

The Rehab the Lab program was done in cooperation with the United States Environmental Protection Agency. Several workshops were conducted around the state to educate high school science teachers and administrators on the potential dangers of hazardous and toxic chemicals which are often stored in deteriorating conditions at the schools. Ecology offered grants to pay professional consultants to

Table 5: Rehab the Lab Grants - 2003

Recipient	Grant Number	Total Project Cost	Local Toxics Control Account Amount
Bethel Public Schools	G0300234	5,000	3,750
Clark County Public Works	G0300141	42,000	32,900
Clover Park School District	G0300161	5,000	3,950
Colfax School District	G0300173	5,000	3,950
Eatonville School District	G0300167	5,000	3,950
Educational Service District 101	G0300190	80,960	64,240
Ellensburg School District	G0300189	5,000	3,950
Enumclaw School District	G0300187	5,000	3,950
Jefferson County Public Works	G0300164	20,000	15,650
Klickitat County Health	G0300142	31,600	25,300
Lewis County Health	G0300145	50,000	39,500
Moses Lake School District	G0300186	5,000	3,950
North Franklin School District	G0300188	5,000	3,950
North River School District	G0300175	5,000	4,000
Richland City of	G0300194	20,000	16,000
San Juan Health	G0300162	5,000	4,000
Skagit County Health	G0300140	30,000	23,700
Snohomish County Public Works	G0300143	121,600	95,000
Spokane Solid Waste	G0300144	39,600	31,500
Sumner School District	G0300185	5,000	3,950
Tacoma School District	G0300165	13,480	10,830
Thurston County Public Health	G0300177	18,000	13,500
Toutle Lake School District	G0300176	5,000	3,950
Wahkiakum School District	G0300172	5,000	3,950
Walla Walla/Columbia Waste Reduction Recycling	G0300166	10,000	7,900
Whatcom County Health	G0300163	45,000	35,550
White River School District	G0300171	5,000	3,750
Woodland School District	G0300174	5,000	3,950
Total Rehab the Lab Grants		*597,240*	*$466,570*

audit school labs, inventory hazardous materials, and package and dispose of the most dangerous chemicals. Also the consultants provided on-site education in ways to reduce the use of hazardous chemicals in the instruction process, and to safely store the remaining hazardous items. The work was conducted throughout calendar year 2003.

Public Participation Grants

The Public Participation Grants Program provides citizen groups and not-for-profit organizations with funding for projects that motivate people to change their behavior and take action to improve the environment and protect their health. The projects create awareness of the causes and costs of pollution. Public Participation grants are funded from one percent of the Local and State Toxics Control Accounts. All the grant funds were awarded to 24 projects at the beginning of the 2001-2003 biennium and, therefore, reported in last year's (FY 02) report. During FY 03 there was one new award made to Quincy Concern, with amendments to the existing 24 grants.

Table 6: Public Participation Grants - Fiscal Year 2003

Recipient	Grant Number	Total Project Cost	Local Toxics Control Account Amount	State Toxics Control Account Amount
Quincy Concern	G0300230	20,000		20,000
Amendments to Previous Year Grants:			118,250	108,425
Total Public Participation Grants:			*$118,250*	*$128,425*

Seventeen grant awards were for Hazardous Substance Release Site grants, and eight were for Pollution Prevention Education/Technical Assistance grants. The following is a list of the twenty-five grant recipients and descriptions of the funded activities:

- *Association of Bainbridge Communities*: follow-up grant for the Vincent Road Landfill cleanup in order to complete the final cleanup phase of the site.
- *Automotive Recyclers of Washington*: hold seminars to discuss best management practices for hazardous waste and storm water for cleaning up wrecking yards; educate recyclers about new regulatory changes pertaining to mercury issues.
- *Bracketts Landing Foundation*: educate the community on the progress of the Unocal Edmonds cleanup and encourage community involvement.
- *Citizens for a Healthy Bay*: advocate for the most protective cleanup of Commencement Bay.
- *Clark Co HW Citizens Task Force*: educate residents of Clark County about protecting and conserving ground water in their area through best management practices for home and nursery gardening, classroom education, and monitoring local ground water issues at contaminated sites.
- *Columbia Riverkeeper*: educate and motivate the public to become active participants in the Hanford cleanup process, especially as it impacts the Columbia River.
- *Community Services Work Group*: prepare and implement outreach activities for waste reduction and recycling on Earth Day.
- *Environment Group of Klickitat*: educate and lead the community through the cleanup process at the old Champion International Sawmill site.
- *Georgetown Crime Prevention & Community Council*: provide information and guidance for community oversight on the cleanup at the Philips Environmental site.
- *Hanford Information Network*: educate high school students on the importance of protecting the Columbia River from contamination and from leaking underground storage tanks at the Hanford Reservation.
- *Heart of America Northwest*: work with regulators and United States Department of Energy to define a process for public involvement and decision making.
- *Island Remediation & Public Participation Center*: acts as clearinghouse and source of information on the Vashon/Maury Island cleanup.
- *Lake Roosevelt Forum:* create an arena where diverse interests can be expressed and discussed and where dialogue is based on trust and respect while developing ways to protect and/or preserve the quality of Lake Roosevelt.
- *Methow Conservancy:* promote, advertise, and educate the residents of the Methow Valley about the new recycling center.
- *Nisqually Delta Association*: educate and guide the community of DuPont on the Model Toxics Control Act cleanup process and encourage responsible land-use planning in the community.
- *NW Everett Neighborhood Association*: educate and lead the community through the investigation and cleanup of residential properties around the former Everett Smelter site.

- *Olympic Environmental Council*: educate Port Angeles residents on the cleanup process for the Rayonier Mill site and the monitoring of local landfills.
- *People for Puget Sound*: provide information and guidance for community oversight on the Duwamish River cleanup site.
- *Puget Soundkeeper Alliance*: initiate and facilitate meetings and discussions with Clallam, Jefferson, Island, and Skagit counties with the EnviroStar Cooperative to identify needs and limitations of participating in the EnviroStar program (a program where auto body shops, dentists, and dry cleaners can earn stars for operating a green business); assisted with implementing Phase three of three-year pilot project with Puget Sound Clean Air Agency and auto body shops.
- *Quincy Concern*: oversee the cleanup of the former CENEX fertilizer and fumigant storage facility.
- *Skykomish Environmental Coalition*: educate the community and seek involvement in the cleanup process at the Burlington Northern Santa Fe site.
- *WA Citizens Advisory Committee*: provide information to Spokane residents on the cleanup process of the Spokane River/ Coeur D'Alene area.
- *WA Physicians for Social Responsibility*: focus on educating the public on Hanford issues from a medical perspective.
- *WA State Recycling Association*: hold statewide commercial recycling roundtables to bring local community businesses and commercial waste haulers and/or recyclers together to discuss opportunities for increasing commercial recycling.
- *WA Toxics Coalition*: provide up-to-date healthcare information on how to protect residents of the state and the environment from toxins. The focus is to persuade and enable citizens to use safe or less toxic indoor/outdoor homecare products to reduce the exposure to humans, wildlife, and fish in state streams and lakes.

Coordinated Prevention Grants

Coordinated Prevention Grants are awarded to local governments to prevent pollution from improper management and disposal of solid waste and moderate risk waste. The grant program runs on a two year cycle, with Fiscal Year 2003 being the second year of the current cycle. During Fiscal Year 2002, a total of $17, 419,902 was awarded for new grants, allowing $23,226,536 in costs to be leveraged by local governments who provide twenty five percent (25%) of the costs. In Fiscal Year 2003, three new grants were awarded as administrative transfers from awards made in Fiscal Year 2002.

Table 7: Coordinated Prevention Grants - Fiscal Year 2003

Recipient	Grant Number	Total Project Cost	Local Toxics Control Account Amount
Clark County Health Department	G0300193	53,333	40,000
Port Angeles City of	G0300203	40,000	30,000
Skamania County	G0300192	53,333	40,000
Total Coordinated Prevention Grants:		*146,666*	*$110,000*

In addition to the regular grants cycle, $2,000,000 was awarded to twenty two (22) local governments for pilot projects on sustainability, defined as waste reduction, pollution prevention, materials reuse, and energy or resource conservation.

The categories of waste management activities funded by the Coordinated Prevention Grant Program for the 2002 - 2003 cycle are identified in Table 8.

Table 8: Waste Management Activities Funded by Coordinated Prevention Grants

Activity	Total	% of Total
Household Hazardous Waste Collection and Disposal	$5,704,989	33.1%
Waste Reduction and Recycling—Activities	$5,180,233	30%
Solid Waste Enforcement	$3,204,546	18.4%
Waste Reduction and Recycling—Capital	$1,115,234	6%
Small Quantity Generator Implementation	$1,084,830	6%
Household Hazardous Waste Implementation	$ 780,689	4.5%
Solid Waste Planning	$ 177,654	1%
Moderate Risk Waste—Capital	$ 139,214	.08%
Hazardous Waste Planning and Education	$ 32,513	.02%
Total	*$17,419,902*	*100%*

Table 9: Remedial Action Grants - Fiscal Year 2003

Recipient	Grant Number	Total Project Cost	Local Toxics Control Account Amount
Aberdeen City of	G0300223	1,600,000	1,200,000
Anacortes Port of	G0300134	1,330,000	665,000
Bellingham City of	G0300220	124,316	62,158
Central Puget Sound Regional Transit	G0300122	181,914	90,957
Centralia Puget Sound Regional Transit	G0300072	42,569	21,285
Chelan County Public Works	G0300153	30,746	15,373
Clark County Health District	G0300111	195,500	195,500
Everett City of	G0300076	179,331	89,666
Grays Harbor Public Utilities Department	G0300218	137,084	102,813
Kitsap County	G0300027	216,700	108,350
Moses Lake City of	G0300090	202,180	151,635
Museum Development Authority	G0300224	4,489,170	2,244,585
Pasco Port of	G0300152	1,030,110	772,583
Pierce County	G0300091	200,000	100,000
Port Angeles School District	G0300007	24,726	12,363
Raymond City of	G0300209	161,900	121,425
Spokane County	G0300205	200,000	100,000
Tacoma City of	G0300044	3,224,456	1,612,228
Tacoma City of	G0300086	7,238,752	3,619,376
Tacoma City of	G0300208	1,000,000	500,000
Tacoma Port of	G0300063	9,347,099	4,673,550
Thurston County Public Health	G0300215	296,773	296,773
Vancouver City of	G0300113	25,000	12,500
Whatcom County Public Works	G0300210	10,438	5,219
Yakima City of	G0300207	167,500	125,625
		31,656,264	*16,898,964*
Amendments to Previous Year Grants:			6,447,912
Total Remedial Action Grants:			*$23,346,876*

Department of Ecology: Toxics Cleanup Program

Remedial Action Grants

The administrative and accounting functions of the Remedial Action Grants Program are administered by the Solid Waste and Financial Assistance Program. Based on site cleanup criteria and decisions made by the Toxics Cleanup Program, staff awards grants to local governments to clean-up publicly owned contaminated sites and related work.

Approximately $25 million in funds were allocated by the Legislature for local government grants during the period July 1, 2001 through June 30, 2003. In January 2002, Ecology pursued and received $18.5 million in additional supplemental funding. The combined allocation total of about $43 million was available for grants to local governments. During FY 03, funding was provided to projects that originally received only partial funding in FY 02 and to new requests for financial assistance. The grant distribution includes the following:

- Twelve local governments received grants to study and clean up publicly-owned contaminated sites;
- Two cities and one school received grants to remove underground storage tanks and clean-up related soil or ground water contamination;
- Twelve county health departments received grants to continue or begin investigating contaminated sites and preparing Site Hazard Assessments, including drug labs and the Tacoma Smelter Plume site;
- Six local governments received grants to conduct independent cleanups at publicly-owned sites and enter the Voluntary Cleanup Program;
- Port of Ridgefield received a loan to pay their 25 percent grant match.
- $5,188,664 was awarded as amendments to existing projects.

For the period July 1, 2003 through June 30, 2005, the Department has been allocated $25.6 million in Remedial Action Grant funding. These funds will be distributed for various grant activities as follows:

Site Study and Remediation	8,500,000
Site Hazard Assessments	2,500,000
Drug Labs	900,000
Area Wide Study and Remediation	2,850,000
Voluntary Cleanup Actions	1,000,000
Derelict Ships - Hazardous Waste Removal	50,000
Bellingham Bay Remediation	2,000,000
Port of Ridgefield Remediation	8,000,000

Other Activities Funded with Local Toxics Control Account Dollars

Department of Ecology: *Toxics Cleanup Program*

Remedial action grants are available to local governments for cleaning up publicly-owned contaminated sites and related work. Staff from the Toxics Cleanup Program oversees the cleanup of these sites to ensure the cleanup meets the requirements of the Model Toxics Control Act.

Department of Ecology: *Administrative Services*

Administrative Services uses funds from the Local Toxics Control Account interchangeably across Ecology activities. These services provide the foundation from which Ecology is able to address its core environmental goals.

Department of Ecology: *Hazardous Waste and Toxics Reduction Program*

Providing Technical Assistance on Hazardous Waste-Derived Fertilizers

In fiscal year 2003, Ecology reviewed two hundred eighty (280) fertilizer product registration applications for the state of Washington. In addition to meeting the standards required by the Washington State Department of Agriculture for all fertilizers, fertilizers containing waste materials must also meet compliance standards set by Ecology. Technical assistance provided to the public and other state agencies in a one-on-one format or via the Fertilizer Database on Ecology's web site is an important part of this activity.

The Hazardous Waste and Toxics Reduction Program

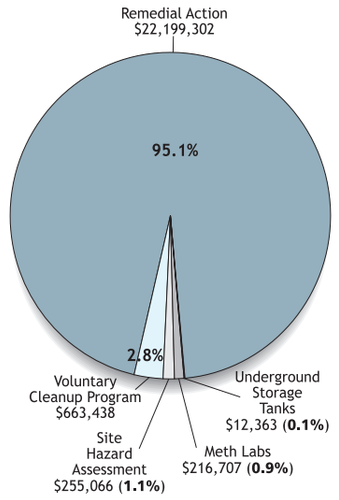
This program also provided technical assistance to Washington businesses by conducting an education outreach effort with the goal of informing wood ash generators that dioxins are commonly found in wood ash. As a result, the land application of wood ash as a fertilizer, soil amendment, or simply as a convenient disposal method could result in the creation of contaminated sites. Information sent to generators of wood ash offered technical assistance from Ecology, Best Management Practices for the prevention of dioxin generation, and suggested ash management procedures for the approximate seven thousand two hundred (7,200) tons of wood ash that is applied to the land every year in Washington.

Department of Ecology: *Environmental Assessment Program*

Many of the studies undertaken by the Environmental Assessment Program are conducted in support of clients in other agency programs. During Fiscal Year 2003, the Environmental Assessment Program received funding from the Local Toxics Control Account to conduct studies requested by the Toxics Cleanup Program. Projects for the year included:

- Collecting fish from Long Lake on the Spokane River to analyze for metals and polychlorinated biphenyls, commonly called "PCBs." The Department of Health used this information to evaluate human health risks and the need for fish tissue consumption advisories for this reach of the river.
- Conducting arsenic speciation analyses on water, sediments, and fish collected from four lakes upstream from known anthropogenic arsenic inputs. These lakes: Black Lake (Stevens County), Conner's Lake (Okanogan County), Mountain Lake (San Juan County), and Lake Pleasant (Clallam County), provide a snapshot of background arsenic levels in Washington.

Figure 11: Categories of Remedial Action Grants



total $23,346,876

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