Model Toxics Control Act 2002 Annual Report



E C O L O G Y Ecology publication #03-09-046

Cover Photo: Pasco Landfill NPL site. Approximately 5,000 drums containing waste from herbicide manufacturing were disposed at the Pasco Landfill in the 1970s. In early 2002, the drums were removed and treated/disposed off-site.

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## 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 you with an update on what state agencies and programs accomplished using Toxics Control Account funds in Fiscal Year 2002 (July 1, 2001, through June 30, 2002). Specifically, this report will show:

How much revenue was generated during Fiscal Year 2002 for the Toxics Control Account fund from the Hazardous Substance Tax, cost recovery, fines and penalties, Voluntary Cleanup Program fees, and mixed waste fees;

<sup>(3)</sup> Which governmental entities received dollars from the Toxics Control Account in Fiscal Year 2002;

**③** What accomplishments were achieved as a result of receiving those dollars.

It has been 14 years since the citizens of Washington passed the Model Toxics Control Act to clean up contaminated sites in our state, improve how hazardous wastes are managed in our communities, and prevent future contamination. One of the most important features of that law is the Toxics Control Account, which was established to pay for state and local activities aimed at cleaning up and preventing toxic contamination.

Because its main source of revenue is a tax on petroleum product, funds in the account have fluctuated through the years. For example, the fund balance grew from \$56 million in fiscal year 2000 to \$81 million in fiscal year 2001. This revenue spike allowed us to clean up or investigate 26 abandoned sites that needed attention.

But just as quickly as revenue went up—it came back down, declining to \$51 million in fiscal year 2002. These fluctuations affect how many contaminated sites get cleaned up each year.

In contrast, dollars appropriated for improving how hazardous waste is managed and for improving pollution prevention have remained steady. The departments of Health, Agriculture, and Ecology, and the Washington State Patrol have used this money to work with local governments, industry, and communities to manage the re-use, recycling, and disposal of hazardous wastes; provide environmental health protection and education; respond to incidents involving hazardous materials; and reduce and eliminate prohibited pesticides.

In spite of the unpredictability of money to do the work, our highest priority consistently has been to clean up contamination and ensure that human health and the environment are protected.

With many challenges already met and many more on the horizon, the agencies responsible for helping Washington meet the objectives of the Model Toxics Control Act continue to focus and succeed in accomplishing their respective missions, as illustrated in this report.

*Tom Fitzsimmons,* Director Washington State Department of Ecology



## **History of the Toxics Control Account**

The Model Toxics Control Act became law in 1988 with the passing of Initiative 97. The purpose of the Act was to:

Of Clean up contaminated sites;

Improve management of hazardous wastes;

**<sup>3</sup>** Prevent future contamination through pollution prevention.

The Toxics Control Account was created under the Model Toxics Control Act. The primary source of money into the account is through a tax on petroleum products, pesticides, and certain chemicals. This tax is known as the Hazardous Substance Tax.

The Toxics Control Account is divided into two accounts: the State Toxics Control Account and the Local Toxics Control Account. By statute, 47 percent of the tax collected goes into the State Toxics Control Account and 53 percent goes into the Local Toxics Control Account. These percentages do not change. However, there are other sources of money for the State Toxics Control Account. They are cost recovery, Voluntary Cleanup Program fees, fines and penalties, and mixed waste fees.

## The Hazardous Substance Tax

As mentioned earlier, the Hazardous Substance Tax is a tax imposed on petroleum products, pesticides, and certain chemicals. The tax is calculated by taking 0.7 percent or \$7 per \$1,000 of the wholesale value of the hazardous substance. It is imposed on the first in-state possessor of the hazardous substance. There are currently 8,000 different hazardous substances subject to the tax. However, over 85 percent of the money collected is based on petroleum products.

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

Money is continuously collected by the Department of Revenue and deposited into the Toxics Control Account.

> Every **August** of every **even year**, Ecology and other agencies present their budget requests in the Biennial Appropriations Request Report that is submitted to the Office of Financial Management (OFM).

In **December** of every **even year**, the governor releases his/her budget based on agency input and the governor's own preference.

In January of every odd year, the governor's budget is presented to the Legislature. In **August** of every **even year**, the budget process starts all over again.



July of every odd year is the beginning of the new biennium. On this date, the agencies can start spending the money that was appropriated to them by the Legislature.

> The **budget is signed** by the governor and becomes law.

The House and Senate review the governor's **budget**. After reviewing the governor's budget, they both write and pass their own budgets. These budgets then go to a joint conference committee to have any differences between the two budgets resolved. Once a version of the budget is passed by both the House and Senate, it is presented to the governor for approval and signature. If the governor approves and signs the budget, it becomes law.

## **State Toxics Control Account**

The State Toxics Control Account helps fund activities of state agencies. In Fiscal Year 2002, the departments of Ecology, Health, Agriculture, Revenue, and Washington State Patrol received funds from the State Toxics Control Account.

In addition to Hazardous Substance Tax collections, the State Toxics Control Account receives money through the following sources:

**Ocost Recovery:** Ecology recovers the costs it incurs (from liable parties) for actions taken at contaminated sites.

**Fines & Penalties:** Ecology issues fines and penalties to liable parties that do not comply with the law.

**Voluntary Cleanup Program (VCP) Fees:** For a fee, Ecology reviews liable parties' site work plans, sampling plans, cleanup plans, and provides technical assistance.

**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 funds in Fiscal year 2002. Details on how the funds were spent are provided.

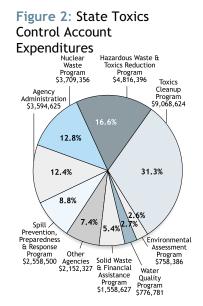
## State Toxics Control Account Revenue

Hazardous Substance Tax	\$21,097,892
Cost Recovery	\$643,339
Fines & Penalties	\$127,536
Voluntary Cleanup Program Fees	\$253,149
Mixed Waste Fees	\$4,356,368
Miscellaneous	\$7,710
Total Revenue	\$26,485,994

 Table 1: Toxics Control Account Revenue

 and Expenditures. Fiscal Year 2002

and Expenditures, Fiscal Year 200	۷	
Toxics Control Account Revenue	Local Toxics	State Toxics
Hazardous Substance Tax	\$24,936,756	\$21,097,892
Cost Recovery		\$643,339
Fines & Penalties		\$127,536
Voluntary Cleanup Program Fees		\$253,149
Mixed Waste Fees		\$4,356,368
Miscellaneous		\$7,710
Total Revenue	\$24,936,756	\$26,485,994
Ecology Expenditures		
Toxics Cleanup Program	\$123,421	\$9,068,624
Hazardous Waste & Toxics Reduction Program	\$81,518	\$4,816,396
Agency Administration, Facility, & Related Costs	\$287,127	\$3,594,625
Nuclear Waste Program		\$3,709,356
Solid Waste & Financial Assistance Program	\$1,175,381	\$1,558,627
Spill Prevention, Preparedness, & Response Program		\$2,558,500
Environmental Assessment Program	\$125,113	\$758,386
Water Quality Program		\$776,781
Total Ecology Expenditures	\$1,792,560	\$26,841,295
Other Agency Expenditures		
Agriculture		\$730,308
Health		\$1,296,007
State Patrol		\$110,424
Revenue		\$15,588
Total All Agency Expenditures	\$1,792,560	\$28,993,622



In Fiscal Year 2002, the Toxics Cleanup Program was appropriated almost 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 its Voluntary Cleanup Program, the Toxics Cleanup Program generated nearly \$900,000 for the State Toxics Control Account.

During Fiscal Year 2002, the Toxics Cleanup Program used State Toxics Control Account funds primarily on:

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;

**③** Providing program support to staff working 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.

What makes these sites high-priority? The answer is the contaminants—the amount, how toxic they are, 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.

There are currently 488 high-priority sites in the state of Washington. The Toxics Cleanup Program cost recovers about 75 percent of the money it spends on these sites.

#### What is the 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 following nine high-priority sites are considered cleaned up and were removed from the Hazardous Sites List during Fiscal Year 2002:

 Table 2: Nine High-Priority Sites Considered Cleaned Up and

 Removed From the Hazardous Sites List During Fiscal Year 2002

		-	
Site	City	County	Rank
Cascade Timber 3 US Oil	Tacoma	Pierce	0*
Buffalo Don Murphy Waller Road	Tacoma	Pierce	1
Geiger SIA Fuel Farm	Spokane	Spokane	1
Inland Empire Plating	Spokane	Spokane	1
Walnut Grove Industrial Park	Vancouver	Clark	1
Washington State University Smith Tract	East Wenatchee	Douglas	1
Cenex Kennewick	Kennewick	Benton	2
Olympic Testing Lab	Quilcene	Jefferson	2
Rayonier Inc.	Hoquiam	Grays Harbor	2

\*0 represents Superfund ranking

#### Figure 3: Known and Suspected Contaminated Sites (as of September 2002)

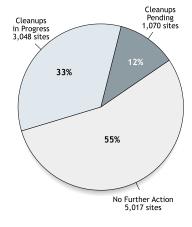




Table 3: 36 High-Priority Sites With a Major Cleanup ActionTaken in Fiscal Year 2002

Taken in Fiscal Teal 2002			
Site	City	County	Rank
Kaiser Aluminum Mead Works	Mead	Spokane	0
Lower Duwamish Waterway	Seattle	King	0
Mica Landfill	Mica	Spokane	0
Pasco Landfill	Pasco	Franklin	0
Shore Terminals LLC	Tacoma	Pierce	0
Sound Battery	Tacoma	Pierce	0
Tacoma Redevelopment Properties	Tacoma	Pierce	0
USN Jackson Park	Bremerton	Kitsap	0
Bee Jay Scales	Sunnyside	Yakima	1
Burlington Northern Othello	Othello	Adams	1
Burlington Northern Railroad Maintenance & Fueling Fac.	Skykomish	King	1
Everett Smelter	Everett	Snohomish	1
Gebber Farms	Brewster	Okanogan	1
Glacier Park Budget Fuel East	Leavenworth	Chelan	1
Industrial Petroleum Distributors	Olympia	Thurston	1
Kenmore Industrial Park	Kenmore	King	1
Manhole 34	Sunnyside	Yakima	1
Norwegian Salmon Industries	Gig Harbor	Pierce	1
Pacific Wood Treating Corp	Ridgefield	Clark	1
South Wilbur Petroleum	Wilbur	Lincoln	1
Tiger Oil	Yakima	Yakima	1
Whatcom Waterway	Bellingham	Whatcom	1
Yakima Valley Spray	Yakima	Yakima	1
Alexander Farms	Grandview	Yakima	2
Bay Chemical	Yakima	Yakima	2
Bingo Fuel Stop	Thorp	Kittitas	2
Burlington Environmental	Tacoma	Pierce	2
Burlington Northern Santa Fe Railway	Spokane	Spokane	2
Cascade Helicopters	Cashmere	Chelan	2
City Parcel	Spokane	Spokane	2
Holly Street Landfill	Bellingham	Whatcom	2
Klickitat Valley Sawmills	Klickitat	Klickitat	2
Port of Vancouver Bldg 2220	Vancouver	Clark	2
Rayonier Port Angeles Pulp Mill	Port Angeles	Clallam	2
Schwerin Concaves Walla Walla	Walla Walla	Walla Walla	2
Wondrack Ellensburg	Ellensburg	Kittitas	2

#### Natural Resource Damage Assessments (NRDA):

A site becomes involved in the NRDA 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 Superfund sites.

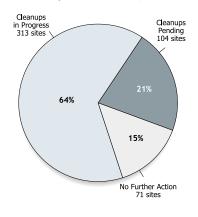
During Fiscal Year 2002, public comment was held for the Draft Allocation Report for the Hylebos Waterway of Commencement Bay. Allocation reports are used to distribute damages at sites where multiple responsible parties exist. The Hylebos Report is unique because nationally, it was the first time public notice was held 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

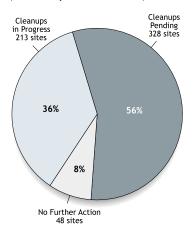
The Toxics Cleanup Program oversees 589 contaminated sites with a state ranking of 3, 4, or 5. Two-hundred and thirteen of these sites are in the cleanup process, and another forty-eight have been cleaned up. In Fiscal Year 2002, 11 lower-priority sites were removed from the Hazardous Sites list.

# Figure 4: Status of Superfund & State Ranked 1 or 2 (as of September 2002)



488 total sites

#### Figure 5: Status of State Ranked 3, 4 or 5 of Sites (as of September 2002)





Former Rainier Brewery Voluntary Cleanup Program site. Soil and ground water at the truck maintenance facility of the former Rainier Brewery were contaminated with diesel and heavy oil range hydrocarbons. The building and petroleum-contaminated soil were removed, and the ground water will be monitored following construction of a new Sound Transit Light Rail Maintenance Base. Although the floating petroleum was skimmed off and some oxygen releasing compound was placed in the excavation before it was refilled with clean soil, further ground water remediation may be required to receive a No Further Action determination from Ecology.

## **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. It allows staff to advise liable parties or prospective purchasers before, during, or after their 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 or company that wants to purchase and redevelop 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.



#### **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 2002, 18 of the 20 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, 1,529 sites have entered the program. Eight-hundred and thirty received a no further action determination, and another 699 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. This includes:
Ensuring that discharge permits adequately address sediment quality to minimize the impact of discharges into our waterways;

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 appropriate places to dispose of dredged material.

Staff is also engaged in ongoing scientific investigations and research to better understand and address contamination in these very unique marine and freshwater environments.

## 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 present conditions of 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 information 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 2002, 116 site hazard assessments were completed. Of those, 60 new sites were added to the states Hazardous Sites List. The remainder received a "No Further Action" decision.

## **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.

# Additional State Toxics Funding for 2001-2003 Biennium

In 2000, crude oil prices were soaring, and the Toxics Control Account was forecasted to be at its highest level since 1989. With that in mind, the Toxics Cleanup Program proposed and received a budget increase of \$12.6 million from the State Toxics Control Account for the 2001-2003 biennium to spend on three initiatives:

- Investigate area-wide contamination problems;
- Meet state Superfund match dollars;
- **6** Reduce the backlog of contaminated sites.

#### **Area-wide Contamination**

Ecology is increasingly finding large areas with low-level soil contamination caused by a range of historical activities. As Washington's population has grown, 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.

Ecology is working with other agencies, organizations, and individuals to develop an effective strategy for addressing this type of widespread soil contamination. In Fiscal Year 2002, the additional funding was used to develop a study-team to:

S Determine the actual size of the contamination problem;

Identify methods for protecting the health of people who live and work in these areas;

<sup>(5)</sup> Ensure the cleanup actions are implemented in a timely manner and in coordination with local agencies.

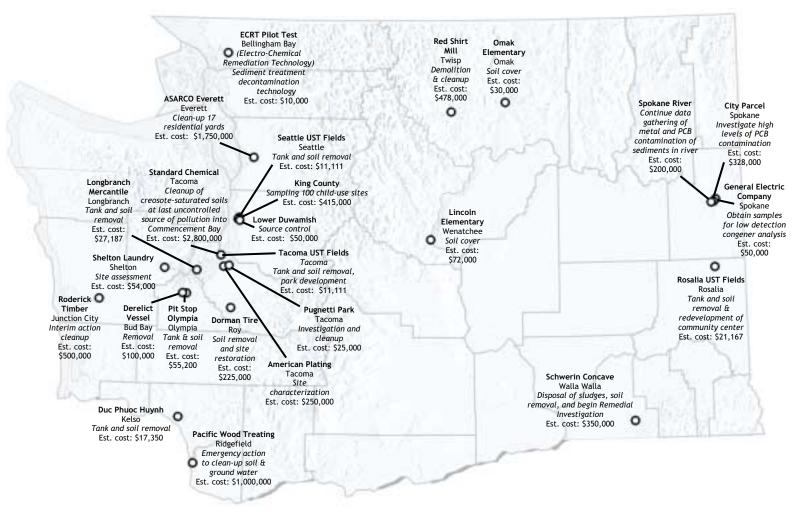
#### **Superfund Match**

Ecology has an agreement with the Environmental Protection Agency (EPA) to pay for (or match) 10 percent of the costs EPA spends on Superfund cleanups and 100 percent of the operation and maintenance costs associated with these cleanups. This biennium, State Toxics dollars will be used to meet those obligations.

#### **Reduce the Backlog of Contaminated Sites** (Clean Sites Initiative)

Dollars from the clean sites fund (\$9.4 million) are being used to clean-up 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 dollars to work on. Starting in Fiscal Year 2002, the Toxics Cleanup Program contracted with environmental consulting firms to begin the cleanup work at these sites. Staff from the Toxics Cleanup Program is overseeing the work. (*See map below*.)

#### Figure 6: Sites Cleaned Up by the Clean Sites Initiative



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 1,513 visits.

Staff also provides on-site technical assistance, employee training, vendor workshops, and peer exchanges and training through its Cleaner Product Challenge. This is a non-enforcement program designed to help companies in the aerospace parts and plating and circuit board manufacturing industries reduce the amount of water they use, wastewater they produce, and hazardous waste they generate. Those who participate receive special recognition from Ecology. Those who meet their pollution prevention goal are eligible for state awards. Last year, 59 facilities participated in the program.

### **Providing Technical Assistance on Hazardous Waste-Derived Fertilizers**

During Fiscal Year 2002, staff worked with the Department of Agriculture to review over 240 fertilizer products for compliance with state standards. Staff also provided one-on-one technical assistance to fertilizer manufacturers and the general public. In addition, improvements were made to the Fertilizer Database to provide better assistance and information to fertilizer consumers. It is available on Ecology's Web Site at *http://www.ecy.wa.gov/programs/hwtr/publications.html.* 

#### **Promoting Pollution Prevention**

It is a state law that businesses that produce more than 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 671 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 2002, the program issued eight hazardous waste enforcement actions totaling \$372,000.

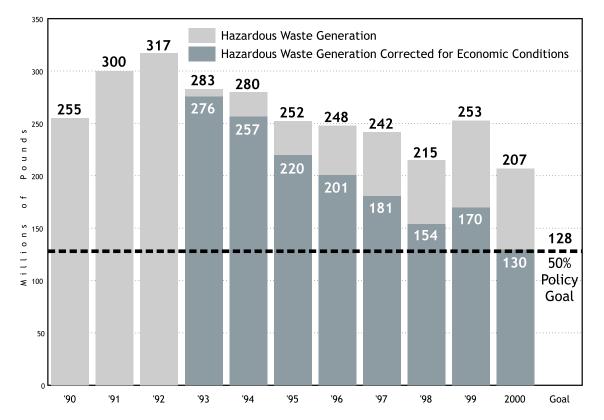
#### **Permitting Facilities that Treat, Store, or Dispose of Hazardous Waste**

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 2002, staff modified 10 existing permits.

#### 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 2002, on average, the 19 high priority sites the program manages advanced from 52 percent complete to 58 percent complete. In terms of the four-step cleanup process, this means that nearly three-quarter of the high-priority sites are in the third step of cleanup.

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.

#### Making Common Sense Hazardous Waste Management Decisions

Through a directive from the 2001 Legislature, the Hazardous Waste and Toxics Reduction Program assessed the state and federal requirements that apply to facilities that manage hazardous wastes. The Legislature prompted this action because recent closure of several facilities led to substantial economic liabilities for public agencies, former customers, and property owners.

Through its assessment, the program found significant problems and risks associated with the current system in-place and prepared a report based on its findings. The report includes options and recommendations to reduce long-term liability and to move 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 2002, staff responded to more than 16,749 telephone calls on hazardous waste issues, conducted 71 workshops on safe waste management and pollution prevention that were attended by 2,443 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 7,000 businesses, hazardous substance use and storage data from 3,013 businesses, and pollution prevention planning data from 671 businesses. Data is also collected from about 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 directed environmental studies of toxic pollutants in priority waterbodies and technical review and investigations dealing with toxic chemical contamination of marine and freshwater aquatic organisms and sediments. Staff also conducts 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 in Fiscal Year 2002 include:

<sup>(5)</sup> Monthly monitoring at selected freshwater sites across the state on the 1998 303(d) list that were impaired due to metals. Data collected indicated all of the sites could be removed from the list, because water quality standards had been achieved.

Monitoring for pesticides in Padden Creek (Bellingham), cranberry-growing areas along the Washington Coast, and Mission Creek (Wenatchee River tributary). The results of these studies should lead to improved management practices that will reduce pesticide levels in these streams.

<sup>(2)</sup> 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. More information about the project is available at *www.ecy.gov/programs/eap/toxics/index.html*.

## **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 2002, 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:

S 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;

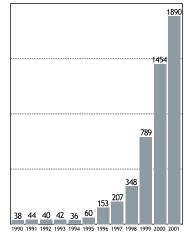
Education and public information staff provide primary leadership in environmental education, community outreach, public involvement, and media relations;

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.



Environmental Assessment Program staff prepares to lower a grab sampler to collect sediments from Lake Whatcom.

#### Figure 8: Statewide Reported Drug Labs

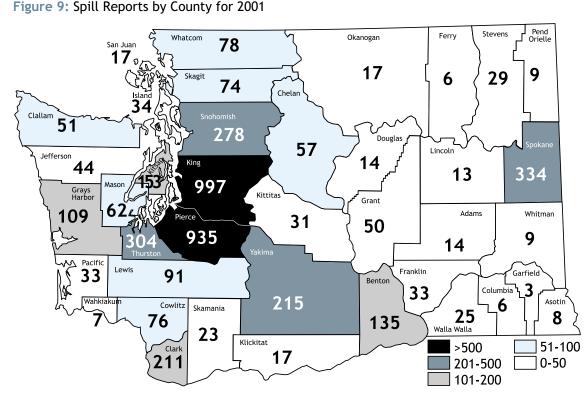


## **Department of Ecology:** Spill Prevention, Preparedness and Response Program

The Spill Prevention, Preparedness and Response Program responds to oil and hazardous substance spills. This involves ensuring cleanup of orphan spills where the owner is bankrupt, unable to locate, or nonexistent; acting as on-scene coordinator; investigating and providing technical assistance or issuing enforcement actions when appropriate; participating in drills; and working closely with federal spill programs. Emergency cleanup at hazardous waste sites and drug labs are included in this activity. Cost recovery is pursued whenever a responsible party is identified.

In 2000, the Spills Program received reports of 4,602 spills in Washington. Staff conducted 4,047 field responses to cleanup and investigate spills.

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#### **Drug Lab Activity**

The Spills Program uses State Toxics Control Account funds for handling and disposing of hazardous wastes found at drug sites. The number of drug labs and abandoned dumpsites in Washington State has risen consistently and dramatically for several years. However, in 2002 there was a slight decrease. Ecology responders statewide saw drug labs reach 963 in the first six months of 2002, compared to 1,041 for the same time period in 2001. The Spills Program is working hard to reduce and control the costs associated with drug lab activity.

## **Department of Ecology:** Solid Waste & 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 2002, the program provided professional engineering and hydrogeology support to local health departments. This included:

<sup>(3)</sup> *Providing training*. Staff organized, funded, and presented a ground water statistics modeling class for local health districts. Staff also organized and facilitated a "Management of Landfill Operations" training and an 8-hour refresher class oriented towards moderate-risk waste for local solid waste managers in eastern Washington.

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.

<sup>(5)</sup> Environmental protection through technical assistance. Staff researched and analyzed ground water contamination and gas migration problems associated with arid landfill design and provided technical assistance to a growing number of local governments facing these issues. Staff also assisted Okanogan County in evaluating solid waste management options, developing operational strategies, and complying with the landfill's local-use permit.

Addressing emerging issues. Staff actively facilitate and support public-private partnerships in developing composting facilities and in introducing anaerobic digestion technology. 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.

<sup>(5)</sup> 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 state's 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, and Horn Rapids Landfill in Richland.

## **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 (EPA), 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, EPA, local governments, and industry also contribute funding for this cooperative project.

#### **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.

#### Water Quality Standards for Toxics

Staff provides technical support in the development 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 intraagency committee that is developing Ecology's strategy on persistent bioaccumulative toxic chemicals and the interagency marine toxics work group.

#### **Implementation of Surface Water Quality Standards for Toxics**

This project provides technical support for the remediation of ground and surface waters contaminated by the disposal of contaminated waste. Water quality staff has worked on a team to design cleanup procedures and evaluate future testing protocols to determine potential impacts of contaminated waste on ground and surface water quality.

#### **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 (TMDLs) on the Yakima River. A fecal coliform TMDL is under development for the Granger Drain.

#### **Stormwater Program**

The Clean Water Act and state law require 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:

Orvide 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. 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's health from exposure to toxic substances released into the environment. The following is a brief description of some of the agency's accomplishments in Fiscal Year 2002.

#### **Great Western Malting Company Cancer Cluster Investigation**

The Department assisted with an investigation after a complaint was received expressing concern over an unusually high number of Great Western Malting employees with cancer. Using statistical analysis, staff determined the number of cancers identified among employees at the plant was no greater than what would be expected given ages, work histories, and state cancer rates. Staff met with employees to explain the results of the investigation and to address their concerns.

#### Area-wide Contamination: Assessment of Statewide Cancer Data

Staff analyzed patterns of lung and bladder cancer rates statewide to partially address citizen and legislator concerns and questions regarding the health impacts of widespread arsenic concentrations in soils. Their results revealed that many regions had statistically higher and lower cancer rates than the state average. However, there was no pattern to demonstrate a relationship between cancer rates and proximity to the former Asarco Smelter in Ruston.

### **Other Cluster Investigations**

Staff conducted several cancer and pediatric illness cluster investigations. This included evaluating reported cancer cases in adults and neurological illnesses in children, along with possible environmental factors – such as proximity of cases to known hazardous waste sites. To complete their investigations, staff reviewed drinking water chemistry data from wells within the vicinity of the cancer cases and evaluated the spatial relationship of the reported cancers and possible contributing factors using geographic information systems (GIS). The results were summarized in Health Consultation reports.

## Cle Elum Indoor Air Quality Health Investigation

Due to widespread complaints of air quality problems and reported symptoms among students at Roslyn High School in Cle Elum, staff provided technical support to a coalition of local residents to conduct a survey of students from the school. A similar survey was conducted in Ellensburg to act as a comparison group. Generally, much larger proportions of students in Cle Elum reported experiencing a wide-range of health symptoms.

# **Cancer Data Evaluation for Exposure to Emission from Vermiculite Processing**

In the wake of the discovery of significant asbestos contamination in and around Libby, Montana, the Department was contacted by the Agency for Toxic Substances and Disease Registry (ATSDR) to identify all vermiculite processing plants in Washington State. They identified one vermiculite processing plant in Spokane that had been in operation until 1974.

As part of the investigation, staff compiled statistics on all diagnoses and deaths due to a number of specific cancers associated with asbestos exposure. ATSDR is combining the data with similar data from other sites to assess whether there appears to be any excess risk to the general population.

#### Study of Nitrate and Methemoglobin Levels in Infants

Staff continued to provide epidemiological support to a study of nitrate exposures among infants in the Columbia Basin and the relationship between nitrate exposure and methemoglobin levels in those infants. Data collection was completed at the end of September 2002 and is currently under analysis.

#### Lower Duwamish Waterway Health Assessment

The Department released a public health assessment of the Lower Duwamish Waterway concluding that consumption of shellfish, crab, crab hepatopancreas, resident fish from the Lower Duwamish Waterway, and rockfish from nearby Elliott Bay pose some health risk for frequent consumers. In addition, staff provided more specific consumption limits for resident fish in the Lower Duwamish Waterway and rockfish in Elliott Bay and provided warning to crab consumers not to eat the hepatopancreas.

Staff conducted an extensive community outreach campaign in preparation of the public health assessment. Various outreach approaches were instrumental in gathering health concerns and feedback from nine different ethnic groups in the South Park and Georgetown communities.



#### Development of Environmental Health Tracking Network

The Department hosted a multi-agency meeting to discuss current collaborative efforts between the departments of Ecology and Health for data sharing and technology development to support development of an environmental public health tracking network.

Staff prepared a proposal for a pilot program to improve the ability to link environmental contamination data, particularly persistent bioaccumulative toxics, to adverse health outcomes—with a focus on birth defects. These efforts lead to the receipt of federal funding to further develop an environmental health tracking network.

#### **Development of Environmental Health Chapters** for "The Health of Washington State"

The report "The Health of Washington State" depicts the current public health status and disease trends among Washington's population. In 2002, staff developed environmental health indicators for the report and served as the primary authors of chapters that addressed overviews of environmental health issues. The report is available on the Internet at: *www.doh.wa.gov/HWS/default.htm*.

#### **Aquatic Herbicides**

Staff responded to inquiries from the Department of Ecology on the use of aquatic herbicides for controlling aquatic and wetland invasive plant species. Staff also reviewed specific permit applications for aquatic herbicide use in lakes and commented on Ecology's development of a five-year general aquatic herbicide permit.

The Department continues to serve on an interagency committee to provide technical assistance and oversight in the development of a Supplemental Environmental Impact Statement on aquatic herbicides for use in controlling plants. A major task has been reviewing Ecology's multi-volume risk assessments of the herbicide, diquat. As part of the review process, staff provided detailed technical information on human health toxicity for aquatic herbicides.

Lower Duwamish Waterway

#### **Cadet Manufacturing Health Assessment**

The departments of Ecology and Health are working with Cadet Manufacturing Inc. in Vancouver to determine if residents living adjacent to the contaminated site are being exposed to contaminants moving from ground water into the indoor air of homes.

Staff evaluated soil vapor extraction and ground water monitoring data, and conducted limited modeling to estimate indoor air quality of residential homes. Their analysis indicated little health risk to residents but recommended more indoor air sampling to better evaluate the potential exposure. As a follow-up, air from 32 properties was sampled. From this data, staff determined there is no immediate health hazard.

Staff is currently preparing a health consultation to further evaluate this and more recent sampling data and will provide any necessary recommendation to reduce or eliminate exposure.

#### **Alder Mill Health Consultation**

Samples taken from several private drinking water wells near the Alder Mill in Twisp revealed the water was unsafe to drink. The Department worked with the community, Ecology, the Okanogan Health District, and the EPA to identify ways to provide clean water to affected households.

#### **Philip Services Health Assessment**

The Philips Services facility, located in the Georgetown area of Seattle, treated and stored industrial and household hazardous wastes. The soil and ground water at and around the facility is contaminated from leaking underground storage tanks and other releases and underlies a large residential, commercial, and industrial area. The departments of Health, Ecology, and the EPA are concerned about volatile organic compounds dissolving in shallow ground water and moving up through the soil.

Results from indoor sampling indicate there are low levels of volatile organic compounds that are not an immediate health concern. Additional data is needed to evaluate whether unsafe indoor air levels occur as ground water contaminants continue to move from the Philip Services site toward the Duwamish River.

#### **Tacoma Smelter Plume**

Soil in many areas of King and Pierce counties is contaminated with arsenic and lead due to past emissions from the former Asarco Smelter in Ruston. Since the emissions were spread over several 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.

Staff has worked closely with Ecology, Public Health-Seattle and King County, and the Tacoma-Pierce County Health Department to assess the health hazard, plan further investigations of the contamination, and develop health information to help those people living and working in areas understand the potential hazards and how to reduce their risk.

#### Soil Contamination in Schoolyards in Central and Eastern Washington

Soil samples taken from schoolyards in central and eastern Washington have shown elevated concentrations of lead or arsenic. These samples were taken from schoolyards that may have been built on former orchards lands where lead arsenate pesticides were used.

The Department has been working with Ecology and local health districts to advise the schools on how to develop measures to reduce the children's exposure to the contamination and to provide information to parents about associated health issues.

#### Area-wide Soil Contamination Task Force

It is estimated that several hundred square miles of land in Washington has been contaminated with lead and arsenic from emissions from smelters and from pesticides applied to agricultural lands.

To address area-wide contamination issues, the departments of Health, Ecology, Agriculture, and Community Trade and Economic Development formed a task force to develop recommendations to address low-to-moderate arsenic and lead soil contamination. Their specific goals are to develop procedures to determine the extent of the problem, develop guidelines for reducing people's exposure to the contamination, and identify institutional measures and funding resources to facilitate exposure-reduction activities.

#### Yale Lake

The Department received a request from Cowlitz County Health Department to evaluate fish in Yale Lake (the site of a transformer oil spill). Based on screening level contaminant data and information from a site visit, staff recommended that two fish species should be analyzed for polychlorinated biphenyls (PCBs). The analysis was subsequently performed and the resulting data indicated that both fish species had relatively low levels of PCBs and were safe to consume. The Department is continuing to work with Ecology to develop future PCB sampling plans.

#### Lake Chelan

The Department is evaluating fish tissue collected from Lake Chelan. The insecticide, DDT, was detected in lake fish in a screening survey conducted by the EPA. Preliminary results indicate that these concentrations are among the highest in the United States.

Currently, the Department does not know the extent of the contamination, what other species may be contaminated, or the spatial or geographical trend of possible contamination in the lake. Until further sampling data is obtained, the Department is working with Ecology, EPA, Chelan-Douglas Health District, and community groups to develop a sampling plan and a plan on how to provide information to the public about risk to human health from fish consumption.

#### Walla Walla River

The Department worked with Ecology to develop a sampling plan to address possible fish contamination in the Walla Walla River. Staff is currently reviewing fish tissue for possible human health implications.

#### **Okanogan River**

Staff met with Ecology, EPA, and the Okanogan Health Department to discuss concerns over elevated levels of PCBs and DDT in fish from the Okanogan River. Staff is currently evaluating the contaminant levels for possible human health implications.

#### **Bellingham Bay**

Staff began reviewing available data on fish and shellfish/crab taken from Bellingham Bay in 2002. Their next step is to propose a sampling plan to further address data gaps from the bay and healthcare concerns of the community.

#### **Ostrich Bay Shellfish Sampling**

Staff responded to a request by the Suquamish Tribe to assist them in preparing a shellfish sampling plan for Ostrich Bay within Dyes Inlet. The goal was to quantify selected chemical and metal concentrations in specific clam species to determine whether they were safe for tribal harvest and consumption.

Staff reviewed historical shellfish and sediment chemistry data, conducted a field investigation, and presented their sampling recommendations in a report to the Tribe.

#### **Polychlorinated Biphenyls (PCBs)**

For the past decade, the Washington State Department of Fish and Wildlife has collected data on PCBs in Puget Sound rockfish, English sole, and Coho and Chinook salmon. Based on this data and PCB congener data collected from fish from selected sites, the Department was asked to determine if there is any human health threat from consuming Puget Sound fish. The Department is currently developing a human health critical value for total PCBs and is assessing the data collected.

#### **Statewide Mercury Advisory**

In 2001, the Department issued its first statewide Fish Consumption Advisory for several commercially available fish, including canned tuna, because these fish contained levels of methyl mercury that can impact human health. In 2002, outreach and education materials were developed and efforts were made to inform health practitioners and those groups at risk, including low-income women of childbearing age.



The insecticide, DDT, was used to control insects on agricultural crops and insects that carry diseases like malaria and typhus. After 1972, the use of DDT was no longer permitted in the United States, except in cases of a public health emergency.

#### **Indoor** Air

Staff provided approximately 3,000 indoor air phone consultations this year and conducted 24 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.

Last year, staff participated in health assessments of indoor air problems at two schools. The Artondale Elementary School in the Gig Harbor School District and the Cle Elum-Roslyn High School both had histories of indoor air problems that resulted in adverse health complaints.

## **Chemical Monitoring in Drinking Water**

Staff continues to monitor drinking water for inorganic, volatile, or synthetic substances. Last year, many larger water systems were found to be in compliance with drinking water standards and as a result, 70 percent had their frequency of chemical sampling reduced.

Staff requested additional arsenic sampling of drinking water to determine baseline estimates and to ensure that levels were in compliance with the new EPA standard of 10 parts per billion. Under the new rules for arsenic testing, more sensitive analytical methods are required.

#### Drug Labs

Cleaning up contaminated properties continues to be a priority. Working with the departments of Ecology, Labor and Industries, and local health jurisdictions, staff developed remediation guidelines for septic tanks, asbestos abatement, and handling and disposing dangerous wastes from drug labs.

In addition, staff conducted four decontamination certification trainings and certifications were issued to 23 contractors, 31 supervisors, and 91 workers. The departments of Health and Ecology also collaborated to establish accreditation for analytical laboratories to be certified for methamphetamine analysis from wipe samples. Washington is the only state to have this type of accreditation.

Narcotics Enforcement Agents collect evidence from drug lab site.



## **Department of Agriculture**

## Waste Pesticide Identification and Disposal Program

The Department of Agriculture's Waste Pesticide Identification and Disposal Program has two primary goals:

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;

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.

Unusable pesticides are collected at two types of events: *regional* and *special site*. The majority of pesticides are collected at regional events.



Regional 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 mails 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 location 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 customers if brought to a regional event.

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 DDT, are "land ban" chemicals and are prohibited from disposal at a hazardous waste landfill.

A record amount of 162,565 pounds was collected and properly disposed during the 2002 fiscal year. The next highest amounts were 141,487 pounds in 2001, 138,490 pounds in 1999, and 120,292 pounds in 2000.

As of June 2002, the Waste Pesticide Identification and Disposal Program collected and properly disposed of over 220,000 pounds of Dinoseb, DDT, Endrin and Parathion alone. Through the years, the program has collected 1,312,341 pounds of unusable pesticides from 4,276 customers.

Special precautions are taken when disposing of calcium cyanide. Protective clothing, face and eye shields, and breathing protection are required. Other states that have implemented similar programs are also finding that a tremendous amount of old pesticides remain in storage. In addition to rural areas, old pesticides are being found in suburban locations, as housing developments expand into traditional agricultural areas.

#### **Endangered Species Program**

The Washington State Department of Agriculture's Endangered Species Program was created to ensure that pesticide use does not cause harm to or "take" of species listed for protection under 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 primary mechanism the Department will use to minimize harm or take of listed salmonids is to identify and subsequently reduce the transport of pesticides to aquatic habitats in Washington State.

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.



A hazardous waste contractor sorts through unusable pesticides collected at regional disposal site.

Table 4	: Waste	Pesticide	Disposal	Projects	Performed	bv ۱	WDSA	Fiscal	Year	2002

posal Projects Pe	erformed by	WDSA FISCa	al Year 2002	
When	Customers	Pounds	Disposal Cost	Per Pound
7/17/01	2	3,102	\$7,512.41	\$2.42
7/18/01	12	2,841	\$7,133.37	\$2.51
7/19/01	18	6,525	\$11,076.57	\$1.70
8/20/01	7	3,251	\$6,933.00	\$2.13
8/21/01	9	3,110	\$7,004.96	\$2.25
8/22/01	2	593	\$2,434.63	\$4.11
8/23/01	14	3,421	\$7,209.01	\$2.11
9/18/01	20	11,216	\$18,365.35	\$1.64
9/20/01	11	3,249	\$9,200.00	\$2.83
10/16/01	12	9,453	\$14,732.34	\$1.56
10/18/01	19	5,836	\$10,784.48	\$1.85
3/19/02	16	7,798	\$13,560.86	\$1.74
3/20/02	20	13,774	\$23,415.61	\$1.70
3/21/02	20	9,746	\$14,898.11	\$1.53
4/22/02	5	1,087	\$5,277.30	\$4.85
4/23/02	18	13,533	\$19,204.36	\$1.42
4/24/02	17	8,022	\$13,048.80	\$1.63
4/25/02	21	8,848	\$13,895.09	\$1.57
05/20 & 21/02	50	13,210	\$20,589.59	\$1.56
5/22/02	21	5,384	\$10,318.44	\$1.92
5/23/02	14	8,711	\$14,119.82	\$1.62
6/18/02	12	2,293	\$6,436.85	\$2.81
6/19/02	14	1,439	\$5,673.90	\$3.94
6/20/02	25	5,377	\$10,339.42	\$1.92
6/21/02	11	1,596	\$5,531.26	\$3.47
25 events	390	153,415	\$278,695.53	\$1.82
8/22/01	1	87	\$1,028.33	\$11.82
9/19/01	1	198	\$1,587.90	\$8.02
10/15/01	10	5,201	\$10,307.20	\$1.98
10/17/01	4	2,447	\$6,526.03	\$2.67
3/20/02	1	801	\$991.05	\$1.24
3/21/02	1	86	\$1,938.00	\$22.53
5/7/02	1	330	\$3,310.00	\$10.03
7 events	19	9,150	\$25,688.51	\$2.81
32 events	409	162,565	\$304,384.04	\$1.87
	When           7/17/01           7/17/01           7/18/01           7/19/01           8/20/01           8/21/01           8/22/01           8/23/01           9/18/01           9/20/01           10/16/01           10/18/01           3/19/02           3/20/02           3/21/02           4/22/02           4/22/02           4/25/02           05/20 & 21/02           5/22/02           5/22/02           6/18/02           6/18/02           6/19/02           6/20/02           6/21/02           25 events           8/22/01           9/19/01           10/15/01           10/15/01           3/20/02           3/21/02           5/7/02           5/7/02	When         Customers           7/17/01         2           7/18/01         12           7/19/01         18           8/20/01         7           8/21/01         9           8/22/01         2           8/23/01         14           9/18/01         20           9/18/01         20           9/20/01         11           10/16/01         12           10/18/01         19           3/19/02         16           3/20/02         20           3/21/02         20           4/22/02         5           4/23/02         18           4/24/02         17           4/25/02         21           05/20 & 21/02         50           5/22/02         21           5/23/02         14           6/18/02         12           6/19/02         14           6/20/02         25           6/21/02         11           25 events         390           8/22/01         1           9/19/01         1           10/15/01         10           10/17/01         4 <td>WhenCustomersPounds<math>7/17/01</math>2<math>3,102</math><math>7/18/01</math>12<math>2,841</math><math>7/19/01</math>18<math>6,525</math><math>8/20/01</math>7<math>3,251</math><math>8/21/01</math>9<math>3,110</math><math>8/22/01</math>2<math>593</math><math>8/23/01</math>14<math>3,421</math><math>9/18/01</math>20<math>11,216</math><math>9/20/01</math>11<math>3,249</math><math>10/16/01</math>12<math>9,453</math><math>10/18/01</math>19<math>5,836</math><math>3/19/02</math>16<math>7,798</math><math>3/20/02</math>20<math>13,774</math><math>3/21/02</math>20<math>9,746</math><math>4/22/02</math>5<math>1,087</math><math>4/23/02</math>18<math>13,533</math><math>4/24/02</math>17<math>8,022</math><math>4/25/02</math>21<math>8,848</math><math>05/20</math> &amp; <math>21/02</math>50<math>13,210</math><math>5/22/02</math>14<math>8,711</math><math>6/18/02</math>12<math>2,293</math><math>6/19/02</math>14<math>1,439</math><math>6/20/02</math>25<math>5,377</math><math>6/21/02</math>11<math>1,596</math><math>25</math> events<math>390</math><math>153,415</math><math>8/22/01</math>1<math>87</math><math>9/19/01</math>1<math>198</math><math>10/15/01</math>10<math>5,201</math><math>10/17/01</math><math>4</math><math>2,447</math><math>3/20/02</math>1<math>801</math><math>3/21/02</math>1<math>86</math><math>5/7/02</math>1<math>330</math><math>7</math> events<math>19</math><math>9,150</math></td> <td>7/17/012<math>3,102</math><math>\$7,512.41</math><math>7/18/01</math>12<math>2,841</math><math>\$7,133.37</math><math>7/19/01</math>18<math>6,525</math><math>\$11,076.57</math><math>8/20/01</math>7<math>3,251</math><math>\$6,933.00</math><math>8/21/01</math>9<math>3,110</math><math>\$7,004.96</math><math>8/22/01</math>2<math>593</math><math>\$2,434.63</math><math>8/23/01</math>14<math>3,421</math><math>\$7,209.01</math><math>9/18/01</math>20<math>11,216</math><math>\$18,365.35</math><math>9/20/01</math>11<math>3,249</math><math>\$9,200.00</math><math>10/16/01</math>12<math>9,453</math><math>\$14,732.34</math><math>10/18/01</math>19<math>\$,836</math><math>\$10,784.48</math><math>3/19/02</math>16<math>7,798</math><math>\$13,560.86</math><math>3/20/02</math>20<math>13,774</math><math>\$23,415.61</math><math>3/21/02</math>20<math>9,746</math><math>\$14,898.11</math><math>4/22/02</math>5<math>1,087</math><math>\$5,277.30</math><math>4/23/02</math>18<math>13,533</math><math>\$19,204.36</math><math>4/24/02</math>17<math>8,022</math><math>\$13,048.80</math><math>4/25/02</math>21<math>8,848</math><math>\$13,895.09</math><math>05/20</math><math>\$21/02</math>50<math>13,210</math><math>\$20,589.59</math><math>5/22/02</math>21<math>\$,384</math><math>\$10,318.44</math><math>5/23/02</math>14<math>8,711</math><math>\$14,119.82</math><math>6/18/02</math>12<math>\$2,293</math><math>\$6,436.85</math><math>6/19/02</math>14<math>1,439</math><math>\$5,673.90</math><math>6/20/02</math>25<math>\$3,777</math><math>\$10,339.42</math><math>6/21/02</math>11<math>198</math><math>\$1,587.90</math><math>10/15/01</math>10<math>\$5,201</math><math>\$10,307.20</math><math>10/17/01</math>4<math>\$2,447</math><math>\$6,526.03</math><td< td=""></td<></td>	WhenCustomersPounds $7/17/01$ 2 $3,102$ $7/18/01$ 12 $2,841$ $7/19/01$ 18 $6,525$ $8/20/01$ 7 $3,251$ $8/21/01$ 9 $3,110$ $8/22/01$ 2 $593$ $8/23/01$ 14 $3,421$ $9/18/01$ 20 $11,216$ $9/20/01$ 11 $3,249$ $10/16/01$ 12 $9,453$ $10/18/01$ 19 $5,836$ $3/19/02$ 16 $7,798$ $3/20/02$ 20 $13,774$ $3/21/02$ 20 $9,746$ $4/22/02$ 5 $1,087$ $4/23/02$ 18 $13,533$ $4/24/02$ 17 $8,022$ $4/25/02$ 21 $8,848$ $05/20$ & $21/02$ 50 $13,210$ $5/22/02$ 14 $8,711$ $6/18/02$ 12 $2,293$ $6/19/02$ 14 $1,439$ $6/20/02$ 25 $5,377$ $6/21/02$ 11 $1,596$ $25$ events $390$ $153,415$ $8/22/01$ 1 $87$ $9/19/01$ 1 $198$ $10/15/01$ 10 $5,201$ $10/17/01$ $4$ $2,447$ $3/20/02$ 1 $801$ $3/21/02$ 1 $86$ $5/7/02$ 1 $330$ $7$ events $19$ $9,150$	7/17/012 $3,102$ $$7,512.41$ $7/18/01$ 12 $2,841$ $$7,133.37$ $7/19/01$ 18 $6,525$ $$11,076.57$ $8/20/01$ 7 $3,251$ $$6,933.00$ $8/21/01$ 9 $3,110$ $$7,004.96$ $8/22/01$ 2 $593$ $$2,434.63$ $8/23/01$ 14 $3,421$ $$7,209.01$ $9/18/01$ 20 $11,216$ $$18,365.35$ $9/20/01$ 11 $3,249$ $$9,200.00$ $10/16/01$ 12 $9,453$ $$14,732.34$ $10/18/01$ 19 $$,836$ $$10,784.48$ $3/19/02$ 16 $7,798$ $$13,560.86$ $3/20/02$ 20 $13,774$ $$23,415.61$ $3/21/02$ 20 $9,746$ $$14,898.11$ $4/22/02$ 5 $1,087$ $$5,277.30$ $4/23/02$ 18 $13,533$ $$19,204.36$ $4/24/02$ 17 $8,022$ $$13,048.80$ $4/25/02$ 21 $8,848$ $$13,895.09$ $05/20$ $$21/02$ 50 $13,210$ $$20,589.59$ $5/22/02$ 21 $$,384$ $$10,318.44$ $5/23/02$ 14 $8,711$ $$14,119.82$ $6/18/02$ 12 $$2,293$ $$6,436.85$ $6/19/02$ 14 $1,439$ $$5,673.90$ $6/20/02$ 25 $$3,777$ $$10,339.42$ $6/21/02$ 11 $198$ $$1,587.90$ $10/15/01$ 10 $$5,201$ $$10,307.20$ $10/17/01$ 4 $$2,447$ $$6,526.03$ <td< td=""></td<>

\* 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 2002 was approximately 397 pounds. Since the program began in 1988 and up until June 30, 2002, it collected and properly disposed of

1,312,341 pounds of pesticides from 4,276 customers.

The average amount collected per customer for the entire program (1988 - June 2002) is approximately 307 pounds.

#### **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, dealers, aerial applicators, growers, lawn care, and public facilities at the user and dealer level.

This position works to carry out the Department's Chemigation Fertigation Technical Assistance Program. 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 12,000 and less than 20 percent 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 9,500 federally registered pesticide products distributed in Washington. In addition, it is responsible for the review and approval/denial of the following:

1. Special local needs (SLN) 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.

## 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 staff, equipment, and consumables required to deliver live-fire training in the following areas:

✤ 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.

S *Level* 2 provides additional tactical and fire-ground training and experience with problems involving flammable liquids. The course provides live-fire training using a simulated fuel-loading dock, fuel under pressure (broken flange), and a bulk fuel storage container.

#### **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.

#### Liquid Petroleum Gas (LPG)

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

#### Hazardous Material Training (HazMat)

The Hazardous Materials Training program is designed to include academic and hands-on training for first responders to meet the current WISHA, OSHA, DOT, and NFPA requirements. In addition, it is an invaluable tool in providing training scenarios for 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.

#### **Marine Firefighting**

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

Additional instruction, such as incident command, using self-contained breathing apparatus, and search and rescue is also provided. This training is vital to ensure minimum loss of life and property to all citizens throughout the state of Washington.

#### **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.

### **Airport Rescue Firefighting**

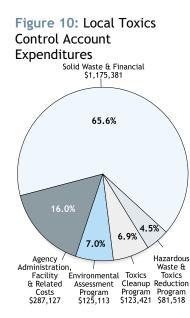
This unique training prop was constructed to provide hands-on live firefighting training for aircraft incidents. This training experience enhances the public safety of all flight operations in and out of airports in the state.

Students use water and foam to extinguish fire in a simulated aircraft.



## **Department of Revenue**

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



#### Local Toxics Control Account Revenue

Local Toxics Control Account Revenue Total \$24,936,756

#### Local Toxics Expenditures

Toxics Cleanup Program	\$123,421
Hazardous Waste & Toxics Reduction Program	\$81,518
Agency Administration	\$287,127
Solid Waste & Financial Assistance Program	\$1,175,381
Environmental Assessment Program	\$125,113
Total All Agency Expenditures	\$1,792,560

## **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.

#### **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.

In Fiscal Year 2001, changes to the application process and timing of the grant awards delayed issuance of new grants until Fiscal Year 2002. Due to these changes, the grant program now awards grants for one or two years. All Hazardous Substance Release Site grants are written for a biennium (two years). The Pollution Prevention Education/Technical Assistance grants may be written for one or two years.

In Fiscal Year 2002, a total of 24 grants were awarded. Sixteen were Hazardous Substance Release Site grants, and eight were Pollution Prevention Education/Technical Assistance grants.

The following grants were awarded:

Association of Bainbridge Communities – follow-up grant for the Vincent Road Landfill cleanup for "wrap-up" of the final cleanup phase of the site.

Automotive Recyclers of Washington – held seminars to discuss best management practices for hazardous waste and stormwater for cleaning up wrecking yards; educated recyclers about new regulatory changes pertaining to mercury issues.

Brackett's Landing Foundation – educated the community on the progress of the Unocal Edmonds cleanup and encouraged community involvement.

Citizens for a Healthy Bay – advocated for the most protective cleanup of Commencement Bay. If Clark Co HW Citizens Task Force – educated 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.

<sup>(3)</sup> *Columbia Riverkeeper* – educated and motivated the public to become active participants in the Hanford cleanup process, especially as it impacts the Columbia River.

<sup>(3)</sup> Community Services Work Group – prepared and implemented outreach activities for waste reduction and recycling on Earth Day.

Invironment Group of Klickitat – educated and led the community through the cleanup process at the old Champion International Sawmill site.

Georgetown Crime Prevention & Community Council – provided information and guidance for community oversight on the cleanup at the Philips Environmental site.

Interpretent the second students on the importance of protecting the Columbia River from contamination from leaking underground storage tanks at the Hanford Reservation.

<sup>(5)</sup> *Heart of America Northwest* – worked with regulators and United States Department of Energy to define a process for public involvement and decision making.

Island Remediation & Public Participation Center – acted as clearinghouse and source of information on the Vashon/Maury Island cleanup.

Methow Conservancy – promoted, advertised, and educated the residents of the Methow Valley about the new recycling center. Nisqually Delta Association – educated and guided the community of DuPont on the Model Toxics Control Act cleanup process and encouraged responsible land-use planning in the community.

• *NW Everett Neighborhood Association* – educated and led the community through the investigation and cleanup of residential properties around the former Everett Smelter site.

#### Table 5: Public Participation Grants

Recipient	Grant	Total	Local Toxics	State Toxics
	Number		Control Account	
Assoc of Bainbridge Communities	G0200061	3,000		3,000
Automotive Recyclers of Washington	G0200004	25,000	25,000	
Brackett's Landing Foundation	G0200012	75,000	75,000	
Citizens for a Healthy Bay	G0200006	30,000	30,000	
Clark Co HW Citizens Task Force	G0200084	20,000		20,000
Columbia Riverkeeper	G0200009	60,000	60,000	
Community Services Work Group	G0200001	2,500	2,500	
Environment Group of Klickitat	G0200007	25,000	25,000	
Georgetown CP&C Council	G0200079	50,000		50,000
Hanford Information Network	G0200059	19,000	19,000	
Heart of America Northwest	G0200013	50,000	50,000	
Island Remediation &	G0200065	50,000		50,000
Public Participation Center				
Lake Roosevelt Forum	G0200062	15,500		15,500
Methow Conservancy	G0200003	5,000	5,000	
Nisqually Delta Association	G0200005	20,000	20,000	
NW Everett Neighborhood Association	G0200008	40,000	40,000	
Olympic Environmental Council	G0200016	40,000	40,000	
People for Puget Sound	G0200070	60,000		60,000
Puget Soundkeeper Alliance	G0200002	28,000	28,000	
Skykomish Environmental Coalition	G0200015	25,000	25,000	
Wa Citizens Advisory Committee	G0200078	50,000		50,000
Wa Physicians for Social Responsibility	G0200010	15,000	15,000	
Wa State Recycling Association	G0200035	17,000	17,000	
Wa Toxics Coalition	G0200024	25,000	25,000	
Total Public Participation Grants		\$750,000	\$501,500	\$248,500

• Olympic Environmental Council – educated Port Angeles residents on the cleanup process for the Rayonier Mill site and the monitoring of local landfills.

People for Puget Sound – provided information and guidance for community oversight on the Duwamish River cleanup site.

Puget Soundkeeper Alliance – initiated/facilitated meetings and discussions with Clallam, Jefferson, Island, and Skagit counties with the EnviroStar Cooperative to identify needs/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 3 of three-year pilot project with Puget Sound Clean Air Agency and auto body shops.

Skykomish Environmental Coalition – educated the community and sought involvement in the cleanup process at the Burlington Northern Santa Fe site.

## Table 6: Waste Management Activities Funded by the Coordinated Prevention Grants Program for 2002-2003

Activity	Total	% of Total
Household Hazardous Waste Collection and Disposal	\$5,704,989	33%
Waste Reduction and Recycling-Activities	\$5,180,233	30%
Solid Waste Enforcement	\$3,204,546	18%
Waste Reduction and Recycling-Capital	\$1,115,234	6%
Small Quantity Generator Implementation	\$1,084,830	6%
Household Hazardous Waste Implementation	\$780,689	5%
Solid Waste Planning	\$177,654	1%
Moderate Risk Waste—Capital	\$139,214	.8%
Hazardous Waste Planning and Education	\$32,513	.2%
Total	\$17,419,902	100%

WA Citizens Advisory Committee – provided information to Spokane residents on the cleanup process of the Spokane River/Coeur D'Alene area.

• *WA Physicians for Social Responsibility* – focused on educating the public on Hanford issues from a medical perspective.

WA State Recycling Association – held 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* – provided up-to-date healthcare information on how to protect residents of the state and the environment from toxins. The focus was 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 help prevent pollution from improper management and disposal of solid waste and moderate risk waste. Local governments must apply and meet eligibility requirements to receive the grants. They must also provide a cash match of 25 percent of the total eligible costs of their project.

The grant program runs on a two-year cycle, with Fiscal Year 2002 being the first year of the current cycle. During Fiscal Year 2002, a total of \$17,419,902 was awarded for new grants, allowing \$23,225,599 in costs to be leveraged by local governments who provide 25 percent of their costs.

In addition to the regular coordinated prevention grants, nearly \$2,000,000 was awarded to 22 local governments for pilot projects on sustainability. This is defined as waste reduction, pollution prevention, materials reuse, and energy or resource conversation.

#### Table 7: Coordinated Prevention Grants

Recipient	Grant Number	Total Project Cost	L.T.C.A. Amount
Adams Co Health Dist	G0200185	85,333	64,000
Adams Co Public Works	G0200199	156,607	117,455
Algona City of	G0200132	5,132	3,849
Arlington City of	G0200126	15,425	11,569
Asotin Co	G0200204	166,464	124,848
Asotin Co HD	G0200203	86,800	65,100
Bellevue City of	G0200151	90,756	68,067
Benton Co Solid Waste	G0200232	457,944	343,458
Benton-Franklin Health Dist	G0200171	200,000	150,000
Black Diamond City of	G0200133	7,435	5,576
Bothell City of	G0200240	44,177	33,133
Bremerton-Kitsap Co Health District	G0200157	387,133	290,350
Chelan Co Solid Waste	G0200195	276,589	207,442
Chelan-Douglas Health Dist	G0200159	230,000	172,500
Clallam Co Environmental Health	G0200173	133,333	100,000
Clallam Co Environmental Health	G0200174	169,600	127,200
Clallam Co Public Works	G0200149	40,000	30,000
Clark Co Public Works	G0200147	992,682	744,512
Columbia Co Health Dist	G0200186	4,000	3,000
Covington City of	G0200134	22,363	16,772
Cowlitz Co Dept of Bldg & Planning	G0200237	133,333	100,000
Cowlitz Co Public Works	G0200237	261,340	196,005
Douglas Co Solid Waste	G0200243	195,275	146,457
Duvall City of	G0200107	28,052	21,039
Edmonds City of	G0200247	51,142	38,357
Enumclaw City of	G0200130	18,321	13,741
Everett City of	G0200133	118,324	88,743
Federal Way City of	G0200127 G0200192	128,803	96,602
Ferry Co Public Works	G0200192 G0200200	118,672	89,002
Franklin Co Public Works	G0200200 G0200189	235,305	176,478
			,
Garfield Co HD	G0200206	12,800	9,600
Garfield Co Public Works	G0200221	85,350	64,013
Grant Co Health Dist	G0200184	133,333	100,000
Grant Co Public Works	G0200201	295,912	221,934
Grays Harbor Environmental Health	G0200164	133,333	100,000
Grays Harbor Utilities & Development	G0200167	277,972	208,479
Island Co Health Dept	G0200176	133,333	100,000
Island Co Solid Waste	G0200163	288,404	216,303
Issaquah City of	G0200220	21,011	15,758
Jefferson Co Health	G0200224	133,333	100,000
Jefferson Co Health	G0200225	53,333	40,000
Jefferson Co Public Works	G0200148	139,045	104,284
Kelso City of	G0200214	28,667	21,500
Kenmore City of	G0200136	29,884	22,413
Kent City of	G0200155	112,447	84,335
King Co Solid Waste	G0200219	854,256	640,692
Kirkland City of	G0200143	70,880	53,160
Kitsap Co Public Works	G0200128	551,426	413,570
Kittitas Co Health Dept	G0200160	66,667	50,000
Kittitas Co Public Works	G0200170	197,091	147,818

Recipient	Grant Number P	Total Project Cost	L.T.C.A. Amount
Klickitat Co Solid Waste	G0200194	163,141	122,356
Lake Forest Park City of	G0200217	21,329	15,997
Lewis Co	G0200236	281,333	211,000
Lewis Co Health	G0200234	86,666	65,000
Lincoln Co Health Dept	G0200183	36,923	27,692
Lincoln Co Public Works	G0200190	141,680	106,260
Longview City of	G0200242	49,535	37,151
Lynnwood City of	G0200131	43,776	32,832
Maple Valley City of	G0200137	23,503	17,627
Mason Co Health	G0200223	202,672	152,004
Mason Co Utilities and Waste Mgmt	G0200252	168,777	126,583
Monroe City of	G0200139	47,016	35,262
Newcastle City of	G0200138	13,208	9,906
Normandy Park City of	G0200141	60,764	45,573
Northeast TriCounty HD	G0200188	100,725	75,544
Okanogan Co Health District	G0200193	133,000	99,750
Okanogan Co Public Works	G0200162	211,917	158,938
Pacific City of	G0200140	9,508	7,131
Pacific Co DCD	G0200166	182,165	136,624
Pacific Co Environmental Health	G0200147	133,333	100,000
Pend Oreille Co Public Works	G0200250	145,380	109,035
Pierce Co Public Works	G0200246	1,037,390	778,042
Port Angeles City of	G0200150	61,450	46,088
Redmond City of	G0200165	46,500	34,875
Renton Solid Waste Utility	G0200255	79,040	59,280
Sammamish City of	G0200175	53,847	40,385
San Juan Co Health	G0200202	80,000	60,000
San Juan Co Public Works	G0200129	217,654	163,240
SeaTac City of	G0200154	39,897	29,923
Seattle Public Utilities	G0200216	975,753	732,565
Seattle-King Co HD	G0200230	206,667	155,000
Seattle-King Co HD	G0200231	1,494,501	1,120,876
Shelton City of	G0200196	66,667	50,000
Shoreline City of	G0200218	71,428	53,571
Skagit Co Health Dept	G0200158	146,667	110,000
Skagit Co Public Works	G0200172	363,522	272,641
Skamania Co Solid Waste	G0200233	141,000	105,700
Skykomish Town of	G0200144	1,660	1,245
Snohomish Co Health	G0200177	324,000	243,000
Snohomish Co Solid Waste	G0200248	1,234,834	926,125
Spokane Regiona Solid Waste System	G0200251	1,191,487	893,615
Spokane Regional Health District	G0200182	186,667	140,000
Stevens Co Public Works	G0200102	228,117	171,088
SW Washington HD	G0200244	106,667	80,000
Tacoma City of	G0200245	488,707	366,530
Tacoma-Pierce Co HD	G0200245	266,661	199,996
Tacoma-Pierce Co HD	G0200237 G0200247	266,667	200,000
Thurston Co Health	G0200247 G0200254	233,333	175,000
Thurston Co Public Health			
Thurston Co Public Health Thurston Co Water & Waste Mgmt	G0200198	333,192	249,894
murston to water a waste mgmt	G0200197	306,525	229,894

Recipient	Grant Number	Total Project Cost	L.T.C.A. Amount
Tukwila City of	G0200215	27,515	20,636
Wahkiakum Co Health	G0200235	17,146	12,860
Walla Walla Co Health Dept	G0200187	30,000	22,500
Walla Walla Regional Planning	G0200191	376,300	282,225
Whatcom County	G0200156	676,130	507,098
Whitman Co HD	G0200205	100,000	75,000
Whitman Co Public Works	G0200222	214,728	161,046
Woodinville City of	G0200142	15,328	11,496
Yakima Co Public Works	G0200168	649,451	487,088
Yakima Health Dist	G0200161	133,333	100,000
Total Coordinated Prevention Grants:		\$23,225,599	\$17,419,902

## **Coordinated Prevention Grants -**Pilot Projects

Recipient	Grant Number	Total Project Cost	L.T.C.A. Amount
Asotin Co Health	G0200380	18,350	13,762
Bellevue City of	G0200353	246,667	185,000
Chelan-Douglas HD	G0300034	31,333	23,500
Clallam Co Environmental Health	G0200345	50,000	37,500
Clark Co	G0200351	43,751	32,813
Clark Co	G0200352	23,667	17,750
Grant Co Public Works	G0200371	19,625	14,719
Grays Harbor Public Utilities	G0200348	4,111	3,083
King Co Solid Waste Division	G0200342	118,933	89,200
Kitsap Co Public Works	G0200357	14,667	11,000
Kittitas Co Solid Waste	G0200374	37,009	27,757
Lincoln Co Public Works	G0200382	38,500	28,875
Okanogan Co Public Works	G0200373	10,000	7,500
Richland City of	G0200372	18,667	14,000
San Juan Public Works	G0200356	581,313	435,985
Seattle Public Utilities	G0200355	119,067	89,300
Snohomish Co	G0200354	118,467	88,850
Tacoma City of	G0200349	152,239	114,179
Tacoma City of	G0200350	25,000	18,750
Tacoma City of	G0200385	43,750	32,812
Thurston Co Environmental Health	G0200344	23,450	17,587
Thurston Co Environmental Health	G0200346	37,440	28,080
Thurston Co Water & Waste Mgmt	G0200343	15,000	11,250
Thurston Co Water & Waste Mgmt	G0200347	2,870	2,153
Twisp Town of	G0200386	63,464	47,598
Walla Walla Regional Planning	G0200381	639,584	479,688
Yakima Co Public Works	G0200378	80,000	60,000
Yakima Co Public Works	G0200379	20,000	15,000
Yakima Co Public Works	G0200383	37,333	28,000
Yakima Co Public Works	G0200384	26,667	20,000
Total CPG-Pilot Projects		\$2,660,924	\$1,995,691

## **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 are provided to local governments each biennium.

In 2001, Ecology pursued and received \$18.5 million in additional supplemental funding for Fiscal Year 2002. These dollars were used to provide funding to projects that originally received only partial funding last year and to new requests for financial assistance. It includes the following:

Twelve local governments received grants to study and remediate 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;

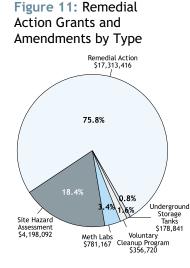
Six local governments received grants to conduct independent cleanups at publicly-owned sites and enter the Voluntary Cleanup Program;

The Port of Ridgefield received a loan to pay theirpercent grant match.

\$5,188,664 was awarded as amendments to existing projects.

#### Table 8: Remedial Action Grants

Table 6. Refficulat Action Gra	103		
Remedial Action Grants Recipients	Grant Number	Total Project Cost	Local Toxics Control Account Amount
Bremerton-Kitsap Co Health Dist	G0200011	240,000	240,000
Centralia City of	G0200369	12,926	9,695
Centralia City of	G0200370	169,200	126,900
Chelan Co Public Works	G0200123	300,000	150,000
Chelan-Douglas HD	G0200256	79,600	79,600
Clallam Co Dept of Community Development	G0200284	90,000	90,000
Everett City of	G0200099	1,358,144	679,072
Grandview School District	G0200363	77,597	58,198
Grays Harbor Co	G0200265	15,000	15,000
Hoquiam City of	G0200257	130,644	97,983
Hoquiam School District	G0200303	18,481	13,861
Island County Health Dept	G0200037	80,000	80,000
Kitsap County	G0200100	3,978,518	2,586,036
Lewis Co HD	G0200307	90,000	90,000
Lewis County	G0200145	597,334	448,000
Lincoln County	G0200322	240,000	120,000
Museum Development Authority	G0200111	1,228,200	614,100
Public Health Seattle-King Co	G0200101	1,551,057	1,551,057
Ridgefield Port of - grant	G0200088	7,408,474	4,815,508
Ridgefield Port of - loan	L0200001	2,592,966	2,592,966
Seattle City of	G0200290	200,000	100,000
Seattle Dept of Parks & Recreation	G0200261	1,487,210	743,605
Seattle Port of	G0200213	1,000,000	500,000
Seattle School District	G0200305	132,208	66,104
Seattle School District	G0200306	149,009	74,505
Snohomish Co HD	G0200267	250,000	205,000
Sno-Isle Regional Library System	G0200323	200,000	100,000
Spokane Regional Health District	G0200066	200,000	200,000
SW Washington HD	G0200285	107,000	107,000
Tacoma City of	G0200146	45,319	22,660
Thurston Co	G0200304	4,499	2,250
Thurston Co Public Health	G0200027	421,472	421,472
Whatcom Co Health	G0200122	128,000	128,000
Yakima City of	G0200336	668,000	511,000
Totals		\$25,250,858	\$17,639,572



## **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

Hazardous Waste and Toxics Reduction staff worked with the Department of Agriculture to review 235 fertilizer products for compliance with state standards. This review process requires a great deal of one-on-one technical assistance with fertilizer manufacturers, as well as laboratories conducting the required testing. Technical assistance is also provided to the general public on fertilizer products through phone calls and a web site that allows citizens to research fertilizer data based on product name, manufacturer, or waste used in the product. In addition, information to be disseminated to generators of wood ash on the liabilities of using wood ash as a soil amendment or fertilizer was prepared during this time frame.

## **Department of Ecology:** Environmental Assessment Program

Many of the directed studies undertaken by the Environmental Assessment Program are conducted in support of clients in other agency programs. During Fiscal Year 2002, 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:

A cooperative effort with the Whatcom County Health Department and the U.S. Geological Survey to evaluate sources and trends in mercury accumulation in Lake Whatcom and the surrounding area;

The B&L Landfill Arsenic Study to determine if arsenic is migrating offsite and evaluate potential impacts in an adjacent wetland;

A study evaluating metals and PCB contamination in fish tissue in Long Lake (Spokane River). Editor: *Sherrie Minnick* Layout Design: *Tom Leonard* 

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