



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

# **Model Toxics Control Accounts**

## **Annual Report**

### **Fiscal Year 2012**

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July 2013  
Publication No. 12-09-237

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Toxics Cleanup Program  
Washington State Department of Ecology  
Olympia, Washington 98504-7600

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## Message from the Director

Welcome to our Fiscal Year 2012 report on funds collected and disbursed under authority and direction of the Model Toxics Control Act (MTCA), Washington's hazardous waste cleanup law.

This report provides examples of how the Department of Ecology partnered with business and industry, tribes and local governments, and other state agencies to take care of Washington's environment. It showcases the ways our partnerships put resources and people to work sustaining Washington's environment.

When it comes to environmental protection, the old adage *an ounce of prevention is worth a pound of cure* could be restated as *an ounce of prevention is worth tons of cure*. Ecology removed tons of contaminants from our environment, at great expense, where chemical pollution long resided. When Washington voters passed MTCA in 1988, they recognized the value of preventing pollution from reaching and harming our environment. MTCA's original framework dedicated funding to three purposes: toxic pollution prevention, hazardous and solid waste management, and toxic cleanup. This report of how MTCA funds have been allocated and spent reflects the original intent of MTCA.

Moving forward, MTCA-generated funding will focus on:

- Continuing cleanups as an effective tool—removing toxic contaminants reduces exposure to hazards that would otherwise threaten people, wildlife, and the food chain.
- Supporting local governments' plan-and-build projects that prevent polluted stormwater from flowing into our precious waters, including our fresh water systems such as rivers, lakes, or coulees; and our marine water bays, harbors, straits, and the Puget Sound.
- Working with manufacturers to identify less-toxic ingredients, to analyze systems and adopt processes that use fewer raw materials, and to find profitable uses for manufacturing by-products.
- Promoting materials reuse; improving waste collection, disposal, and recycling methods; and creating programs to address emerging problems (e.g., electronic wastes, drugs disposal).

Between July 1, 2011, and June 30, 2012, (the state's fiscal year), MTCA funds strengthened collaborations serving Ecology's mission, and other state agencies. We designed, adopted, and applied hazardous chemical action plans to minimize exposures within our borders. We collected and disposed of stockpiles and containers that held banned pesticides. We continued working to restore and protect Puget Sound. We taught first responders how to control oil spills. We extended our partnerships to leverage funding designated for local governments. And together, we achieved environmental goals that also support jobs and community priorities.

These efforts promise a healthier environment for our people, our economy, and our way of life.

A handwritten signature in black ink that reads "Maia D. Bellon". The signature is fluid and cursive, with a long horizontal line extending to the right.

Maia D. Bellon, Director

## **Introduction**

### **Ecology's Mission**

The mission of the Department of Ecology (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.

### **Model Toxics Control Act**

In 1988, Washington voters passed Initiative 97, the Model Toxics Control Act (MTCA). The act cites its main purpose as raising "sufficient funds to clean up all hazardous waste sites and to prevent the creation of future hazards due to improper disposal of toxic wastes into the state's lands and waters." To do this work, voters authorized a tax on hazardous materials, including petroleum products, pesticides, and some chemicals. MTCA anticipated the need to respond to new threats from toxic materials. It dedicated the funding raised by the tax to a broad range of toxic pollution prevention, hazardous and solid waste management, water and environmental health protection and monitoring, and toxic cleanup purposes.

### **Purpose of This Report**

Each year, the law requires Ecology to provide the Legislature and public with an accounting of activities supported by appropriations from the State Toxics Control Account (STCA) and Local Toxics Control Account (LTCA) (RCW 70.105D.030(4)(e)). The MTCA Annual Report must include information on:

- Known hazardous waste sites and their hazard rankings.
- Actions taken and planned at each site.
- Ecology's work to meet its toxic and solid waste management priorities.
- A summary of all funds expended.

This report highlights environmental efforts and goals attained by Ecology and other state agencies, with funding from MTCA's Toxics Control Accounts. The period of review is Fiscal Year 2012 (July 1, 2011 through June 30, 2012). This report outlines:

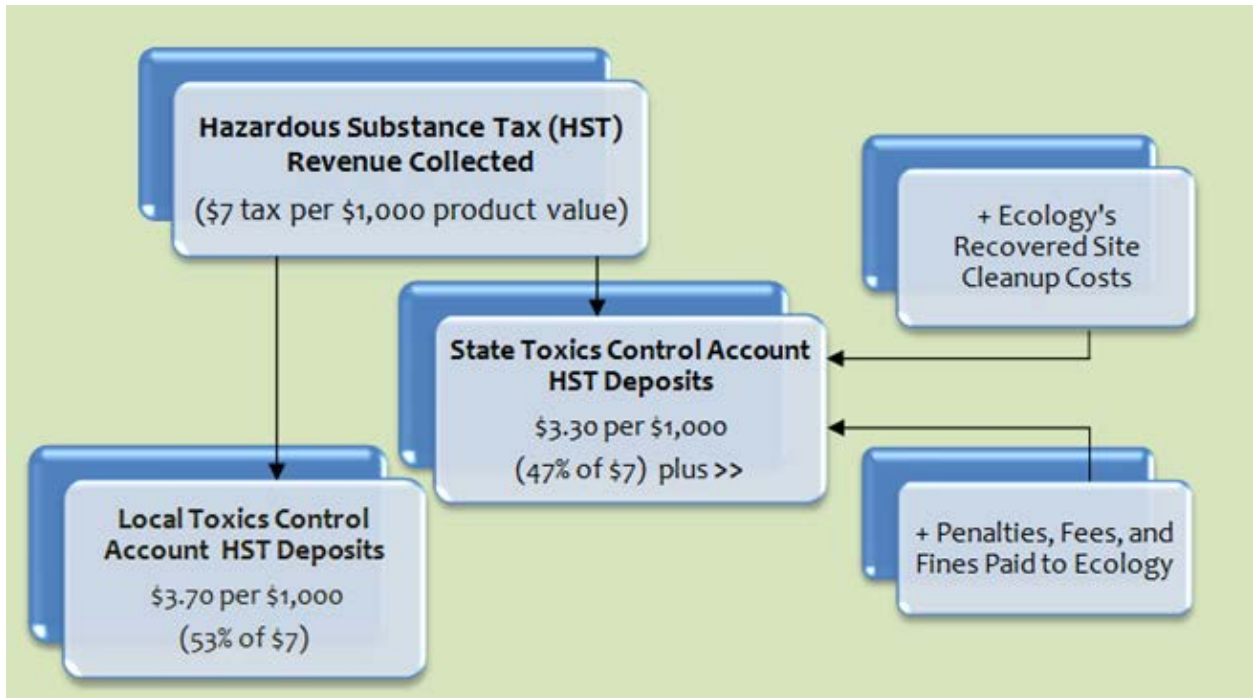
- The amount of revenue generated and distributed.
- State agencies' programs that received MTCA appropriations.
- Results obtained through expenditure of the MTCA funding.

The MTCA Annual Report has been published since 1986. Previous reports can be found here:

[http://www.ecy.wa.gov/programs/tcp/MTCA\\_AnnualReport/annualRpt.html](http://www.ecy.wa.gov/programs/tcp/MTCA_AnnualReport/annualRpt.html)

# Toxics Control Accounts – Revenue Streams

Figure 1: Primary Source of Revenue



## Hazardous Substance Tax

The Department of Revenue collects payments of the Hazardous Substance Tax (HST) for deposit into the Toxics Control Accounts. First possession in our state of petroleum products, pesticides, and certain chemicals is taxed at the rate of 0.70 percent of the wholesale value of this class of hazardous substances (\$7 tax per \$1,000 product value). More than 85 percent of the revenue deposited to the Toxics Control Accounts comes from payments of the HST.

## Mixed Waste Fees

Ecology obtains permit fees from one Hanford site and from several non-Hanford businesses that collect, transport, or dispose of mixed wastes (combinations of hazardous wastes with radiation-exposed wastes).

## Cost Recovery

Ecology recovers the costs of conducting or overseeing cleanup actions conducted under the terms of a formal Decree or Order, or of evaluating reports of independent site cleanup actions. Charges for Ecology's professional staff services are billed at a fully loaded hourly rate, as defined by rule.

## Fines and Penalties

Ecology issues fines and imposes penalties when parties knowingly fail to comply with our state's environmental protection or cleanup laws.

## Miscellaneous

Revenue collected that does not fit into any of the above designations is deposited into a “miscellaneous” category.

## The Toxics Control Accounts

### Revenue Deposits – Fiscal Year 2012

State Toxics Control Account		Local Toxics Control Account	
Hazardous Substance Tax	\$99,989,000	Hazardous Substance Tax	\$110,750,000
Operating Transfers In	15,000,000	Miscellaneous	15,000
Mixed Waste Fees	4,917,000	<b>Operating Transfers Out</b>	<b>-\$15,000,000</b>
Cost Recovery	4,887,000	<b>Tax Refunds</b>	<b>-\$8,276,000</b>
Fines & Penalties	166,000	<b>Total Funds</b>	<b>\$ 87,489,000</b>
Miscellaneous	159,000		
<b>Tax Refunds</b>	<b>-7,427,000</b>		
<b>Total Funds</b>	<b>\$117,691,000</b>		

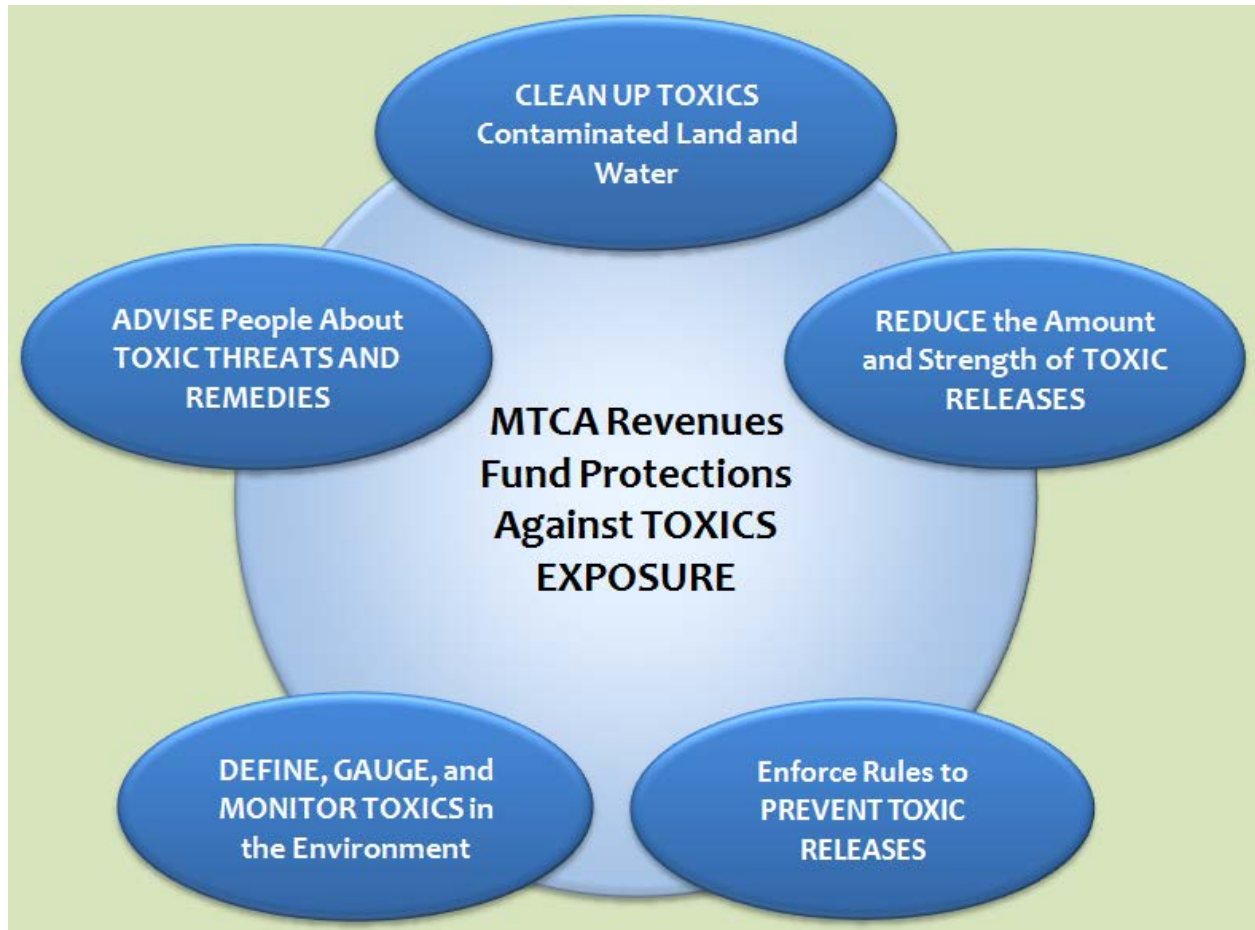
## Funds Appropriated

The Legislature appropriates the Toxics Control Accounts to state agencies through the biennial budget process. During the 2011-13 biennium, the Legislature appropriated operating and capital funds to a number of state agencies. Those with operating expenditures in Fiscal Year 2012 include Ecology and the Departments of Agriculture, Revenue, and Health; Puget Sound Partnership, and Washington State Patrol. Capital funds were spent by Ecology, Washington State University – Spokane, Department of Fish and Wildlife, and University of Washington-Tacoma.

## Confronting Toxic Threats, Toxics Control Accounts Support

The Toxics Control Accounts support specific environmental restoration and protection work. See Figure 2, Primary Benefits of MTCA.

**Figure 2: Primary Benefits of MTCA**



### **Purpose of the Toxics Control Accounts**

Washingtonians built a strong framework and entrusted government with supporting resources to protect our environment and quality of life. The integrity of that framework sustains our communities and families, our economy and businesses, and our natural environment. These three dimensions are interconnected and interdependent. When all three are healthy, Washingtonians thrive; but if we allow environmental quality to falter, our communities and our businesses struggle.

In 1970, Governor Dan Evans called a special session of the Legislature to concentrate on passing environmental legislation. One outcome of that special session was the creation of the Department of Ecology. Composed of previously separate but sometimes overlapping public entities, it was the first agency of its kind in the United States—even preceding the U.S. Environmental Protection Agency (EPA).

Since then, Washington’s government and its people have passed laws to maintain and improve our state’s environmental health. MTCA made one long-term investment toward those goals when it set up the Toxics Control Accounts as funding sources dedicated to supporting environmental cleanup work, toxic pollution prevention projects, and hazardous and solid waste management activities.

**Table 1: State Toxics Control Account Expenditures by Ecology<sup>1</sup>**

Ecology Programs	Operating		Capital
	Total STCA	Subject to GF-S Shift: <sup>1</sup>	
<b>Agency Administration Program</b> Provided statewide support through executive leadership, governmental relations, communications, HR, financial, IT, and facility services.	\$7,365,000	Yes	\$52,000
<b>Air Quality Program</b> Identified and reduced health threats from toxic air pollutants, especially diesel fuel emissions and wood stove smoke particulates.	\$3,656,000	Yes	\$0
<b>Environmental Assessment Program</b> Provided objective, scientifically valid information about existing environmental conditions.	\$3,974,000	Yes	\$0
<b>Hazardous Waste &amp; Toxics Reduction</b> Fostered reductions of toxic wastes generated and hazardous substances used and ensured safe management of hazardous substances.	\$ 6,364,000		\$261,000
<b>Nuclear Waste Program</b> Oversaw nuclear waste cleanup at the greater U.S. Hanford Site, and regulated mixed waste.	\$5,073,000		\$0
<b>Shorelands and Environmental Assistance</b> Reviewed plans and published dredging projects guidance to avoid creating new contamination and started Puget Sound restoration projects.	\$3,312,000	Yes	\$199,000
<b>Spill Prevention, Preparedness &amp; Response</b> Responded to and cleaned up oil and hazardous materials spills; removed public health/environmental threats posed by meth labs.	\$6,036,000		\$0
<b>Toxics Cleanup Program</b> Managed and oversaw contaminated site cleanup at priority locales statewide.	\$14,622,000		\$8,983,000
<b>Waste 2 Resources Program</b> Ensured safe management and disposal of solid waste, reduced uses of persistent bioaccumulative toxics, and regulation of the state's largest industrial facilities.	3,296,000		\$545,000
<b>Water Quality Program</b> Reduced toxic storm water flow into our state's fresh and marine water resources.	\$3,951,000	Yes	\$11,026,000
<b>Total Ecology's Fiscal Year 2012 Expenditures</b>	<b>\$57,649,000</b>		<b>\$21,066,000</b>

<sup>1</sup> The descriptions in this table define the normal work funded from the STCA. In the 2012 supplemental budget, the Legislature required a \$20.1 million one-time fund shift of expenditures in the 2011-13 biennium from the General Fund-State (GF-S) to the STCA. Program activities that were shifted and are normally funded by GF-S are described in detail in this report. See sections titled *Activities Shifted by the Legislature from GF-S to STCA*.



**Table 2: State Toxics Control Account Expenditures by Other State Agencies<sup>2</sup>**

<b>Other State Agencies</b>	<b>Operating</b>	<b>Capital</b>
<b>Department of Agriculture*</b> Held regional collection events that removed hazardous waste sources (e.g., banned pesticides, containers) from farms, ranches, or nurseries.	\$2,555,000	\$0
<b>Department of Fish &amp; Wildlife*</b> Puget Sound general investigation; nearshore habitat restoration project plans, engineering analysis, and document files.	\$0	\$142,000
<b>Department of Health</b> Studied toxics in our food chain and published fish consumption (limits); assessed chemical exposures from consumer goods and air pollutants.	\$1,538,000	\$0
<b>Puget Sound Partnership</b> Published ways to reduce storm water runoff hazards, respond to spills.	\$287,000	\$0
<b>Department of Revenue</b> Collected Chapter 82.21 RCW (Hazardous Substance Tax) payments.	\$44,000	\$0
<b>University of Washington*</b> Soil cleanup projects on the UW-Tacoma campus sites.	\$0	\$42,000
<b>Washington State Patrol Fire Training Academy</b> Protected training grounds, conserved water, offered special training.	\$235,000	\$0
<b>Washington State University*</b> Removed contaminated soil and ash from a lined containment cell located at the Biomedical and Health Sciences Building in Spokane.	\$0	\$1,150,000
<b>Total Other State Agencies' Fiscal Year 2012 Expenditures</b>	<b>\$4,659,000</b>	<b>1,334,000</b>

<sup>2</sup> Most State Toxics Control Account funding supports operations of specified programs by the recipient state agencies. The three agencies marked with an asterisk (\*), however, received funding that paid certain costs of actual cleanup activities or purchase of cleanup-related equipment.

**Table 3: Local Toxics Control Account Expenditures by Ecology – Primarily Pass Through Grants to Local Governments**

<b>Ecology Programs</b>	<b>Operating</b>	<b>Capital</b>
<b>Air Quality Program</b> Identified and reduced health threats from toxic air pollutants, especially diesel fuel emissions and wood stove smoke particulates.	\$0	\$2,426,000
<b>Hazardous Waste &amp; Toxics Reduction Program</b> Provided local government positions in Puget Sound and Spokane River areas to make technical assistance visits that help small businesses comply with hazardous waste and stormwater control laws.	\$1,110,000	\$0
<b>Shorelands &amp; Environmental Assistance Program</b> Funding to local governments to help support comprehensive updates of Shoreline Master Programs. Updates are scheduled to be completed by December 2015.	\$2,236,000	\$0
<b>Toxics Cleanup Program</b> Provided technical assistance to local governments that conducted priority site cleanup projects using Remedial Action Grant funding. <i>(NOTE: The Remedial Action Grants are paid and accounted for within the Waste 2 Resources Program Capital Budget.)</i>	\$601,000	\$0
<b>Waste 2 Resources Program</b> Technical assistance to local governments to ensure proper management and disposal of solid waste, the proper cleanup of hazardous waste sites, and proper implementation of grant-funded programs.	\$1,645,000	\$25,727,000
<b>Water Quality Program</b> Provided technical and grants management support to local entities.	\$1,977,000	\$3,186,000
<b>Agency Administration Program</b> Provided statewide support through executive leadership, governmental relations, communications, HR, financial, IT, and facility services.	\$433,000	\$118,000
<b>Total Ecology's Fiscal Year 2012 Expenditures</b>	<b>\$8,002,00</b>	<b>\$31,457,000</b>

## Part 1: Ecology's Fiscal Year 2012 Expenditure Summary, State Toxics Control Account

### Ecology and the State Toxics Control Account

Ecology was created in 1970 in recognition that population growth places a need on all segments of our society to plan, coordinate, restore, and regulate our natural resources. Ecology would strive to protect and conserve our clean air, pure and abundant waters, and the natural beauty of our state.

Ecology is committed to protecting both humans and the environment from pollution, to restoring and preserving ecosystems that sustain life, and to meeting human needs without destroying environmental resources and functions.

### State Toxics Control Account Supports Specific Environmental Work

MTCA's declaration of policy is:

- *Each person has a fundamental and inalienable right to a healthful environment, and each person has a responsibility to preserve and enhance that right. The beneficial stewardship of the land, air, and waters of the state is a solemn obligation of the present generation for the benefit of future generations.*
- *A healthful environment is now threatened by irresponsible use and disposal of hazardous substances. There are hundreds of hazardous waste sites in this state, and more will be created if current waste practices continue. Hazardous waste sites threaten the state's water resources, including those used for public drinking water. Many of our municipal landfills are current or potential hazardous waste sites and present serious threats to human health and the environment. The cost of eliminating these threats, in many cases, is beyond the financial means of local governments and ratepayers. The main purpose of Chapter 2, Laws of 1989, is to raise sufficient funds to clean up all hazardous waste sites and to prevent the creation of future sites due to improper disposal of toxic wastes into the state's land and waters.*
- *Many farmers and small business owners who have followed the law with respect to their uses of pesticides and other chemicals may nonetheless face devastating economic consequences because their uses have contaminated the environment or water supplies of their neighbors. With a source of funds, the state may assist these farmers and business owners, as well as those persons who sustain damages, such as the loss of their drinking water supplies, as a result of the contamination.*
- *It is in the public's interest to efficiently use our finite land base, to integrate our land use planning policies with our clean-up policies, and to clean up and reuse contaminated industrial properties in order to minimize industrial development pressures on undeveloped land and to make clean land available for future social use.*
- *Because it is often difficult or impossible to allocate responsibility among persons liable for hazardous waste sites, and because it is essential that sites be cleaned up well and expeditiously, each responsible person should be liable jointly and severally.*
- *Because releases of hazardous substances can adversely affect the health and welfare of the public, the environment, and property values, it is in the public interest that affected communities*

*be notified of where releases of hazardous substances have occurred and what is being done to clean them up.*

This MTCA framework outlines a balanced investment strategy in toxic pollution prevention, hazardous and solid waste management, and toxic cleanup. For nearly 25 years, the investment strategy has been in place and the allowed uses of the STCA have largely remained unchanged.

The STCA receives 47 percent of HST revenues which are dedicated to:

- Hazardous and solid waste planning, management, regulation, enforcement, technical assistance and public education.
- Hazardous waste cleanup.
- State matching funds required under federal cleanup law.
- Financial assistance for local programs.
- State government programs for the safe reduction, recycling, or disposal of hazardous wastes from households, small businesses, and agriculture.
- Hazardous materials emergency response training.
- Water and environmental health protection and monitoring programs.
- Public participation grants.
- Public funding to assist potentially liable persons under certain conditions and findings by the Director of Ecology.
- Development and demonstration of alternative management technologies designed to carry out the hazardous waste management priorities.

## **Legislature Expanded the Use of the Toxics Control Accounts to Manage State Budget Crisis**

While the underlying law has not changed, the Legislature has made budget decisions redirecting the STCA (and LTCA) to other government purposes.

- Direct Transfers to the State General Fund (GF-S): Since the 2007-09 biennium, the Legislature has directly transferred nearly one-quarter billion dollars of the Toxics Control Accounts to the GF-S.
- Fund Shifts to STCA: The Legislature has shifted costs of programs traditionally funded with GF-S to the STCA in Ecology and other state agencies. Those shifts required MTCA amendments in the budget, not to the underlying statute. This report highlights those legislative decisions in two ways:
  - In the 2012 supplemental budget, the Legislature required a \$20.1 million one-time fund shift of expenditures in the 2011-13 biennium from the GF-S to the STCA. Environmental program work was shifted which is traditionally funded by GF-S and is described in each section of this report.
  - Ecology’s work to support Shoreline Master Program updates was funded by GF-S. A switch to both the STCA and LTCA was made by the Legislature and authorized through a back of the budget amendment.

## **Toxics Cleanup Program ..... \$14.6 M Operating, \$9.0 M Capital – STCA**

### **Mission**

The mission of the Toxics Cleanup Program (TCP) is to remove and keep contaminants out of the environment. The Toxics Cleanup Program exercises all the powers and performs all the duties assigned to Ecology by MTCA at RCW 70.105D.030. MTCA changed the way our state cleans up hazardous waste sites:

- It set strict cleanup standards to ensure that approved and completed cleanup actions protect both human health and environmental health over the long term.
- Its cleanup process was designed to foster cooperation among potentially liable persons, and factor site-specific circumstances—including community concerns—into Ecology’s determination of permanent cleanup methods that best apply to the site.
- It created a funding mechanism. Taxing the products that contaminate most of the hazardous waste sites in our state provides a dedicated funding source—avoiding the delays and costs of waiting for a court award before starting urgent cleanup actions.

### **What is a hazardous waste site?**

A hazardous waste site is any property or area where there has been a release or threatened release of a hazardous substance. When Ecology receives a report, a TCP inspector goes to the site. The inspector looks at structures; soil, water, and sediment; and flow patterns for signs of (1) toxic spills, or (2) threats posed by the historic manufacture, use, or storage of toxics on site or nearby. The inspector may collect soil, sediment, or water samples for analysis.

Ecology staff compare the samples’ contaminant levels to MTCA standards (concentration limits). If the comparison suggests a need for further investigation, a TCP expert conducts a Site Hazard Assessment (SHA). The SHA evaluates environmental traits and peculiarities at the site, and may include the site’s land use history, to estimate the likelihood that contamination could spread and people could encounter it and be exposed.

**Site hazard ranking.** Ecology’s evaluation considers the amount of contamination, the types of contaminants, the risk that contamination will spread, and primary exposure routes (i.e., location and ways people and other living creatures could be exposed through inhalation, ingestion, or absorption). The hazards rise where contamination:

- Threatens drinking water supplies or delivery systems;
- Exists in quantity or spreads over a large area;
- Is toxic to animals or fish that absorb, inhale, or ingest it;
- May affect the health of a water body/flow, its biota, and sediments; or
- May affect the health of people who live, work, or recreate there.

Hazard ranking helps Ecology make choices about taking action at hazardous waste sites. The Washington Assessment and Ranking Method (WARM) evaluates sites based on environmental and human health risks. The WARM method assigns the site a score ranging from one to five. A score of 1 denotes the highest level of concern—and a first priority for cleanup, relative to other ranked sites. A score of 5 denotes the lowest level of concern. Federally designated hazardous waste sites, commonly called Superfund sites, have a special rank of 0 (zero). Ecology’s site cleanup efforts focus principally on high-priority sites.

Federal Superfund sites—ranked 0 (zero) on the Hazardous Sites List—and those sites where our preliminary risk assessment implied urgency, Ecology ranks as either 1 or 2 and are defined as high priority.

Ecology maintains a Hazardous Sites List and updates it twice a year. This list includes all assessed and ranked facilities/sites located throughout the state, whether engaged in some phase of cleanup or waiting to begin it. This list is updated in February and August of each calendar year. The updates add sites, show changes in any listed site’s cleanup status, and proposed removals from the list. The most important change in site status is being designated as requiring “no further action.” This means the site has been cleaned up and no longer poses a threat to human health or the environment. During Fiscal Year 2012, Ecology issued “No Further Action” opinions at eight high-priority sites where reported final cleanup actions satisfied MTCA standards and requirements. Ecology also removed 12 sites from the Hazardous Sites List within that period. A searchable Hazardous Sites List and link to other related lists can be found at: <http://www.ecy.wa.gov/programs/tcp/sites/SiteLists.htm>

At high-priority sites, Ecology conducts or oversees all phases of the cleanup process. The public and affected communities are consulted during the planning stages of site investigation and remedy selection, and before applying the site cleanup methods and performance sequence. High priority site cleanups are typically conducted by the parties responsible for the release of the contaminants. In these instances, Ecology binds the parties to the requirements of the cleanup process through Agreed Orders or Consent Decrees.

### Hazardous Site Cleanup Process

Procedures for hazardous waste site cleanup are published in Chapter 173-340 WAC. Below are the general steps in the process.



\*Comment periods can be combined when possible.

## Site Cleanup

Cleanup action includes applying the design, actual construction (or site de-construction) operations, and monitoring throughout the activities. After Ecology verifies a completed cleanup meets MTCA standards, and following public comment, Ecology can allow the site's removal from the state Hazardous Sites List.

### Who pays for site cleanup?

Any person's past or present connection to a contaminated site may give rise to liability:

- Past or current facility owner, tenant, or operator.
- Hazardous product storage facility or a hazardous substance treatment or disposal business.
- Seller of a hazardous product where use—according to written instructions—results in contamination.
- MTCA holds each potentially liable person (PLP) jointly and individually responsible for the entire cost of cleanup. If the PLP is unknown or has no assets, Ecology's cleanup costs are paid by the STCA.

### Cost Recovery

- Through a process prescribed by MTCA, and defined by rule, Ecology recovers site cleanup costs.
- During Fiscal Year 2012, Ecology recovered and deposited \$3.1 million into the STCA to support other site cleanup projects.

### Formal Cleanup Sites – The 25 Highest Dollar Amounts Invoiced in Fiscal Year 2012

OCCIDENTAL CHEMICAL	258,833
HOLDEN MINE	183,676
PASCO SANITARY LANDFILL	173,838
U.S. NAVY DEPT	152,056
PACIFIC WOOD TREATING	149,165
LOWER DUWAMISH WATERWAY	139,159
ARKEMA INC	138,919
BOEING EVERETT	133,832
BNSF RAILWAY SKYKOMISH	103,128
N BOEING FIELD GEORGE TOWN	88,428
TERMINAL 91 TANK FARM	74,361
MILLENNIUM BULK LONGVIEW	73,350
B & L WOODWASTE LANDFILL	65,243
CAMP BONNEVILLE	62,734
PORT ANGELES RAYONIER MILL	60,254
GEORGIA-PACIFIC WEST BELLINGHAM	56,911
LORA LAKE APARTMENTS	56,550
KAISER TRENTWOOD	54,405
NUSTAR ENERGY LP	53,913
FORT LEWIS WASHINGTON	51,514
BAY WOOD PRODUCTS	51,450
SMC/CADET SITE	49,526
FOX AVENUE BUILDING	47,797
GLACIER NORTHWEST INC	47,425
BOEING AUBURN	47,398

## Lower-Ranked Sites and the Voluntary Cleanup Program

Projects ranked 3, 4, or 5 on the Hazardous Sites List do not pose an imminent threat to human health or the environment. Nonetheless, TCP staff directly managed cleanup actions, or gave technical assistance to liable parties to ensure their cleanup action have the desired results.

The majority of persons responsible for lower-ranked contaminated sites (the potentially liable parties) choose to conduct site cleanup projects independent of Ecology's direct oversight. Ecology has a program for site owners or operators conducting cleanup in this way. This program, the Voluntary Cleanup Program (VCP), allows for liable parties to voluntarily submit their cleanup plans and sampling reports for review by Ecology. This ensures that independently conducted cleanup work meets MTCA standards. It also provides certainty to the private parties that their site is clean.

Ecology's VCP offers an option at lower-ranked sites where the source and type of contamination, and a reasonable and available cleanup method, can be readily identified. The majority of VCP projects address sites contaminated by leaks or spills of petroleum products from fuel stops or storage tanks.

**Benefits to the State:** (1) Entry into the VCP allows prompt cleanup of contamination at a lower-ranked site. (2) Ecology's reviewer can advise and consult with multiple VCP customers during a given timeframe. (3) The rates for VCP review and evaluation are paid by each respective customer/beneficiary, rather than by taxpayers. The fees paid for VCP review are deposited into the STCA to fund other cleanup activities.

**Benefits to the VCP Customer:** (1) A "No Further Action" opinion letter satisfies financial institutions' requirements. (2) The VCP puts decision-making power over the cleanup process into the site owner's or tenant's hands. (3) The VCP cleanup process tends to proceed predictably due to the nature of contamination at a lower-ranked site; a VCP cleanup foregoes third-party verification of sampling or monitoring reports and avoids public comment on each plan and on each proposed action phase of the cleanup. The customer can obtain an "opinion" letter from Ecology in far less time than formal oversight of a cleanup requires, thereby saving time and money.

**Benefits to the Community:** (1) When contamination renders property unusable, the site loses its value and lowers the value of surrounding properties; cleanup can restore or boost the commercial and aesthetic value of the site and neighboring properties. (2) Actions on the site create awareness of the risks posed by the contamination and by cleanup-related construction; informed residents can adopt behaviors that prevent/avoid exposures. (3) A completed cleanup that fulfills the standards and requirements of MTCA boosts the site's potential to attract investments and redevelopment—usually as a business enterprise.

During Fiscal Year 2012, the VCP issued 1,242 invoices, billing a total of \$564,581 in review and consultation service charges. VCP payments/reimbursements are deposited into the STCA. A total of 208 sites undergoing independent cleanup were accepted into the VCP review and consultation process during Fiscal Year 2012.

## **Toxics Cleanup Program .....Capital – STCA**

The state Capital Budget provides STCA funding to pay for cleanup activities at sites which are orphaned or abandoned, or where there is not a viable party to pay for the cleanup. The state works from a biennial budget (a two year cycle). If the project cannot be completed in a two year period, funds may be reappropriated. This allows for the cleanup work to continue.

During Fiscal Year 2012, Ecology's Toxic Cleanup Program oversaw capital investments in three general areas:

- **Safe Soils Program:** This program is focused specifically on schools built on former orchards contaminated by historic use of lead arsenate pesticides.
- **Eastern Washington Clean Sites Initiatives:** This program is specially focused on the unique cleanup needs of rural communities located in eastern and central Washington.
- **Clean Up Toxic Sites Puget Sound:** This program, also known as the Puget Sound Initiative (PSI), is specifically directed at cleanup sites located within half a mile of Puget Sound. The emphasis is on designing cleanups with habitat or recreational enhancement as an additional objective.



On the following pages are brief descriptions of two sites. The first is a cleanup site located in Anacortes (Skagit County)—this site is part of the PSI. The second site is located in Buena (Yakima County)—this project is being conducted as part of the Eastern Washington Clean Sites Initiative.

**Toxics Cleanup Program** ..... *Custom Plywood Mill Site, Anacortes*



Before cleanup: The Custom Plywood Mill Site.

This site was used for lumber and milling operations, beginning around 1900. Custom Plywood operated the facility from 1984 until 1991; all operations ceased following a fire in 1992.

In 2007, GBH Investments LLC bought a portion of the property (the site retains the Custom Plywood name in Ecology records). The Custom Plywood Mill site consists of upland, wetland, intertidal, and subtidal areas. Wood waste and chemical contaminants were found in upland soil, in groundwater, and in sediments. A dry boat storage

yard was once located in the northwest part of the property; the remainder held abandoned building remnants and debris.

The Phase I interim upland area remedial action was completed in the summer of 2011. That action included removal of 30,300 tons of contaminated material and 900 pilings—all of that material was properly disposed of off-site. It also included construction of a 12,000 square foot wetland mitigation area, and a vegetated buffer zone in the upland area.



After cleanup: A great blue heron explores the wetland buffer zone.



After cleanup: Clouds sweep over the hydro-seeded upland area.

The remaining portion of the upland was graded and hydro-seeded with grasses, and a stormwater bio-swale was built along the southern section. The Phase II in-water work is scheduled for action July 2013 through February 2014:

- Remove marine construction debris and pilings (they pose a navigational hazard).
- Remove contaminated sediment and dispose of dioxin and wood waste.
- Replace existing bulkhead and install a protective feature.
- Clean up contaminated tideland and re-contour 1.7 acres of beach.
- Enhance and promote recovery of marine habitat.

## Toxics Cleanup Program..... *Community of Buena, Yakima County*

The small community of Buena lies south of Yakima, in the heart of the Valley’s wine region, with the old Yakima Valley Highway meandering through the center of town. Unfortunately, Buena is also home to at least four contaminated sites, leading to a perception of “community blight” by residents and visitors alike.

The Eastern Washington Clean Sites Initiative was designed to spur cleanup and economic development on the east side of the Cascades. During the 2011-13 biennium, the Legislature provided \$7.5 million for Ecology to work with communities to clean up several sites in Central and Eastern Washington. Two owners of sites in Buena (Roby’s Service Station and Gold Nugget Market) were eager to participate.



“This is a huge step for us in terms of being able to get at the contamination. We knew the groundwater was contaminated—now we’ll finally be able to address it at the source,” said Valerie Bound, Ecology’s Toxics Cleanup Program Section Manager from the Central Regional Office.

Ecology became aware of soil and groundwater contamination in the Buena community around 1997, and has monitored the groundwater intermittently ever since. Leaking underground storage tanks were presumed the likely source of the contamination and five tanks were removed in 2001.

In October 2011, when the former Roby’s Service Station was demolished, site work got started. The building had long been an eyesore in the community, tagged with graffiti and declared unsafe by the county years earlier after a fire. Ecology staff worked closely with Yakima County Code Enforcement to make the building demolition and site preparation process quick and safe.

“We appreciate that the Legislature realizes cleanup is important to the environment, public health, and the economy of our local communities,” Bound said. “Funding for this initiative, now and in the future, gives us the ability to work with local partners on projects that improve their quality of life.”

After the demolition, Ecology worked with contractors through the fall and winter to complete a series of soil and groundwater sampling. Removal of additional contaminated soil occurred in November 2012, and groundwater treatment continues. Now the property may be redeveloped to benefit the Buena community.



**Air Quality Program..... \$3.7 M Operating – STCA**

**Complying with Federal Air Quality Standards – \$600,000**

The Air Quality Program mission is to ensure that Washington’s air is safe to breathe.

The program initially received STCA appropriations in the 2011-13 biennium to address violations of federal ambient air quality standards. These funds are being used to meet specific requirements to achieve standards consistent with federal and state law, and Governor, agency, and local program goals to reduce toxic threats to public health.

EPA establishes outdoor air quality standards for six criteria pollutants harmful to public health. In 2010 and 2011, EPA made the National Ambient Air Quality Standards more protective for four of the six criteria pollutants contained in the federal Clean Air Act (carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide). These revisions require substantial new work to assess air pollution levels and refine policies and strategies to ensure the state complies with new standards. This work is on-going.

Two other criteria pollutants—fine particles and ozone—are of most concern in Washington. The outdoor air standards for these pollutants will be reviewed by EPA and are expected to become more stringent within the next few years. Most of Pierce County violates the existing air pollution standard for fine particles. To bring the Pierce County area back into compliance with the fine particle standard, Ecology must develop and execute strategies to reduce pollution. If the state does not do that in a timely manner, Washington faces financial and economic sanctions. It is far less burdensome and less expensive to prevent nonattainment than to clean up an area after it violates a standard. At least six other areas in the state are border-line for violating the particulate standard. Ecology is also working to reduce pollution in those at-risk communities.

The greater Puget Sound area measures pollution levels close to violating the existing federal standard for ozone. Ecology is evaluating ozone pollution levels, contributors, and potential actions to reduce ozone pollution to prevent violations of that standard.

**Activities Shifted by the Legislature from GF-S to STCA; Fund Shift of \$3.1 M**

In the 2012 legislative session, the Legislature reduced \$20.1 million of Ecology’s GF-S appropriation and replaced it with STCA authority. The Air Quality Program replaced \$6.2 million of planned GF-S expenditures with STCA funds for the 2011-13 biennium. Ecology spent \$3.1 million of those STCA funds during Fiscal Year 2012 and will spend the remainder in Fiscal Year 2013.

Along with Ecology’s local air agency partners, the Air Quality Program identifies and reduces health threats from toxic air pollutants, including the six criteria pollutants and hundreds of other toxic air contaminants released into the atmosphere. STCA fund shift dollars received in the 2012 supplemental budget were spent to prevent unhealthy air and violations of air quality standards, and to ensure that appropriate and cost effective strategies are in place that protect public health. This work was previously paid for by GF-S dollars at Ecology and local air pollution control agencies around the state.

## **Environmental Assessment Program ..... \$3.9 M Operating – STCA**

The Environmental Assessment Program (EAP) provides objective, reliable information about environmental conditions that can be used to:

- Measure agency effectiveness.
- Inform public policy.
- Help focus the use of agency resources.

Ecology staff collect baseline measurements, monitor environmental trends (change influences), and report results (human impacts upon the environment). Ecology uses accepted scientific methods to gather samples and to analyze data so people can rely on its accuracy. The Environmental Assessment Program publishes reports so Ecology staff, other state and local governments, tribal authorities, individuals, communities, and business interests can obtain the information.

Examples of the Ecology’s work products/activities during Fiscal Year 2012 include:

- Studying toxic pollutants in priority water bodies.
- Investigating and reviewing technical reports of toxic chemical contamination in marine and freshwater aquatic organisms, in sediments, and in groundwater (a water supply located below the soil’s surface).
- Identifying sources and amounts of contamination in priority watersheds, and recommending ways to reduce pollution so water meets state water quality standards (so pollution concentrations fall below the maximum allowed).

### **Studying Creeks That Flow to Oakland Bay**

Building upon our 2008 Oakland Bay sediment study, Ecology collected sediment samples from creeks that flow to Oakland Bay. Testing the samples and comparing them to the kinds and levels of dioxin and furans we found in Oakland Bay sediments will help us determine whether those creeks are the conduits that bring the contaminants from their source to Oakland Bay. The results of this study will show current levels of dioxin and furans contamination in Oakland Bay. Reducing those concentrations will help Ecology protect human and environmental health.

### **Assessing Levels of PBTs in Bottom Fish**

During Fiscal Year 2012, Ecology collected fish from four rivers and lakes known to have a history of toxic chemicals contamination. Ecology drew fish samples from (1) Lake Washington, (2) lower Columbia River, (3) lower Yakima River, and (4) Lake Spokane (lower Spokane River). Ecology analyzed the tissues of those fish for levels of select PBTs—persistent bioaccumulative toxic chemicals. Previous studies had either not analyzed for that class of PBTs in local fish populations, or had focused on a single chemical action plan (to reduce or eliminate a defined toxic threat). Results from this survey will help Ecology design effective future studies that monitor PBT residues in Washington’s freshwater fish. You can find our records at: [www.ecy.wa.gov/biblio/1203042.html](http://www.ecy.wa.gov/biblio/1203042.html)

### **Measuring Long-Term Effectiveness at Cleanup Sites**

The Environmental Assessment Program collected quarterly groundwater data at multiple sites statewide to determine whether those sites met cleanup standards (had reduced contamination to allowed concentration levels) or needed additional remedial actions.

## Marine Sediment Monitoring

Ecology's Marine Sediment Monitoring Team conducts annual monitoring in Puget Sound. The Environmental Assessment Program measures sediment quality at ten long-term stations (adding to records of more than 20 years of data) and from a network of regional stations sampled on a 10-year rotation cycle. Characteristics Ecology measures include toxicity, chemistry, and the community structures of organisms. This information helps to identify existing problems and measures the success of environmental programs.

### Activities Shifted by the Legislature from GF-S to STCA; Fund Shift of \$1.6 M

Many of the program's toxics-related activities are funded by a combination of GF-S and STCA funding. When the Legislature shifted a portion of the program's funding from GF-S to STCA, these activities became funded proportionately higher by STCA. As noted above, these activities include (1) studying toxic pollutants in priority water bodies, (2) investigating and reviewing technical reports of toxic chemical contamination, and (3) identifying sources and amounts of contamination in priority watersheds.

## Hazardous Waste and Toxics Reduction Program

..... \$6.4 M Operating, \$0.3 Capital – STCA

The Hazardous Waste and Toxics Reduction (HWTR) Program envisions a society where waste is viewed as inefficient and where most wastes and toxic substances have been eliminated. To achieve this vision, the program has set goals to foster sustainability and prevent pollution. HWTR also works to ensure the safe handling of millions of pounds of the hazardous substances used, and dangerous wastes disposed, by businesses and by non-commercial consumers in Washington every year.

Businesses of all types and sizes use and handle toxic chemicals. When those chemicals or products are no longer useful, they become hazardous waste. Washington's definition of "dangerous" waste includes some substances not included in the federal definition of "hazardous" waste. Facilities that produce large amounts of dangerous waste need to handle those wastes and toxic chemicals on a daily basis, which increases the chance for mismanagement. Mismanaging dangerous wastes can result in contamination that threatens human and environmental health and it must eventually be cleaned up.

The key to breaking the cycle of ongoing cleanup expenses is to use fewer toxic chemicals, and to safely manage each hazardous substance for which no safer alternative is available.

During Fiscal Year 2012, HWTR spent \$6.4 million appropriated from the STCA. Ecology focused on three main types of activities to help break the cycle of costly cleanups:

- **Preventing toxics pollution avoids site contamination.** HWTR staff (1) provided compliance advice to operators and managers, and (2) identified specific ways to achieve the business purpose using fewer hazardous substances.
- **Safely handling hazardous waste helps protect people and their surroundings.** HWTR (1) provided technical assistance to help businesses reduce risks to, and avoid impacts on, human health and the environment; (2) conducted formal inspections; (3) enforced the dangerous waste rules; and (4) enforced permit requirements to prevent releases of hazardous wastes at dangerous waste treatment, storage, and disposal facilities.
- **Cleaning up Treatment, Storage, and Disposal (TSD) facilities.** HWTR specializes in managing cleanup actions at hazardous waste TSD facilities. Cleaning up active and former TSD business sites stopped groundwater, stormwater, soil, and air contamination. Ecology recovered most site cleanup costs from property owners or business operators.

## Technical Assistance to Businesses

During Fiscal Year 2012, Ecology staff visited 460 businesses. Ecology's technical assistance visits focused on improving operations and maintenance practices in those sectors with the highest rates of waste generation and noncompliance with state dangerous waste laws. Ecology offered business-specific advice to reduce the amounts of hazardous substances used, to use fewer kinds of toxic chemicals, and to manage dangerous waste safely. Ecology also promoted energy savings and water conservation. Those who applied our advice found that good environmental management led them to a better bottom line. Here are two examples:

1. HWTR staff worked with Heath Tecna (an aerospace company) in Bellingham. Heath Tecna reduced its hazardous substance use, waste generation, and utility costs by at least \$90,000 annually. Savings were achieved through lean manufacturing methods and new efficiencies:
  - Chemical component testing.
  - Hazardous substance use.
  - Waste segregation and waste labeling.
  - Water use (an estimated water savings of more than three million gallons per year).

Savings resulting from new efficiencies are still being quantified. These good results are attributed to a partnership built among the company, Impact Washington, and our state's manufacturing extension with Ecology's technical assistance staff.

2. The Washington Wine Grape Growers Association requested Ecology's assistance in communicating with the hundreds of small wineries in the state. These small- and medium-sized businesses discharge their wastes to groundwater or surface water. Ecology's technical assistance staff prepared a summary of water supply, wastewater, and stormwater regulatory alternatives for wineries and other small businesses. The document—*Water Supply, Wastewater, and Stormwater Management Options*—clearly lists alternatives, advantages and disadvantages of each option, and tells how to get more information about the options.



More Technical Assistance: Ecology's pollution prevention specialists Paul Fabiniak (center) and Jenny Yoo (right) consult with Dale Haley of Aim Aerospace on how the company can use less-hazardous substances and reduce the amount of dangerous waste it creates.

## Toxics Used in Consumer Products

Awareness of threats posed by toxic chemicals used in consumer products has increased concern about them. Toxic chemical exposure adversely affects human health, the environment, and our state economy. Some effects are largely avoidable through safe handling practices, but Ecology also works toward making chemical products safer. In concert with other states, Ecology participated in the National

Chemicals Policy Reform effort to promote safer chemicals. Among Ecology’s reform efforts was our work toward persuading government to narrow, and industry to limit, allowed uses of toxic chemicals.

1. HWTR hosted the “Toxics in Packaging Clearinghouse” focused on restricting toxic metals in packaging. Ecology and other states’ environmental protection agencies monitored compliance with content restrictions on these substances.
2. HWTR continued working with businesses and consumers on the “Quick Screen” method of assessing comparative risks among chemical-based products. The Quick Screen method identifies the highest-risk chemicals among an array of similar products. It supports Washington’s Children’s Safe Products Act and provides ready access to chemical data by the most users.
3. HWTR joined the multi-state push to reform federal chemical management law—the 1976 Toxic Substances Control Act—to make the federal law more responsive to state policies and emerging health risk data.
4. HWTR worked with Washington State University, businesses, environmental groups, and others to complete a “Green Chemistry Roadmap” now available at <https://fortress.wa.gov/ecy/publications/SummaryPages/1204009.html>. The document recommends actions for government organizations, educational institutions, and businesses to advance “green chemistry” in Washington. Green chemistry will provide the foundation to eliminate the use and generation of hazardous substances in the design of chemicals and products in a manner that is economically viable for businesses.
5. HWTR contributed to the “Interstate Chemicals Clearinghouse” to facilitate states’ collaboration on compiling chemical data, on sharing chemical information, and on assessing and finding safer alternatives to toxic chemicals.

### Monitoring Compliance

While Ecology works to prevent tomorrow’s toxic threats, we strive to safely manage today’s dangerous wastes. Around 1,200 mid- to large-size businesses statewide produce more than 100 million pounds of recurrent hazardous wastes each year. Dangerous waste inspections comprise a critical line of defense between hazardous waste and environmental contamination.



Joe Cason, Dangerous Waste Compliance Inspector in Ecology’s Southwest Regional Office, notes the condition of paint containers during a site visit. When compliance inspectors visit facilities, they pay special attention to how dangerous waste is being handled to make sure the facility is doing everything it should to protect human health and the environment.

Inspections revealed how well businesses complied with state and federal dangerous waste handling rules. During Fiscal Year 2012, Ecology conducted more than 370 pre-scheduled or unannounced inspections at facilities that generate or manage hazardous wastes. These inspections helped Ecology staff find and resolve 300 serious environmental threats (such as dangerous waste leaks or spills that could pollute our environment).

Ecology also worked with local governments to ensure safe handling of dangerous waste produced by thousands of smaller businesses in Washington. Smaller businesses are rarely inspected by Ecology.

Ecology staff found serious environmental violations at almost 60 percent of the businesses inspected during the 2009-11 biennium. This result ranked as one of the highest violation rates in 20 years. Adding capacity to perform more inspections was a high priority for HWTR during Fiscal Year 2012. The Legislature approved additional funding for four new inspectors beginning July 1, 2012. HWTR staff applied a Lean process to our inspection procedures in May 2012 to reduce the overall time required to complete each inspection. As expected, using those revised procedures is increasing the number of annual inspections we complete.

If facility operations continue to violate safe toxics management requirements despite technical assistance visits and informal compliance efforts, then Ecology applies its enforcement authority. Ecology imposed four penalties during Fiscal Year 2012 (that number falls within the program's historic average of penalties issued each year).

### **Permitting and Corrective Action**

Specially designed facilities that treat, store, or dispose of hazardous waste (TSDs) must obtain a federal permit to operate in Washington. The permit defines the design, construction, maintenance, and operating procedures necessary to protect human and environmental health. HWTR permit managers are engaged in writing permit renewals that incorporate the latest federal and state requirements. Each of Washington's 15 active facilities either expects to receive (interim status) or has already obtained a final permit issued by Ecology.

Where historic operations at TSD sites contaminated soil and groundwater, Ecology required that the facilities conduct necessary cleanup. Under federal permit authority, such site cleanup is called "corrective action." Corrective actions are currently under way at 36 sites (most located near Puget Sound) that the EPA designated as priorities.

By the close of Fiscal Year 2012:

- An average of 78 percent of the site work had been completed under Ecology's supervision.
- Human exposures are now controlled at 90 percent of these sites.
- Groundwater contamination has been controlled at 79 percent of them.
- Ecology exceeded EPA's 2012 national goals, having attained 81 percent control of human exposures, and 69 percent control of groundwater contamination.

The full cleanup process takes 10-12 years. Ecology expects to complete (be maintaining) all corrective actions at these 36 sites by 2020. Corrective actions are expensive, but the program can recover most costs from property owners. Once completed, these properties could be available for economic redevelopment, for public recreation uses, or habitat restoration projects.



## Providing Access to Dangerous Substances and Waste Information

HWTR staff gather, maintain, and update hazardous substance and waste information in searchable data systems. HWTR retrieves and reports the data to individuals and businesses, to emergency responders, and to local government decision-makers. The program’s website, printed materials, telephone information line, and quarterly newsletters provide the most current hazardous substance and waste information.

During the 2009-11 biennium, HWTR responded to more than 700 information requests from individuals and businesses through the program’s Toxic Free Tips information service. In addition, the HWTR program website logged more than 750,000 visits.

The Legislature made a one-time reduction in HWTR’s spending on dangerous waste information and education in Ecology’s 2012 supplemental budget. Changes in service levels began in May 2012. HWTR will continue gathering and reporting information for emergency responders and responding to specific requests from individuals and businesses. Spending has been curtailed for such uses as:

- Toxic Free Tips outreach to teachers and households (eliminated).
- Maintenance of the Hazardous Waste Services Directory (eliminated).
- Production of printed materials (reduced).
- Requests for existing publications will be answered on a priority basis (delayed/no response).
- Less frequent updates to HWTR’s website (some postings could become obsolete).

## **Nuclear Waste Program ..... \$5.1 M Operating – STCA**

The mission of the Nuclear Waste Program is to lead the effective and efficient cleanup of the U.S. Department of Energy’s (USDOE) Hanford Site, ensure sound management of mixed hazardous wastes in Washington, and protect the state’s air, water, and land at and adjacent to the Hanford Site.

The Nuclear Waste Program works to protect Washington’s people and environment from exposures threatened by any mismanagement of mixed hazardous wastes—including threats that occur during the waste’s storage, treatment, or disposal—at the Hanford Site and at certain non-Hanford facilities. “Mixed waste” contains both a defined hazard component and a radioactive component.

The Nuclear Waste Program collects fees from facilities in the state that manage mixed waste. These fee payments are deposited into the State Toxics Control Account (STCA). The Legislature appropriates STCA funds to apply and enforce the federal Hazardous Waste Management Act at these facilities.

In Fiscal Year 2012, half of the \$11.2 million from mixed waste fees and \$199,902 appropriated for the 2011-13 biennium from the STCA helped pay Nuclear Waste Program costs of:

- Pursuing litigation to enforce the Tri-Party Agreement and other protective legal mandates.<sup>3</sup>
- Conducting compliance inspections.

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<sup>3</sup> In 2010, Ecology settled litigation with USDOE over Hanford cleanup delays. The resulting Consent Decree and new Tri-Party Agreement milestones will accelerate waste treatment, tank removal and closure, and contaminated site cleanup. They require USDOE to complete construction of the tank waste treatment plant; to remove waste from single-shell waste storage tanks and close the first tank farm; and clean up contaminated soil and [under]groundwater sites near the Columbia River.

Ongoing litigation supported by MTCA funds include our lawsuits against USDOE and the Nuclear Regulatory Commission regarding USDOE’s petition to withdraw its application for a license to operate a deep geologic repository for high-level nuclear waste at Yucca Mountain.

- Performing regulatory oversight.
- Providing technical assistance.
- Reviewing applications/issuing permits to qualified operators of mixed waste management facilities.

On May 1, 2012, Ecology submitted the draft Hanford sitewide permit for public comment. Substantial comment provided by EPA, USDOE, and the public showed the need for revisions to the draft permit. The permit covers all radioactive mixed waste treatment storage and disposal facilities on the Hanford site (37 units in all) and represents a significant level of work to complete. Once completed, the revised draft permit will be resubmitted for public comment. When finalized, it will be issued to address mixed waste management activities across Hanford. The work is expected to continue through the current biennium and be completed in the 2013-15 biennium. In the interim, Hanford operates mixed waste activities under the existing Hanford sitewide permit.

## **Shorelands and Environmental Assistance Program**

.....\$3.3 M Operating, \$0.2 M Capital – STCA

### **Puget Sound Dredging Projects – \$90,000**

STCA funds the Shorelands and Environmental Assistance (SEA) Program’s oversight of dredging operations in Puget Sound and to review reports of the safe removal and disposal of contaminated sediments found in waters throughout the state.

Ecology managed the following Puget Sound dredging projects and actions:

- Evaluated whether sampling and analysis plans were suitable for proposed projects and sites.
- Ensured project plans included appropriate dredging operations details, water quality monitoring protocols, and post-dredge effects monitoring.
- Provided special guidance for addressing bioaccumulative chemicals of concern.
- Updated Ecology’s freshwater sediment quality guidelines.
- Developed guidance on ways to avoid risks posed by dioxin-contaminated dredged material.
- Revised our regional Sediment Evaluation framework.

This funding also supported multi-agency (and multi-state) dredged materials management activities that addressed both fresh water and marine water sediments.

### **Shoreline Master Programs – \$230,000**

Ecology works in partnership with local governments to manage shorelines throughout Washington State. This work includes developing local Shoreline Master Programs, issuing shoreline permits, and ensuring compliance. Funded by the STCA, Ecology staff provided technical assistance, financial accountability, and final review and approval of all Shoreline Master Program updates.

### **Activities Shifted by the Legislature from GF-S to STCA; Fund Shift of \$2.9 M**

In the 2012 supplemental budget, the Legislature required a \$20.1 million one-time shift in the 2011-13 biennium from the GF-S to STCA. The Legislature expanded the allowed uses of STCA to maintain funding for the following activities. These activities are not typical uses of STCA.

### ***Shoreline Permitting, Technical Assistance, and Compliance Review in Non-Coastal Areas – \$624,000***

Ecology staff provided Shoreline Management Act (SMA) technical assistance and permit review to local governments throughout the state. Ecology SMA staff working in 15 coastal counties were funded by the state's federal coastal zone management grant. Ecology SMA staff working in non-coastal counties were funded by STCA.

### ***Washington Conservation Corps – \$847,000***

The Washington Conservation Corps (WCC) is an environmental training and development program designed to provide Washington's young men and women with training and meaningful work experience. WCC members complete important environmental enhancement projects for local, state, and federal resource organizations. Participation in WCC instills values of hard work, volunteerism, and group achievement in our members during a year of service. WCC crews and individual placements work within local communities throughout the state to restore portions of ecological systems and support sustainability projects. WCC also comprises part of our state's emergency response network—crews deploy to flood, wildfire, and spill emergencies, and play an important role in these recovery activities.

WCC conducted fee-for-service work on environmental projects throughout the state, for non-profit or government organizations.

STCA funding supported costs of WCC's administrative staff and goods and services not funded by federal grants or by local stakeholder interagency agreements. The funds directly supported five FTEs.

### ***Watershed Plan Implementation – \$578,000***

Grants to local governments – \$165,000. Local governments developed (or implemented recently adopted) watershed plans designed according to Chapter 90.82 RCW, the Watershed Planning Act.

In Fiscal Year 2012, Ecology awarded a variety of grants to lead agencies to implement locally adopted watershed plans. These plans were developed by basin stakeholders to solve water quantity and quality management challenges. Plans had to be consistent with state water laws and with other environmentally oriented laws, and sensitive to competing in-stream and out-of stream uses and demands. Watershed plans provide blueprints for Ecology's subsequent decisions and actions on topics such as (1) total maximum daily load (TMDL) contaminant discharge limits to basin water courses, (2) water rights allocation and permitting, (3) point or non-point source water pollution permits; and (4) in some cases, the plans provide greater understanding to support projects that address Endangered Species Act listings and implementation needs. For some categories of grants, a local cost match of 10 percent is required (general plan implementation grants) while in other categories, the awards amount to 100 percent of the requested/demonstrated need. These grants also leverage capital budget funds conditionally provided to increase in-stream flows in targeted basins.

Watershed planning advice – \$413,000. Ecology staff also assisted Water Resources Inventory Areas (WRIA) lead agencies (local governments) and affiliated plan implementation groups.

Regional and headquarters staff provided professional and technical assistance, managed grant funds, and provided grant application and decision-making criteria, and gave policy and procedural guidance to local groups seeking to implement the Watershed Planning Act. During Fiscal Year 2012, 29 distinct lead agencies and plan implementation groups, representing all or parts of 34 WRIsAs, gained access to Ecology's assistance and grant management services specialists. Our expert staff (1) reviewed or gathered input about technical requests from lead agencies; (2) approved billings for work performed under the

terms of a grant, tracked spending reports, and compared grant recipients' performance to grant requirements; and (3) analyzed legislative or Office of Financial Management (OFM) budget proposals for their likely impacts on watershed plans. The SEA Program also sustained cross-programmatic coordination with the Water Quality Program, the Environmental Assistance Program, and the Water Resources Program in their projects funded by the GF-S, by the capital budget, or by other fund sources.

### ***Wetlands – \$487,000***

Mitigation that works. The SEA Program used these funds to support wetland compliance staff. Under section 401 of the Clean Water Act (CWA), Ecology requires compensatory wetland mitigation to offset damaging impacts to state waters—including damage caused by the loss of water quality functions that wetlands provide. Under the CWA, developers must acquire, produce, or support mitigation projects, and must monitor and report on the development of wetland mitigation sites. Historically, only 47 percent of wetland mitigation sites were moderately to fully successful. Lack of follow up by the responsible agencies was cited as one reason for the lack of success. Support from these STCA funds allowed us to complete 49 compliance visits of wetland mitigation sites. We coordinated our compliance visits with applicants and their consultants, and with staff from local governments and from the U.S. Army Corps of Engineers. Our follow-up letters and e-mails described the conditions and identified contingency actions needed to ensure successful wetland restoration at each of those sites.

Wetland in-lieu-fee mitigation. Ecology staff approved one In-Lieu-Fee (ILF) project and are negotiating another. ILF mitigation is an option for developers to pay a third party to construct and maintain the required compensatory mitigation plot. ILF mitigation can be more successful than project-by-project, individual mitigation sites where the third party has greater technical expertise in wetlands health, and where the third party seized an opportunity to locate mitigation sites at a place that is important for the affected watershed. ILF programs can be sponsored by state, local, or tribal natural resource entities.

Examples:

- In July 2012, Ecology approved the Hood Canal ILF program to provide mitigation for nearshore, overwater, and wetland impacts in the Hood Canal region. As part of this work, staff will give technical input into the development of a function assessment tool for the nearshore environment.
- The Pierce County ILF is being developed to provide freshwater wetland mitigation in the Chambers/Clover Watershed.

Wetland Banking. Wetland mitigation banks are wetland restoration projects established to provide mitigation in advance of unavoidable wetland impacts. Wetland mitigation banks need state certification to qualify as mitigation for state authorized permits. Staff provided oversight of the 11 approved banks and continued to review and negotiate details for three more sites. Site visits confirmed reported monitoring/conditions and credit releases were performed this summer for six of the banks. Adaptive management actions are being developed for one site where invasive species are a problem.

### ***Program Management and Support – \$456,000***

STCA funds were used to partially fund program-level management and support functions. These functions included SEA Program management and administrative assistance, records and public disclosure, budget planning, operations lead, policy assistance, web coordination, and information technology.

### ***Puget Sound Restoration – \$199,000 Capital***

**Beach Creosote Removal.** The Washington Department of Natural Resources (DNR) completed three creosote-debris removal projects, partnering with the Puget Sound Corps for crew work. Using a helicopter, heavy equipment, and hand carrying, they removed over 125 tons of creosote-contaminated debris from beaches on Lopez Island, Indian Island County Park, and Double Bluff County Park on Whidbey Island. DNR plans to complete several additional projects in Fiscal Year 2013 (by June 30, 2013). Potential site locations include Dungeness Spit and Dungeness Bay, as well as additional work in Mutiny Bay.

**Dabob Bay Restoration.** The Northwest Watershed Institute restored two shoreline properties along inner Tarboo Bay:

Site 1 (Ingebretsen) – Removed the house, all utilities, garbage, and non-native invasive plants; the soil was ripped, amended, and mulched during summer 2011. Native trees and shrubs were planted in winter of 2011-12 at this 1.5-acre site. Plantings have been maintained through the present, with summer watering and mechanical weed control completed. Additional maintenance and weed control are scheduled through end of the contract (June 2013).

Site 2 (Tarboo Creek Mouth) – Pulled ivy and killed remaining knotweed; with the assistance of the Jefferson County Noxious Weed Control Board, applied two additional rounds of herbicide spray at this two-acre site during summer 2012. After further ivy pulling and cleanup, Ecology will be prepared for January 2013 planting of native plants at the site.

**Dungeness Floodplain Forest Restoration.** The Jamestown S’Klallam Tribe expanded planting areas for both the Rivers End and the Towne Road properties, approximately 31 acres of riparian floodplain plantings, in preparation for the Army Corps dike setback. In addition to planting and monitoring the planting, they are controlling invasive species.

**Dungeness Floodplain Restoration.** Clallam County has controlled invasive species and monitored and maintained plantings on two properties comprising approximately 62 acres. Fence removal, originally proposed as part of a grant-funded project, was completed with other funding pending the grant award. The grant was amended to reflect the shift in costs.

**Samish Watershed Restoration.** Funding was applied to five projects throughout the Samish Basin and is slated to be used on two more. This money paid costs to install livestock exclusion fencing and native plants, while removing invasive vegetation; and to install large woody debris along the waterway to reduce bank erosion and fine sediment input. Combined with funding from another grant, Ecology completed larger projects and stretched the money further. All of the property owners have signed temporary (ten years) conservation easements, and Clallam County committed to provide three years of maintenance following the completion of these restoration projects.

**Twin Rivers Ranch.** Capitol Land Trust workers controlled a total of 4.9 acres of invasive species; planted 3,700 native trees and shrubs along creeks and wetlands (a total of 9.2 acres of planting areas); weeded and mulched 2,000 previous plantings; installed 3,000 plant tubes to protect against damage caused by browsing wildlife; and removed approximately 8,900 feet of fencing. They also completed a restoration site assessment and design plan to guide site restoration for the next ten years. Capitol Land Trust held three volunteer work parties to restore habitat, and hosted three other educational events (a bird walk, a kayak tour, and a walking tour for Earth Day) on the ranch.

## **Spill Prevention, Preparedness, and Response Program**

..... \$6.0 M Operating – STCA

The Spill Prevention, Preparedness and Response (Spills) Program relies on the State Toxics Control Account (STCA) to protect human health, public safety, and our environment. The program focuses on preventing oil spills to Washington’s waters and land, as well as planning for and delivering a rapid, aggressive, and well coordinated response to oil and hazardous substance spills wherever they occur. Spill responders maintain the capability, equipment, and training to respond 24-7-365 (24-hours a day, seven days a week, 365 days a year) to clean up spilled oil and other hazardous materials. Oil spill contingency plans are reviewed and approved to ensure oil spill readiness by the industry. Response equipment is verified, inspected, and tested to ensure spill response readiness by response contractors. Vessel inspectors board and inspect vessels to minimize the environmental threat of oil spills in state waters.

### **Responding To and Cleaning Up Oil and Hazardous Material Spills**

STCA pays the costs of responding to and cleaning up oil and hazardous material spills. These activities include overseeing cleanup of spills where the responsible party is taking appropriate action to manage the incident and minimize environmental damage. Ecology also addresses “orphan” spills where the owner is unknown, unwilling, or unable to fund the necessary removal of hazards.

Spill responders collaborate with the responsible party and with other government entities to manage spill incidents. Responders deploy immediately to spills that impact or pose a threat to Washington’s waters. Ecology likewise responds to releases of petroleum or other hazardous materials to soil and air—any related exposure threat to public health and safety.

The Spills Program coordinated with local governments and public safety authorities to address meth-related pollutants. Ecology’s Spills Program is the only public entity in Washington that cleans up hazardous chemicals and waste that result from meth lab operations. Spills Program responders have developed expertise in safely handling and disposing of highly hazardous wastes found at meth labs and dump sites. Such hazardous wastes include pressurized cylinders of anhydrous ammonia, ammonia generators, and pressurized containers of gaseous hydrochloric acid.

Other related activities the Spills Program engages in include:

- Participating in oil and hazardous materials spill response training exercises.
- Providing technical assistance for spill prevention and cleanup planning.
- Investigating spills to determine their source and cause.
- Training first responders who serve communities located throughout Washington.
- Taking appropriate enforcement actions.
- Participating in and evaluating oil spill drills.
- Systematically verifying, inspecting, and testing response equipment around the state to ensure equipment is ready for rapid deployment during incidents.
- Outreach and education to local governments and tribal communities before and during spills and incidents.

### **Oil Spill Contingency Plans**

Operators of large commercial vessels and oil handling facilities are required to maintain state-approved oil spill contingency plans to ensure they can rapidly and effectively respond to major oil spills. State planning standards ensure equipment and response personnel are strategically staged throughout the state.

STCA pays for the Spills Program to review and approve contingency plans to ensure plan holders and spill response contractors maintain oil spill readiness.

### **Vessel Inspections**

The Spills Program works with the regulated community and others to minimize the environmental threat of oil spills from vessels by focusing on human procedural and organizational factors. STCA pays for this work which is done through the following activities:

- Boarding vessels for educational and compliance purposes.
- Requiring and reviewing operations manuals and prevention plans.
- Overseeing the implementation of the industry-funded Neah Bay response tug to ships in difficulty.
- Helping and recognizing oil tanker and barge companies for attaining best achievable protection.

### **Implementing House Bill 1186**

STCA was also used to implement House Bill 1186, which revised vessel planning standards. Existing rules were revised to establish a vessel of opportunity program to assist with oil spill response activities, including on-water oil recovery in the near-shore environment, and the placement of oil spill containment booms to protect sensitive habitats.

### **Fiscal Year 2012 Spills Program Accomplishments**

- The Spills Program responded to 4,042 reported spills.
- Responders recovered 60,078 gallons of the reported 67,266 gallons of oil spilled (an 89 percent recovery rate) from 2,932 reported oil spills. These totals don't include the additional 45,700 gallons of oil recovered from the Davy Crockett barge and Deep Sea fishing vessel incidents.
- Our responders contained and recovered an estimated 100,112 pounds of hazardous material (other than oil products) from the environment. In addition, more than one million pounds of heavy metal, asbestos, and PCB-contaminated wastes were removed and safely disposed of from the Davy Crockett barge and Deep Sea fishing vessel.
- Clandestine drug lab and dump site cleanup activity resulted in the disposal of 100 highly toxic and corrosive compressed anhydrous ammonia cylinders, 14 ammonia generators, and 20 hydrochloric acid gas generators. This resulted in the safe disposal of more than 4,800 pounds of compressed toxic and corrosive gas.
- The program completed verification of 100 percent of the state's known response assets, ensuring maintenance and training is well managed by private contractors.
- The Spills Program evaluated 94 oil spill drills throughout the state to ensure oil spill readiness by the industry.
- Ecology vessel inspectors boarded and inspected 909 vessels. Less than one cup in 100 million gallons of oil transferred over water by vessels was spilled in 2012.

### **Spills Program at Work: "Davy Crockett" Barge Response**

In September 2012, Ecology completed an 8-month emergency field response effort on the Davy Crockett barge spill. This response started in January 2011 when Ecology responders traced an 11-mile-long oil sheen on the Columbia River back to the 431-foot flat-deck barge, the Davy Crockett. The owner of the Davy Crockett had conducted improper and unpermitted salvage operations. As a result of the owner's practices, the vessel had broken in half and partially sunk (leaking) near shore between Vancouver and Camas, Washington. Ecology efforts focused first on containing the leaking oil, securing other hazardous materials on board, and stabilizing the vessel in the water.

Ecology responders joined with the U.S. Coast Guard and the Oregon Department of Environmental Quality responders to construct a coffer dam to contain the vessel and provide a safe work environment during vessel deconstruction. In total, crews removed and safely disposed of 38,400 gallons of heavy bunker oil, 5,000 pounds of asbestos, nearly two million gallons of oil-contaminated water, and 1.2 million pounds of contaminated debris. Additionally, approximately 4.5 million pounds of steel were recycled during the vessel's deconstruction.



The Davy Crockett barge, broken in half and sinking, near shore between Vancouver and Camas, Washington.



A coffer dam contained the Davy Crockett providing a safe work environment during vessel deconstruction.



### **Spills Program at Work: “Deep Sea” Fire and Sinking**

In May 2012, the 128-foot former crabbing vessel, the Deep Sea, caught fire and sank while anchored in Penn Cove, Whidbey Island. Oil leaking from the sunken Deep Sea threatened the highly productive commercial and recreational mussel-harvesting areas nearby. Ecology’s Spills Program staff led the pollution response and recovery effort, working with the state Department of Natural Resources (Derelict Vessel Program) and Department of Health (Shellfish Program).



Our initial response efforts focused on containing and recovering leaking fuel while divers plugged underwater vents and rigged the vessel for salvage. After raising the vessel, removing remaining fuel, and making the vessel seaworthy, the Deep Sea was towed to a dry-dock where tons of asbestos and heavy-metal-contaminated debris were removed. The Deep Sea was then cut up for recycling. In total, approximately 7,300 gallons of fuel were removed from the vessel or from the water after it leaked into Penn Cove.

### ***Spills Program at Work: Hattenhauer Tanker Truck Fire***

In February 2012, a Hattenhauer tanker truck and trailer hauling 10,850 gallons of gasoline crashed and burned on Highway 14 east of Goldendale. The tanker came to rest on a railroad track immediately adjacent to the Columbia River. About half of the fuel burned, and half of the fuel saturated the railroad ballast and ground. Ecology immediately deployed an oil-containment boom and sorbent materials along the river bank to prevent any leaching oil from forming a slick on the Columbia River. Ecology’s aggressive response, including contaminated-soil excavation and installation of recovery and monitoring wells, prevented fuel from entering the Columbia River.



A tanker truck and trailer crashed and burned on Highway 14 along the Columbia River.

**Waste 2 Resources Program.....\$3.3 M Operating, \$0.5 M Capital – STCA**  
..... \$1.5 M Operating – LTCA

The mission of the Waste 2 Resources Program is to reduce generation of wastes. The program’s goal is to properly manage the recycling and reuse of source materials, and then safely dispose of unusable wastes.

Ecology’s Waste 2 Resources Program conducts the following services with MTCA funding. Those services are:

- Providing planning, technical assistance, and support to local governments confronting solid waste management issues.
- Regulating hazardous chemical releases from large industrial facilities (pulp and paper mills, petroleum refining and distribution systems, and aluminum smelters).
- Regulating and managing cleanup projects on contaminated industrial sites or closed landfills.
- Reducing toxic chemicals in children’s and other consumer’s products.
- Reducing or phasing out sources of persistent bioaccumulative toxics in the environment.
- Administering grants to local governments for solid waste management and cleanup.

**Technical Assistance**

The Waste 2 Resources Program helps local governments safely handle and regulate solid waste throughout the state. Efforts focus on giving technical assistance, reviewing local permits, providing regulatory and policy guidance, and examining research on methods to reduce and recycle materials from the waste stream.

Improper disposal practices of the past have resulted in many of today’s cleanup sites. Ecology provides technical hydrogeology and engineering assistance to local health jurisdictions (such as reviewing landfill cover design and operation issues, landfill liners, leachate collection systems, and groundwater sampling). In many counties, Ecology staff provide the engineering and hydrology support. This helps protect ground and surface water, soils, and air quality. In addition, Ecology staff provide technical assistance to ensure moderate risk waste facilities, compost, and other solid waste handling facilities meet current regulations that protect human health and the environment.

Ecology staff review all permits to jurisdictional health departments (JHDs). Ecology helps JHDs interpret regulations to ensure consistent compliance with state and federal regulations. Ecology offers technical training on federal and state regulatory requirements, and certification training for landfill and compost operators. Ecology provides technical assistance to both local JHDs that are responsible for permitting and compliance in the state, and to facility owners and operators to implement these regulations. Consistent with implementing state and federal laws, Ecology develops regulations to prevent improper disposal of hazardous and toxic wastes. Ecology requires better designed landfills that are environmentally monitored both while they are actively used, and for a number of years after they have closed. The goal is to ensure contaminants do not reach the environment through groundwater, surface water, or discharges to the air.

Staff research recycling technologies and identify alternatives for materials in today’s waste stream that enable ordinary waste, such as farm waste, to be turned into energy. While solid waste landfills have become more protective of the environment, disposal of certain wastes still pose potential threats. As the waste stream continues to change with new products, the need to keep toxic materials out of landfills is a priority for Ecology.

In 2012, because of significant issues at compost facilities, Ecology updated the Solid Waste Handling Regulations to address waste management issues associated with composting and composting facilities. In collaboration with Washington State University and the Puget Sound Clean Air Agency, Ecology conducted air emission tests at compost facilities to determine the source of odors and to determine if any air toxics are found in emissions from compost facilities. Feedstock and emission samples were evaluated and have helped guide updates for composting regulations. Staff also worked with local JHDs and a private compost facility to help bring the facility into compliance with regulations so they could continue operating.

Updates to Chapter 173-351 WAC, Criteria for Municipal Solid Waste Landfills, were completed. Ecology has full approval from EPA to implement federal regulations allowing for more flexibility for municipal solid waste landfills to meet state and federal requirements.

### **Major Industrial Facilities**

The Industrial Section in the Waste 2 Resources Program regulates some of the largest industries in the state including petroleum refineries, pulp and paper mills, aluminum smelters, and chemical manufacturers. Accidental spills of dangerous substances and past environmental practices at these facilities left a legacy of contaminated land and water. Ecology works to remedy these situations through the Model Toxics Control Act (MTCA).

Ecology is overseeing cleanup at the former Reynolds Aluminum site near Longview, Washington. This “brownfield” property was contaminated with fluoride and other hazardous materials during its +60 years of operations as an aluminum smelter, and is now the site of a proposed coal export terminal. Ecology is working with current owner, NW Alloys (an Alcoa subsidiary), and current operator, Millennium Bulk Terminals, to complete a Remedial Investigation/Feasibility Study. Ecology expects to complete the study in 2013. Given the high level of interest in cleanup and redevelopment of the property, Ecology is working hard to provide regular updates to the Longview/Cowlitz County community.

As a result of the closure and bankruptcy of Kaiser Aluminum site near Spokane, Washington, the Mead Custodial Trust was established to maintain waste containment structures and monitor groundwater at the site. The Trust is also the beneficiary of an insurance policy related to groundwater contamination. The insurance policy provides money to further remediate groundwater if the contamination did not naturally attenuate within five years of waste capping. Unfortunately, the groundwater contamination did not get better on its’ own, and Ecology is working with the Trust to prepare a Supplemental Feasibility Study to evaluate options for further groundwater remediation using insurance proceeds.

The former Columbia Gorge Aluminum site near Goldendale, Washington, ceased production in 2003, and dismantling of the structures was completed in 2012. Ecology is now working with liable parties, Lockheed Martin and Golden Northwest, to address hazardous waste and cleanup issues at the site. A portion of this property has been proposed for redevelopment as a “falling water” energy storage project. This site is also important to the Yakama Nation and Ecology is working to address their concerns with the cleanup.

Ecology is contracting the cleanup of petroleum-contaminated soils and groundwater at the former Lilyblad site in Tacoma, Washington. Contamination includes volatiles, semi-volatiles, and diesel and gasoline-range petroleum hydrocarbons. Extraction wells located on the site remove contaminants from groundwater and the soil vapor phase, and keep the contamination from migrating to Puget Sound. Ecology closely monitors groundwater and soil conditions on the site to determine the cleanup’s progress.

A cleanup at the Emerald Kalama Chemical site is also in progress in Kalama, Washington. Contamination at the site includes benzene, toluene, diphenyl oxide, and other volatile and semi-volatile organic compounds. The cleanup process employs a series of extraction wells. Pumping liquid out of the wells removes contaminants from the groundwater and provides hydraulic control to prevent them from entering the Columbia River and wetlands north of the site. Ecology is currently working with the company to determine when use of the extraction field can be discontinued.

Uplands and portions of the Columbia River adjacent to the former Evergreen Aluminum smelter site in Vancouver, Washington, were cleaned up under a consent decree between Alcoa and Ecology. The Port of Vancouver is now redeveloping the former aluminum smelter site. Ecology is working with the Port to ensure that closed landfills and other areas on which we imposed deed restrictions during the smelter cleanup won't be compromised.

### **Reduce Persistent Bioaccumulative Toxics in the Environment**

Persistent bioaccumulative toxics (PBTs) define the characteristics of certain chemicals that, when introduced into the environment, result in long-term harm to the health of humans and wildlife. Once in the environment, PBTs are slow to break down, and therefore build up in organisms in the food chain. Exposure can cause cancer, impair immune systems, and damage development. The 2006 PBT rule includes a list of chemicals that meet the criteria for these PBT, and prescribes a process (called a Chemical Action Plan or CAP) for mapping out how and when to decrease releases of these chemicals within Washington.

CAPs have been completed for mercury, polybrominated diphenyl ethers or PBDEs (a chemical flame retardant), and lead. In 2012, a CAP for polycyclic aromatic hydrocarbons (PAHs) was completed. This group of chemicals is a byproduct of combustion. Ecology worked extensively with external stakeholders and across Ecology programs to quantify sources of PAHs, and recommend strategies to reduce releases of these carcinogenic compounds. Ecology has existing programs to address the most significant of these sources: wood smoke, vehicle emissions, and creosote pilings. The next CAP will be on PCBs or polychlorinated biphenyls.

The Waste 2 Resources Program continues to lead agency efforts to implement the lead and PBDE CAP recommendations.

- The number one CAP target is lead-based paint, which is the largest source of exposure for children. Ecology and the Department of Health (DOH) worked together to increase awareness of children's exposure to lead-based paint as part of DOH's "Healthy Homes" initiative. Staff arranged field training for DOH, Commerce, and local health departments on conducting home inspections for sources of lead. Ecology staff also provided technical assistance to local health departments charged with investigating sources of elevated blood lead levels. Elevated blood lead levels must be reported to DOH, and local health departments are charged with helping the affected families identify and remove sources of lead.
- In 2012, as part of the implementation of the 2010 lead wheel weight ban, Ecology staff provided technical assistance to local governments, as well as translated information on the ban for local governments to use with non-English speaking owners of auto shops.
- During the 2012 legislative session, Ecology staff provided information to legislators and legislative staff in response to questions concerning lead in fishing tackles, and asbestos in building materials.
- In 2012, staff began purchasing and testing products regulated under Chapter 70.76 RCW. This law restricts the sale of mattresses, residential upholstered furniture, and televisions and computers containing PBDE flame retardants.

## **Children’s Safe Products Act and Other Consumer Product Laws**

Ecology adopted the Children’s Safe Products Reporting Rule in July 2011. The rule identifies 66 chemicals of high concern for children. Manufacturers or distributors of children’s products sold in Washington must report to Ecology if their products contain a listed chemical. The rule provided a phased-in reporting requirement, and the first reporting deadline was August 2012. The second round of reporting must be completed by February 2013. During 2012, staff worked to develop and test an on-line database to facilitate this reporting requirement. The first two reporting deadlines passed without incident, and the database is now being requested by other states considering similar laws. Staff also developed enforcement guidance for product laws, including the Children’s Safe Products Act.

In 2012, Ecology staff began to purchase and test children’s products to assure compliance with the Children’s Safe Products Act, as well as laws limiting Bisphenol A in baby bottles and sippy cups. Staff also conducted a webinar for other states interested in coal-tar sealants.

## **Water Quality Program..... \$4.0 M Operating – STCA**

The mission of the Water Quality Program (WQP) is to protect and restore Washington’s waters. The State Toxics Control Account (STCA) paid for activities that helped us pursue and fulfill our mission.

### **Water Quality Standards**

The federal Clean Water Act requires Ecology to develop water quality standards and to identify water bodies that fail to meet those standards. The program does this by reviewing thousands of water quality data samples and publishing an integrated water quality assessment report. The program works with local interests to prepare water quality improvement reports to reduce pollution which includes hazardous substances within the state, establish conditions in discharge permits and nonpoint-source management plans, and monitor the effectiveness of the improvement of the report.

### **Aquatic Pesticide Program**

The Aquatic Pesticide program aims to reduce risks to human health and the aquatic environment from exposure to pesticides used to manage aquatic weeds and invasive animal species. Staff developed permits and updated Environmental Impact Statements that pertain to aquatic pesticides and also provided technical assistance to pesticide applicators, lake associations, and similar interests.

Ecology gave permit information to chemical manufacturers, and to pesticide applicators, and their client groups. Ecology provided materials to encourage the use of integrated pest management principles to manage invasive species. Ecology maintained databases that tracked the amount and uses of aquatic pesticides in Washington.

### **Stormwater Program**

The federal Clean Water Act and state laws require entities (approximately 3,400 businesses and 150 local or municipal governments) to obtain a National Pollutant Discharge Elimination System (NPDES) permit before they may discharge stormwater into Washington’s water bodies.

STCA dollars allowed WQP staff to:

- Develop new permits, providing a compliance pathway to industrial and construction facility operators and to local government entities.

- Provide technical assistance and support to permit holders.
- Develop and maintain tools to help permit holders and others operate their facilities in ways that meet Ecology stormwater management requirements.

### **Lower Columbia Estuary Program (LCREP)**

Congress established a National Estuary Program in 1987 to identify those nationally significant estuaries threatened by overuse, development, and pollution. This program helps communities along rivers develop local management plans designed to protect and preserve those important natural systems. The Lower Columbia Estuary Program partnership (the Partnership) entered the National Estuary Program in 1995.

The Partnership works concertedly in three areas to:

- Protect the ecosystem and species—working to restore 16,000 acres of wetlands and habitat and to promote improvements in stormwater management.
- Reduce toxic and conventional pollution—working with partners to eliminate persistent bioaccumulative toxics, to bring water bodies up to water quality standards, to reduce hydrocarbon and heavy metal discharges, and to reduce bacterial contamination.
- Provide information about the river—reaching a range of audiences by conducting classes and volunteer learning experiences; collecting data from long-term monitoring; and building coordination among federal, state, and local authorities with public and private interests.

STCA funded a grant to the Partnership of \$150,000 in Fiscal Year 2012.

### **Activities Shifted by the Legislature from GF-S to STCA; Fund Shift of \$890,000**

During the 2012 supplemental budget, the Legislature required Ecology a one-time fund shift of \$20.1 million from GF-S to STCA. The following activities were shifted in the Water Quality Program.

#### ***Clean Up Polluted Waters – \$257,000***

Funding to develop water quality standards and to identify water bodies that fail to meet those standards. Ecology works with local interests to develop and implement Total Maximum Daily Load (TMDL) water quality improvement plans to reduce pollution, establish conditions in discharge permits and nonpoint-source management, and monitor the effectiveness of the TMDLs. During Fiscal Year 2012, Ecology worked with key partners to identify toxic contaminants in Puget Sound based on the completed toxics loading study and other work to identify chemicals of concern.

#### ***Control Stormwater Pollution - \$113,000***

Funding to provide training and assistance to communities and industries on the guidance and use of stormwater manuals and the Western Washington hydrology model. The program prepares tools, provides assistance, and offers compliance strategies to control the quantity and quality of stormwater runoff from development and industrial activities.

#### ***Prevent Point Source Pollution - \$34,000***

Funding to provide permit development, inspections and site visits, technical assistance on permit guidance, and follow-up on wastewater discharge permit violations.

***Provide Water Quality Financial Assistance - \$344,000***

Funding to provide technical assistance and grant/loan management for funding to local governments, state agencies, and tribes for programs authorized under chapter 70.146 RCW and storm water pollution control projects and activities that protect or preserve water and environmental health.

***Reduce Nonpoint-Source Water Pollution - \$142,000***

Funding to provide technical assistance targeted to raise awareness, encourage community action, provide funding, and support local decision makers in addressing toxic nonpoint source pollution (i.e. persistent/bioaccumulative toxins (PBTs), pesticides, fertilizers, phthalates, flame retardants, and pharmaceuticals).

**Agency Administration Program**

.....\$7.4 M Operating, \$0.1 M Capital – STCA  
.....\$0.4 M Operating, \$0.1 M Capital – LTCA

The Ecology Administration Program is supported with a fund split that equitably distributes costs across all funds—operating and capital; restricted and unrestricted sources. This methodology is required by state law in RCW 43.09.210 which provides that one fund cannot benefit another.<sup>4</sup>

Any reduction, or addition, to Ecology’s budget has a corresponding FTE and dollar amount added to, or subtracted from, the Administration Program using Ecology’s federally approved indirect rate as a percentage of salaries and benefits. FTE are calculated at 0.15 per direct program FTE.

Activities included in the Administration Program for Fiscal Year 2012 are summarized below.

**Executive, Financial, Information Technology, Information Services, and Facility Services**

Ecology’s leadership resides in the executive office.

- **Financial Services** personnel perform centralized accounting, budget, contracts, payroll, fiscal notes, audits, purchasing, and inventory functions.
- **Information Technology Services** personnel manage IT hardware and software (e.g. desktop computers, program applications, data systems, and network services). They guide information technology policy and strategic direction for Ecology.
- **Information Services** personnel maintain Ecology’s central records, respond to public records requests, intake/distribute postal mail and prepare out-going postal mail, and control the movement of extensive library resources (books, periodicals, and research publications) at headquarters and at regions.
- **Facility Services** personnel manage office facilities’ and vehicles’ maintenance and security tasks.

**Governmental Relations**

The Governmental Relations office provides leadership, policy support, and coordination for federal and state legislative issues. Ecology staff perform strategic planning functions, measure agency performance, and develop environmental indicators.

<sup>4</sup> This statute refers to local government accounting, but has been used by the State Auditor in its 2001 and 2002 audit reports as the basis for audit findings and direction to state agencies.

Staff address issues that affect local governments, tribes, and British Columbia. They coordinate rule making, and they provide economic analysis of rule proposals (e.g. small business economic impact statements and cost/benefit studies).

### **Communication and Education**

Ecology performs enforcement actions, conducts toxic site cleanup, and carries out other work that demands public information delivery and requires a public consultation process. Ecology strives to be transparent, open, and accountable to the public, policy leaders, news media, and community. To fulfill this commitment, the Communication and Education office applies up-to-date communication technologies to support Ecology's leaders and environmental programs.

The public relies on Ecology to make pertinent information easily accessible:

- Ecology sends consistent general messages and publishes timely community-specific information through both print and interactive media.
- Ecology employs different communication technologies to learn what information our customers need and which presentation styles or delivery methods best meet those needs.
- Ecology partners with local governments, community groups, schools, and universities to help Washington residents make informed choices about using and protecting Washington's water and air, reducing toxic threats, and reducing climate change hazards.
- When Ecology responds to oil and other hazardous chemical spills, public information officers provide timely information to the affected community using electronic and broadcast media. Ecology's staff may also serve on multi-jurisdictional incident response teams, once those teams are established.

### **Regional and Field Offices**

Staff stationed at Ecology's four regional offices (Lacey, Yakima, Spokane, and Bellevue) and three field offices (Bellingham, Vancouver, and Wenatchee) provide core administrative support for Ecology's local environmental work in all regions of the state. In addition to administrative functions (reception services, postal mail and records management, and building and regional fleet management), this support includes complaint and response tracking, and State Environmental Policy Act (SEPA) compliance review. Four Ecology regional directors focus on their local communities' needs; they also sanction cross-program coordination and they manage large, multiple-program environmental reviews and permitting projects.

### **Human Resources**

The Human Resources office provides a full scope of human resources management and consulting services. Human Resources activities include recruitment, labor relations, classification and compensation, performance management, training and development, employee safety and wellness, layoffs, personnel records management, and personnel action processing.

Human Resources plays a key role in ensuring Ecology complies with federal and state employment laws, civil service rules, and agency policy. Human Resources also manages implementation and administration of collective bargaining agreements, including bargaining, contract compliance, handling grievances, and arbitration.

The office develops and manages Ecology's Affirmative Action Plan and ensures equal employment opportunity, and sponsors and coordinates activities that encourage diversity. This includes helping create a supportive work environment that reflects the diversity of the communities we serve.



**Activities Shifted by the Legislature from GF-S to STCA; Fund Shift of \$1.0 M**

In the 2012 supplemental budget, the Legislature required a \$20.1 million one-time fund shift of expenditures in the 2011-13 biennium from the GF-S to the STCA. For the Administration Program, this equaled \$1.0 million for Fiscal Year 2012.

## Part 2: Other State Agencies' Fiscal Year 2012 Expenditure Summary, State Toxics Control Account

### Department of Agriculture..... \$2.6 M Operating – STCA

During Fiscal Year 2012, the STCA funded several pesticide-related toxics control activities carried out by the Washington State Department of Agriculture (WSDA).

#### Waste Pesticide Identification and Disposal – \$0.58 M STCA

The WSDA waste pesticide identification and disposal activity protects water and land from potential pesticide contamination. WSDA's objectives are to (1) reduce and eventually eliminate stockpiles of unusable pesticides, now stored by small businesses and on farms and similar enterprises; and (2) prevent future accumulations of unusable pesticides through user and purchaser education.

During Fiscal Year 2012, WSDA held eight regional collection events and three special site projects. In total, WSDA collected 189,670 pounds of unusable pesticide products and pesticide material from 273 customers. WSDA collected and properly disposed of banned persistent, bioaccumulative, and toxic (PBT) pesticides such as dinoseb, DDT, endrin, parathion, pentachlorophenol, and lead arsenate. WSDA also removed cyanide-based pesticides and highly toxic vertebrate poisons from private storage locations. These removals prevented accidental exposure or intentional misuse of "designated priority pesticides" that could adversely affect public health and the environment.

WSDA collected most pesticides at two types of events:

1. **Regional Events:** People brought waste pesticides to collection sites where WSDA worked with the hazardous waste contractor to segregate the pesticides into common hazard classes, then packed and shipped the pesticides for destruction. More than three-fourths of the pesticides disposed of by the program during Fiscal Year 2012 were collected at regional events.
2. **Special Site Events:** WSDA, the hazardous waste contractor, and project cooperators all traveled to the customer's sites to collect, sort, and package their pesticides for destruction. In September and October 2011, we picked up obsolete pesticides from 45 customers throughout North Central Washington and transported them to a location at Okanogan. There the products were inventoried and segregated, packed and manifested, then shipped for destruction. Taking possession of the pesticides transferred legal responsibility to WSDA for their safe transportation to, and proper destruction at, federally permitted treatment, storage, and disposal facilities (TSDFs). Most of the pesticides were destroyed at one of two TSDFs.

Many tree-fruit growers—especially those producing apples and pears for export—participate in private, third-party certified Good Agricultural Practice (GAP) programs such as "GLOBAL G.A.P" and "Safe Quality Food" (SQF). Tree-fruit and other fresh-produce growers must meet the standards set by GAP or SQF programs for growers to maintain their market opportunities and enhance their sales to key domestic and international food distributors.

GAP requirements include the mandate to eliminate all obsolete or otherwise unusable agricultural chemicals from the grower's storage shed. Many growers, and some fruit cooperatives, asked the WSDA Waste Pesticide Program staff to help them identify

Washington exports more than 30 percent of our state's tree fruit to international markets—an important part of Washington's export market and economy.

containers' contents and dispose of unwanted pesticides. This increased demand for the WSDA disposal service currently exceeds the Waste Pesticide Disposal Program's MTCA appropriation.

WSDA's budget dictates the volume of pesticides we can collect and dispose. Our Fiscal Year 2012 budget did not allow us to meet the growers' increased demand for pesticides collection and disposal during the current budget cycle. Instead, WSDA responded to growers' continuing requests by providing more on-farm technical and packing assistance. WSDA inventoried, segregated, and prepared and packed the pesticides at the grower's locations to ensure that those toxic wastes posed no immediate threat of exposure or release while they await the next disposal opportunity. Third-party GAP inspectors recognized the unmet demand for waste pesticide disposal. Those certifying bodies gave WSDA-segregated and packed pesticides stored in a grower's storage facility a "temporary pass" of the obsolete pesticide removal mandate (GAP standard).

**Table 4: Waste Pesticide Collection/Disposal Projects Performed by WSDA in Fiscal Year 2012**

Collection Event Location	Dates of Events	Number of Customers	Pounds Collected	Disposal Cost	Cost Per Pound
<i>Regional Collection Event Location</i>					
Seattle Regional	08/23/11	37	13,501	\$18,962	\$1.40
Walla Walla Regional	09/13/11	21	7,155	13,240	1.85
Spokane Regional	09/15/11	22	11,131	17,870	1.61
Wenatchee Regional	10/04/11	42	27,833	41,714	1.50
Yakima (Mini) Regional	10/18/11	21	20,211	31,374	1.55
Prosser Regional	10/19 & 20/11	40	37,033	55,434	1.50
Pasco Regional	05/23/12	27	20,169	35,174	1.74
Longview Regional	06/20/12	12	12,273	7,621	0.62*
<b>Regional Total, Fiscal Year 2012</b>	<b>8 events</b>	<b>222</b>	<b>149,306</b>	<b>\$221,389</b>	<b>\$1.47</b>
<i>Special Collection Event Location</i>					
Yakima Special	07/12/11	5	7,609	\$11,819	\$1.55
North Central WA Special	10/05 & 06/11	45	28,615	48,480	1.69
Quincy Special	05/29/12	1	4,140	5,360	1.29
<b>Special Site Total, Fiscal Year 2012</b>	<b>3 events</b>	<b>51</b>	<b>40,364</b>	<b>65,659</b>	<b>1.63</b>
<b>Total, Fiscal Year 2012</b>	<b>11 events</b>	<b>273</b>	<b>189,670</b>	<b>\$287,048</b>	<b>\$1.55</b>

\*Note: The Lower Columbia River Estuary Partnership paid the first \$11,000 of the invoice total (\$18,621). The average amount collected per customer during Fiscal Year 2012 was approximately 695 pounds. Since 1988, WSDA collected and disposed of 2,714,839 pounds of pesticides from 7,418 customers. The average amount collected per customer (1988 through June 2012) was approximately 366 pounds.

Market forces pushed food producers' rising interest in GAP certification, and GAP mandates spurred growers to inventory their pesticide stocks and dispose of those they no longer use. Competition to meet GAP standards raised the number of potential participants in pesticide collection events to unpredictable levels. The volume of pesticides disposed in Fiscal Year 2012, for example, averaged 695 pounds per customer—nearly double the program's overall per customer average of 366 pounds. Four years ago, the Fiscal Year average was 376 pounds per customer and the overall program average from 1989 through

2007 was 338 pounds. During the past three years, one effect of the GAP programs has been the challenge to WSDA to increase the number of collection events scheduled (and the volume of pesticides disposed) despite tighter budget constraints.

To improve planning and ensure the most efficient use of appropriated funds, the WSDA Waste Pesticide Identification and Disposal program embraced the Lean management philosophy and modified some key aspects of the program operations early in calendar year 2012. Coincident to this Lean transformation, WSDA began using a new database. Together, the two changes increased staff efficiency and data accuracy.

**Lean Operational Change:** WSDA no longer announces collection event locations and dates. Instead, customers around the state can access the program's website to download inventory forms, request on-site assistance, or obtain disposal information. Collection events are now "built" upon submitted disposal inventories; WSDA provides service to groups of customers located in common geographical areas (when several are ready). Using this cluster-of-need scheduling method allows WSDA to collect waste pesticides more efficiently—keeping costs within budget, smoothing workload peaks and valleys, and managing data associated with the increased pesticide volume—without having to increase staff.

To help prevent future accumulations of unusable pesticides, WSDA encourages pesticide users, distributors, and retailers, to stay current on federal and state pesticide use laws, and to limit pesticide purchases to the kinds/amounts needed only for a specific application or growing cycle. Pesticides become obsolete when (1) a food producer or production sector changes pesticide use patterns, (2) owners convert agricultural land to other uses, or (3) international, federal, and state pesticide control authorities discontinue registrations or restrict residue tolerances.

Find more information at <http://agr.wa.gov/PestFert/Pesticides/WastePesticide.aspx>.

### **Endangered Species Program/Water Quality Assessment – \$1.24 M STCA**

Staff within the Natural Resource Assessment Section (NRAS) of the WSDA collected data to evaluate the impact of current pesticide use on threatened and endangered species, and on general water quality. Staff posted the data in a geographic information mapping system, which links usage and location to certain species populations. These data helped WSDA devise ways to reduce exposures to pesticide residues by threatened or endangered species.

WSDA staff combined these data with groundwater information collected by state and federal agencies to assess the impact of registered pesticides on human and environmental health. Applying the Pesticide Management Strategy (approved by the U.S. EPA Region 10) helped WSDA decide which measures would protect water quality and prevent surface waters' designations as impaired water bodies. In May 2011, the EPA approved our Washington State Endangered Species Protection Plan for Pesticide Use (the first state plan approved in the nation). This plan defined the EPA's and the WSDA's complementary roles and responsibilities for planning and coordinating data gathering and analysis, and for using the data to perform quality assurance tasks.

In 2003, the Department of Ecology and WSDA began a cooperative long-term monitoring study. Data collected during typical pesticide use seasons helped us characterize pesticide concentrations found in surface water designated as salmon habitat.



Water sampling for pesticide residues in Grayland, Pacific County, Washington

The study focused on six Watershed Resource Inventory Areas, representing a wide range of agricultural land uses and urban core areas in Washington State. The Department of Ecology and WSDA jointly published the resulting annual data reports. In 2012, WSDA will publish a ten-year summary report that analyzes trends and infers the effectiveness of pesticide label requirements and of using select application methods.

WSDA conducted two additional studies in Fiscal Year 2012. The first, coordinated with the Washington Department of Health, measured herbicide concentrations in wells operated by the City of Quincy. The results prompted the WSDA to impose the Pesticide Management Strategy to

eliminate the use of herbicides in areas around the City of Quincy. The second, conducted in the cranberry growing regions of Pacific and Grays Harbor Counties where growers used Best Management Practices (BMP), assessed the extent to which using BMPs reduced insecticide contamination in 303(d) listed water bodies with endangered species implications. Currently, WSDA is engaged in developing a rule to address continued pesticide detections in affected water bodies.

WSDA continues to work with agricultural commodity groups to address possible pesticide contamination sources and to refine application methods that help avoid pesticide drift or runoff.

Find further information at <http://agr.wa.gov/PestFert/natresources/EndangSpecies.aspx>.

### **Pesticide Compliance and Registration – \$0.22 M STCA**

The STCA provided funding for three positions in WSDA’s core Pesticide Regulation program—one in the compliance program area, and two in registration.

**Compliance:** In January 2012, the job duties of the compliance position changed from a technical assistance function to an enforcement-oriented function. The primary responsibilities of the compliance position were focused on investigating pesticide misuse; on inspecting pesticide dealers and manufacturers, market places (any place pesticides are sold), and applicators’ equipment; and confirming that licensed applicators’ practices comply with Worker Protection Standards. The compliance position conducted approximately 20 investigations, 20 inspections, and made compliance presentations to continuing education classes.

**Registration:** Any pesticide product intended for use on crops in Washington must be registered with the WSDA. Because Washington’s extensive crop diversity gives rise to specific pest control needs, our agricultural industry values the limited availability of special local need registrations. STCA funding of two registration positions gave WSDA the assessment capacity that helped determine whether a “special local need” or emergency pest situation would justify the limited use of certain pesticides not registered with EPA for such purposes. Staff weighed pesticide residue, efficacy, and adverse effects data to decide how to protect human health, endangered species, beneficial organisms, and ground and surface water. Conducting these two programs ensured that pesticides were used safely and that both appropriate products and methods were available as needed to protect Washington’s agriculture from preventable damage.

Find more information on these activities at <http://agr.wa.gov/PestFert/>.

**Pesticide Chemistry Laboratory – \$0.36 M STCA**

WSDA used STCA funding as direct support for pesticide residue analysis tasks performed in our chemistry laboratory located in Yakima. The funding paid (1) salaries and benefits for three full-time employees, (2) about ten percent of the laboratory facility lease, and (3) for laboratory and instrumental supplies needed to perform chemical analysis of pesticide samples.

**Department of Agriculture Administration Services – \$0.15 M STCA**

Department of Agriculture Administration includes services for the WSDA’s 26 programs:

- Executive leadership, policy development and review, and financial services.
- Computer and information technology services, communications.
- Administrative procedures guidance and legal services.
- Human resources services, employee safety, and risk management.

The STCA amount allocated for Department of Agriculture Administration reflects a proportional share of total funding appropriated to the agency for Fiscal Year 2012.

**Department of Fish and Wildlife ..... \$0.1 M Capital – STCA**

The mission of the Washington Department of Fish and Wildlife (WDFW) is to preserve, protect, and perpetuate fish, wildlife, and ecosystems, while sustaining fish and wildlife recreational and commercial opportunities. As part of that mission, WDFW is working to restore coastal wetlands and other nearshore ecosystems in Puget Sound. This work supports responsibilities shared with Ecology to restore and protect Puget Sound, and advancing interagency efforts guided by the Puget Sound Partnership action agenda.

In Fiscal Year 2010, the WDFW received an appropriation of \$1,030,000 from the STCA to advance nearshore restoration projects. During the 2009-11 biennium, WDFW expended approximately \$590,000 of the funds appropriated to us, and the remaining funds were re-appropriated for the same purpose in the 2011-13 biennium. In Fiscal Year 2012, WDFW expended approximately \$120,000 of the remaining \$440,000. We plan to expend the remaining \$320,000 by the end of the 2011-13 biennium.

During Fiscal Year 2012, WDFW’s Habitat Restoration Division staff continued work that advanced projects identified by the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP). They have been completing design, cost-estimation, and cost-effectiveness analysis in partnership with the U.S. Army Corps of Engineers. Work is on-going to complete plans and file documentation required to qualify for construction authorization. A series of 15 engineering appendices are being completed for selected projects funded by MTCA. These documents evaluate projects from a variety of engineering disciplines to identify risks and uncertainties and to establish construction feasibility. Our contractor has also produced a series of summary fact sheets for projects. PSNERP uses those fact sheets to support on-going stakeholder involvement and outreach activities. Fact sheets and project designs can be accessed on the PSNERP website at <http://www.pugetsoundnearshore.org/cdr.html>.

**Department of Health ..... \$1.5 M Operating – STCA**

Toxic chemicals and environmental contaminants can harm the people of Washington. They are found in our water, air, soil, and sediments, and in our food, consumer products, and wildlife—including fish.

The Washington State Department of Health (DOH) evaluated hazards that toxic contaminants pose to human health. DOH collaborated with local, state, and federal agencies, with tribal governments, and with interested communities, to prevent or minimize human exposures to such contaminants.

Our activities included:

- Measuring contaminant levels.
- Assessing current potential threats to human health.
- Identifying exposure routes.
- Informing communities to minimize their exposure.
- Advising local, state, and national regulators.

**Did you know...**

- PCBs, mercury, and DDT are the main chemical contaminant drivers leading to Washington’s fish advisories.
- Pesticide illness monitoring indicates that farm workers experience higher illness rates than other occupational groups.
- In 2011, two percent of children who were tested for lead had a blood lead level greater than or equal to 5 ug/dL the Center for Disease Control action level.
- Indoor air can be two to five times more polluted than outdoor air in the same geographic area.
- Many private wells in Washington exceed EPA’s drinking water standard (limit) for arsenic.

During Fiscal Year 2012, the Department of Health spent \$1,538,000 from the STCA.

This funding supported health assessment, education, and monitoring programs that protect the public—especially children—from the health consequences of environmental exposures to legacy contaminants, as well as exposures to emergent toxic chemicals.

Highlights from DOH Fiscal Year 2011-12 efforts follow.

**Assessing Toxic Exposure Pathways and Public Health Hazards**

***Fish Consumption***

Ecology uses current fish contamination data and fish consumption rates as a basis for our state’s environmental cleanup standards and water pollution control requirements. DOH measures toxic chemical levels in fish tissue, and the fish consumption rates of people in different locations throughout the state, as the basis for its fish consumption safety guidance to individuals, community groups, and government entities. DOH toxicologists work closely with scientists from Ecology to identify and measure toxic contaminants found in the tissue of fish from our marine and freshwater bodies.

***Fish Consumption Advisories Program***

Fish and shellfish contain high-quality protein and other essential nutrients, are low in saturated fat, and contain omega-3 fatty acids that are important for heart health and a child’s growth and development. Some fish, however, contain methyl mercury (mercury) and other harmful chemicals at levels of concern to public health—especially at risk are the developing fetus, infant, and child.

Eating fish is the main way people from Washington can be exposed to mercury and PCBs. Program experts determine whether the fish you catch or buy from the store is safe to eat.

### ***Dietary Exposure to Mercury***

For the most sensitive human populations (fetuses, infants, and children), the primary health effect of mercury exposure is impaired neurological development. Mercury exposure in the womb can adversely affect a growing brain and nervous system. Children exposed to mercury in the womb exhibit irreversible impacts on cognitive thinking, memory and attention, language, and fine motor and visual spatial skills.

### ***Dietary Exposure to PCBs***

High levels of PCBs in humans have been associated with increased risk of developing certain types of cancer. Health effects associated with low-level exposures vary. The children of mothers who consumed high dietary levels of PCBs have shown altered infant behavior, poorer cognitive function, and mild immune effects. Adverse reproductive effects and disruption of thyroid hormones have also been associated with PCB exposure.

Our response: Staff published—and posted on the agency’s website—healthy fish eating guidelines, fact sheets, and health assessment reports. Program staff distributed outreach materials through health practitioners, Child Profile Health Promotion mailings, and the Women Infant Child Nutrition Program; supplied the information to WDFW for inclusion in their fishing pamphlet; and addressed community groups and responded to individual questions and requests. Staff respond to the public’s questions about fish. They continue to work with other local and state health departments, and attend public events to ensure consistent and accurate statewide messaging.



### ***STCA-Funded Fish Consumption Activities During Fiscal Year 2012***

Informing communities to minimize their exposure:

- Working with Ecology to evaluate background levels of PCBs and dioxins in freshwater fish from lakes, rivers, and streams across the state.
- Issuing fish advisories such as the Pend Oreille River Fish due to mercury levels.
- As a response to the high volume of questions and requests from the public about which recreational and commercial fish are safe to eat, staff revised and reprinted the *Healthy Fish Guide*, which is available in English and Spanish.

Advising and educating local, state, and national government entities about the risks and benefits of eating fish:

- MTCA and Sediment Management Standards Advisory Group
- Spokane River Regional Toxics Task Force
- Columbia River Toxics Reduction Workgroup
- Puget Sound Toxics Monitoring Workgroup
- State National Parks

### ***Arsenic Mercury Intake Biometric Study***

Mercury and arsenic are toxic chemical compounds which impact human health globally. People are exposed to arsenic through drinking water, shellfish consumption, smoking and second-hand smoke, as well as from historic use of arsenicals in pesticides and deposition of arsenic from air pollution sources (such as the ASARCO smelter in Tacoma, Washington). People are exposed to mercury primarily through eating fish.



Our response: Staff initiated the Arsenic Mercury Intake Biometric Study in 2005. Over 200 women of childbearing age who identified themselves as Korean, Japanese, or of Japanese or Korean descent participated. This longitudinal study involved an in-depth fish-consumption survey, collection of biomarker samples (hair, urine, blood, toenails), marking toenails and recording hair-sample locations to determine growth rates at a later date, and a self-administered food-frequency questionnaire.

Two public health outcomes were completed during Fiscal Year 2012:

- Results from hair and toenail bio-monitoring improved our understanding of mercury impacts on cardiovascular disease.
- Spot blood samples were not predictive of ongoing methyl mercury exposure. We, therefore, recommend physicians not use spot blood samples for monitoring individual patients considered to be high fish consumers.

### ***Pesticide Illness Monitoring and Prevention Program***

Approximately 1.1 billion pounds of pesticides are used annually in the U.S. More than 20,000 different pesticide products are currently marketed. Pesticides are used in homes and gardens, schools, office buildings, roadsides, and in agriculture to kill or control pests. In Washington, pesticides are also used to control insects that cause diseases such as West Nile virus.

About eighty percent of all U.S. pesticides sold are used in agriculture. Washington's agricultural industry employs about 160,000 people and makes up 12 percent of the state's economy. Agricultural use of pesticides increases crop production and reduces labor required in the fields, which helps keep food costs low. Farm workers are at higher risk than others for over-exposure to pesticides.

The goal of the DOH Pesticide Program is to prevent pesticide illness. To achieve this goal, staff investigate reports of acute pesticide illness, document findings, and apply findings to illness prevention actions. The information collected helps DOH design illness prevention messages, reduction strategies, and outreach materials.

Our response: In 2011-2012, staff reviewed more than 1,000 reports of illness, and 201 investigations were completed. Program staff work closely with the National Institute for Occupational Safety and Health, other federal, state, and local agencies, health care providers, and community-based organizations to strengthen reporting mechanisms and to pursue special illness prevention projects with an emphasis on agriculture. Staff also worked with the Department of Labor and Industries to improve reporting workers' compensation data.

### ***Agricultural Pesticide Drift***

DOH staff developed materials and reviewed draft legislation regarding prevention of agricultural pesticide drift. Staff met with farm workers and grower advocates, the Washington Department of Agriculture, and the Department of Labor and Industries to discuss legislative and other strategies to prevent agricultural pesticide drift.

### ***Product Labeling***

DOH staff identified a highly toxic product (dichlorvos) marketed to consumers in the form of "No Pest Strips." Staff elevated public health safety concerns to manufacturers, WSDA, and EPA and recommended that the product labeling be changed to protect public health. Staff developed a website to further educate the public on this topic.

## ***Outreach and Education***

DOH staff presented investigation findings to health care providers, industry and farm workers, and WSDA's workers recertification classes.

## ***Revising the Comprehensive Cancer Control Plan***

DOH participated in the Washington CARES About Cancer Partnership, on its Primary Prevention Committee. During the past biennium, DOH collaborated with other member-sectors to revise the Washington State Comprehensive Cancer Control Plan 2009-2013, designed to reduce the burden of cancer in Washington State.

**Cancer has been the overall leading cause of death in Washington State since 2004.** Community involvement is the most important course of action to prevent and control cancer in Washington.

DOH focused on reducing environmental carcinogen exposures and identified arsenic, diesel exhaust, and wood smoke as the three environmental carcinogens to which the greatest number of residents are exposed. DOH worked closely with Ecology's Air Quality Program staff to ensure that the 2009-2013 Comprehensive Cancer Control Plan recognized wood smoke as an environmental carcinogen.

Staff provided analysis on legislation affecting air emission permits on generators used with an anaerobic digester, and protection of air quality from wood stove and fireplace emissions. Both were passed. Staff continue to educate the public through news releases, organizing panel discussions at the Joint Conference on Health on "Reducing Wood Smoke to Improve Air Quality and Health," and serving on advisory and work groups to strategize on how to reduce air toxics emissions in the home to protect children's health.

## **Protecting the Public by Assuring Safe Indoor Air Quality**

Indoor air can be two to five times more polluted than outdoor air. Children, the elderly, the chronically ill, and people with respiratory or cardiovascular disease such as asthma, are more susceptible to air-borne toxics. Sources of indoor air pollution include:

- Chemical processes or use of chemical-laden consumer products such as asbestos, carbon monoxide, formaldehyde, particulates, ozone generators, pesticides, and volatile organic compounds.
- Human behavior choices in response to environmental or natural events such as floods/storm hazards, a mercury release, mold, ozone, poor ventilation, radon, and tobacco or wood smoke.

Our response: Staff educated people in communities about ways to protect or improve indoor air quality by responding to concerns from building tenants, property owners/landlord associations, public/private schools, and local health jurisdictions. Staff has been working closely with schools, and operating a mold and landlord-tenant consumer information phone line. DOH focused on key issues identified through collaborative relationships with local and state health and education departments, environmental agencies, and local professional organizations and entities.

## ***Preventing Carbon Monoxide Poisoning***

Carbon monoxide (CO) poisoning is a serious public health issue which can kill a person in minutes. Between 1990 and 2010, 1,540 Washington residents died from acute exposure to CO, an average of 73 deaths per year. During the same period, an average of 59 Washington residents were hospitalized for symptoms related to CO poisoning.

### ***Exposure Routes***

Records of people treated for CO poisoning at hyperbaric oxygen treatment facilities show residential CO emissions typically come from in-house combustion devices (fuel-fired appliances such as furnaces), and from portable generators or charcoal burners (cooking grills) brought inside from out-of-doors.

Our response: Staff identified several ways to reduce the number of CO-related poisonings in Washington through education and outreach efforts. DOH has been (1) working with the State Building Code Council to create rules that define how to fulfill the 2009 law requiring CO alarms in residences, (2) maintaining the CO poisoning prevention webpage, and (3) answering questions from the public.

## **Assuring Healthy Schools for Children**

Staff conducted nine workshops for school and local health jurisdiction staff on children's environmental health exposure issues and reduction strategies in the environment and indoor air quality. Staff provided technical assistance to schools and school-related professional organizations. DOH collaborated with the Office of the Superintendent of Public Instruction on the state pilot of the U. S. Department of Education's Green Ribbon Schools Award. The award encourages and recognizes schools for achievement in environmental impact and energy efficiency, healthy school environments, and environmental and sustainability education.

## **MTCA Funding Supported DOH Collaborative Staff Activities**

### ***Chemical Action Plans - Reducing Harmful Impacts of PAHs***

Partnering with Ecology, DOH proposed strategies to reduce exposures to polycyclic aromatic hydrocarbons (PAHs) to lessen their impact on public health.

### **Carbon Monoxide Poisoning is a Serious Public Health Threat**

Low levels of carbon monoxide poisoning can be confused with flu symptoms, food poisoning, or other illnesses and can pose a long term health risk if left unattended. Some symptoms of low CO exposure are:

- Shortness of breath
- Mild nausea
- Mild headaches

Moderate levels of CO exposure can cause death if the exposure persists; symptoms include:

- Headaches
- Dizziness
- Nausea
- Light-headedness

Exposure to high levels of CO can be fatal, causing death within minutes.

### ***Children’s Safe Products Act***

The Children’s Safe Products Act was passed to protect children from harmful chemicals in children’s products. The final rule names 66 chemicals or classes of chemicals that pose special health risks to children. Manufacturers or distributors of any product they market for use on or by children must report to Ecology if the product contains a listed chemical.

DOH recommended expanding reporting—to better support risk assessment in children and supported policy efforts—to require manufacturers to consider less toxic alternatives in their products. DOH prepared focus sheets for decision makers and disease prevention programs. Focus sheets summarized emerging evidence that environmental chemicals contribute to major adverse childhood conditions. Topics included childhood asthma, learning and behavior, childhood obesity, childhood cancer, and children’s reproductive systems.

### ***Childhood Lead Poisoning***

Preventing and reducing childhood lead exposure is a key public health goal to assure children reach their full health potential. MTCA funds continue to support DOH in maintaining the Child Blood Lead Registry, helping high-risk children get blood lead tests, and providing information to parents to help them create a healthy home environment so they can better protect their children from lead exposure.

### ***Cyanobacteria Toxic Blooms***

Washington has become a national leader in recognizing toxic blue-green algae as a serious public health problem. DOH’s strategy walks local health jurisdictions through a three-tiered response—testing for exposure to microcystin and anatoxin-a in affected lakes, ponds, or rivers. DOH leveraged MTCA funds to be competitive for a grant from the Centers for Disease Control and Prevention. The grant allowed DOH to implement a statewide outreach strategy which raised awareness of health impacts from exposure to cyanotoxins, focusing on animals as sentinel indicators. DOH continues to work with Ecology to investigate whether microcystins accumulate in fish tissue and will develop a human health assessment to determine how many fish a person can safely eat if the fish contain these toxins.

### ***Safe Drinking Water***

DOH works to assure public water supply systems provide safe and reliable drinking water to the people of Washington. The Office of Drinking Water leverages MTCA funds with federal money to maintain technical staff support to assess water storage and delivery systems. The Office of Drinking Water also gives technical advice to system operators whose water supplies are at risk of, or apparently impaired by, contamination. DOH works with Ecology, WSDA, and other state agencies, local health departments, municipalities, and purveyors to ensure public access to safe drinking water.

## **Puget Sound Partnership ..... \$0.3 M Operating – STCA**

The Puget Sound Partnership (Partnership) spent \$286,928 in State Toxics Control Account (STCA) funding to improve protection of Puget Sound by helping surrounding communities better manage their stormwater runoff and prepare to address the potential hazards posed by major oil spills.

## Reducing Stormwater Runoff Hazards

Stormwater runoff in developed areas is a major cause—if not the biggest cause—of a decline in the health of Puget Sound. Toxic compounds that reach the Sound via surface water runoff affect many species. Salmon runs are threatened by chemical runoff from streets and structures. Bottom-dwelling species, such as English sole, bear a toxic burden from chemicals flushed into the Sound by storm water runoff. Polluted runoff also forces closures of productive shellfish harvest areas and public swimming beaches.



The final “Integrating LID into Local Codes: A Guidebook for Local Governments,” was published July 31, 2012. The Puget Sound Partnership used MTCA funds to pay a contractor to write the document that will help local governments incorporate innovative stormwater management and land use development techniques (low impact development) into their communities’ local codes and standards.

One strategic response to stormwater runoff has been to slow and “filter” the drainage of runoff through widespread adoption of low-impact development (LID) methods. Washington’s Pollution Control Hearings Board (PCHB) issued a series of decisions during 2008 and 2009 directing the Department of Ecology to require—rather than merely encourage—insertion of LID measures into state-issued and enforced NPDES (National Pollutant Discharge Elimination System) municipal stormwater permits for western Washington. Beginning in August 2012, Ecology incorporated new LID requirements into municipal stormwater permit conditions. The new conditions apply when the agency renews permits for any municipality located in western Washington.

Finding increased threats to Puget Sound’s health (threats posed by inadequately controlled stormwater runoff) and seeing PCHB rulings that promote low impact development encouraged the Partnership to use MTCA funding to create two technical guidance documents:

- “Integrating LID into Local Codes: A Guidebook for Local Governments, July 2012” offers step-by-step guidance to local government staff charged with incorporating LID into local regulations, and to staff charged with writing LID requirements into municipal NPDES permits renewals.
- The “2012 LID Technical Guidance Manual for Puget Sound” gives specific guidance to any interested person in the Puget Sound region who wants to use effective LID methods that are appropriate to the site. The Washington State University Extension Office compiled the new manual, which was completed in November 2012.

## Addressing Oil Spills

A major hazard threatening Puget Sound is the ever-present potential for a major oil spill. MTCA funding fueled a Partnership-led effort to better integrate local entities into the state’s oil spill preparedness and response system. The Partnership advocated including local entities in the state’s available training in incident command, natural resource damage assessment, and the northwest area plan.

The 2009 Legislature directed the Partnership to assess Washington’s existing oil spill programs, and to provide independent advice and recommend any necessary improvements. The Partnership’s marine policy specialist focused on identifying ways to prevent major oil spills and participated on a cross-agency stakeholder Oil Spill Work Group that set state priorities for strategic action.

The Partnership convened the broad-based stakeholder Oil Spill Work Group in May 2011, and again in August 2012. Recommendations from those meetings led to the advancement of a vessel traffic risk assessment for north Puget Sound, coordinated with the Puget Sound Harbor Safety Committee. The state’s emphasis on improving marine safety by better modeling, and better managing risk, is a core strategy in the Partnership’s 2012 action agenda.

The Partnership’s action agenda contains singular directions to prioritize and focus Puget Sound recovery and protection efforts. The agenda informs government entities and scientists, environmental groups, and business and agricultural organizations located in the 12 county Puget Sound region.

**Department of Revenue ..... \$43,500 Operating – STCA**

**Revenue Source: The Hazardous Substance Tax (HST)**

The HST was defined by public vote in November 1988, on passage of Initiative 97, creating what became the Model Toxics Control Act (MTCA). MTCA is Washington’s hazardous waste site cleanup law.

Washington law improves upon the federal contaminated site cleanup law, referred to as Superfund. Congress allowed the federal cleanup program’s funding mechanism to expire. Under Superfund, before site investigation or cleanup work can begin, the EPA must win a series of court rulings that compel the property owner or previous land-user to pay site cleanup costs. Under MTCA, the Department of Revenue collects HST payments and deposits the revenue into the Toxics Control Accounts to support site cleanup.

In urgent cases of contaminated sites, the Toxics Control Accounts (primarily HST revenues) provides a financial safety net, paying costs of site cleanup even where the owner or polluter can’t or won’t pay. Interim site investigation and cleanup costs can be recovered from the polluter during or after the process. HST revenues enable Ecology to conduct remedial action ahead of the court’s fixing legal liability for the cleanup costs on the site’s polluters.

**Taxable Substances**

The HST is imposed on the wholesale value of certain products or components either defined as “hazardous” in a statute (state law), or determined by Ecology as a threat to human health or the environment. Only the first possession of the hazardous substance within our state is subject to this privilege tax. The tax applies foremost to petroleum products, secondarily to pesticides, and lastly to as many as 8,000 other chemical compounds.

**Who Pays?**

Identifying the firms that must pay the HST poses a problem for our staff and for taxpayers. The tax is self-reported on the “combined excise tax return” along with other taxes a business may owe. Small firms and businesses that infrequently use or distribute a defined hazardous substance or listed product may have trouble accounting for purchases of these specific items. The Department of Revenue may receive HST payments annually, quarterly, or monthly—depending on the size of the business. HST payers are audited when the Department of Revenue conducts its regular audit processes.

**Exemptions, Deductions, Credits**

- Previously-taxed hazardous substances (limits the tax to first possession of the substance).
- Products to be used for personal or domestic—not business—purposes.

- Minimal amounts—not including petroleum products or pesticides—possessed by retailers.
- Alumina or natural gas.
- Persons or activities which cannot be taxed under the U.S. Constitution.
- Products within the state before March 1, 1989 (when MTCA took effect).
- Credit for tax paid on fuel exported from the state in vehicle fuel tanks.
- Credit for the amount of similar tax paid on the same product in another state.

**University of Washington – Tacoma.....\$41,500 Capital – STCA**

The University of Washington – Tacoma Campus (UWT) was founded in 1990 in the historic warehouse district of Tacoma. Some historical uses of the district’s properties included gas stations, petroleum recycling, auto repair, and tire maintenance and repair. The EPA inspected UWT in 1996 and concluded that releases of hazardous substances, including volatile organic compounds and petroleum, had occurred at the Cragle Parcel, a former dangerous waste management facility.



The University of Washington – Tacoma.

UWT entered into an Agreed Order with Ecology in 1997 to investigate the nature and extent of

contamination, and then recommend cleanup actions for UWT properties. The remedial investigation and feasibility studies were completed in 2003.

During the 2009-11 biennium, UWT was appropriated \$1 million from the STCA for environmental remediation at its campus. Funding has supported several remediation efforts at UWT.

UWT pursued an interim action cleanup at the Howe parcel, the source of Perchloroethylene-(PCE) contaminated groundwater that flows under the Union Station Federal Courthouse. In 2009, UWT sampled existing groundwater wells and installed/sampled additional groundwater wells. In 2010 and 2011, vapor intrusion studies were completed at the Howe site (UWT’s bookstore) and in the courthouse. In 2011 and 2012, an amendment to the 1997 Agreed Order, a draft Interim Action Work Plan, and a Compliance Monitoring Plan, were completed and are currently under review. These draft documents went through a public review period in the fall of 2012. The UWT spent \$41,541 developing these documents in Fiscal Year 2012.

**Washington State Patrol..... \$0.2 M Operating – STCA**

The Washington State Patrol, Fire Protection Bureau, receives funds from the State Toxics Control Account (STCA) to maintain a clean and safe training facility in North Bend, Washington. The mission of the Fire Training Academy (the Academy) is to provide live fire training that meets or exceeds the minimum standards required by federal and state regulations governing firefighter training.

The Academy offers classes and exercises to convey technical knowledge and to practice recognizing and containing hazardous materials incidents. Success at the Academy reduces risks to first responders, to the people and property they protect, and to the environment.

For Fiscal Year 2012, the Fire Training Academy spent \$235,020 from the STCA. This funding paid for toxics control operations at the Academy:

- Conducting hazards monitoring and hazardous substance containment processes on site.
- Removing, transporting, and disposing hazardous waste by-products of live fire training.
- Conducting on-site water quality testing, operating the wastewater treatment facility, and reclaiming 5,000 gallons each month of the treated waste water (for use in training exercises).
- Purchasing supplies used to prevent an accidental release of contaminated water from the on-site retention pond system. This practice of using reclaimed water avoided drawing from the well water supply to replenish the amount of water lost to evaporation.

The Academy also deployed three electric golf carts for moving individuals on campus. Using electric golf carts avoids release of auto emissions from old, inefficient, combustion engine vehicles. Carts have proven to be more efficient and environmentally friendly.



The Fire Training Academy training grounds.



Vacuum truck cleaning Fire Training Academy drains.



The Fire Training Academy waste water treatment facility.



During Fiscal Year 2012, the Fire Training Academy provided training to first responders in:

- Flammable liquids.
- Portable fire extinguishers.
- Liquid petroleum gas.
- Airport rescue firefighting.
- Hazardous materials.
- Marine firefighting.

Course descriptions can be found at <http://www.wsp.wa.gov/fire/openroll.htm#schedule>.

## **Washington State University – Spokane.....\$1.1 M Capital – STCA**

For Fiscal Year 2012, Washington State University (WSU) received an appropriation of \$1.3 million from the State Toxics Control Account (STCA) and spent \$1.1 million. WSU paid costs of removing contaminated soil and ash from a lined containment cell located at the Biomedical and Health Sciences Building on their Riverpoint Campus in Spokane.

Historical land uses of the property contaminated soil at the site. The SIRTI and adjacent Riverpoint Campus property were part of a larger parcel that previously held railroad freight, a terminal facility, and other industrial businesses operated throughout the area until the early 1970s. WSU cleaned up the site using MTCA-approved methods that meet human and environmental health standards.

The containment cell was constructed in 1994 to store ash and soil excavated during construction of the Spokane Intercollegiate Research and Technology Institute (SIRTI) Building. Significant development occurred at the Campus thereafter. The Nursing Center Building was built on the east end of the property, and the Health Sciences Building, the Academic Building, and the Phase I Classroom Building were constructed in areas immediately north and east of the containment cell. In accordance with the campus master plan, the area where the containment cell was located was identified as the preferred location for a new Biomedical Building. Construction of this building required removal of that portion of the containment cell that fell within the planned Biomedical Building's footprint.

The work funded from the STCA was conducted as a voluntary cleanup action in accordance with the requirements of WAC 173-340-360. Work performed included preparing engineering and environmental documents; actual excavation, transport, and offsite disposal of approximately 36,000 cubic yards of contaminated material to a permitted landfill; and completion of defined construction monitoring and oversight tasks to ensure all cleanup and construction activities complied with the work plan designed to protect human health and the environment. All work plans, construction plans, and specifications were submitted to Ecology for review and comment prior to starting the planned activities, and a completion report documenting construction activities was also submitted to Ecology for review and evaluation.

## Part 3: Ecology's Fiscal Year 2012 Expenditure Summary, Local Toxics Control Account, Primarily Pass Through Grants to Local Government

### Ecology and the Local Toxics Control Account

Ecology's budget, particularly the capital budget, is focused on providing grants and loans to local governments and communities for environmental work. Money is awarded for cleaning up publicly-owned contaminated sites, supporting community awareness and involvement in hazardous and solid waste management, and making investments to protect water quality. Most of the work described in Part 3 is supported by the Local Toxics Control Account (LTCA). However, the State Toxics Control Account (STCA) does fund some local grant pass through programs. The Public Participation Grant Program is required in MTCA and funded from both Toxics Control Accounts. Recently, the Legislature has made decisions to fund the Centennial Clean Water Program and Stormwater investments using the STCA.

### Local Toxics Control Account Supports Specific Environmental Work

The following excerpts are from the MTCA declaration of policy (see it in its entirety in Part 1). The declaration of policy recognizes the needs of local communities, and the benefits of public involvement in the balanced work of toxic pollution prevention, hazardous and solid waste management, and toxic cleanup.

- *A healthy environment is now threatened by irresponsible use and disposal of hazardous substances. There are hundreds of hazardous waste sites in the state, and more will be created if current waste practices continue. Hazardous waste sites threaten the state's water resources, including those used for public drinking water. Many of our municipal landfills are current or potential hazardous waste sites and present serious threats to human health and the environment. The costs of eliminating these threats in many cases are beyond the financial means of local governments and ratepayers. The main purpose of Chapter 2, Laws of 1989, is to raise sufficient funds to clean up all hazardous waste sites and to prevent the creation of future hazards due to improper disposal of toxic wastes to the state's land and waters.*
- *Many farmers and small business owners who have followed the law with respect to their uses of pesticides and other chemicals may nonetheless face devastating economic consequences because their uses have contaminated the environment or the water supplies of their neighbors. With a source of funds, the state may assist these farmers and business owners, as well as those persons who sustain damages, such as the loss of their drinking water supplies, as a result of the contamination.*
- *It is in the public's interest to efficiently use our finite land base, to integrate our land use planning policies with our clean-up policies, and to clean up and reuse contaminated industrial properties. This minimizes industrial development pressures on undeveloped land and makes clean land available for future social use.*
- *Hazardous substance releases can adversely affect the health and welfare of the public, the environment, and property values. It is in the public interest that affected communities be notified of where releases of hazardous substances have occurred and what is being done to clean them up.*

LTCA receives 53 percent of the HST revenues which are dedicated to:

- Remedial actions.
- Hazardous and solid waste plans and programs.
- Methamphetamine cleanup.
- Cleanup and disposal of hazardous substances from abandoned or derelict vessels.
- Public participation grants.

## **Legislature Expanded the Use of the Toxics Control Accounts to Manage State Budget Crisis**

As described in the Part 1 of this report, the Legislature has made budget decisions redirecting the Toxics Control Accounts to other government purposes. Since the economic downturn began in the 2007-09 biennium, two types of departures have been made:

- Direct Transfers to the GF-S and STCA. Since the 2007-09 biennium, the Legislature has directly transferred nearly one-quarter billion dollars from the Toxics Control Accounts to the GF-S. Also, to boost resources in the STCA, the Legislature transferred just over \$34 million from the LTCA to the STCA.
- Fund Shifts to LTCA. The Legislature shifted costs of Ecology programs traditionally funded with GF-S to the LTCA. Those shifts required MTCA amendments in the budget—not to the underlying statute. For example, Ecology’s work to support Shoreline Master Program updates was funded by GF-S. A switch to the Toxics Control Accounts was made by the Legislature and authorized through a back-of-the-budget amendment.

### **Air Quality Program..... \$2.4 M, Capital – LTCA**

#### **Reducing Toxic Diesel Emissions – \$1.9 M**

Highly toxic diesel exhaust poses the highest health risk of any air contaminant in Washington. Diesel soot is hazardous to public health as a fine particle, and also because it contains chemicals from the combustion of petroleum that are harmful and carcinogenic. The California Air Resources Board estimates that every \$1 spent toward diesel emission reduction saves \$8 in health care and societal costs of diesel health impacts.

Ecology administers a grant program to reduce these emissions to protect people, both in areas where large numbers of diesel engines operate in close proximity (such as ports and distribution centers), and in situations where emissions can expose sensitive populations (children, asthmatics, and the elderly). Projects include installing particle-reduction devices on exhaust systems; installing idle-reduction technologies on school buses; and replacing the oldest, dirtiest engines with newer, cleaner ones. In 2012, Ecology began working with local agencies to install idle-reduction devices on emergency vehicles—reducing emissions in neighborhoods, at emergency scenes, and near hospitals and health-care facilities. While improving public health, this also lowers costs for local governments and taxpayers by reducing fuel use and engine wear.

**Table 5: 2011-13 MTCA Funded Projects – Fiscal Year 2012 Report**

NA = Not available. Emissions reductions measurement is not yet available.

Diesel Emission Reduction Project	City	County	Number of Vehicles or Equipment	Annual Diesel PM Reduced (pounds)
<b>School Bus Scrap &amp; Replacement</b>				
Burlington-Edison SD #100	Burlington	Skagit	1	27.4
Deer Park SD #414	Deer Park	Spokane	1	14.2
Evergreen SD #114	Vancouver	Clark	1	26.7
Freeman SD #358	Rockford	Spokane	1	43.6
Loon Lake SD #183	Loon Lake	Stevens	1	41.2
Mead SD #354	Mead	Spokane	2	104.6
Monroe SD #103	Monroe	Snohomish	2	70.4
Moses Lake SD #161	Moses Lake	Grant	3	103.3
Mukilteo SD #006	Mukilteo	Snohomish	2	48.6
Naselle-Grays River SD #155	Naselle	Pacific	1	30.7
Port Angeles SD #121	Port Angeles	Clallam	1	25.5
Sequim SD #323	Sequim	Clallam	2	51.5
Stevenson Carson SD #303	Stevenson	Skamania	1	21.0
West Valley SD # 208	Yakima	Yakima	1	24.3
<b>School Bus Scrap &amp; Replace Subtotal</b>			<b>20</b>	<b>633.0</b>
<b>Exhaust Retrofits for Emergency Response Vehicles</b>				
Olympia Fire Department	Olympia	Thurston	1	NA
Olympia Fire Department	Olympia	Thurston	4	NA
Pierce Co FD #5 - Gig Harbor	Gig Harbor	Pierce	10	10.1
Pierce Co FD # 6 - Central Pierce	Pierce Co	Pierce	11	NA
Pierce Co FD # 22 - East Pierce	Pierce Co	Pierce	16	12.6
Thurston Co FD # 2 & # 4	Thurston Co	Thurston	4	5.0
Thurston Co FD # 6 - E Olympia	Olympia	Thurston	6	1.7
Thurston Co FD # 7 - N Olympia	Olympia	Thurston	2	2.4
Thurston Co FD # 9 - McLane	McLane	Thurston	4	2.0
Thurston Co FD # 12 - Tenino	Tenino	Thurston	3	0.2
Thurston Co FD # 13 - Griffin	Griffin	Thurston	5	0.9
<b>Exhaust Retrofit–Response Subtotal</b>			<b>66</b>	<b>34.9</b>

Diesel Emission Reduction Project	City	County	Number of Vehicles or Equipment	Annual Diesel PM Reduced (pounds)
<b>Idle Reduction for Emergency Response Vehicles</b>				
Thurston Co. FD #3 - Lacey	Lacey	Thurston	4	NA
Medic 1	Thurston Co.	Thurston	6	NA
Thurston Co FD # 8 - South Bay	Olympia	Thurston	2	NA
Valley Regional Fire	Auburn	King	2	NA
<b>Idle Reduction-Response Subtotal</b>			<b>14</b>	<b>NA</b>
<b>Idle Reduction for School Bus</b>				
Entiat SD #127	Entiat	Chelan	6	0.5
Lind SD #158	Lind	Adams	15	2.2
Methow Valley SD #350	Winthrop	Okanogan	13	1.4
Oak Harbor SD #201	Oak Harbor	Island	38	26.7
White Salmon Valley SD #405-17	White Salmon	Klickitat	12	1.7
Mount Vernon SD #321	Mount Vernon	Skagit	30	7.6
<b>Idle Reduction-School Bus Subtotal</b>			<b>114</b>	<b>40.1</b>
<b>GRAND TOTAL</b>			<b>214</b>	<b>708</b>

NA = Not available. Emissions reductions measurement is not yet available.

### Reducing Toxic Wood Stove Emissions – \$0.5 M

Smoke from residential wood heating devices is a toxic pollutant—the second highest health risk air pollutant in Washington. It is the leading cause of high pollution levels in many communities during the home heating season.

Ecology provides grants to support actions to reduce emissions from residential devices that burn wood. Traditionally, these have included wood stove change-out and removal programs offering incentives to homeowners to upgrade older, more polluting, uncertified woodstoves with newer, cleaner-burning, certified wood stoves, pellet stoves, or electric or natural gas heating appliances. In 2012, Ecology focused on low-income households, homes that used large volumes of wood each heating season, and/or homes where wood was the sole source of heat in areas with the highest smoke pollution levels. A significant portion of funds have been directed to reduce emissions in Pierce County communities where air quality violates the federal fine particle standard.

Grants were awarded in the 2011-13 biennium to the following entities:

- Northwest Region Clean Air Agency ..... \$103,640
- Olympic Region Clean Air Agency ..... \$100,000
- Puget Sound Clean Air Agency ..... \$1,750,000
- Southwest Clean Air Agency ..... \$140,000
- Spokane Regional Clean Air Agency ..... \$168,000
- Yakima Regional Clean Air Agency ..... \$518,000
- Department of Ecology ..... \$135,860  
*(for removal programs in three eastern WA communities)*

**Hazardous Waste and Toxics Reduction Program**  
 ..... \$1.1 M Operating – LTCA

Toxic chemicals can harm the environment and people’s health. Reducing the potential threat of toxics contamination is a priority for Ecology. Reducing the use of toxic chemicals is the smartest, cheapest, and healthiest approach to reducing toxics exposures. Ecology’s Hazardous Waste and Toxics Reduction (HWTR) Program works to:

- Reduce the use of toxic chemicals.
- Find safer alternatives to toxic chemicals.
- Ensure that dangerous wastes are managed and disposed of safely.

Businesses of all types and sizes produce and use a variety of toxic chemicals. Even small amounts of mismanaged toxic chemicals or dangerous waste can cause big problems (contaminated sites and polluted stormwater).

The HWTR Program works to keep people and the environment safe by inspecting businesses and other facilities that produce dangerous waste. Inspectors educate the people who operate the businesses and facilities, making sure they know—and practice—proper handling and disposal of their toxic chemicals and dangerous wastes. Regular on-site inspections result in a high rate of compliance (90 percent or higher) with our state’s dangerous waste regulations.

**Local Source Control Program**

Businesses in Washington legally store or release chemicals to the environment during their normal activities. An estimated 75,000 businesses and other facilities produce only a few thousand pounds of dangerous waste per year. Many of the smaller businesses received neither environmental inspections nor technical assistance visits until Ecology created the Local Source Control Program.

Ecology teamed up with local governments from Spokane County, and from twelve Puget Sound area counties, to reach out to businesses that produce small

**Local Source Control Program**

Adding capacity to perform more on-site inspections was a high priority for the Hazardous Waste and Toxics Reduction (HWTR) Program during Fiscal Year 2012. The Legislature approved additional funding for four new inspectors to begin work July 1, 2012. To use our inspectors’ time more efficiently, in May 2012, HWTR applied a Lean process to our inspection procedures. Changes identified by the Lean process reduced the overall length of time needed to complete each inspection.

Sharing these changes with our local government partners offered a structure that all of us can use to increase the number of inspections we perform each year—and to increase the number of technical assistance visits that Local Source Control Specialists can conduct at businesses that produce small amounts of dangerous waste. More technical assistance visits will help smaller business operators reduce their hazardous waste production and improve stormwater control systems.

amounts of dangerous waste. Ecology established performance contracts with those local governments, paying for Local Source Control Specialists to conduct technical assistance visits. The visits helped small businesses comply with hazardous waste and stormwater control laws.

By the end of the 2009-11 biennium, Local Source Control Specialists had visited more than 6,300 small businesses. Nearly half of the visits found and addressed minor hazardous waste, stormwater control, or spills violations. Properly managing hazardous substances and dangerous waste helps protect our land, waterways, and people.

## **Shorelands and Environmental Assistance Program**

..... \$2.2 M Operating – LTCA

### ***Shoreline Master Programs (SMPs) - \$2.2 M***

A legal settlement agreement in 2003 commits the Governor’s Office and the settlement parties (a diverse array of stakeholders and local governments) to "...support projected future funding ...required to complete implementation statewide based on current estimates, sufficient to meet the schedule..." of the Shoreline Management Act.

Based on the negotiated legal settlement, RCW 90.58, the Shoreline Management Act (SMA), was amended by the Legislature in 2003 to require all 257 local governments with shorelines to comprehensively update their shoreline regulations between 2005 and 2014 (and with the extra year allowed by the statute, the final end date for updates is December of 2015). The Legislature also required the state to provide "reasonable and adequate" funding to local governments for the updates.

Ecology is working with local governments across the state to update local SMPs. Updated shoreline regulations are vital tools for protecting freshwater and marine shorelines throughout the state. They set standards for shoreline development, protect important habitats, and identify places best suited for restoration.

During the 2009-11 biennium, the Legislature appropriated funds to Ecology’s Shorelands and Environmental Assistance (SEA) Program from the Local Toxics Control Account (LTCA) for the first time.<sup>5</sup> MTCA directs Ecology to distribute LTCA funds to local governments in the form of grants and loans. The SEA Program distributed the LTCA appropriation as grants to local jurisdictions that needed to update their SMPs:

- SMPs record shoreline development regulations.
- Enforcing SMP regulations protects important habitats.
- Adhering to SMPs helps communities throughout the state protect their local marine and freshwater shorelines, including lands along riverbanks.
- SMPs identify those places best suited for restoration.

Many existing SMPs have been in place for 25 years—despite local changes in populations, land uses, and community priorities. Ecology is currently engaged in a multi-year effort to update SMPs. Funds drawn from the LTCA were used to fund grants to local governments needing to update their SMPs.

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<sup>5</sup>In previous years, Shoreline Master Program grant dollars came from the State General Fund (GF-S). Find lists of SMP grants on line: <http://www.ecy.wa.gov/program/sea/grants/smp/jurisdiction.html>

**Waste 2 Resources and Toxics Cleanup Programs.....***Remedial Action Grants*  
 ..... *Capital \$18.4 M – LTCA (W2R)*  
 ..... *Operating \$601,000 – LTCA (TCP)*

**Remedial Action Grants**

The Waste 2 Resources and Toxics Cleanup Programs use operating funds from the Local Toxics Control Account (LTCA) to pay staff costs in providing technical assistance and grant administration for Remedial Action Grants. The Waste 2 Resources Program is responsible for grant administration, while the Toxics Cleanup Program provides policy and prioritization for publicly-owned sites. The Toxics Cleanup Program also provides technical assistance to grant recipients on site cleanup issues.

MTCA, at RCW 70.105D.070, allocates money for distribution to local governments as grants or loans. Remedial Action Grants pay investigation and cleanup costs for publicly owned contaminated sites. Ecology was appropriated \$93.77 million in the 2011-13 biennium from the LTCA (\$63.8 million in new appropriation and \$29.9 million in reappropriation).

**Categories of Remedial Action Grants**

When local governments need to clean up contaminated sites, Ecology may offer Remedial Action Grants to encourage and expedite cleanup activity. These grants lessen cleanup costs that would otherwise burden local governments (or community rate payers and taxpayers). Local government projects typically supported with Remedial Action Grants awards include:

- Oversight of Remedial Actions: Grants help fund local governments’ site investigation and cleanup costs of publicly owned land known to be contaminated with hazardous substances.
- Site Hazard Assessment: Grants help the local health department/district pay costs to identify the type(s) and assess the scope/degree of toxics contamination at a site within its jurisdiction.
- Integrated Planning: Grants to local governments support integrated project planning that addresses contaminated site cleanup and broader property redevelopment opportunities.
- Safe Drinking Water Actions: Grants provide financial assistance to the local government, applying on behalf of itself or a purveyor of safe drinking water, where a hazardous substance has contaminated the local drinking water supply/source. The local government need not own the property to obtain this type of grant.
- Area-Wide Groundwater Contamination: Grants generally fund local governments’ efforts to clean up and redevelop property within their jurisdiction, where hazardous substances from multiple sources have combined/mixed and contaminated subsurface water(s). The local government need not own the property to obtain this type of grant.
- Independent Remedial Actions: Grants offset some of the costs, where a local government conducted a site cleanup action under Ecology’s Voluntary Cleanup Program.
- Methamphetamine Labs: Grants can help fund the local government’s initial investigation and assessment of suspected methamphetamine laboratories, and pay costs of cleanup activities conducted on property owned by the local government.
- Derelict Ships: Ecology makes funding available to local governments to remove and dispose of hazardous substances from derelict or abandoned vessels.



**Table 6: Remedial Action Grant Agreements, 2011-13 Biennium**

This table reflects biennial grant awards for the 2011-2013 biennium, not grant expenditures for Fiscal Year 2012. Fund sources include LTCA and State Building Construction Account.

Remedial Action Grant Agreements, 2011-13 Biennium			
Grant No.	Recipient	County	Total Cost (\$)
CONTAMINATED SITE REMEDIAL ACTION OVERSIGHT PROJECTS			
G1200108	Foss Waterway Development Authority	Pierce	600,000
G1200123	Grant County Public Works	Grant	2,040,000
G1200158	Port of Ridgefield	Clark	10,000,000
L1200004	Port of Ridgefield	Clark	
G1200296	City of Bellingham	Whatcom	6,000,000
G1200297	Port of Anacortes	Skagit	9,000,000
G1200174	Port of Seattle	King	6,000,000
G1200173	City of Walla Walla	Walla Walla	3,912,000
G1200196	Port of Tacoma	Pierce	6,000,000
G1200434	Port of Tacoma	Pierce	6,231,614
G1200435	City of Palouse	Whitman	636,896
G1200450	LOTT Cleanwater Alliance	Thurston	350,000
G1200484	Port of Tacoma	Pierce	5,268,000
FISCAL YEAR 2012 AMENDMENTS TO EXISTING AGREEMENTS			
G0400049	Port of Bellingham	Whatcom	1,000,000
G0500141	Port of Bellingham	Whatcom	1,333,560
G0700055	Port of Pasco	Franklin	445,591
G0800558	Seattle Public Utilities	King	2,000,000
G0900054	Seattle Public Utilities	King	9,193,866
G0900086	King County International Airport	King	252,000
G0900087	Seattle City Light	King	244,000
G0900088	Seattle Public Utilities	King	260,000
G0900104	Port of Bellingham	Whatcom	1,494,082
G0900177	Port of Bellingham	Whatcom	2,364,114
G0900178	Port of Bellingham	Whatcom	9,592,944

Remedial Action Grant Agreements, 2011-13 Biennium			
Grant No.	Recipient	County	Total Cost (\$)
G0900180	Port of Bellingham	Whatcom	4,615,300
G0900217	Seattle Public Utilities	King	5,100,000
G0900251	Port of Tacoma	Pierce	604,110
G1000347	Port of Everett	Snohomish	10,000,000
FUNDS FOR INDEPENDENT HAZARDOUS SITE CLEANUP PROJECTS			
G1200119	City of Port Townsend	Jefferson	101,860
G1200120	Bremerton Housing Authority	Kitsap	400,000
G1200449	Spokane	Spokane	400,000
FUNDS FOR SITE HAZARD ASSESSMENT PROJECTS			
G1200166	Chelan Douglas Health District	Chelan-Douglas	29,594
G1200167	Island County Health	Island	78,400
G1200168	Kitsap County Health	Kitsap	195,270
G1200169	Snohomish County Health	Snohomish	156,800
G1200170	Skagit County Public Health	Skagit	59,360
G1200171	Okanogan County Public Health	Okanogan	99,200
G1200175	Clark County Public Health	Clark	271,278
G1200179	Whatcom County Health	Whatcom	101,143
G1200176	Clallam County Health	Clallam	18,400
G1200177	Spokane Regional Health District	Spokane	100,000
G1200178	Jefferson County Public Health	Jefferson	25,687
G1200201	Tacoma Pierce County Health	Pierce	584,363
G1200203	Grant County Public Works	Grant	50,600
G1200204	Thurston County Public Health	Thurston	220,800
G1200252	Lewis County Public Health	Lewis	54,000
DRUG LAB CLEANUP PROJECTS			
G1200167	Island County Health	Island	4,000
G1200168	Kitsap County Health	Kitsap	15,380
G1200169	Snohomish County Health	Snohomish	96,800
G1200170	Skagit County Public Health	Skagit	640

<b>Remedial Action Grant Agreements, 2011-13 Biennium</b>			
<b>Grant No.</b>	<b>Recipient</b>	<b>County</b>	<b>Total Cost (\$)</b>
G1200171	Okanogan County Public Health	Okanogan	800
G1200175	Clark County Public Health	Clark	6,955
G1200176	Clallam County Health	Clallam	17,600
G1200177	Spokane Regional Health District	Spokane	40,000
G1200178	Jefferson County Public Health	Jefferson	524
G1200179	Whatcom County Health	Whatcom	17,849
G1200201	Tacoma Pierce County Health	Pierce	174,390
G1200202	Grays Harbor Co. Dept. of Public Services	Grays Harbor	7,000
G1200203	Grant County Public Works	Grant	8,960
G1200204	Thurston County Public Health	Thurston	14,400
G1200252	Lewis County Public Health	Lewis	4,000
<b>INTEGRATED PLANNING GRANTS</b>			
G1200096	Foss Waterway Development Authority	Pierce	80,000
G1200097	Port of Camas-Washougal	Clark	200,000
G1200098	Kittitas County Fire District	Kittitas	200,000
G1200099	Port of Sunnyside	Yakima	200,000
G1200172	City of Walla Walla	Walla Walla	200,000
G1200329	Pend Oreille	Pend Oreille	195,500
<b>Remedial Action Project Funding - 2011-13 Biennium</b>			<b>\$108,969,630</b>

<b>Waste 2 Resources Program.....</b>	<i>Public Participation Grants</i>
.....	<i>\$0.4 M Operating – STCA</i>
.....	<i>\$0.1 M Operating – LTCA</i>

**Public Participation Grants**

MTCA reserves funding for a grant program that enables Washington’s citizens to assume an active role in solving waste management problems. Funding for these grants comes from one percent of the revenue collected under the Hazardous Substance Tax (HST), for deposit to the State Toxics Control Account (STCA) and the Local Toxics Control Account (LTCA).

**Characteristics of the MTCA Public Participation Grant (PPG) Program**

- PPGs are available to non-government entities, not-for-profit organizations, or public interest groups for engaging interested communities in a hazardous site cleanup process, or in solving a specific waste control problem. Government entities are not eligible because they have access to other public funding sources. Commercial enterprises are not eligible because state law prohibits using public moneys to enrich private entities.
- Each biennium, eligible PPG applicants apply for MTCA funding to either engage citizens impacted by a cleanup of hazardous waste, or a waste reduction or recycling program. Applicants must: (1) state their PPG projects’ objectives, (2) identify their target audiences’ and participants’ shared/complementary stakes in achieving those objectives, and (3) outline how their proposed projects will encourage and prepare participants/audiences to achieve those objectives. PPG proposals must include cost estimates and project activity schedules through the end of the project, or through the end of the biennium (whichever comes first). PPG is a competitive grant program with priority given to citizens impacted by the cleanup of hazardous wastes.

PPG proposals focus on serving defined needs and achieving specific results. Each PPG project falls into one of two broad categories: “Contaminated Site Cleanup” or “Waste Management.”

- Contaminated Site Cleanup Projects encourage people to educate themselves, and advise Ecology, about details of any planned investigation and cleanup of a contaminated site. PPG project examples include community oversight at the Hanford, Duwamish River, and Spokane River cleanup projects.
- Waste Management Projects encourage people to involve themselves in eliminating and reducing waste. Examples include providing instruction on recycling methods and promoting sustainability practices within low-income communities, warning residents about dangers posed by chemical pesticides and toxics hazards in household products, and mounting educational campaigns to keep toxic materials out of Puget Sound.

Ecology’s 2011-13 biennium PPG program was funded at \$2.5 million. Ecology approved 34 contaminated site cleanup or waste management projects to receive PPG funding. However, in the 2012 supplemental budget, the Legislature reduced total PPG funding to \$1.1 million (less than half the original sum) and temporarily suspended the one percent funding requirement. As a result, twenty qualified grant projects were only funded for five months (July 1, 2011, through November 4, 2011) despite the original terms of our grant agreement.

The remaining 14 grant projects (contaminated site projects) were eligible for reimbursement throughout the full biennium. PPG guidelines promise to reimburse a maximum \$120,000 budget to conduct a two-year project, but the amount of money available in the revised appropriation was insufficient to cover

estimated costs to conduct the contaminated site projects. During the 2011-13 biennium funding cycle, the average PPG reimbursement amount was \$33,000.

**Table 7: Public Participation Grant Agreements**

This table reflects biennial grant awards for the 2011-2013 biennium, not grant expenditures for Fiscal Year 2012.

Public Participation Grant Agreements, Projects Started During Fiscal Year 2012		
Grant No.	Recipient	Amount (\$)
G1200100	Institute of Neurotoxicology and Neurological Disorders	\$48,000
G1200160	Habitat for Humanity of East King County	6,139
G1200161	Puget Sound Restoration Fund	6,549
G1200282	Facing the Future	12,887
G1200283	Heart of America NW	120,000
G1200284	Greater Puget Sound Car Wash Association	330
G1200285	Duwamish River Cleanup Coalition Technical Advisory Group	95,000
G1200286	Friends of the Cedar River Watershed	16,673
G1200309	Habitat for Humanity Seattle/South King County	1,030
G1200325	Spokane Neighborhood Action Program	275
G1200326	White River Valley Museum	5,000
G1200330	People for Puget Sound	70,000
G1200331	Neighborhood House	2,222
G1200332	Stilly-Snohomish Fisheries Enhancement Task Force	4,168
G1200333	Friends of Skagit Beaches	90,000
G1200334	Washington Physicians for Social Responsibility	120,000
G1200335	Puget Soundkeeper Alliance	5,009
G1200346	Hanford Challenge	90,000
G1200347	Columbia Riverkeeper	90,000
G1200348	Citizens for a Healthy Bay	52,000
G1200378	RE Sources for Sustainable Communities	1,763

Public Participation Grant Agreements, Projects Started During Fiscal Year 2012		
Grant No.	Recipient	Amount (\$)
G1200382	Port Townsend Marine Science Center	1,699
G1200383	Spokane River Forum	10,577
G1200384	The Lands Council	42,000
G1200385	Brackett's Landing/Edmonds Citizens' Awareness Committee	4,182
G1200386	Sustainable Connections	5,562
G1200387	Salish Sea Expeditions	23,251
G1200388	Georgetown Crime Prevention and Community Council	50,000
G1200398	Olympic Environmental Council	50,000
G1200401	Lake Roosevelt Forum	40,000
G1200409	Environmental Science and Technology Foundation	3,190
G1200411	Heart of America NW Research Center	28,958
G1200451	Brackett's Landing/Edmonds Citizens' Awareness Committee	31,500
<b>Total PPG</b>		<b>\$1,127,964</b>

**Waste 2 Resources Program.....** *Coordinated Prevention Grants*  
.....*\$7.3 M Capital – LTCA*

**Coordinated Prevention Grants**

The Coordinated Prevention Grants (CPG) program supports household hazardous waste collection, ongoing waste reduction and recycling programs, and regulatory oversight of solid waste collection and disposal. Funding implementation of the state Solid and Hazardous Waste Plan is done through Beyond Waste projects. These grants encourage communities to design innovative and cost effective programs that can reduce toxic threats, to divert organic waste away from landfills and into beneficial uses, and to reuse/repurpose or recycle used manufactured goods. Alternatives to Burning grants help communities devise alternative and beneficial methods to deal with yard waste debris rather than outdoor burning.

Without LTCA funding, solid and hazardous waste management programs would have ceased to exist in many of Washington’s small communities. The goal of CPG projects is to move communities toward wiser use of natural resources, to reduce or prevent use of toxic substances, and to adopt less wasteful personal habits and community practices. While recognizing that Ecology will always have to manage some wastes, CPG projects address the full spectrum of community waste management—from proper waste collection, handling, and disposal through effective pollution prevention.

## Categories of Coordinated Prevention Grants

### *Waste Management*

Landfills and Waste Handling Facilities: Local health authorities regulated all 700 solid waste handling facilities in Washington. Local health officials issued permits or enforced permit compliance at such facilities—they oversaw construction at solid waste landfills, and they reviewed environmental monitoring data. Up to 15 landfills needed either construction of new waste disposal cells and leachate collection systems, or they needed to close existing waste disposal cells. During the biennium, CPG funding supported the following waste management activities:

- Local health officials conducted 2,404 facility inspections statewide.
- Local health officials resolved about 7,000 illegal dumping and illegal waste storage complaints, and provided technical assistance to more than 32,400 businesses or individuals.

Household Hazardous Waste: Collection and disposal events do not prevent waste, but CPG-funded collection activities removed more than 19,000 tons of hazardous materials from homes and small businesses during the year. With CPG funding support, local governments ensured proper handling, identification, and disposal of those wastes. Many household hazardous waste programs collected waste oil for energy recovery projects. Some household waste products contained PBTs (e.g., thermostats, fluorescent bulbs), while others contained toxic chemical combinations or carcinogens (e.g., pesticides, cleaning agents, solvents). Some collected hazardous materials (e.g., paint) could be safely reused or recycled, but others must be disposed of at special hazardous waste landfills.

### *MTCA and Organic Waste Management*

Reducing Waste and Adding Value: Many CPG organics projects focus on taking materials out of the waste stream or burn piles—putting them to beneficial use as a component of products such as compost or garden mulch. Removing yard waste and food waste from solid waste disposed in the landfill reduces the production of methane gas (an air toxic) and leachate (toxic liquids produced from solid waste disposed in the landfill).

Both methane and leachate are hazardous substances. Organic waste management and composting are effective tools to prevent release of these substances to the environment. In addition, placing organic waste in compost facilities or anaerobic digesters creates a product that—when distributed to the public—improves soil quality, contributes to cleaner stormwater, and eliminates or reduces the need for toxic pesticides and fertilizers.

Just as CPG funds to local governments helped curbside recycling services become a statewide practice, CPG funds supported a broad base of organics projects that moved from disposal to a beneficial use. CPG-funded projects ranged from small to large—from home composting workshops, back-yard compost bin distribution, or chipping yard waste for mulch, to building and operating large regional composting facilities that treated and used yard and food waste collected at the curb in Washington cities.

- During the 2011-13 biennium, CPG projects turned 413,592 tons of yard and food waste into compost.
- Composting reduced greenhouse gas emissions by 51,508 metric tons of carbon equivalent.<sup>6</sup> In addition, organics recycling saved 85,212 BTUs of energy (equivalent to 14,692 barrels of oil or the annual energy consumption of 794 households) compared to the costs of disposing of organics and buying chemical products to perform the same function in yards and fields.

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<sup>6</sup> Calculated using the U.S. EPA's Waste Reduction Model applied to 2005-07 CPG biennial outcomes.

## Examples of Coordinated Prevention Grant Projects



Jefferson County Solid Waste (G1300004) uses CPG funds to contract with an expert to conduct training sessions about composting with worms. This type of composting focuses on food-waste management at home. The county expects to train up to 100 residents diverting an estimated 26 tons of organics from the waste stream.



Grays Harbor County Solid Waste (G1000388) used CPG funds to make moderate risk waste facility improvements including a wall enclosure and ventilation system. The wall reduced extensive duct accumulation in the facility which impacted worker safety and interfered with materials processing.



Kittitas County Public Health Department (G1200233) used CPG funds to inspect and take regulatory enforcement actions to bring a moderate risk waste handling facility into compliance with regulatory requirements and acquire a solid waste handling permit. Technical assistance was provided to help correct violations and complete the permit application process.

To view details of CPG projects funded in calendar year 2012, visit the Solid Waste Information Clearinghouse at <https://fortress.wa.gov/ecy/swicpublic/>. Select “CPG” and “1/1/2012” in the “Dates Project Active” fields.



## Coordinated Prevention Grant Funding Allocation

Ecology’s CPG program awards funds to local governments using two distribution criteria:

- During the regular cycle, Ecology distributes funding based on an allocation formula published in the rule. This is not a competitive cycle.
- During the offset cycle, Ecology awards funding based on a competitive process using unrequested, unencumbered funding from the regular grant cycle.

When Ecology awards Alternatives to Burning grants, funding is based on a competitive process.

## Coordinated Prevention Grant Regular Cycle Awards and Beyond Waste Proviso Projects

Historically, CPG regular cycle funding was awarded as a two-year grant, operated on a calendar-year basis, consistent with the rule. (For the 2011-13, the cycle would have been January 2012 through December 2013.) This practice required that CPG funding cross biennial lines. Ecology no longer asks the Legislature to re-appropriate unspent CPG funds to fulfill Ecology’s funding promise to existing grant recipients (beyond the biennial end-date). Instead, to manage the transition in 2011-13, Ecology requested approximately \$15 million to operate a calendar-year based regular cycle for 18 months. Ecology also requested an additional \$4 million to fund Beyond Waste projects that would be incorporated into the regular cycle grants. The Legislature appropriated the requested \$19 million to Ecology from the LTCA for the 2011-13 biennium.

At the end of the 2011-13 biennium, Ecology would either terminate the 18-month grant project, or complete a two-year grant cycle by applying funding appropriated by the Legislature for the 2013-15 biennium. With stakeholder input, Ecology’s Waste 2 Resources Program elected to terminate the regular cycle grants at the end of the 2011-13 biennium. Ecology shifted the CPG program grant cycles to a schedule that now corresponds to state appropriation cycles.

**Table 8: Coordinated Prevention Grants, Regular Cycle and Beyond Waste Proviso Projects, 2011-13 Biennium**

This table reflects biennial grant awards for the 2011-13 biennium, not grant expenditures for Fiscal Year 2012.

Coordinated Prevention Grants Regular Cycle & Beyond Waste Proviso Projects 2011-13 Biennium			
CPG Recipient	Amount	Project Title	County
SOLID WASTE IMPLEMENTATION – Regular Cycle			
Adams County Solid Waste	\$38,462 64,863	HHW Collection and Disposal Recycling Facility O & M	Adams
Asotin County Regional Landfill	104,940 31,500	Operation of Fixed MRW Facility County Drop-Box Recycling Bins O & M	Asotin
Benton County	355,433 6,728	Moderate Risk Waste Management and Planning Recycling Education and Collection	Benton

**Coordinated Prevention Grants  
Regular Cycle & Beyond Waste Proviso Projects  
2011-13 Biennium**

CPG Recipient	Amount	Project Title	County
Chelan County	56,250	HHW & Conditionally Exempt SQG Collection Event	Chelan
	101,227	Moderate Risk Waste Facility Design	
	22,125	Purchase Recycling Equipment	
City of Port Angeles	108,750	MRW Collection and Disposal	Clallam
	26,250	Business Hazardous Waste Clearinghouse	
	2,250	Business Waste Reduction	
	15,750	Residential Education and Outreach	
Clark County	292,500	Moderate Risk Waste Collection Program	Clark
Columbia County Solid Waste	15,300	HHW Collection and Disposal	Columbia
	91,875	Recycling Services	
City of Kelso	30,000	Residential Recycling Education and Outreach	Cowlitz
City of Longview	56,745	Waste Reduction/Recycling and Education Programs	Cowlitz
Cowlitz County P Works	140,900	MRW Collection and Disposal	Cowlitz
Douglas County	164,658	Constructing WRR Facilities	Douglas
Ferry County PW/ SWD	12,375	MRW/Disposal/Education Activities	Ferry
Franklin County Solid Waste	39,375	Moderate Risk Waste Collection and Disposal	Franklin
	72,675	WRR Public Education and Outreach	
	10,800	Recycling operations-Recycle drop box	
Garfield County Public Works	5,897	Household Hazardous Waste Education & Collection	Garfield
	60,000	WRR Education and Outreach	
	4,500	Drop Box Recycling Facility	
	7,500	Drop Box Recycling - Capital	
Grant County Public Works	84,619	MRW Education, Collection, and Disposal	Grant
	119,087	Waste Reduction & Recycling	
Grays Harbor County	220,247	Moderate-Risk Waste Collection & Disposal	Grays Hbr
Island County Solid Waste	235,302	Moderate-Risk Waste Collection and Disposal	Island
	900	Multi-Media Presentations	
Jefferson County P W	54,207	Conduct Recycling Program	Jefferson
Algona-Pacific	11,804	Residential Recycling Collection Events	King
Bothell-Woodinville	27,704	Recycling Collection Events	King
	19,065	King/Snohomish, Woodinville Education & Outreach	
City of Auburn	36,302	Residential Recycling Outreach	King
	14,805	Schools Environmental Education	
	11,543	Public Place & Event Recycling Outreach	
City of Bellevue	22,500	Multifamily Recycling Optimization Program	King

**Coordinated Prevention Grants  
Regular Cycle & Beyond Waste Proviso Projects  
2011-13 Biennium**

CPG Recipient	Amount	Project Title	County
City of Carnation	3,087	Special Recycling Collection Event	King
City of Des Moines	32,924	Residential Recycling Collection Events	King
City of Enumclaw	10,724 2,799	Residential Recycling Collection Events Business Recycling Collection Events	King
City of Federal Way	43,743 30,000 15,000 4,001	Recycling Collection Events – Residential Multi & Single Recycling Container Distribution Commercial Education and Outreach Community Facility Recycling	King
City of Issaquah	13,575	Multifamily & Commercial Recycling Outreach & Education	King
City of Kent	108,991 16,500	Residential Recycling Collection Events Business Recycling Collection Events	King
City of Kirkland	16,043 72,829	Recycling Collection Events-Commercial Commercial Recycling and Outreach	King
City of North Bend	7,175	Special Recycling Event Program	King
City of Redmond	16,650 27,000 9,485 2,373	Special Collection and Recycling Events Commercial Recycling Outreach Eco Kit Battery Recycling	King
City of Sammamish	43,139 2,625	Residential Recycling Collection Events Business Recycling Collection Events	King
City of Seatac	29,219	SeaTac Residential Recycling Collection Events	King
City of Shoreline	12,699 4,875 19,727 23,189	Climate Action Plan Development Business Special Collection Event Residential Special Collection Events Public Education and Outreach	King
City of Snoqualmie	11,736	Special Recycling Collection Events	King
City of Tukwila	8,826 12,000	Commercial education and Outreach Residential Recycling Collection Events	King
Kenmore- Lake Forest Park	35,127 3,375	Residential Recycling Collection Events Business Recycling Collection Events	King
King County	323,400 75,000	WR/R School Program Recycling Revenue Feasibility Study	King
Maple Valley-Covington- Black Diamond	47,504 4,500	Residential Recycling Collection Events Business Recycling Collection Events	King

**Coordinated Prevention Grants  
Regular Cycle & Beyond Waste Proviso Projects  
2011-13 Biennium**

CPG Recipient	Amount	Project Title	County
Newcastle-Mercer Island	37,799	Residential Recycling Collection Events	King
Normandy Park-Burien	54,789 4,500	Residential Recycling Collection Events Business Recycling Collection Events	King
Seattle King County P H	179,164	Household Hazardous Waste (HHW) Collection	King
Seattle Public Utility	444,901	Business Waste Prevention, Recycling Tech Assist	King
Kitsap County	420,750 8,352 87,900	Moderate Risk Waste Collection and Disposal Moderate Risk Waste Education and Outreach Public Education and Outreach	Kitsap
Kittitas County S W	101,167	Moderate Risk Waste Disposal	Kittitas
Klickitat County Solid Waste	48,750 24,750 29,250	Household Hazardous Waste – Collection & Disposal HHW-Public Outreach Waste Reduction and Recycling - Public Outreach	Klickitat
Lewis County Solid Waste Utility	130,065 63,330	MRW Disposal and Education Waste Reduction and Recycling	Lewis
Lincoln County Public Works	13,875 100,309	Household Hazardous Waste WRR and Public Outreach and Education	Lincoln
City of Shelton	52,754	Waste Reduction and Recycling	Mason
Mason County Utilities & Waste Management	102,188 20,700	MRW Collection and Disposal Recycling Education and Outreach	Mason
Okanogan County Public Works	59,042 109,648	Moderate-Risk Waste Collection Public Education and Out reach	Okanogan
Pacific County	61,055 12,463 49,500 4,894	MRW Collection and Disposal Special Collection Events Drop Box Recycling Recycling Event	Pacific
Pend Oreille Solid Waste Division	60,263 64,688	MRW Collection and Disposal Recycling	Pend Oreille
City of Tacoma	30,000 75,000	Recycling Center Operations -Expand Polystyrene #6 Business Recycling Outreach	Pierce
Pierce County Solid Waste	428,063 55,080 234,000	MRW Collection, Disposal and Education Commercial Recycling and Composting Residential Recycling and Composting	Pierce
Tacoma-Pierce County Health Department	22,019	Used Oil Collection	Pierce
San Juan County P W	105,188	Hazardous Waste Collection, Disposal, Education	San Juan

**Coordinated Prevention Grants**  
**Regular Cycle & Beyond Waste Proviso Projects**  
**2011-13 Biennium**

CPG Recipient	Amount	Project Title	County
Skagit County	150,178	MRW Collection, Disposal and Outreach	Skagit
Public Works	150,178	Public Education and Outreach	
Skamania County	118,306	Drop Box Recycling	Skamania
City of Edmonds	34,344	Public Education and Outreach	Snohomish
City of Everett	72,413	WR&R Outreach Assistance & Education	Snohomish
	15,000	Public Recycling Events	
City of Lynnwood	30,364	Public Education and Outreach	Snohomish
City of Marysville	48,736	WR&R Outreach Assistance & Education	Snohomish
Snohomish County SW	953,948	Moderate-Risk Waste Collection	Snohomish
	3,837	City of Sultan Recycling Collection Events - Residential	
	14,510	City of Arlington WR&R Outreach & Education	
City of Spokane	64,800	Household Hazardous Waste Implementation	Spokane
	312,750	HHW Collection and Disposal	
	8,100	Small Quantity Generator Implementation	
City of Spokane	20,250	City of Cheney Recycling Project	Spokane
	9,450	Medical Lake Recycling Facility	
City of Spokane	384,484	Spokane Regional Solid Waste System	Spokane
	90,000	Waste Reduction Assessment Program	
Stevens County	5,081	Public Education and Outreach	Stevens
Public Works	27,000	HHW & Refrigerant Collection and Disposal	
Stevens County	57,525	Waste Oil, Antifreeze, Battery Collection & Disposal	Stevens
Public Works	32,250	Public Education and Outreach	
	31,355	Recycling Facilities and Equipment O & M	
Thurston County PH & SS	14,816	Used Oil Program	Thurston
Wahkiakum County	73,652	Waste Reduction & Recycling	Wahkiakum
City of Walla Walla	100,047	Household Hazardous Waste Collection Activity	Walla Walla
	10,047	Public Education and Outreach	
	52,500	Public Education and Outreach	
Whatcom County PW	428,250	MRW Collection & Disposal	Whatcom
Whitman County	48,600	Household Hazardous Waste	Whitman
Public Works	76,023	Waste Reduction and Recycling	
Yakima County PS-SW	501,551	Moderate Risk Waste Collection and Disposal	Yakima
<b>Sub-Total</b>	<b>\$11,124,094</b>		

<b>Coordinated Prevention Grants</b> <b>Regular Cycle &amp; Beyond Waste Proviso Projects</b> <b>2011-13 Biennium</b>			
CPG Recipient	Amount	Project Title	County
<b>SOLID WASTE ENFORCEMENT – Regular Cycle</b>			
Adams County Health Department	66,026 38,138	Solid Waste Enforcement - Illegal Dumping SW Facility permitting, inspection, enforcement	Adams
Asotin County H Dept	104,164	Enforcing Solid Waste Statutes and Local Ordinances	Asotin
Benton-Franklin Health District	154,932	Solid Waste Permitting and Enforcement	Benton, Franklin
Chelan-Douglas Health District	170,876	Solid Waste Enforcement	Chelan, Douglas
Clallam County Enviro H	104,164	Solid Waste Enforcement	Clallam
Clark County Public H	104,164	Solid Waste Enforcement	Clark
Cowlitz County Building and Planning	52,082 52,082	Solid Waste Facility Permitting and Inspections Solid and Hazardous Waste Complaint Investigation	Cowlitz
Northeast Tri-County Health Department	16,501 12,749 12,519 33,750 810 13,950 2,250 3,600	Inspection Permit Closure Violations Plan Review Regulation/Technical Assistance Equipment/Supplies Professional Services	Ferry, Stevens, Pend Oreille
Garfield County H Dist	3,375	Enforcing solid waste codes	Garfield
Grant County H District	104,164	Solid Waste Enforcement	Grant
Grays Harbor County	39,300 64,864	Solid Waste Facility Permitting and Inspections Solid and Hazardous Waste Complaint Investigation	Grays Harbor
Island County Health	104,164	Solid Waste Enforcement	Island
Jefferson County Public Health	93,752 10,416	Enforcing Solid Waste Codes Facility Permitting and Inspections	Jefferson
Seattle, King County PH	104,164	Solid Waste Enforcement	King
Kitsap County	93,747 10,417	Complaint Response and Enforcement Policy, Regulation and Interagency Coordination	Kitsap
Kittitas County Public Health	60,045 18,000 7,594 18,525	Solid Waste Facility Permitting, Routine Inspection Solid and Hazardous Waste Complaint Investigation Inventory Closed and Abandoned Landfills Waste Tire Compliance Check Program Unsecured Loads - Solid Waste Compliance Pilot	Kittitas

**Coordinated Prevention Grants**  
**Regular Cycle & Beyond Waste Proviso Projects**  
**2011-13 Biennium**

CPG Recipient	Amount	Project Title	County
Lewis County Public Health, Social Services	104,164	Solid Waste Facility Permitting and Inspection Solid Waste Enforcement and Investigation	Lewis
Lincoln County H Dept	17,483	Solid Waste Enforcement	Lincoln
Mason County Pub H	104,164	Solid Waste enforcement	Mason
Okanogan County P H	104,164	Solid Waste Enforcement	Okanogan
Pacific County	1,409 102,755	Solid Waste Facility Permitting and Inspections Solid and Hazardous Waste Complaint Investigation	Pacific
Tacoma-Pierce County Health Department	104,164	Solid Waste Enforcement	Pierce
San Juan County H	62,888	Solid Waste Enforcement	San Juan
Skagit County Health	104,164	Solid Waste Enforcement	Skagit
Skamania County Community Dev. Dept.	37,500 37,500	Solid Waste Facility Permitting and Inspections Solid and Hazardous Waste Complaint Investigation	Skamania
Snohomish Health Department	76,414 15,000 12,750	Solid Waste and Moderate Waste Enforcement Exempt Facility Monitoring Groundwater Monitoring at Closed Landfills	Snohomish
Spokane Regional H Dist	104,163	Enforcement of Solid Waste Codes	Spokane
Thurston County	44,276 59,888	Solid Waste Facility Permitting and inspection Solid and Hazardous Waste Complaint Investigation	Thurston
Wahkiakum County Health	1,764 14,153 13,012	Solid Waste Facility Permitting and Inspection Solid and Hazardous Waste Complaint Investigation Customer Technical Assistance	Wahkiakum
City of Walla Walla	104,164	Solid Waste Enforcement	Walla Walla
Whatcom County Health	93,960 10,204	Solid Waste Complaint Response & Enforcement Exempt Solid Waste Handling Facility Inspection	Whatcom
Whitman County P H	104,100	Solid Waste Enforcement	Whitman
Yakima Health District	104,164	Solid Waste and Biosolids Facilities Compliance Enforcement of solid waste regulations	Yakima
<b>Sub-Total</b>	<b>\$3,213,651</b>		
<b>GREEN BUILDING – Beyond Waste</b>			
Clallam County E H	18,753	Clallam County Built Green Program	Clallam
Clark County E S	137,808	Green Businesses Program	Clark
<b>Sub-Total</b>	<b>\$156,561</b>		

<b>Coordinated Prevention Grants</b> <b>Regular Cycle &amp; Beyond Waste Proviso Projects</b> <b>2011-13 Biennium</b>			
CPG Recipient	Amount	Project Title	County
<b>MODERATE RISK – Beyond Waste</b>			
Clallam County E H	27,228	MRW Education and Outreach	Clallam
Ferry County PW - SW	3,150	Solid Waste and Moderate Risk Waste Planning	Ferry
Franklin County S W	72,675	MRW Public Education and Outreach	Franklin
Jefferson County P H	80,750	Solid Waste Education /EnviroStars Certification	Jefferson
Seattle, King County PH	992,287	Household Hazardous Waste (HHW) Collection	King
City of Bellevue	67,454	Natural Yard Care Program	King
	45,000	Household Hazardous Waste Education Program	
Tacoma-Pierce County Health Department	33,032	Moderate Risk Waste Coordination/Policy Develop	Pierce
	146,813	MRW Education and Outreach	
	128,453	SQG Technical Assistance	
Snohomish HD	52,500	MRW Education and Outreach	Snohomish
	55,028	Pharmaceuticals Take-Back Program	
Thurston County P H and Social Services	147,191	Small Quantity Generator Technical Assistance	Thurston
	99,938	MRW/Toxics Reduction - Education and Outreach	
<b>Sub-Total</b>	<b>\$1,951,499</b>		
<b>ORGANICS COMPOSTING AND CONVERSION – Beyond Waste</b>			
Adams County Solid W	27,409	Green Waste Diversion	Adams
Benton County	10,965	Composting and Yard Waste Chipping	Benton
Chelan County	43,500	Brush Collection & Chipping	Chelan
City of Port Angeles	7,500	Backyard Composting and Yard Waste Diversion	Clallam
Clark County Environmental Services	135,000	Master Composter/Recycler and Gardener outreach	Clark
	150,000	Green Schools & Sustainable Building	
Cowlitz County P Works	18,750	Compost Bin Purchase and Distribution	Cowlitz
Franklin County Solid Waste	30,000	Organics Public Education and Outreach	Franklin
	1,272	Christmas Tree Recycling	
Grant County P Works	33,503	Organics	Grant
Seattle Public Utility	243,750	Natural Soil Building	King
King County	35,325	Compost Incentives	King
City of Issaquah	17,025	Commercial Organics Contamination Reduction Recognition	King
City of Federal Way	5,000	Compost Container Distribution	King
Klickitat County S W	25,500	Organics - Public Outreach	Klickitat
Lewis County SW Util	28,417	Organics (Master Recycler Composter Program)	Lewis
Lincoln County P Wks	3,450	Composting	Lincoln



<b>Coordinated Prevention Grants</b> <b>Regular Cycle &amp; Beyond Waste Proviso Projects</b> <b>2011-13 Biennium</b>			
CPG Recipient	Amount	Project Title	County
Mason County Util & Waste Management	9,900	Organics Diversion Education and Outreach	Mason
City of Shelton	20,018	Organics & Yard Debris Public Outreach & Education	Mason
Pierce County Solid Waste	50,625 123,750	Coordinated Regional Adult Education and Outreach Food Waste BMP Project	Pierce
Tacoma-Pierce County Health Department	61,688	Natural Yard Care	Pierce
City of Olympia	47,150	GrassCycling Campaign	Thurston
Thurston County PW SW	214,793	School Waste Reduction Assistance	Thurston
Whitman County PW	48,600	Yard and Wood Waste	Whitman
<b>Sub-Total</b>	<b>\$1,392,890</b>		
<b>PLANNING – Beyond Waste</b>			
Benton County	17,248	Update Solid Waste Plan	Benton
Clark County E S	116,250	Management Plan Research, Analysis and Update	Clark
Grant County P Works	10,078	Solid Waste Management Plan Update	Grant
Klickitat County S W	6,178	Update the Klickitat County Solid Waste Plan	Klickitat
Lewis County S W Util	5,153	Solid Waste Management Plan Update	Lewis
Pacific County	9,202	Solid Waste Management Plan Update	Pacific
San Juan County P W	22,500	Solid & Hazardous Waste Management Plan Update	San Juan
Stevens County P W	21,188	Solid Waste Management Plan Update	Stevens
City of Walla Walla	37,500	Walla Walla County S W Management Plan Update	Walla Walla
<b>Sub-Total</b>	<b>245,297</b>		
<b>WASTE REDUCTION AND RECYCLING – Beyond Waste</b>			
Ferry County PW, SW	97,658	Public Education and Outreach Programs	Ferry
Jefferson County P H	14,250	Solid Waste Education / Green Business Program	Jefferson
Kittitas County S W	66,850	Recycling, Compost Facility	Kittitas
City of Tacoma	75,000	Product Stewardship	Pierce
<b>Sub-Total</b>	<b>253,758</b>		
<b>Total CPG Reg Cycle</b>	<b>\$18,337,750</b>		

## Coordinated Prevention Grants Alternatives to Burning (ATB) Awards

Ecology requested and the Legislature allocated up to \$2 million of LTCA funds for ATB grants to local governments to provide alternatives to backyard burning of organic materials. The funds were allocated through a competitive process with priority given to:

- Urban growth areas of less than 5,000 people affected by the January 1, 2007 ban on outdoor burning.
- Projects that develop infrastructure for an on-going program.
- Projects that coordinate regionally.
- 2012-13 grants provided 18-month funding from January 1, 2012 through December 31, 2012, and will continue to through June 30, 2013—the end of the 2011-13 biennium—and will then be terminated.

**Table 9: Coordinated Prevention Grants, Regular Cycle, Alternatives to Burning Projects, 2011-13 Biennium**

This table reflects biennial grant awards for the 2011-2013 biennium, not grant expenditures for Fiscal Year 2012.

Coordinated Prevention Grants, Regular Cycle Alternatives to Burning Projects 2011-13 Biennium			
CPG Recipient	Amount	Project Title	County
Benton County	10,500	Composting and Yard Waste Chipping	Benton
Chelan County	43,500	Brush Collection and Chipping	Chelan
Clark County	7,500	Yacolt Town Chipping	Clark
Columbia County	11,250	City of Dayton Alternatives to Burning	Columbia
Solid Waste	14,475	Town of Starbuck Alternatives to Burning	
City of Republic	42,300	Wood chipping operations/Yard debris collection program	Ferry
	12,900	Program Development.	
Franklin County PWSW	30,000	Organics Public Education and Outreach	Franklin
Garfield County	61,313	Alternatives to Burning Project	Garfield
Lewis County P Works	26,550	Organics-Chipping Events	Lewis
Solid Waste Utility	12,849	Organics-Master Recycler/Composter Program	
Lincoln County	28,688	Organics and C&D Collection/Handling Improved	Lincoln
San Juan County	16,934	WSU Master Composter/Recycler Coordinator; Education/Public Outreach/Events Recycling	San Juan
Public Works			
City of Spokane – Spokane Regional SW	34,875	Yard debris collection events – Rural SE Spokane County	Spokane
Stevens County	9,563	Community Yard Waste Collection/Chipper Events	Stevens
	8,625	Home/Backyard Composting Workshops	
Whitman County	93,750	Paved Pad for Yard and Wood Waste	Whitman
<b>Total CPG Alt to Burn</b>	<b>465,572</b>		

## Coordinated Prevention Grants Offset Cycle Awards

The CPG Program used (1) unspent LTCA funds after the close-out of the 2010-11 regular cycle grants, and (2) unrequested funds from the 2011-13 biennial LTCA allocation for the 2012-13 regular cycle, and (3) the alternatives to burning grants to fund offset cycle awards. These funds were allocated through a competitive process.

Priority consideration was given to projects that promote cost effective Beyond Waste initiatives. Priority for allocation of the unrequested and unspent solid waste enforcement funds was given to offset cycle solid waste enforcement projects.

**Table 10: Coordinated Prevention Grants, Offset Cycle, Competitive Projects, 2011-13 Biennium**

This table reflects biennial grant awards for the 2011-2013 biennium, not grant expenditures for Fiscal Year 2012.

Coordinated Prevention Grants, Offset Cycle Competitive Projects 2011-13 Biennium			
CPG Recipient	Amount	Project Title	County
Seattle and King County Public Health	92,566	Code Compliance Inspection (Ch. 173-350 WAC) Exempt and Non- permitted Solid Waste Facilities	King
Skagit Health Department	5,871 20,250	Technical training for enforcement staff abandoned/closed landfills internet location info.	Skagit
Okanogan County P H	24,000	Solid Waste Enforcement	Okanogan
Yakima Health District	50,000	Solid Waste and Biosolids Facilities Compliance SW Regulations Enforcement, Expedited Process	Yakima
Spokane Regional H D	15,000	Exempt Solid Waste Facility Assessment	Spokane
Kittitas County Public Health	17,367	Remote SW & HW Complaint Investigation & Surveillance Acquire, Test, Legal Determination, and Implementation	Kittitas
Cowlitz County Building and Planning	22,500	Purchase and implement GIS tracking, with citizen access, for enforcement & permitting.	Cowlitz
Kitsap Public Health District	10,350 93,049	Policy, Regulation and Interagency Coordination Complaint Response and Enforcement	Kitsap
Cowlitz County B&P	37,500	Funding legal activities related to Mt. Solo Landfill	Cowlitz
Thurston County P W partnership with King & Snohomish Counties	78,750	Product Stewardship Community Education	Thurston
Snohomish County Solid Waste Division	69,000 115,000	Product Stewardship Programs – Use & Access Food Cycle – Compost Quality and Utilization	Snohomish

**Coordinated Prevention Grants, Offset Cycle**  
**Competitive Projects**  
**2011-13 Biennium**

CPG Recipient	Amount	Project Title	County
Lewis County P Works Solid Waste Utility	56,820 46,875	Construction & Demolition Debris Diversion & Reuse Organics Collection – infrastructure upgrades.	Lewis
Jefferson County P W	15,696	Residential Vermicomposting Workshops	Jefferson
Spokane City - Rockford	26,916	Compost facility in rural SE County.	Spokane
Thurston County P W	129,750	Food Recovery	Thurston
City of Everett	24,000	Compost & Recycling Program (Monitor & Educate)	Snohomish
Seattle Public Utilities	80,250	Promote onsite management of landscape waste, emphasizing grass recycling.	King
City of Bridgeport	45,000	Purchase county chipper, conduct chipping events.	Douglas
City of Tacoma	75,000	Compost -Anaerobic Digestion Feasibility Study	Pierce
Thurston County P H	37,763	Hazardous Waste Plan Update	Thurston
Kitsap County P Works Solid Waste Division	45,000	Developing Multifamily Recycling Best Management Practices - Statewide Property Manager Survey	Kitsap
City of Federal Way	17,625	Sustainable Schools - WRR Outreach	King
Seattle Public Utilities	45,000	Carpet Recycling Market Development	King
City of Tacoma	337,500	Recycled Asphalt Pavement / Shingle Feasibility	Pierce
City of Walla Walla for Walla Walla County	112,500	Update of 1994 Solid Waste Management Plan	Walla Walla
City of Richland	116,250 206,250	Expand compost facility at Horn Rapids Landfill Purchase portable trommel screen for comp facility.	Benton
Town of Garfield	7,500	Recycle Center Final Phase - Storage/Handling Bay	Whitman
City of Shelton	12,000	Waste Reduction and Recycling	Mason
City of Port Angeles	22,500	Task 1: 2013 Solid Waste Management Plan Update, Task 2: Waste Composition Study	Clallam
City of Issaquah	24,750	Master Composter/ Resource Steward	King
Lincoln County P Works	90,000	Recycling Center Upgrades	Lincoln
Steven's County Public Works	129,375	Replace commodity baler & in-feed conveyor (Recycling Center).	Stevens
Benton County	93,800	Purchase land, construct new MRW Facility.	Benton
Chelan County	158,750	Moderate Risk Waste Facility Construction	Chelan
<b>Total CPG Offset Cycle</b>	<b>2,608,073</b>		

**Water Quality Program..... Centennial Clean Water Program**  
..... \$5.2 M Capital – STCA

**Centennial Clean Water Program**

Ecology’s Water Quality Program administers the Centennial Clean Water Program. Ecology awarded grants of capital budget funding to eligible recipients. Recipients included public entities (counties, cities, and towns) and conservation, water, and sewer districts.

The program grants funding for the following types of projects that improve and protect water quality in our state.

***Wastewater Facilities***

- Comprehensive sewer planning.
- Facilities construction.
- Facilities plans and designs.
- Water reclamation facilities.
- Sewer collection projects.
- Wastewater treatment.
- Reclaimed water distribution.
- Combined sewer overflow correction.

***Nonpoint (Pollution) Source Activities***

- Water quality focused Best Management Practices implementation.
- Riparian/wetland restoration planning and implementation.
- Groundwater/aquifer/wellhead planning and protection.
- Lake restoration planning and implementation.
- Public outreach and education.
- Total maximum daily loads (TMDL) support, and setting and implementing pollution limits.

**Table 11: Water Quality Program, Centennial Clean Water Program**

**Summary:** Ecology had \$5,158,000 in Centennial grant expenditures for Fiscal Year 2012 for the projects listed below. The list of Centennial Clean Water grants shows the total grant award for the life of the project which can take an average of three years to complete.

Project Name	Grant Award	Centennial Clean Water Grants Project Description	City	County	Leg. Dist.
Spokane County/City	\$5,000,000	Ongoing extended payment grant.	Spokane	Spokane	9
City of Snohomish \$3,500,000	3,500,000	Proviso	Snohomish	Snohomish	44
Freeland Sewer District \$3,500,000	3,500,000	Proviso	Freeland	Island	10
Town of Mabton \$600,000	600,000	Proviso	Mabton	Yakima	15
Mason County	500,000	Proviso from 2007-09 biennium		Mason	35
Central Klickitat Conservation District	250,000	Little Klickitat TMDL Implementation Project	Goldendale	Klickitat	17
Seattle Public Utilities (prime), Shoreline PWD, King Co. Dept. of Natural Resources & Parks	60,000	Thornton Creek Source Identification and Control Methodology Evaluation	Seattle	King	46
Northeast Tri County Health District (serving Ferry, Stevens, Pend Oreille Counties)	346,490	Northeast Tri County Health District Sewage Disposal System Repair Program	Colville	Stevens	7
Lind, Town of	2,600,109	Town of Lind Wastewater Treatment Facility	Lind	Adams	9
Palouse Rock Lake Conservation District (in partnership with Pine Creek CD)	249,000	Rock Creek and Pine Creek Agricultural BMP Partnership	St. John	Whitman	9
Snohomish Conservation District	109,423	Tychman Slough Riparian Enhancement Project	Lake Stevens	Snohomish	39
Curlew Water & Sewer District	2,719,891	Curlew Wastewater Collection & Treatment System	Curlew	Ferry	7
Bellingham, City of	500,000	Padden Creek Daylighting and Stream Restoration Project	Bellingham	Whatcom	42
Jefferson County Public Health	299,686	Northeast Jefferson Clean Water Project	Port Townsend	Jefferson	24
Adams Conservation District	234,000	WRIA 34 Basin Implementation Project	Ritzville	Adams	9

Project Name	Grant Award	Centennial Clean Water Grants Project Description	City	County	Leg. Dist.
Thurston County Public Health and Social Services Department	178,132	On-site Sewage Management in the Scatter Creek Aquifer	Olympia	Thurston	20
Thurston County Public Health and Social Services Department	183,269	On-site Financial Assistance Program	Olympia	Thurston	22
Clark Public Utilities	250,000	Salmon Creek Restoration IV	Vancouver	Clark	17
<b>Total</b>	<b>\$21,080,000</b>				

**Water Quality Program..... Stormwater Grants**  
.....\$5.9M Capital – STCA  
.....\$3.2 M Capital – LTCA

Ecology provides funding through legislative appropriation for local governments to address statewide stormwater management and control for jurisdictions covered by the National Pollutant Discharge Elimination System (NPDES) Phase I and II Municipal Stormwater permits. Eligible projects include planning, design, and implementation of stormwater retrofit and low-impact development (LID) projects. In addition, grants are provided for building staffing capacity, improving stormwater research, data management, and monitoring.

Examples of eligible stormwater projects include:

- Construction or design/construction projects that retrofit existing stormwater facilities
- Construction or design/construction of LID techniques
- New or retrofit construction of Vactor Waste Decant Facilities
- Installation of pre-treatment/oil control facilities upstream of existing drywells
- Stormwater quality treatment and flow control to reduce stormwater flows to combined sewers
- Public education and outreach activities/Public involvement and participation activities
- Illicit discharge detection and elimination activities
- Activities to control runoff from new development and redevelopment
- Pollution prevention
- Water Quality monitoring to implement permit requirements for a Water Cleanup Plan or TMDL

For Fiscal Year 2012, Ecology had \$5,868,000 in expenditures from the State Toxics Control Account (STCA) and \$3,186,000 in expenditures from the Local Toxics Control Account (LTCA). The following table shows the total grant award for each project (projects can take up to three years to complete).

**Table 12: Water Quality Program, Stormwater Retro-Fit and Capacity Program**

Grant Recipient	Project Title	Stormwater Retro-Fit & Capacity Grants Project Description	Grant Award	County
Cities and Counties Managing Local Stormwater Programs	Municipal Stormwater Capacity Grants Program	Provided non-competitive capacity building grants for local governments to implement their NPDES stormwater permits. Grants were awarded to municipalities by providing a base amount of \$70,000 and distributing the remaining amount available by population.	\$23,510,000	Statewide
Seattle Public Utilities	South Park Stormwater Facility	This project will reduce pollutant loading to the Duwamish Waterway from the 7th Ave S drainage basin through a retrofit of the existing drainage system. Seattle Public Utilities will construct a diversion structure, pump station, and stormwater treatment system at the downstream end of the 7th Ave S drainage system.	1,000,000	King
Arlington, City of	Stormwater Wetland Project	The City of Arlington is constructing a Stormwater Wetland to treat stormwater from the City's storm sewer system prior to discharging into the Stillaguamish River. This project utilizes a wetland's natural treatment processes to support the goals and requirements of the Stillaguamish TMDL Plan and the NPDES Phase II permit.	195,000	Snohomish
Burlington, City of	Burlington LID Demonstration Project	The City of Burlington proposes a comprehensive approach to incorporating LID practices into redevelopment of historic old town. The redevelopment currently underway is the result of years of community-supported process. This grant allows the City to demonstrate and interpret LID and stormwater management to community members, visitors, and local developers.	104,563	Skagit



<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Woodinville, City of	Sammamish River Stormwater Outfall Retrofit	The final phase of this project installs water quality treatment filters into a vault to provide enhanced treatment of untreated stormwater runoff from a 52-acre basin in the City's urban core that is primarily commercial land use and pavement that discharges to the Sammamish River, a critical salmonid migration corridor.	303,750	King
King County	Vashon Island Park and Ride	The Vashon Island Park and Ride project will consist of adding 27 porous concrete parking spaces and constructing two rain gardens to reduce stormwater impacts. Additionally, this project will monitor the fate of infiltrated pollutants and provide opportunities for public education/stewardship of these techniques to nearby schools and community.	342,154	King
Lakewood, City of	2011 Drywell Replacement Project	This project will replace approximately one hundred existing drywell facilities with two-stage infiltration systems. The proposed facilities include devices, which greatly diminish the amount of oil and sediment that discharges into the ground.	375,000	Pierce
Poulsbo, City of	Old Town Poulsbo LID Retrofit	Reduce pollutant loading and improve stormwater quality discharge to Liberty Bay from Old Town Poulsbo by retrofitting 2.9 acres of City streets with raingardens and tree box filters. Conduct water quality monitoring and provide public education opportunities at an adjacent City park to showcase LID stormwater management methods and benefits.	276,337	Kitsap

<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Olympia, City of	Pacific Avenue Stormwater Treatment Facility	The project will provide water quality treatment for a 13-acre highly developed urban basin in East Olympia. Untreated runoff currently flows to Indian Creek and subsequently Budd Inlet, both 303(d) Category 5 impaired waters. The existing stormwater system will be retrofitted with approved technologies in accordance with state guidelines.	299,023	Thurston
Seattle Public Utilities	Venema Natural Drainage System	The Venema Natural Drainage System (NDS) Project will provide flow control and stormwater quality treatment in the Venema basin which will improve hydrology and water quality in Venema Creek, a tributary of Piper's Creek.	1,000,000	King
King County Road Services Division	Military Rd S. at South 342nd St. Intersection Improvement and LID Demonstration Project	The Military Road South at South 342nd Street intersection improvement project demonstrates how multiple stormwater low-impact development practices can be integrated within existing public right-of-way. The project utilizes pavement reduction, permeable pavements, swales, and rain gardens to maximize treatment of stormwater conveyed through the project area.	724,500	King
Pierce County Surface Water Management	Spanaway Lake Park Stormwater Retrofit	This project will retrofit stormwater facilities at Spanaway Lake Park in Pierce County utilizing bioretention areas to infiltrate stormwater that currently directly discharges untreated to Spanaway Lake and Spanaway Creek.	675,000	Pierce
Kitsap County	PRC and HHW LID Project	Kitsap County proposes a two-part LID project: 1) The Poulsbo Recycle Center will be retrofit with perimeter bioretention, a green roof, and a LID demonstration area; and 2) Construction of a new Household Hazardous Waste (HHW) Collection Area adjoining PRC, includes a rain garden, green roof, and pervious parking area.	185,209	Kitsap

Grant Recipient	Project Title	Stormwater Retro-Fit & Capacity Grants Project Description	Grant Award	County
Granite Falls, City of	Granite Falls Regional Decant Facility	The application is to fund a regional decant facility for the purpose of proper management of catch basin vactor waste and street sweeper waste in Granite Falls, Washington. The facility will be sized for three vactor truck loads per day, to serve the City, Snohomish County, the City of Lake Stevens, and WADOT as needed. Non-potable water will be supplied to the facility from the City's wastewater treatment plant.	454,883	Snohomish
King County	Seola Creek Basin Retrofit	This project will demonstrate how retrofitting underperforming facilities in an urban basin lacking stormwater controls improves water quality. Increasing detention and adding wetpool volume to an existing facility within the same footprint and transforming an open channel into bioswale will remove pollutants. Checkdams and channel stabilization will decrease ongoing erosion.	750,000	King
Lake Stevens, City of	Lake Stevens LID Demonstration Project	The Lake Stevens LID Demonstration Project proposes to install multiple individual LID infiltration BMP's within the frontage of an existing vehicle maintenance and storage facility. The facility will be used to educate the local community on available LID practices as well as provide treatment and stormwater mitigation to existing runoff.	88,073	Snohomish
Issaquah, City of	Cemetery Transfer Site Stormwater Retrofits	This stormwater retrofit project will upgrade the City's Cemetery Transfer Site to meet current codes and best management practice standards for municipal facilities. This facility is used by Public Works Operations Department for temporary storage of rock and dirt spoils that are removed during routine street and utility maintenance activities.	210,000	King

<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Issaquah, City of	Central Park LID Parking Lot	This LID implementation project will construct a 134-stall pervious asphalt parking lot at the City of Issaquah's Central Park Pad 3 Fields. The parking area currently consists of compacted dirt and gravel surface. The total amount of pervious asphalt proposed is 62,000 square feet.	316,500	King
Federal Way, City of	S 356th Street Regional Detention Facility Retrofit	This project expands the S. 356th Street Regional Detention Facility (RDF) to improve water quality and moderate flows being discharged to the wetlands forming the headwaters of the North Fork of West Hylebos Creek. The following elements are planned: deep water wet pool; flow control; bioretention; spill containment and extensive native plantings.	1,000,000	King
Shoreline, City of	Thornton Creek Headwaters LID Stormwater Retrofit Project	This project will retrofit existing stormwater drainage infrastructure with LID bioretention facilities in a residential sub-basin in the headwaters of North Fork Thornton Creek. These facilities will improve stormwater retention and water quality in an urban watershed that is water quality impaired for multiple parameters and has substantive flooding problems.	630,000	King
Redmond Public Works	Redmond & King County Stormwater Pond	Evans Creek is impacted by untreated urban runoff. The King County road maintenance facility on Union Hill Road discharges underdetained and undertreated stormwater into Evans Creek. The project constructs a new stormwater detention pond and stormwater treatment wetland retrofitting this area for improving water quality.	937,500	King

<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Snohomish County Public Works	North Creek Neighborhood LID Retrofits	Six low impact development retrofit projects will be designed and constructed to reduce runoff and improve water quality in the North Creek Basin. All six rain garden and ditch retrofit projects are located within the county right-of-way in older neighborhoods with no existing detention or water quality facilities	336,000	Snohomish
Seattle Public Utilities	Capitol Hill Water Quality Improvement Project	This project will install an innovative regional scale stormwater facility. The facility will include vegetated bioswales which will provide stormwater treatment for a portion of the largest subbasin draining to South Lake Union while providing a vibrant pedestrian-friendly streetscape.	1,000,000	King
Olympia, City of	SPSCC Stormwater Retrofit for Water Quality	This project will retrofit the South Puget Sound Community College stormwater infrastructure to provide enhanced water quality treatment. Treatment of runoff from the developed urban campus area will improve water quality in downstream water bodies that are 303(d) listed, and habitat for several species of endangered species like salmon.	791,250	Thurston
Spokane County	Country Homes Boulevard Restoration Project	The Country Homes Boulevard Restoration Project will replace approximately one mile of asphalt ditch drainage channel that carries stormwater runoff from the five mile watershed toward the Spokane River to a low-impact development rain garden/bio-infiltration swale, providing stormwater treatment for the pollution-generating impervious surfaces within this watershed.	750,000	Spokane

<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Pierce County Public Works	Chambers/Clover Creek Basin Pollutant Reduction Project	This project will retrofit up to 100 single stage drywells in the Chambers/Clover Creek watershed in unincorporated Pierce County to improve surface and ground water quality. Work will consist of upgrading the drywells to enhance pollutant capture, simplify operation and maintenance requirements and provide for spill control capacity.	750,000	Pierce
Yakima, City of	Yakima UIC/Water Quality Retrofits	This project designs and constructs prototype Underground Injection Control (UIC) retrofit projects to add water quality (WQ) and low impact development (LID) treatment to the City's existing 436 UIC facilities. These prototype retrofit designs are intended to initiate a long-term UIC retrofit program throughout the City, Yakima County, and Eastern Washington.	210,000	Yakima
Pierce County Public Works	Central Maintenance Facility Vector Waste Processing Facility	This project provides for the construction of a vector waste decant facility with discharge to sewer in the Fredrickson area of Pierce County. The project will insure adequate vector waste handling capacity and protect the Chambers/ Clover Creek Sole Source Aquifer.	750,000	Pierce
Tacoma, City of	Wapato Lake Drive Pervious Street	Wapato Lake Drive will be converted from a failed street to pervious pavement to reduce stormwater runoff by providing infiltration. Wapato Lake has high levels of Phosphorus. This project will reduce the contaminant loading to the lake, which is vital to the health of this sensitive receiving water.	1,000,000	Pierce
Tacoma, City of	Hood Street Treatment Retrofit – (South 17th to South 21st)	Urban rain gardens will be constructed through UW-Tacoma and will provide regional treatment for 42 acres of commercial area. The rain gardens will be designed in cooperation with the University and will complement bike and pedestrian paths that will share this corridor plus provide a teaching opportunity for the public.	1,000,000	Pierce

<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Newcastle, City of	Olympus Subdivision Pond Retrofit	The project seeks to retrofit an existing stormwater pond adjacent to the intersection of Coal Creek Parkway SE and SE 84th Way in Newcastle. The purpose of the improvements is to enhance the pond's ability to provide water quality treatment and detention prior to discharge into Boren Creek.	112,500	King
Pierce County Public Works	Clarks Creek Basin Stormwater Retrofits	This project would retrofit numerous residential and road impervious areas in the Clarks Creek Basin in unincorporated Pierce County with biofiltration, bioretention, infiltration, filtration, hydrodynamic separation and rain gardens to achieve improved water quality conditions, including sediment, nutrient, bacteria and metals reduction in stormwater.	705,000	Pierce
Duvall, City of	Carrie Rae Pond Retrofit	This project includes retrofitting a 4,000 square foot pond that was constructed as a flow-through stormwater facility in 1985 and currently provides no water quality improvement or detention. The retrofit will increase pond depth and volume to provide water quality and flow control within the existing pond footprint.	140,400	King
Redmond Public Works	Redmond Way Stormwater Treatment Facility	Retrofit 263 acre urban basin with a media filter vault before discharge to the Sammamish River that supports diverse fish population but is impacted by untreated urban runoff. Implement redevelopment policy to provide LID treatment and roof infiltration to maintain baseflow, protect City aquifer, and decrease size of treatment system.	1,000,000	King

<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Everett, City of	Underground Stormwater Facility Access Retrofit	This project retrofits existing City of Everett stormwater vaults (18) and tanks (45) installed prior to 1998 with additional access ways. The resulting thorough and efficient cleaning and maintenance will improve the facilities treatment of stormwater and provide high water quality discharges to the Puget Sound and Snohomish River.	862,875	Snohomish
Shoreline, City of	Aurora Corridor Improvement Project	This project will install Filterra bioretention systems, raingardens, and public education facilities as a part of the Aurora Corridor Road Improvement Project. LID features provide water quality treatment to remove TSS, phosphorus, metals, and oils from stormwater prior to entering Echo Lake and ultimately benefiting impaired Lake Ballinger.	624,243	King
Redmond Public Works	Bear Creek Center Stormwater Retrofit	Bear Creek is impacted by untreated urban runoff. Construct stormwater treatment wetland to provide treatment to retrofit an existing parking lot and other impervious area. Replace adjacent multi-use trail with permeable asphalt. Provide public education signage about LID and regional/local efforts on retrofitting for stormwater treatment.	631,500	King
Mercer Island, City of	Mercer Island LID Retrofit Project	This project will install LID facilities at City Hall to improve stormwater runoff quality to Lake Washington and promote the application of LID facilities by serving as a high-profile educational opportunity for City Hall visitors.	225,000	King
Vancouver, City of	Peterson Channel Residential LID Improvements	LID-based bioretention facilities are proposed in Peterson Channel industrial areas to treat stormwater and improve water quality. With its high basin positioning, reductions in temperatures and contaminants are expected in both Peterson Channel and Burnt Bridge Creek. This project demonstrates Vancouver's partnerships with neighborhoods and industries, including nearby SEH America.	601,275	Clark



<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Sumner, City of	CIP 19 Outfall Treatment Retrofit	CIP 19 (Puyallup Street) White (Stuck) River Outfall Stormwater Treatment Retrofit – retrofit existing 24-inch outfall with media cartridge system for full treatment of 43-acre basin.	1,000,000	Pierce
Pacific, City of	White River Treatment BMP Project	The City of Pacific plans to replace an existing stormwater facility that has been damaged beyond operable repairs due to the recent flooding of the White River. The proposed stormwater facility will function more efficiently in its new location and will better serve the local community.	500,000	King
King County Road Services Division	SE Summit-Landsburg Road Stormwater Retrofit	SE Summit Landsburg Road is a 2-mile long roadway located east of Maple Valley. The roadway passes through a Category 1 Critical Aquifer Recharge Area but does not have facilities for treatment of stormwater runoff. King County proposes to add approximately 1,800 linear feet of bioinfiltration swale along the roadway.	277,500	King
Longview (Primary) / Kelso (Secondary)	Pervious Concrete Sidewalk Retrofits	Transition Cities to preferential specification and installation of pervious concrete by modifying relevant concrete plans and specifications to allow pervious concrete, Purchasing necessary tools and training City crews to install pervious concrete, and at a minimum, switching all internal sidewalk and handicap ramp construction to pervious concrete.	125,300	Cowlitz
Spokane Valley, City of	Sullivan Bridge Drain Retrofit	This project will eliminate currently untreated direct flows from the Sullivan Bridges to the Spokane River and convey them off-site to a new treatment facility. Project will design and construct the conveyance, treatment, and infiltration systems to eliminate five outfalls now and additional southbound bridge outfalls in the future.	186,665	Spokane

Grant Recipient	Project Title	Stormwater Retro-Fit & Capacity Grants Project Description	Grant Award	County
Bremerton, City of	Stormwater Retrofit and LID Proviso	<p>This proviso will provide funds for several different stormwater retrofit and LID projects throughout the City:</p> <ul style="list-style-type: none"> <li>* Pacific Avenue – 11th Street to Evergreen Park, \$193,000. The project would complete the Pacific Avenue corridor LID retrofit initiative in downtown Bremerton. Street widths will be reduced and pervious pavement and rain gardens will be introduced to infiltrate street generated stormwater runoff.</li> <li>* 5th Street – Chester to Veneta, \$100,000. The project will provide LID provisions in the form of rain gardens and pervious pavement street and sidewalk improvements in central Bremerton at 5th Street. This project is being developed jointly by Bremerton Parks and Recreation and Bremerton Public Works.</li> <li>* Anderson Cove - \$800,000. The City will acquire .62 acres of property and construct an infiltration facility to provide the treatment of stormwater runoff from nearly 60 acres of the contributing highly urban residential drainage basin. Stormwater will be infiltrated into the underlying glacial outwash soils through the construction of porous pavement and a stormwater infiltration facility.</li> <li>* Manette Business Area - \$250,000. Portions of Pitt, East 11th, and other miscellaneous streets in Manette will be retrofitted with porous pavement, rain gardens, and stormwater infiltration devices. This improvement is expected to infiltrate much of the stormwater from approximately 40 acres of urban commercial/residential development in this central Bremerton neighborhood.</li> </ul>	1,343,000	Kitsap

<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Poulsbo, City of	City of Poulsbo LID Retrofit Project	Decrease pollutant loading and improve stormwater quality discharge to Liberty Bay from the City of Poulsbo Anderson Parkway by retrofitting 2.1-acre high-use parking lot with pervious pavement and rain gardens. Conduct water quality monitoring and provide public education opportunities to showcase LID stormwater management methods and benefits.	237,617	Kitsap
Whatcom County Public Works - Stormwater	Lahti Drive Stormwater Improvements Project	The project consists of the installation of a vegetated bioinfiltration swale to treat runoff from approximately 31 acres of residential area. The swale will reduce the transport of pollutants, namely phosphorus and fecal coliform, to Lake Whatcom, the sole drinking water source for half of Whatcom County's population.  This project implements Puget Sound Plan action item C.2(6), retrofit existing stormwater systems...	218,362	Whatcom
Clark County	Mount Vista Subdivision Retrofit	This project will retrofit the Mount Vista Subdivision with over twenty LID features, reducing runoff to undersized ponds and providing water quality treatment. Project benefits include improved hydrology and water quality for Mill Creek and public education of LID stormwater features in a highly visible location near WSU-Vancouver Campus.	184,290	Clark
Spokane, City of	Hazel's Creek LID Demonstration Project	The Hazel's Creek Low Impact Development (LID) Demonstration Project includes a paved access road and parking lot with LID treatment and a LID demonstration area with a pervious walkway.	183,710	Spokane
Spokane, City of	Bridge Avenue LID project	Construction of a rain garden Low Impact Development stormwater facility in a City of Spokane parking lot. This project categorically meets green project requirements for green infrastructure 1.2-2 by implementing LID features.	342,000	Spokane

Grant Recipient	Project Title	Stormwater Retro-Fit & Capacity Grants Project Description	Grant Award	County
King County	Multiple Stormwater Facility Retrofit Projects	Retrofit 28 stormwater control facilities that are operated by King County to protect water quality but are not performing as originally intended or to the highest level that can be accomplished with reasonable cost. Restore the performance of each facility and improve it to an optimal level within site constraints.	475,547	King
Bellingham, City of	Lake Whatcom LID Residential Retrofits	Application of low impact designs to existing single family properties to promote infiltration, stabilize soils, and increase riparian buffers. These measures are to reduce phosphorus loading into Lake Whatcom. The project proposes to provide monetary reimbursements for the installation of LID BMPs along with technical assistance and follow-up inspections.	500,000	Whatcom
Kitsap County	Kitsap County Fairgrounds LID Retrofit Project	Stormwater Low Impact Development and farm planning practices will be installed at the Kitsap County Fairgrounds. These retrofits will reduce runoff volume and sediments, bacteria and nutrients from contaminating Barker Creek and Dyes Inlet shellfish beds. These improvements provide an opportunity for public education about LID and farm management practices.	468,750.00	Kitsap
Bellevue, City of	Lakemont Boulevard Wet Pond Retrofit	The City of Bellevue is proposing to retrofit the existing stormwater treatment wet ponds at the Lakemont Boulevard SE by replacing them with a sand filter. The proposed retrofit will address high stream temperatures in Lewis Creek and elevated phosphorus levels in Lake Sammamish.	490,644.00	King

<b>Grant Recipient</b>	<b>Project Title</b>	<b>Stormwater Retro-Fit &amp; Capacity Grants Project Description</b>	<b>Grant Award</b>	<b>County</b>
Bremerton, City of	Kiwanis Park LID Retrofit and Green Streets Project	The Kiwanis Park LID Retrofit and Green Streets Project will use LID methods to reduce runoff from 4 blocks of heavily traveled city streets and an urban park. The runoff is currently piped untreated into Sinclair Inlet, a 303d listed body of water, or flows into the sanitary sewer system contributing to combined sewage overflow.	500,000.00	Kitsap
East Wenatchee, City of	Valley Mall Parkway & 3rd St. Stormwater Project	This project will provide stormwater treatment with the installation of stormwater filtration at existing catch basin locations. The purpose of the project is to treat the stormwater prior to release into a new flood control system that will discharge to the Columbia River.	150,000.00	Douglas
Kitsap Transit/Kitsap County	North Base Perm. Paving and SW Treatment Project	The proposed 7 acre project is a stormwater retrofit of a previous recreational vehicle storage yard to a Kitsap Transit public transportation maintenance facility. The project will use LID techniques throughout all paved surfaces for employees, and fleet, and includes a new city road. The new site will be built to city standards and new DOE approved Low Impact Development Guidance, V-1.2 dated June 10, 2009 and will protect Liberty Bay and Dogfish Creek.	225,000.00	Kitsap
Puyallup, City of	8th Avenue NW LID Retrofit Project	The 8th Ave NW LID Retrofit will reconstruct the entire 60 foot wide, 660 foot long ROW from 9th St NW to 11th St NW utilizing a narrow, curvilinear porous pavement roadway and porous sidewalks, with rain gardens between them.	324,080.00	Pierce
<b>Total</b>			<b>\$52,600,000</b>	

## Model Toxics Control Accounts – Agency Contacts Expenditures Report for Fiscal Year 2012

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