Model Toxics Control Act

Model Toxics Control Act, Declaration of Policy

RCW 70.105D.010(1) 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.

Toxics Control Account Expenditures Report

2009–11 Biennium

Publication No. 11-09-047

Washington State Department of Ecology

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

The Model Toxics Control Act

The Model Toxics Control Act (MTCA) became law in 1989, upon voter approval of Initiative 97. The Act defines and supports hazardous waste site cleanup activities, imposes limits on toxic substance releases to the environment, and supports programs that prevent toxic releases to our natural and built environments.

MTCA's stated purpose is to:

- Raise sufficient funds to clean up all hazardous waste sites.
- Prevent the creation of future hazards that result from improper disposal of toxic substances to land and water.
- Integrate land use planning with cleanup policies, keeping finite clean land resources available for future social use.

Purpose of this Report

This report highlights environmental efforts and goals attained by the Department of Ecology and other state agencies, with support from MTCA's Toxics Control Accounts. The period of review is for the 2009–11 Biennium (July 1, 2009, through June 30, 2011).

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.

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Message from the Director, Washington State Department of Ecology

Welcome to our latest Report on funds collected and disbursed under Washington's Model Toxics Control Act (MTCA) hazardous waste cleanup law. In these pages, you will find our account of MTCA-related spending and an overview of urgent work supported by those funds.

The Model Toxics Control Act is much more than a set of legal terms or of statements like this one. It's key to improving, protecting, and maintaining the quality of life that is precious to all Washingtonians, and it's vital to our economy.

Forbes, the national business and financial news publisher, ranks Washington among the very best states on two national scorecards: quality of environment, and business climate. Despite rhetoric about regulations being harmful to the economy, in Washington State a healthy economy goes hand in hand with a healthy environment—and MTCA powers the tools that ensure that health.

Washington's communities, families, and businesses depend on clean air, land, and water, to sustain them. Natural resource activities such as forestry, farming, fishing, hydropower, outdoor recreation, and waterborne trade support more than one-third of our economy. That's why we say "Washington's environment works," and MTCA is a significant reason it keeps working.

MTCA's Toxics Control Account funding helps us address old problems:

- Clean up historic contamination in rural communities where the owner abandoned the property or couldn't afford to pay for cleanup, or when the planned land use would serve a public interest.
- Publish the risks of exposure to lead and other harmful elements found in old paint, or to toxics hidden in children's toys, furnishings, grooming products, and other special consumer goods.
- Clean up publicly owned sites, so communities could return the property to productive uses, or open it to opportunities for economic development.

Preventing new problems—the less expensive, smarter course in the long run—is where we must focus our efforts and Toxics Control Account funding in coming years:

- Help support local governments' plan-and-build projects to prevent polluted stormwater from flowing into our precious waters—to our fresh water systems such as the Spokane, Columbia, and Chehalis Rivers; to lakes or coulees; or to marine waters of Willapa Bay, Grays Harbor, Puget Sound.
- Pollution Prevention Planning staff can help companies identify less-toxic alternative supplies, use fewer raw materials, and find new uses for their manufacturing by-products.
- Promote materials reuse; improve waste collection, disposal, and recycling methods; and create programs to address emerging problems (e.g., electronic wastes, expired drugs).

Toxics Control Account funds bolster direct collaborations between Ecology and other state agencies as we design, adopt, and apply hazardous Chemical Action Plans; we collect and dispose of banned pesticides; we restore and protect Puget Sound; and we teach first responders how to control hazardous-materials incidents. Ecology also grants MTCA funding to continue partnering with local governments and communities. Working together, solving problems and leveraging funding, helps promote and maintain a healthy environment to sustain our people, our economy, and our way of life.

Ted Sturdevant, Director

Bases of the Toxics Control Accounts

Model Toxics Control Act

After voter approval of Initiative 97, the **Model Toxics Control Act** became state law in 1989.

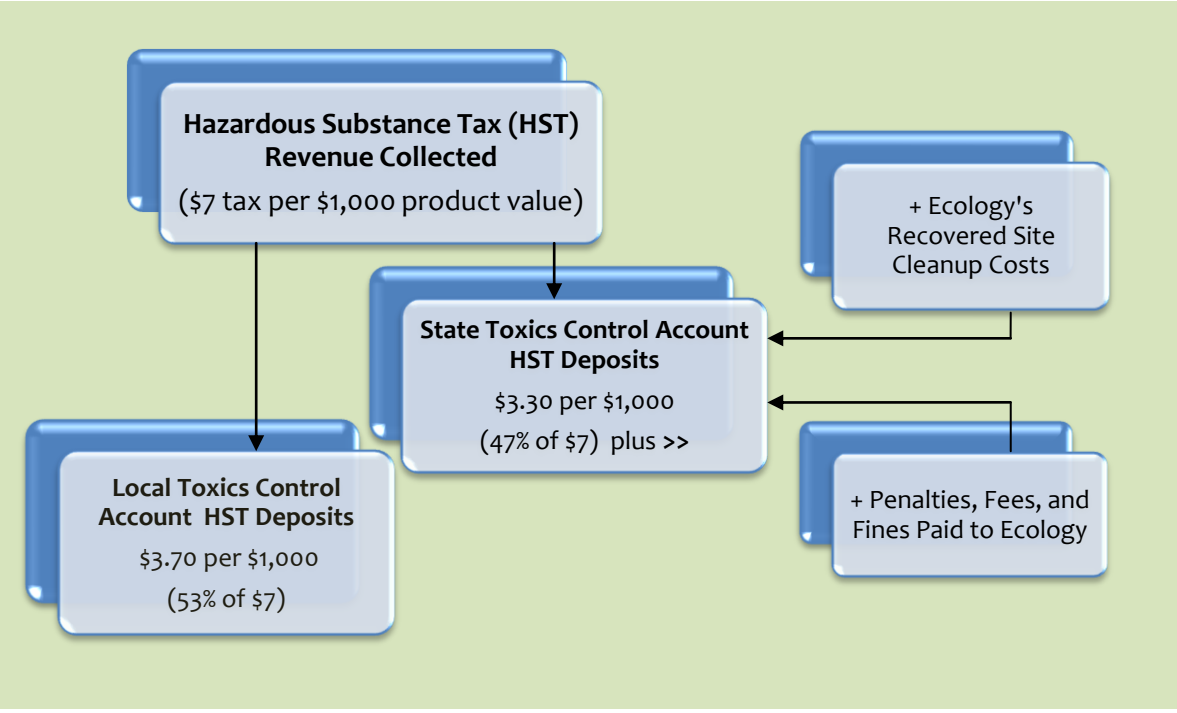
The law (MTCA) is published in Title 70, Chapter 105D, of the Revised Code of Washington. MTCA's Declaration of Policy decries "…the irresponsible use and disposal of hazardous substances…" that harm the environment and thereby threaten human health, economic prosperity, and property values. MTCA authorizes the Department of Ecology (Ecology) to restore and protect our quality of life by defining hazardous waste, directing site cleanup actions, and conducting toxics* control programs. Our state cleanup law also includes a way to pay certain costs of discharging those duties attached to Ecology's authority. Section RCW 70.105D.010 describes MTCA's purpose as operating to:

- Raise sufficient funds to clean up all hazardous waste sites.
- Prevent the creation of future hazards that result from improper disposal of toxic wastes into the state's land and waters.
- Clean up contaminated industrial properties and reuse [that land base], to make clean land available for future social use.

*Ecology defines "toxics" as manufactured or combined chemical compounds. MTCA does not address the class of *toxins* produced by plants (e.g., poison ivy) or animals (e.g., snake venom) through natural, biological processes.

Toxics Control Account Revenue Streams

The primary source of revenue into the MTCA Toxics Control Accounts is continuous collection of the Hazardous Substance Tax (HST) by the State Department of Revenue. Upon receipt of HST payments, the Department of Revenue apportions the deposits into the two Toxics Control Accounts.



Revenue Streams

Hazardous Substance Tax: The Department of Revenue collects payments of the tax 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 substance ($7 tax per $1,000 product value). More than 85 percent of the revenue deposited to the Toxics Control Account comes from payments of the hazardous substance tax.

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: Example: If a Liable Party (historic polluter) files for bankruptcy protection from creditors, and Ecology perfected our claim, then the court awarded some liquidated assets in payment toward the Party's site cleanup debt.

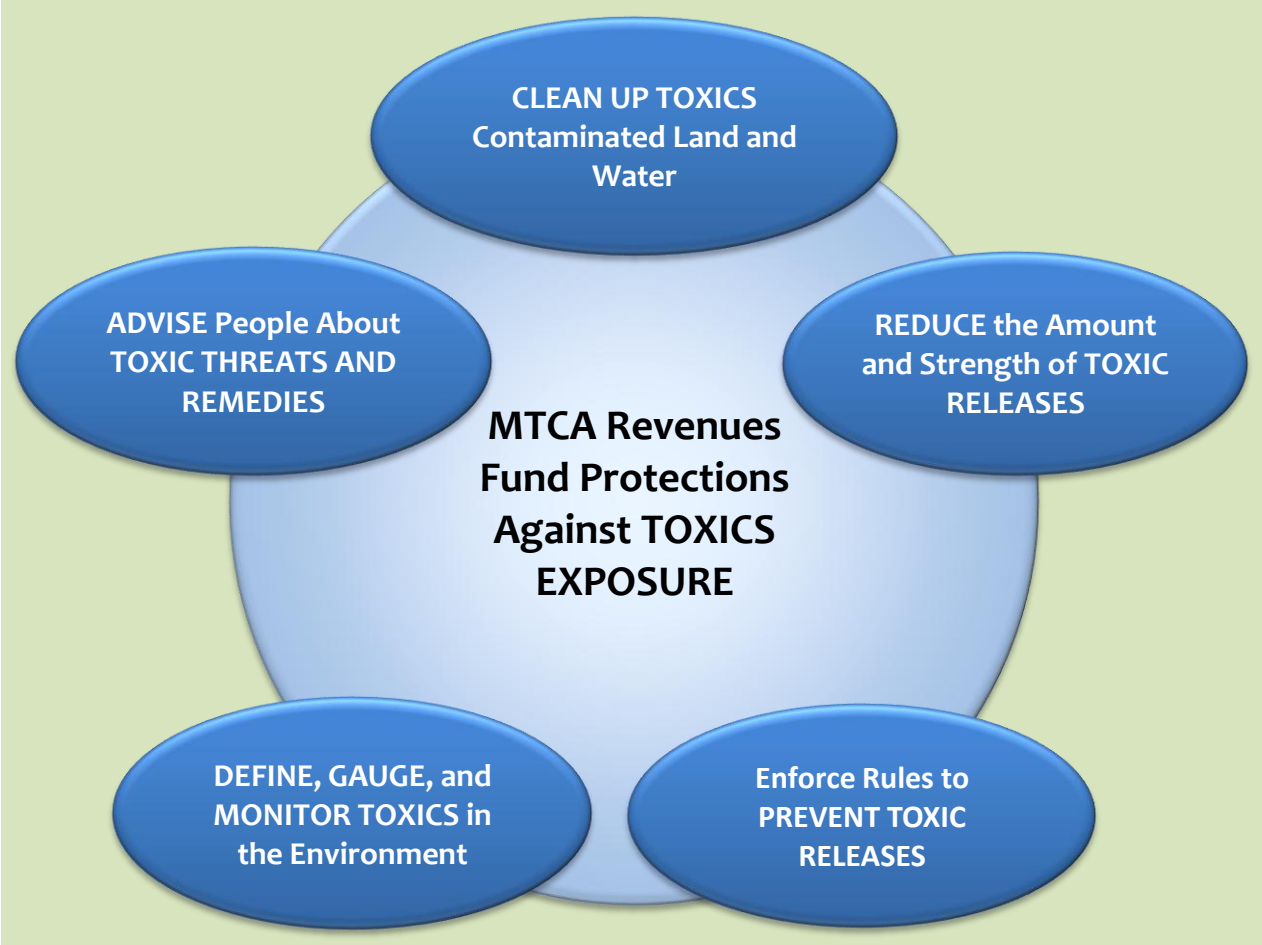
Toxics Control Account Revenue Deposits – 2009-11 Biennium

Revenue Source	2010 Amount	2011 Amount	Biennium Total
STATE TOXICS CONTROL ACCOUNT			
Hazardous Substance Tax	$ 79,054,208	$ 74,029,373	$153,083,582
Mixed Waste Fees	$ 7,165,305	$ 4,872,739	$ 12,038,044
Cost Recovery	$ 24,512,197	$ 5,120,434	$ 29,632,631
Voluntary Cleanup Charges	$ 936,174	$ 872,455	$ 1,808,628
Fines & Penalties	$ 259,848	$ 76,422	$ 336,269
Miscellaneous	$ 18,117	$ 4,281	$ 22,399
Transfers & Tax Refunds	**($15,340,000)**	**($37,780,000)**	**($53,120,000)**
Total STATE TOXICS CONTROL Funds	$ 96,605,849	$ 47,195,704	$ 143,801,553
LOCAL TOXICS CONTROL ACCOUNT			
Hazardous Substance Tax	$ 89,044,786	$ 83,471,812	$ 172,516,598
Transfers & Tax Refunds	**($37,060,000)**	**($65,759,000)**	**($102,819,000)**
Total LOCAL TOXICS CONTROL Funds	$ 51,984,786	$ 17,712,812	$ 69,697,598

Funds Apportioned

The legislature appropriates Toxics Control Account funds to select state agencies through the biennial budget process. During the 2009–2011 Biennium, the legislature appropriated funds to the Departments of Ecology, Fish and Wildlife, Health, Agriculture, Natural Resources, and Revenue; the Puget Sound Partnership; the University of Washington; the State Parks and Recreation Commission; and the Washington State Patrol's Fire Training Academy.

Confronting Toxic Threats
Toxics Control Account Support



The Toxics Control Account was created to support specific environmental protection work.

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 establish the Department of Ecology. Composed of previously separate but sometimes overlapping programs, it was the first agency of its kind in the United States—even preceding the U.S. Environmental Protection Agency.

Since then, Washington's government and its people have passed laws to maintain and improve our environmental health. The Model Toxics Control Act made one long-term investment toward those goals when it set up the Toxics Control Account as a funding source dedicated to supporting specific environmental work and projects.

Toxics Control Accounts – 2009-11 Biennium Expenditures Summary

Distribution of State Toxics Control Account Funds Appropriated to Department of Ecology

Ecology's MTCA Appropriations Transfer History 2009–2011 Biennium

STCA Fiscal Year 2010 Transfer to General Fund	$15.34 Million
STCA Fiscal Year 2011 Transfer to General Fund	$37.78 Million
Total State Toxics Control Funds Transferred:	**$53.12 Million**

2009-11 Biennium Department of Ecology's State Toxics Control Account Expenditures

Ecology's Program Operations Budget Expense	Expenditure Summary
AAFC – Agency Admin., Facilities, Communications Provided administrative, communications, and facilities services statewide.	$ 12,461,966
EAP – Environmental Assessment Program Provided objective, scientifically valid information about existing environmental conditions.	$ 5,064,724
HWTR – Hazardous Waste & Toxics Reduction Fostered sustainable practices, and ensured safe management of hazardous substances.	$13,028,396
NWP – Nuclear Waste Program Oversaw nuclear waste cleanup at the greater U.S. Hanford Site, and regulated mixed waste.	$ 9,839,195
SEA – Shorelands and Environmental Assistance Reviewed plans and published dredging projects guidance to avoid creating new contamination.	$ 730,996
SPPR – Spill Prevention, Preparedness & Response Maintained response capability, equipment, and training; emphasized prevention.	$ 7,337,501
TCP – Toxics Cleanup Program Management and oversight of contaminated site cleanup statewide.	$34,505,573
W2R – Waste 2 Resources Program Continued projects to reduce uses of/exposures to Persistent Bioaccumulative Toxics (PBTs).	$ 6,841,315
WQP – Water Quality Program The programs and activities reduced toxic stormwater flow into our state's fresh and marine water resources.	$ 7,525,015
Ecology's Capital Budget Projects	$ 22,216,069
Ecology's State Toxics Control Account Subtotal of 2009–11 Biennium Expenditures	**$119,550,750**

The Toxics Control Accounts support Washington State agencies' toxics control programs:

- Clean up toxics-contaminated land and water.
- Reduce the amounts and concentrations of toxic substances released to the environment.
- Prevent creation of future hazards that result from improper use or disposal of toxic substances.

Descriptions of Ecology's State Toxics Control Account-funded projects appear on pages 1 – 25 and examples of Other Agencies' State Toxics Control Account-funded projects are on pages 26 – 44.

Distribution of State Toxics Control Account Funds Expended by Other State Agencies

2009–11 Biennium - State Toxics Control Account Expenditures

STCA Programs Operated by Other State Agencies	Expenditure Amount
Department of Agriculture Held regional collection events that removed potential hazardous waste sources (such as banned pesticides or pesticide containers) from farms, ranches, or nurseries.	$ 4,678,145
Department of Fish & Wildlife Awarded a contract to a design team that promised to develop conceptual (10%) engineering designs for "nearshore" restoration projects.	$ 588,859
Department of Health Studied toxics in our food chain and published fish consumption (limits) advice; and assessed chemical exposures from site cleanup activities, consumer goods, and air pollution sources.	$ 3,766,155
Department of Natural Resources Removed creosote-treated pilings, structures, and beach debris.	$ 696,396
Department of Revenue Collected payments of the Chapter 82.21 RCW – Hazardous Substance Tax; divided deposits as defined by RCW 70.105D.070.	$ 86,996
Parks and Recreation Commission Prioritized sanitation and stormwater control system upgrades.	$ 12,870
Puget Sound Partnership Conducted Low-Impact Development – Regulation Assistance workshops.	$ 788,050
University of Washington Conducted soil cleanup projects at sites on its Tacoma campus.	$ 78,764
Washington State Patrol Fire Training Academy Controlled runoff and reclaimed water on site; provided mandated chemical hazards recognition, exposure risks study, and fire suppression training to first responders.	$ 509,000
Total State Toxics Control Funds Spent by Other State Agencies	**$ 11,205,235**

Distribution of Local Toxics Control Account Funds Appropriated to Department of Ecology

Ecology's MTCA Appropriations Transfer History 2009–2011 Biennium

LTCA fiscal year 2010 transfer to the State General Fund	$ 37.06Million
LTCA fiscal year 2011 transfer to the State General Fund	$ 65.76Million
Total Local Toxics Control Account Funds Transferred	**$102.82Million**

Ecology's 2009-11 Biennium Local Toxics Control Account Expenditures by Program

Department of Ecology's Program Name	Total Expenditures
AAFC – Agency Admin., Facilities, Communications Provided communications and outreach support to local governments for their toxics control projects.	$ 878,682
Capital Budget Projects Remedial Action Grants and Stormwater Grants.	$10,747,827
HWTR – Hazardous Waste & Toxics Reduction Program Provided technical assistance to business operators; wrote and enforced pollution-limiting permits, inspected regulated facilities; promoted awareness and use of less-toxic chemical products.	$ 2,669,104
SEA – Shorelands & Environmental Assistance Program Managed grants enabling communities throughout the state to update their local Shoreline Master Programs, thereby protecting environmental assets and human health.	$ 3,000,000
SPPR – Spills Prevention, Preparedness & Response Program Local Toxics Account funding paid contract costs of keeping the Neah Bay Rescue Tug on-station and ready to respond to distressed vessels, year-round, during Fiscal Year 2010.	$ 3,318,367
TCP – Toxics Cleanup Program Provided technical assistance to local governments who had projects funded by the Remedial Action Grant program.	$ 1,291,668
W2R – Waste 2 Resources Program Provided grant management support to local governments.	$ 3,716,275
WQP – Water Quality Program Provided technical and grants management support to local communities.	$ 8,979,848
Total Local Toxics Control Expenditures	**$ 34,601,771**

Examples of Ecology's Local Toxics Control-funded grant projects appear on pages 45 – 65.

Part 1 : Ecology's 2009-11 Biennium State Toxics Control Account Summary

Confronting Toxic Threats

The Department of Ecology and the Toxics Control Account

Toxics Control Accounts were created to support specific environmental protection work.

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

The **Model Toxics Control Act - Chapter 70.105D RCW** stresses the Department of Ecology's duty to administer laws and design rules to control toxic substances and hazardous wastes to remove contamination that affects or threatens soil or water quality, to minimize human and environmental exposures to toxics, to prevent or respond to spills, to reduce the waste of resources and safely manage unavoidable waste, and to promote prudent uses of chemicals and of material goods.

Ecology's Toxics Cleanup Program — $34.5 Million – State Toxics

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 of the duties assigned to the Department of Ecology by the Model Toxics Control Act at RCW 70.105D.030.

The Model Toxics Control Act (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 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's a hazardous site? Any property or structure where toxic chemicals were manufactured, used, or stored—or any property located downstream or down-gradient of such a site—likely contains toxic contaminants. 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 persons 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 the contamination could spread and that 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 the 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 use MTCA funding effectively. The Washington Assessment and Ranking Method evaluates risks and 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 priority for public funding or direct Ecology staff oversight.

Ecology's TCP site cleanup efforts focus first on high-priority sites. Federal Superfund sites—ranked "0" on the Hazardous Sites List—and those sites the TCP expert ranked as either "1" or "2" are defined as high priority. **During the 2009–11 Biennium Ecology completed 322 site hazard assessments and added 68 new sites to the state Hazardous Sites List. Ecology ranked 20 of those sites as high-priority projects.**

The Hazardous Sites List includes all assessed and ranked facilities/sites located throughout the state, whether engaged in some phase of cleanup or waiting to begin it. Ecology published updated lists in February and August each year, showing additions of sites, changes in any listed site's cleanup status, and proposed removals from the list. **During the Biennium, Ecology issued "No Further Action" opinions at 11 high-priority sites** where reported final cleanup actions satisfied Model Toxics Control Act standards and requirements. **Ecology also removed 22 sites from the Hazardous Sites List** within that period. You may conduct an electronic search of the Hazardous Sites List and link to other lists at: http://www.ecy.wa.gov/programs/tcp/sites/SiteLists.htm.

At high-priority sites, Ecology's TCP experts conduct, or direct and oversee, the phases of the process. Ecology's TCP experts consult with the public and affected communities during the planning stages of site investigation and remedy selection, and before applying the site cleanup methods and performance sequence. For lower-ranked sites, Ecology's experts compare independently certified cleanup plans/reports/monitoring results to the MTCA standards. Public concern and an immediate social or economic interest may also draw attention to a site ranked as a lower risk.

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.

1. ***Site Discovery***: Any site where contamination is suspected must be reported to Ecology's Toxics Cleanup Program (TCP).
2. ***Initial Investigation***: Based on information obtained about the site, Ecology decides to investigate, clean up, or require no further action. If further action is required under MTCA, Ecology invites owners, operators, and other potentially liable persons to work cooperatively to find a remedy.
3. ***Site Hazard Assessment***: After Ecology confirms the presence of a hazardous substance on site, a TCP expert weighs the relative threat the contamination poses to human health and the environment.
4. ***Hazard Ranking***: Having worked with the Science Advisory Board to create the Washington Ranking Method, TCP applies it (data gleaned from previous site hazard assessments) to rank sites on a scale; a rank of 1 represents the highest risk, and 5 the lowest. Ranked sites are published on the state Hazardous Sites List.
5. ***Remedial Investigation/Feasibility Study***: A remedial investigation closely defines the extent and magnitude of the contamination. A feasibility study weighs the contamination's potential impacts to human and environmental health and evaluates appropriate technologies to avoid those impacts.
6. ***Cleanup Action Selection***: A cleanup action plan identifies the preferred cleanup methods and the applicable cleanup standards and protections required by MTCA.
7. ***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

The Model Toxics Control Act 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 State Toxics Control Account funds.

Cost recovery. Through a process prescribed by MTCA, and defined by rule, TCP staff recovered site cleanup costs. **During the Biennium, the Toxics Cleanup Program recovered and deposited $24.5 million into the State Toxics Control Account, to support other site cleanup projects.**

Formal Cleanup Sites – The 25 Highest Dollar Amounts Invoiced in 2009-11 Biennium

BNRR SKYKOMISH	582,310.72
OCCIDENTAL CHEMICAL	376,527.63
BOEING EVERETT	355,560.12
LOWER DUWAMISH WATERWAY	346,041.50
PASCO SANITARY LANDFILL	267,899.41
PORT ANGELES RAYONIER MILL	262,086.15
N BOEING FIELD GEORGETOWN	240,151.40
GLACIER NORTHWEST INC	233,191.54
RG HALEY INTL CORP	231,477.19
WARDEN CITY WTR SUP WLLS 4/5	230,791.65
CAMP BONNEVILLE	217,347.17
PACIFIC WOOD TREATING	187,420.44
HOLDEN MINE	176,106.80
PLASTIC SALES AND SERVICE	175,323.67
TACOMA COAL GASIFICATION	171,463.95
FORT LEWIS WASHINGTON	150,181.64
PEND OREILLE MINE	135,549.51
INDUSTRIAL CONTAINER SVCS WA	134,542.11
WEST BAY MARINA	131,843.06
POPE & TALBOT INC SAWMILL	128,177.80
KAISER TRENTWOOD	117,722.46
TERMINAL 91 TANK FARM	112,169.74
BEI/PHILIP – GEORGETOWN	106,405.97
NUSTAR ENERGY LP	104,125.21
SOUTH PARK LANDFILL	103,656.51

Lower-ranked sites: 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 cleanup project managers, at some lower-ranked sites during the Biennium, in locations where local governments expressed a community interest in a site's cleanup.

Owners of some lower-ranked sites were engaged in the cleanup process during the Biennium. Long-term monitoring to verify cleanup action results was under way at others. TCP staff issued "No Further Action" [needed] opinions at those lower-ranked sites where certified reports submitted by licensed and bonded technical contractors assured satisfaction of MTCA standards (toxic contaminants measured in concentrations at or below published limits).

The majority of persons responsible for lower-ranked contaminated sites (the potentially liable parties) chose to conduct site cleanup projects independent of Ecology's direct oversight. One alternative process available to a site owner/inhabitant/operator not compelled by a cleanup Order or Decree, is an independent cleanup reviewed by TCP engineers or hydro-geologists: the Voluntary Cleanup Program.

TCP's **Voluntary Cleanup Program** (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/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 State Toxics Control Account, 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 its neighbor 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 the Model Toxics Control Act boosts the site's potential to attract investments and redevelopment—usually as a business enterprise.

During the Biennium, the Voluntary Cleanup Program issued 2,511 invoices, billing a total of $1.2 million in review and consultation service charges. VCP program reimbursements are deposited into the State Toxics Control Account. A total of 3,609 sites went through the VCP process during the 2009–11 Biennium.

Toxics Cleanup Program Capital Budget Projects

The State Toxics Control Account's (STCA) Capital Budget provides funding to pay actual costs of performing large-scale public works/site cleanup projects. Each discrete project must be completed within the 2-year Capital Projects funding cycle.

Through the Department of Ecology's Toxics Cleanup Program, during Fiscal Year 2010 Capital funds paid for:

- Safe Soils Remediation Grants – Orchard pesticides cleanup
- Clean Sites Initiatives – Community projects at high priority sites
- Puget Sound Initiative – Cleanup activities at sites located within half a mile of Puget Sound

Examples of Fiscal Year 2010 Safe Soils Remediation Projects

Central Washington produces a variety of food crops, including orchard fruits. Pesticides, historically used to protect the crops, left lead and arsenic contamination behind when the orchards were converted to other uses. Throughout Central Washington, former orchards were cleared of trees and local governments built schools on the land. Untreated, those school grounds pose long-term risks that playing children will inhale or ingest legacy lead and arsenic.

Ecology's TCP staff in Yakima began cleaning up contaminated soil from school yards in the summer of 2006. A controlling aspect of school yard cleanup actions is the time constraint—work cannot begin until school is out for the summer, and the work must be completed three weeks before school resumes in the fall. Although this edition of the MTCA Report covers a full biennium, no Soil Remediation Projects occurred during FY 2011 because the appropriation arrived too late to proceed with and complete construction within time constraints.

Barge-Lincoln Elementary School – completed in 2010 at a cost of $206,354.

Hoover Elementary School – completed in 2010 at a cost of $284,592.

Garfield Elementary School – completed in 2010 at a cost of $161,060.

McKinley Elementary School – completed in 2010 at a cost of $142,457.

Ecology's Environmental Assessment Program — $5.1 Million –State Toxics

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

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

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

Examples of EAP's work products/activities during the 2009–11 Biennium include: (1) Studying toxic pollutants in priority water bodies. (2) 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). (3) Identifying sources and amounts of contamination in priority watersheds, and recommending ways to reduce pollution, so the water meets state water quality standards (falls below maximum pollution limits).

Studying toxics in Puget Sound: EAP's new study confirmed surface runoff, including stormwater, contributes the highest levels of most toxic chemicals flowing to Puget Sound. EAP analyzed water samples collected from 16 streams in the Puyallup and Snohomish river watersheds, during the year from August 2009 through July 2010, amid storms and between storm events. The highest toxic chemical levels occurred during storms and were found in samples drawn from the most developed stream basins. Find the study at www.ecy.wa.gov/biblio/1103010.html.

Assessing arsenic contamination levels in soil: During 2010, EAP collected samples from the Tacoma Smelter Plume footprint and from the Hanford Old Orchards area. EAP conducted chemical analyses of soil, plants, and biota, and performed bioassay testing on the soil. Based upon the test results, EAP concluded that using "total arsenic in soil" as the screening level for soils is protective of plants, biota, and wildlife.

Measuring long-term effectiveness at cleanup sites: EAP collected groundwater data quarterly, 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 Sediments Monitoring Team conducts annual monitoring in Puget Sound. EAP measures sediment quality at ten long-term stations (having records of more than 20 years' of data) and from a network of regional stations sampled on a 10-year rotation cycle. Characteristics EAP measures include toxicity, chemistry, and the community structures of organisms. This information helps to identify existing problems and measure the success of environmental programs.

During the 2009–11 Biennium, EAP spent $5,064,724 from appropriated STCA funds.

Ecology's Hazardous Waste and Toxics Reduction Program — $13.0 Million – State Toxics

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 HWTR has set goals to foster sustainability, prevent pollution, and ensure safe management of millions of pounds of the hazardous substances used and disposed of annually by businesses and consumers in Washington.

Businesses of all types and sizes produce and manage toxic chemicals, and they create hazardous waste. Waste is inefficient; it means profit losses. Facilities that produce more hazardous waste also tend to mismanage hazardous substances they use in their production processes. Mismanaging hazardous wastes can result in contamination that threatens human and environmental health, and that must eventually be cleaned up. The keys to breaking the cycle of ongoing cleanup expenses are to use fewer toxic chemicals, and to safely manage each hazardous substance for which no safer alternative is available.

The HWTR Program's personnel spent $13,026,000 appropriated from the State Toxics Control Account, on three main types of activities during the 2009–11 Biennium: preventing toxic threats, managing hazardous waste, and cleaning up toxic sites.

- ***Preventing toxics pollution*** can break the cycle of costly cleanups. HWTR staff (1) review business pollution prevention plans, (2) provide compliance advice to operators and managers, and (3) identify specific ways they could reduce their use of hazardous substances.
- ***Safely managing hazardous waste*** helps protect people and their surroundings. HWTR personnel (1) provide technical assistance to help businesses reduce risks to, and avoid impacts on, human health and the environment; (2) conduct formal inspections; and (3) enforce the dangerous waste rules. HWTR also (4) enforces pollution release limits published in permits issued to operators of hazardous waste treatment, storage, and disposal (TSD) facilities.
- ***Cleaning up dangerous waste handling facilities:*** HWTR staff specialize in managing cleanup actions at hazardous waste TSD facilities. Cleaning up active and former TSD business sites stops groundwater, stormwater, soil, and air contamination. Ecology recovers most site cleanup costs from the property owners or business operators.

Technical assistance to businesses

During the 2009–2011 Biennium, HWTR staff visited more than 1,100 businesses. HWTR's technical assistance visits focused on improving operations and maintenance practices in those sectors with the highest rates of waste generation, and of noncompliance with state dangerous waste laws. HWTR offered business-specific advice to reduce the amounts of hazardous substances used, to use fewer kinds of toxic chemicals, and to manage hazardous waste safely. We also promoted energy savings and water conservation. Those who applied HWTR's advice found that good environmental management leads to a better bottom line. Here are two examples:

1. HWTR staff have worked with Crown Beverage Packaging Inc. (a can manufacturer in Olympia) for more than 15 years; the shared goal was to lower Crown's use of hazardous substances and its production of hazardous wastes. With consistent effort, Crown kept its can production levels relatively constant, while it reduced its hazardous waste output by 70 percent. Crown also cut its water consumption by 2.5 million gallons per year from initial

process volumes; and Crown expects its recent energy audit to show a net savings of $160,000 per year compared to earlier energy use payments.

2. During the 2009–11 Biennium, the HWTR Program paid $229,400 to auto recyclers throughout the state who diverted mercury from landfills. HWTR asked the recyclers to remove mercury-triggered switches from used vehicles before shredding or smelting the auto body shells. Over the 2-year period they collected 61,000 switches (73 pounds of mercury). Since beginning the switch rebate program in July 2006, this program has prevented the release to our environment of more than 340 pounds of mercury.

Toxics used in consumer products

Awareness of threats posed by toxic chemicals used in consumer products has increased concern about them. Toxic chemical exposures adversely affect human health, the environment, our state tax payers, and our state economy. Some effects are largely avoidable through pollution prevention practices, but HWTR 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 2009–11 biennial reform efforts was the plan to persuade government to narrow, and industry to limit, allowed uses of toxic chemicals.

1. HWTR hosts 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 introduced businesses and consumers to 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 like 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 plotted a road map for advancing "green chemistry" as an economic driver in Washington State.
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 HWTR works to prevent tomorrow's toxic threats, we strive to safely manage today's hazardous wastes. Around 1,200 mid- to large-size businesses statewide produce more than 100 million pounds of recurrent hazardous wastes each year. Producers factor the wastes into their financial plans and cost-benefit analyses. Dangerous waste inspections comprise a critical line of defense between hazardous waste and environmental contamination.

Inspections revealed how well businesses complied with state and federal dangerous waste handling rules. During this Biennium, HWTR staff conducted more than 500 pre-scheduled or unannounced inspections at facilities that generate or manage hazardous wastes. These inspections helped HWTR staff find and resolve nearly 500 serious environmental threats (hazardous waste leaks or spills that could pollute our environment).

HWTR personnel also worked with local governments to ensure safe handling of hazardous waste produced by thousands of smaller businesses in Washington; these smaller businesses are rarely inspected. (Refer to page 47 in Part 3, the Local Toxics Control Account section.)

HWTR found serious environmental violations at almost 60 percent of the businesses that were inspected during the Biennium. This result ranked as one of the highest violations rates in 20 years. A decade ago, hazardous waste inspectors found serious environmental threats at 27 percent of businesses. Why the recent increase? Loss of field presence—too few inspectors. A U.S. Environmental Protection Agency (U.S. EPA) study of Washington businesses showed a 20 percent increase in environmental threats when the time lapse between inspections was more than 3 years. But at current staffing levels, almost 6 years would be needed to inspect all of today's regulated businesses.

If facility operations continue to violate safe toxics management requirements, despite technical assistance visits and informal compliance efforts, then HWTR applies our enforcement authority. HWTR imposed 12 penalties during the Biennium; 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 permits define how the facilities must operate to protect human and environmental health. The three commercial TSD facilities that operate in our state all began their permit renewal processes during this Biennium. HWTR permit managers are currently writing the permit renewals, incorporating the latest federal and state requirements.

Where historic operations at TSD sites contaminated soil and groundwater, HWTR required that the facilities conduct necessary cleanup. Under HWTR federal permit authority, such site cleanup is called "corrective action." Corrective actions are currently under way at 39 sites (most located near Puget Sound), that the U.S. EPA designated as priorities.

By the close of the 2009–11 Biennium:

- An average of 75 percent of the site work had been completed under Ecology's supervision.
- Human exposures are controlled at 90 percent of these facilities.
- Groundwater contamination has been controlled at 77 percent of the facilities.
- HWTR exceeded EPA's national goals for 2011, of 65 percent control of human exposures and 55 percent control of groundwater contamination.

The full cleanup process takes 10–12 years. HWTR expects to complete (be maintaining) all 39 corrective actions by 2020. These corrective actions are expensive, but the program can recover most of the costs from the property owners. Once completed, these properties could be available for economic redevelopment, for public recreation uses, or habitat restoration projects.

Providing access to hazardous substance and waste information

HWTR's personnel 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.

Ecology dangerous waste inspector Barb Smith helps a business protect itself from the potential of flood waters reaching its stored hazardous products and dangerous waste. Preventing pollution is cheaper and safer than cleaning up contamination.

Dangerous waste inspector Warren Walton checks the condition and labeling of drums containing toxic materials. Labels are critical to ensuring that everyone who handles a drum knows its contents and the risks they pose.

Ecology's Nuclear Waste Program — $9.8 Million – State Toxics

The mission of the Nuclear Waste Program is to lead the effective and efficient cleanup of the U.S. Department of Energy's 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.

Nuclear Waste Program personnel collect 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 State Toxics Control Account funds to the Program to apply and enforce the federal Hazardous Waste Management Act at these facilities.

In the 2009–11 Biennium, the legislature appropriated $9.8 million from the State Toxics Control Account to the Nuclear Waste Program to help pay costs of:

- Litigation to enforce the Tri-Party Agreement and other protective legal mandates,**
- Conducting compliance inspections,
- Performing regulatory oversight,
- Providing technical assistance, and
- Reviewing applications/issuing permits to qualified operators of mixed waste management facilities.

**In 2010, the Nuclear Waste Program settled litigation with the U.S. Department of Energy (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 includes 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.

Ecology's Shorelands and Environmental Assistance Program — $0.7 Million – State Toxics

Puget Sound Dredging Projects

The legislature appropriated funding from the State Toxics Control Account to support the Shorelands and Environmental Assistance Program's (SEA) oversight of dredging operations in Puget Sound, and to review reports of the safe removal and disposal of contaminated sediments found throughout the state.

A SEA Program employee helped manage the following Puget Sound dredging projects and activities:

- Evaluate whether sampling and analysis plans were suitable for any proposed project and its site.
- Ensure that project plans include appropriate dredging operations details, water quality monitoring protocols, and post-dredge effects monitoring.
- Provide special guidance for addressing bioaccumulative chemicals of concern.
- Update Ecology's freshwater sediment quality guidelines.
- Develop guidance on ways to avoid the risks posed by dioxin-contaminated dredged material.
- Revise our regional Sediment Evaluation framework.

The staff person funded from this account also supported multi-agency and multi-state dredged materials management activities that addressed both fresh and marine water sediments.

Multi-Agency Permit Team

During Fiscal Year 2011, State Toxics Control Account funds paid to pilot and evaluate a program designed to coordinate multi-jurisdictional teamwork on non-transportation permitting projects.

Example 1: A $50,000 grant to the Chelan County Department of Natural Resources (Chelan DNR) funded the Lake Chelan in-lieu-of-fee program pilot. Ecology staff administered this grant and worked with Chelan County. Chelan DNR organized an Interagency Review Team (IRT) to approve the mitigation projects; Chelan DNR also coordinated the financial instruments. The pilot adapted a federal rule [33 CFR Parts 325 and 332] that defined a way to compensate the public and mitigate "Losses of Aquatic Resources." Rather than pay a fine, a developer/property owner could pay a non-profit or governmental natural resources management entity to restore, reestablish, enhance, or preserve aquatic resources. Such an in-lieu-of-fee (ILF) mitigation program was proposed for actions scheduled to occur around and adjacent to lower Lake Chelan. Should federal Department of the Army permits, or state or local permits, require mitigation for shoreline in-water impacts, Chelan's proposed ILF could potentially satisfy them. The Chelan DNR District Engineer convened an Interagency Review Team to advise permit applicants on mitigation site selection, mitigation plans, long-term oversight strategies, and debit/credit considerations. Mitigation projects must be deemed appropriate by the District Engineer (consulting with the Interagency Review Team), to be used in Chelan County's ILF program.

Example 2: A $50,000 grant to WRIA 8** and another $50,000 grant to the King Conservation District (KCD) together paid for the design of a pilot Permitting Assistance Program for "green" shorelines projects.

- Ecology's Office of Regulatory Assistance (ORA) offered project coordination and permit assistance.
- Ecology's SEA Program administered the grants.
- The Lake Washington/Cedar/Sammamish Watershed (WRIA 8), offered education and outreach.
- KCD offered technical assistance.

These entities partnered to establish a Green Shorelines Multi-Agency Permit (GS MAP) project, fueled by a common interest in shorelands ecosystems. No promoters of significant green shorelines projects asked for technical or permit assistance during the 6-month project timeframe, but the partnership provided limited assistance to several projects. The GS MAP project's focus shifted to (1) education and outreach, (2) developing permit assistance tools, and (3) establishing technical assistance pathways for future projects. The team reprinted 5,000 copies of Seattle's Green Shorelines Guidebook and distributed those copies to city shoreline planners, shoreline consultants, and shoreline contractors. The partners also contacted real estate agents and landscape designers/consultants.

The total expended for both efforts' costs and operations—the dredging oversight, and the multi-agency permitting teams—amounted to $178,656.71 from the State Toxics Control Account.

Combined State and Local Toxics Control Accounts – Support for Shoreline Master Programs

During the 2009–11 Biennium, the legislature appropriated funds to Ecology's SEA Program from the Local Toxics Control Account (LTCA), for the first time.** The Model Toxics Control Act 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 Shoreline Master Programs (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. The $3 million drawn from the Local Toxics Control Account were spent to (1) provide grant funds to local governments needing to update their SMPs, and (2) support Ecology staff people who provide technical assistance, financial accountability, and final review/approval of all SMP updates.

The State Toxics Control Account provided $383,545 and the Local Toxics Control Account provided $3,000,000 to enable communities throughout our state to update their local Shoreline Master Programs and thereby protect environmental assets and public health.

**In previous years, Shoreline Master Program grant dollars were funded from the state's General Fund. In the 2009-11 biennium, the legislature authorized the use of State Toxics Control Account funding to be used for shoreline technical assistance. A list of SMP grants can be found at the following link: http://www.ecy.wa.gov/programs/sea/grants/smp/jurisdiction.html

Ecology's Spill Prevention, Preparedness, and Response Program — $7.3 Million – State Toxics

The Spill Prevention, Preparedness and Response (Spills) Program relies on State Toxics Control Account funding to protect public health, public safety, and our environment. Ecology's Spill Responders maintain the capability, equipment, and training to respond 24/7/365 to clean up spilled oil and other hazardous materials.

State Toxics Control Account funding pays costs of responding to, and cleaning up, oil and hazardous material spills. These activities include overseeing the cleanup of spills where a responsible party is taking appropriate action to manage the incident and minimize environmental damage. We also address "orphan" spills where the owner is unknown, unwilling, or unable to fund the necessary removal of hazards.

Ecology personnel collaborate with the responsible party and with other government entities to manage spill incidents. Our Program responders deploy immediately to spills that impact or pose a threat to Washington's waters. We likewise respond to releases of petroleum or other hazardous materials to soil and air—any threat to public health and safety.

Other related activities the 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 around Washington State, and
- Taking appropriate enforcement actions.

2009-11 Biennium program accomplishments:

- Ecology's Spills Program responded to 7,438 reported spills.
- Our responders recovered 97,302 gallons of the reported 132,665 gallons of oil spilled (73 percent recovery rate) from 5,272 reported oil spills. An additional 35,000 gallons of bunker oil was recovered and properly disposed of from the Davy Crockett incident.
- Our responders contained and recovered an estimated 117,485 pounds of hazardous material (other than oil products) from the environment. Nearly an additional 1 million pounds of hazardous materials was recovered and properly disposed of from the Davy Crockett incident.
- Clandestine drug lab and dump site cleanup activity resulted in the disposal of 115 highly toxic and corrosive compressed anhydrous ammonia cylinders, 44 ammonia generators, and 73 hydrochloric acid gas generators. This resulted in the safe disposal of over 9,000 pounds of compressed toxic and corrosive gas.

Responding to meth labs

The Spills Program uses State Toxics Control Account funds to pay costs to remove and dispose of hazardous chemicals and wastes found at clandestine methamphetamine drug labs. The number of illicit drug labs and associated abandoned dump sites rose dramatically through the mid 1990s. Since 2001 when the number of labs and dump sites peaked at 1,890, the number of reported labs has steadily declined. In FY 2010 and FY 2011, Ecology responded to 204 reported meth labs and dump sites around Washington.

The Spills Program coordinates 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 the hazardous chemicals and wastes that result from meth lab operations.** The Spills Program has developed expertise in safely handling and disposing of some highly hazardous wastes found at meth labs, such as pressurized cylinders of anhydrous ammonia, ammonia generators, and pressurized containers of gaseous hydrochloric acid.

The Spills Program at work: BNSF sodium hydroxide spill

In February 2011, a Burlington Northern Santa Fe (BNSF) 103-car northbound freight train side-swiped a southbound train, derailing a total of 14 rail cars, including four fully-loaded tank cars containing sodium hydroxide. Three of these tank cars ended up on the shore of Puget Sound under damaged box cars, and one was found to be leaking the concentrated caustic solution. Ecology worked with the U.S. Coast Guard, local fire department, and BNSF to offload the hazardous solution from the damaged cars and clean up the impacted beach sediments.

Over a period of several days, crews removed contaminated sediments, neutralized contaminated material that could not be removed, and up-righted the tank cars and off-loaded the sodium hydroxide to secure containers. The tank cars were fully cleaned prior to being cut-up and hauled off as scrap metal.

Hazmat crews work to stop sodium hydroxide leaking from a rail car adjacent to Puget Sound.

The Spills Program at work: refinery pipeline diesel spill

Ecology's responders confirm that .U.S Oil and Refining staff followed protocols to contain spilled diesel fuel.

Ecology responders mobilized quickly to a reported spill from a U.S. Oil and Refining diesel pipeline near the refinery's terminal located on the Blair Waterway in Tacoma. The spill saturated the soil near a valve that had been left open and created an oil sheen in the water near the refinery dock. Ecology initiated an aggressive on-water response, including mobilizing an oil containment boom and oil skimming vessels. Crews removed diesel-saturated soil quickly, and less than 25 gallons of oil impacted the Blair Waterway.

Placement of containment boom near the terminal located on the Blair Waterway.

Absorbent materials and oil-skimming vessels limited the release to fewer than 25 gallons.

The Dalles Dam transformer spill

In December 2009, Ecology, the U.S. EPA and the U.S. Army Corps of Engineers responded to a reported oil leak from a transformer at The Dalles Lock and Dam on the Columbia River. Approximately 6,500 gallons of the lightweight, low-level polychlorinated biphenyl (PCB) transformer oil leaked from an out-of-service transformer. Half of this oil was quickly recovered, but half leaked into the fractured basalt formation near the base of the dam. Water impacts were minimized thanks to a rapid action by responders.

After a thorough subsurface investigation, crews installed a grout curtain and a network of recovery wells. These immediate actions stopped the slow migration of residual oil into the Columbia River. Response and recovery operations, aimed at the oil trapped in the basalt, continued through March; beginning in April, response operations transitioned to long-term remedial (cleanup) actions.

Vessel Safety

Davy Crockett barge response

In January 1011, Ecology responded to an 11-mile-long oil sheen on the Columbia River; the sheen led to the 431-foot flat-deck barge, Davy Crockett. The crew of the Davy Crockett had conducted improper and unpermitted salvage operations. The vessel had broken in half and partially sunk—leaking—near shore between Vancouver and Camas, WA. First efforts focused on containing the oil and other hazardous materials on board, and stabilizing the vessel.

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 nearly 2 million gallons of contaminated water and 1 million pounds of contaminated debris; the 35,000 gallons of heavy bunker oil and 5,000 pounds of asbestos were not recoverable. But approximately 4.5 million pounds of steel were recycled during the deconstruction project.

Ecology's Waste 2 Resources Program — $6.8 Million – State Toxics

The Waste 2 Resources Program's mission is to reduce the amount and the effects of wastes generated in Washington State.

This Program's statewide efforts focused on universal threats to human and environmental health.

Reduce persistent bioaccumulative toxics in the environment

Persistent, bioaccumulative toxics (PBTs) define a characteristic group of chemicals introduced to the environment that harm the long-term health of humans and wildlife. Once in the environment, PBTs invade and build up in organisms and in the food chain. Exposure can cause cancer, impair immune systems, and damage human brains and nervous systems. The 2006 PBT Rule features criteria for identifying classes of PBTs in the environment, and prescribes a process for mapping out how and when to decrease exposures within our state; the map for each PBT is a Chemical Action Plan (CAP).

The Waste 2 Resources Program continues along the routes plotted by the 2009 Lead CAP and the 2006 PBDE CAP:

- The Lead CAP targets lead-based paint as the largest source of exposure for children. The Program worked with the Department of Health (DOH) to increase awareness of children's exposure to lead-based paint as part of DOH's new "Healthy Homes" initiative.
- During the 2010 legislative session, the Program supplied information to Department of Commerce as it sought authority to enforce the new federal rule on lead-safe renovation (a recommendation in the Lead CAP).
- In 2010 the Program began preparing for the new ban on installation of wheel weights made of lead (or any other PBT). Staff sent 6,000 postcards to businesses that use wheel weights, describing the law to take effect in January 2011. We also worked with wheel weight distributors to identify safer, reasonably priced alternative products.
- Around the same time, Program staff contacted electronics and furniture manufacturers about the new ban (also effective January 2011) on using deca-BDE as a heat retardant in residential upholstered furniture, and in electronic enclosures for television sets.

Ecology and DOH are now working to design a new CAP on polycyclic aromatic hydrocarbons (PAHs). Ecology and DOH estimated sources of PAH releases in the area, as part of a multi-year study of chemicals in Puget Sound, and expect to jointly publish the findings in October 2012. Ecology and DOH revised PAH estimates for the entire state, based on the findings for the draft PAH CAP. Ecology also supported a bill that passed the 2011 legislature, banning the sale and use of coal tar sealants, which contain PAHs.

Children's Safe Products Act

Ecology adopted the Children's Safe Products Act rule at the end of the 2009–2011 Biennium. The 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. Ecology phased-in the reporting requirement; first the largest sellers of products likely to be placed in a child's mouth or on a child's skin must report dangerous chemical content, then the reporting requirement applies to other products designed for children ages three and under. We expect to receive the first reports by August 31, 2012.

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 material and past business practices at these facilities have contaminated land and water. Through the Model Toxics Control Act, Ecology works to remedy these situations.

Ecology is overseeing the cleanup of petroleum-contaminated soils and groundwater at the former Lilyblad site in Tacoma, WA. Contamination includes volatiles, semi-volatiles, and diesel and gasoline-range petroleum hydrocarbons. Extraction wells located on the site remove contaminants in groundwater and the soil vapor phase. Ecology closely monitors groundwater and soil conditions at the site to determine the cleanup progress. As of September 2011, the system had operated for a total of 17 months and removed about 6,813 lbs of gasoline range petroleum hydrocarbons from the site.

A cleanup at the Emerald Kalama chemical site is also in progress. Contamination at the site includes benzene, toluene, diphenyl oxide, and other volatile and semi-volatile organic compounds. The cleanup includes a series of extraction wells. Pumping of the wells removes contaminants from the groundwater and provides hydraulic control to prevent contaminants from entering the Columbia River and wetlands north of the site.

Ecology investigated a release of black liquor from an above-ground storage tank at the Georgia Pacific pulp mill in Camas, WA. Black liquor was found in the sand and gravel fill beneath the tank but not in the surrounding soils or groundwater. The fill material was excavated.

Remediation of the upland areas and portions of the Columbia River adjacent to the former Evergreen aluminum smelter site in Vancouver, WA was completed in 2009-2010 under a consent decree signed between Alcoa and Ecology. The smelter was demolished and contaminated soils were removed from the site. PCB-contaminated sediments were dredged from the river and disposed. Clean sediment was placed in the dredged area. Additional cleanup work included stabilization of the bank along the river and construction of a habitat enhancement area.

The Port of Vancouver is redeveloping the former Alcoa Vancouver aluminum smelter site. Ecology is reviewing the redevelopment plans to ensure that closed landfills and other areas deed restricted during the smelter cleanup are not compromised.

Ecology is also overseeing the cleanup of the former Reynolds aluminum smelter in Longview, WA. Additional soil, surface water, groundwater, and residual waste sampling is being conducted by Alcoa and Millennium Bulk Terminals to further investigate contamination at the site. Ecology will review remedial alternatives to determine final cleanup actions.

Ecology's Water Quality Program — $7.5 Million – State Toxics

The State Toxics Control Account funded activities that helped the Water Quality Program protect and restore Washington's waters.

Lower Columbia River National Estuary Program

Congress established the National Estuary Program in 1987 to identify those nationally significant estuaries threatened by overuse, development, and pollution. The Program helps communities along the river develop local management plans designed to protect and preserve those important natural systems. The Lower Columbia River entered the National Estuary Program in 1995 to:

1. Protect the ecosystem and species—working to restore 16,000 acres of wetlands and habitat and to promote improvements in stormwater management.
2. Reduce toxic and conventional pollution—working with partners to eliminate PBTs, bring water bodies up to water quality standards, reduce hydrocarbon and heavy metal discharges and to reduce bacterial contamination.
3. 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.

The State Toxics Control Account funded a grant to the Lower Columbia River National Estuary Partnership (the Partnership) whose Board members include representatives from:

- Washington State Office of the Governor, Washington State Department of Ecology,
- Oregon State Office of the Governor, Oregon Department of Environmental Quality,
- U.S. Environmental Protection Agency,
- Industry and commerce, and
- Local governments and citizens.

Limit toxics contamination

Water Quality staff developed approaches to identify impairments by toxics, in particular those caused by PBTs. Staff developed guidance on how to apply toxics criteria to both tissue and water, and we designed studies to assess toxics concentrations in water and tissue. The Program obtained National Estuary Program grant funding to assist tribes in collecting fish consumption rate information, which will be used to develop new water quality standards (limits) for toxic contaminants. Water Quality staff helped workgroups develop toxics loading assessments and agency toxics reduction strategies.

Aquatic Pesticide Program

The 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. Water Quality staff developed permits and updated Environmental Impact Statements that pertain to aquatic pesticides; they also provided technical assistance to pesticide applicators, lake associations, and similar interests. Staff gave permit information to chemical manufacturers, and to pesticide applicators and their client groups; they also provided materials to encourage the use of integrated pest management principles to manage invasive species. Water Quality staff maintained databases that tracked the amount and uses of aquatic pesticides in Washington.

Stormwater Program

The federal Clean Water Act and our 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.

State Toxic Control Account dollars allowed Ecology 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's stormwater management requirements.

During the Biennium, communities throughout our state received a total of **$15.7 million** from the State Toxics Control Account for stormwater management system retrofit projects and low impact development projects. The Local Toxics Control Account funded **$8.5 million** in pass-through grants to communities to implement municipal stormwater control programs.

Ecology's Agency Administration, Facilities, Communications — $12.5 Million – State Toxics

Regional and Field Offices

Staff stationed at Ecology's four regional offices (Lacey, Yakima, Spokane, and Bellevue) and four field offices (Bellingham, Richland, 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. The four 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.

Executive, Financial, and Administrative Services

Ecology's leadership resides in the executive office. Financial Services personnel perform centralized accounting, budget, contracts, purchasing, and inventory functions; they also provide strategic planning functions for Ecology, measure agency performance, and develop environmental indicators.

Administrative Services personnel manage information technology (desktop computers, applications, data systems, and network services), and they manage office facilities' and vehicle maintenance and security tasks. These persons maintain Ecology's central records, respond to public records requests, intake/distribute postal mail and prepare out-going postal mail, and they control the movement of extensive library resources (books, periodicals, and research publications) at headquarters and at the regions.

Climate Policy Group

Climate change poses a significant threat to Washington's economy, but also offers the state enormous new economic and job creation opportunities. Washington must act quickly to reduce greenhouse gases we emit and to transform business practices and personal habits into a new low-carbon economy. State law requires that we pursue reductions in emissions of greenhouse gases, to prepare for and respond to climate changes already under way.

The Agency's Climate Policy Group leads, supports, and coordinates state and federal climate change legislation, policies, regulations, and programs for both emission reductions and preparing for a changing climate.

Ecology Selects Vendor for New Managed Print Services Contract

By Karen Phillips, Information Technology Services Office (ITSO)

Ecology recently completed a competitive bid process to obtain print services. The goal was to find a vendor who could meet requirements for a true "pay-as-you-print" contract. The new Managed Print Services (MPS) vendor had to meet the needs of all Ecology employees, reduce the overall cost of printing for the agency, and support the agency's mission.

Ecology evaluated competitive bids from four major print services vendors, and selected Ricoh as our MPS partner. The process was designed to find a vendor willing to form a solid and functional partnership with Ecology so the agency could continue to lead the state in creating an MPS environment where print output is clearly "pay-as-you-print."

The initial contract period is for three years. The new MPS contract will save money every month for Ecology.

With Ricoh as the selected MPS vendor, on July 1 Ecology began planning the implementation phase of the new contract. The work began with a "walk through" of each program area and will end with a project plan reviewed by management to ensure it meets each program's business needs.

A new aspect of this contract is in the area of plotters (large-format printers). Ecology has asked Ricoh to propose a contract price for supporting, maintaining, and servicing plotters, similar to the way Ricoh supports all of Ecology's other print devices. Over the next few months, Ricoh will work closely with Ecology to determine plotter usage and total associated costs. Ecology will provide updates on progress, as these efforts move forward.

Group members work closely with Ecology's environmental programs, with the state Energy Office, Department of Transportation and other state agencies, and with our counterparts in other states and Canada's provinces, with stakeholder groups, and with the concerned public. This group:

- Reports the state's emission profile and recommends actions to meet statutory reduction limits.
- Works with Washington's congressional delegation and the federal government to help design national programs that reflect state priorities.
- Works with six other western states and four of Canada's provinces, in the Western Climate Initiative, to develop a regional emissions reduction program.
- Collaborates with industries to develop reduction actions and strategies that will meet Washington's 2020 emission reduction goals.
- Examines industry benchmarks for use in national or regional greenhouse gas reduction programs.
- Works with the Washington State Department of Transportation to devise options for reducing carbon emissions from the transportation sector.
- Implements and tracks implementation of state laws on climate change, enacted in recent years.
- Works with the Department of Commerce, to insert climate change concerns into state energy policy.
- Works with other natural resource agencies to design the state's climate change response plan.

Governmental Relations

The Governmental Relations Office offers leadership, policy support, and coordination for federal and state legislative issues. Its staffers address issues that affect local governments, tribes, and British Columbia. They coordinate rule making, and they provide economic analysis of rule proposals (i.e., Small Business Economic Impact Statements and cost/benefit studies).

Communication and Education

Ecology performs enforcement actions, conducts toxic site cleanup, and carries other work that demands public information delivery and requires a public involvement process. Ecology committed to be transparent, open, and accountable to the public, policy leaders, news media, and to the communities it serves. 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 communications technologies to learn what information its customers need and which presentation styles or delivery methods best meet those needs.
- Ecology partners with local governments, with community groups, and with schools and universities to help Washington residents make informed choices about using and protecting Washington's waters and air, reducing toxic threats, and reducing risks related to climate change.
- 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 they are established.

Part 2 : Other State Agencies' 2009-11 Biennium Toxics Control Accounts Summary

Toxics Control Accounts were created to support specific environmental protection work.

RCW 70.105D.070(2) directs state agencies that perform environmental protection or restoration functions to use moneys deposited in the **State Toxics Control Account** in support of certain programs working toward the following purposes (in descending order of priority):

1. Remedial actions (remove or isolate contamination, prevent its spread or exposure)
2. Hazardous waste plans and programs (reduce toxics uses, collect and dispose of waste)
3. Solid waste plans and programs (reduce waste, recycle, and safely dispose of refuse)
4. Assist to assess methamphetamine production sites and facilitate cleanup
5. Clean up and dispose of hazardous substances from abandoned or derelict vessels

Washington State Department of Agriculture — $4.7 Million – State Toxics

During the 2009–11 Biennium, the State Toxics Control Account funded several pesticide-related toxics control activities carried out by the Washington State Department of Agriculture (WSDA).

Waste Pesticide Identification and Disposal

The WSDA Waste Pesticide Identification and Disposal activity protects water and land from potential pesticide contamination. The activity's objectives were to (1) reduce and eventually eliminate stockpiles of unusable pesticides, now stored by small businesses and on farms and similar rural locations; and (2) prevent future accumulations of unusable pesticides through user and purchaser education.

During the Biennium, WSDA held 18 regional collection events, two mini-events, and nine special site projects. In total we collected 253,350 pounds of unusable pesticide products and pesticide material, from 553 customers. Since the start of this program in 1988, WSDA has removed and properly disposed of 2,525,169 pounds of pesticides from 7,145 customers representing more than 6,500 storage locations in the state. WSDA collected and properly disposed of significant amounts of PBT pesticides such as dinoseb, DDT, endrin, parathion, pentachlorophenol, and lead arsenate. Cyanide-based pesticides and highly toxic vertebrate poisons were also removed from private storage locations. Accidental exposure or intentional misuse of "designated priority pesticides" could adversely impact public health and the environment.

WSDA collected most pesticides at two types of events: (1) At regional events people brought waste pesticides a collection site. (2) At special site events, WSDA and the hazardous waste contractor traveled to the customer's site to collect, sort, pack, and ship those pesticides that could pose extra risks if brought to a regional event. Taking possession of the pesticides transferred legal responsibility to us for their safe transportation to a federally permitted treatment, storage, and disposal facility (TSDF). WSDA burned most of the pesticides at one of two TSDFs. WSDA encapsulated and disposed of pesticide products containing high concentrations of metals such as arsenic, cadmium, lead, and mercury at a permitted hazardous waste landfill.

WSDA discontinued disposal services 8 months before the end of the Biennium, because the agency lacked funds to pay for the large volumes of pesticides collected from central Washington tree-fruit growers.

Many tree-fruit growers, especially those producing apples and pears, chose to participate in international 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 of these GAP or SQF programs in order to maintain their export market opportunities and enhance their sales to key domestic and international food distributors. Note: Washington State's tree fruit industry exports more than 30 percent of our state's tree fruit to markets outside the United States. These exports comprise an important part of Washington State's economy.

GAP requirements include the mandate to eliminate all obsolete or otherwise unusable agricultural chemicals from the grower's storage shed. More growers and fruit cooperatives asked the WSDA Waste Pesticide Program to help them identify containers' contents and dispose of unwanted pesticides. This increased demand exceeded the Waste Pesticide Disposal Program's financial resources.

During the 8-month break in disposal, WSDA responded to continuing grower disposal requests by providing on-farm technical and packing assistance. WSDA identified, inventoried, prepared, and packed unusable and unwanted pesticides for Fall 2011 disposal events that would be funded by the next biennial appropriation. These processed pesticide containers were segregated from usable pesticides at the customer's storage facility, ready for the next disposal opportunity. GAP inspections were performed by third-party private inspectors; in light of the significant demand for disposal, those certifying bodies have acknowledged the segregated, WSDA-packed pesticides as a "temporary pass" of the pesticide segregation and disposal GAP standard.

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 amounts needed only for specific applications or season(s) in each growing cycle. Waste pesticides are created due to changes in pesticide use patterns, agricultural land conversions to alternative uses, and restrictions or discontinuations of international, federal, and state pesticide registrations and residue tolerances.

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

Waste Pesticide Disposal Projects Performed by WSDA 2009–11 Biennium (7/1/09-6/30/11)

Collection Event	Dates	Customers	Pounds	Disposal Cost	Per Pound
Seattle Regional	9/1/09	18	5,801	$9,947.04	$1.71
Puyallup Regional	9/2/09	12	3,301	$6,460.12	$1.96
Lynden Regional	9/9/09	12	10,341	$17,365.56	$1.68
Longview Regional	9/16/09	12	4,411	$7,854.52	$1.78
Spokane Regional	9/24/09	23	7,853	$17,570.30	$2.24
Prosser Regional	10/12-13/09	40	16,842	$31,970.67	$1.90
Orondo Regional	10/15/09	17	8,395	$17,010.86	$2.03
Quincy Valley Regional	4/7/10	28	19,458	$29,759.66	$1.53
Mattawa Regional	4/8/10	7	6,064	$10,978.73	$1.81
Yakima Regional	5/3 & 4/10	50	25,323	$41,474.11	$1.64
Othello Regional	5/6/10	21	14,527	$26,158.76	$1.80
Okanogan Regional	5/25/10	25	9,892	$16,958.12	$1.71
Wenatchee Regional	5/26/10	40	19,992	$31,543.48	$1.58
Sedro-Woolley Regional	6/29/10	23	11,150	$18,871.81	$1.69
Grayland Mini event	7/23/10	12	2,988	$4,841.48	$1.62
Puyallup Regional	8/31/10	37	9,933	$20,881.17	*$2.10
Vancouver Regional	9/14/10	19	5,363	$8,906.65	$1.66
Pasco Regional	9/28/10	40	24,717	$40,622.73	$1.64
Regional Totals 2009–2011	**18 events**	**436**	**206,351**	**$359,175.77**	**$1.74**

*Pressurized pesticide cylinders collected at this event required special handling and disposal.

Collection Event	Dates	Customers	Pounds	Disposal Cost	Per Pound
Long Beach Special	7/31/09	12	2,745	$5,638.14	$2.05
Yakima Mini event	8/4/09	25	8,268	$11,288.55	$1.37
Yakima Special	10/12/09	10	1,826	$1,737.80	$0.95
Auburn - Puyallup Special	2/3/10	5	5,628	$8,175.16	$1.45
Yakima Special	2/11/10	25	7,931	$9,758.98	$1.23
Yakima Special	4/6/10	12	4,599	$5,610.07	$1.22
Yakima Special	5/27/10	1	4,640	$4,497.47	$0.97
Long Beach Special	7/22/10	4	3,332	$4,796.21	$1.44
Yakima Special	8/17/10	11	5,401	$6,031.35	$1.12
Wenatchee Mini event	10/2/10	11	2,599	$2,519.60	$0.97
Wenatchee Special	11/15/10	1	30	$309.11	$10.30
Special/Site Totals 2009–11 Biennium	**11 events**	**117**	**46,999**	**$60,362.44**	**$1.28**
Total 2009–11 Biennium	**29 events**	**553**	**253,350**	**$419,538.21**	**$1.66**

WSDA collected approximately **458 pounds** per customer during the 2009–11 Biennium.

Endangered Species Program/Water Quality Assessment STCA Amount: $2.5 Million

Staff within the Natural Resource Assessment Section (NRAS) of the Agency collect data to evaluate the impacts of current pesticide use on threatened and endangered species and on general water quality. Staff post the data in a geographic information mapping system, which links usage and location, to certain species populations. These data help the Department develop ways to reduce exposures to pesticide residues by threatened or endangered species.

WSDA staff combine these data and groundwater information collected by state and federal agencies to assess registered pesticides' impacts on human and environmental health. Using the Pesticide Management Strategy approved by EPA Region 10, WSDA can adopt measures to protect water quality and to prevent designations as impaired water bodies. In May 2011, WSDA received approval for the Washington State Endangered Species Protection Plan for Pesticide Use from the U.S. EPA (the first in the nation). This Plan defines roles and responsibilities between U.S. EPA and WSDA for planning and coordinating, data gathering, analysis, and use for quality assurance tasks.

In 2003, the Department of Ecology and WSDA cooperatively began a long-term monitoring study. Study data collected during typical pesticide use seasons helped characterize pesticide concentrations in surface water designated as salmon habitat. This study focused on six Watershed Resource Inventory Areas, representing a wide range of agricultural land uses and urban core areas in Washington State. Resulting annual data reports were published jointly by the Department of Ecology and WSDA. In 2011 WSDA will publish a 3-year summary report that analyzes trends and the effectiveness of pesticide label requirements and of select application methods.

The 2010 monitoring study included samples collected during March through September. All pesticide concentrations were generally low and close to analytical detection limits, except for endosulfan detections in the Wenatchee Basin. As a result, WSDA has implemented response

actions per the Pesticide Management Strategy that will address these exceedences of endosulfan in surface waters.

WSDA continues our 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

The State Toxics Control Account provided funding for three positions in WSDA's core Pesticide Regulation program—one in the Compliance program area and two in Registration. The Compliance position covers all irrigated areas of the state and provides technical assistance to those involved in chemigation (the application of pesticides, plant or crop protectants, or related compounds with irrigation water). This includes commercial applicators, growers, irrigation equipment distributors and manufacturers, irrigation districts, farm chemical distributors and consultants, lawn care businesses, and others.

The technical assistance program emphasized system inspections and education. In 2010, WSDA presentations to more than 800 people focused on proper chemigation system set-up and use. New EPA re-registration activities concerning fumigants greatly increased grower interest in this information. Compliance field staff inspected more than 100 separate systems at the request of growers wanting to comply with federal and state requirements.

Funding the two Registration positions gave WSDA the assessment capacity that helped determine whether a "special local need" or emergency pest situation would justify limited use of certain pesticides not registered with EPA for such use. Staff weighed pesticide residue, efficacy, and adverse effects data to make decisions that protect human health, endangered species, beneficial organisms, and ground and surface water. Washington's agricultural industry values these special local need registrations because our state's extensive crop diversity gives rise to specific pest control needs.

These programs ensure that pesticides are used safely, and that appropriate pesticides are available to protect Washington's agriculture from preventable damage.

Find more information on these activities at http://agr.wa.gov/PestFert/default.htm.

Pesticide Chemistry Laboratory

WSDA used the MTCA funding as a direct support for pesticide residue analysis in the chemistry laboratory located in Yakima. The funding pays salary and benefits for 3 FTEs and about 10 percent of the rental costs, along with lab and instrumental supplies to handle the pesticide compliance testing workload. MTCA funding was provided in the second year of the 2009–11 Biennium when funding for this activity was shifted from the state general fund to MTCA. This activity will be fully funded by MTCA in the 2011–13 Biennium.

Washington Department of Fish and Wildlife — $0.6 Million – State Toxics

In Fiscal Year 2010, the Washington Department of Fish and Wildlife (WDFW) received an appropriation of $1,030,000 from the State Toxics Control Account established by the Model Toxics Control Act for nearshore restoration projects. In the 2009–11 Biennium, WDFW expended $588,859 of the funds appropriated and the remaining funds were reappropriated to be used in the 2011–13 Biennium.

WDFW used the appropriated funds to build upon the General Investigation study of the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP). Following responses to the WDFW's "Request For Qualifications" solicitation, we awarded a contract to develop conceptual (10 percent) engineering designs for nearshore restoration projects.

The State Toxics Control Account appropriation funded our RFQ and covered the contract price of the selected Design Team, led by an architect/engineering firm. This Design Team produced, reviewed, refined, and delivered a Conceptual Design Report (CDR). The CDR included 72 designs, two each for 36 individual sites. (Find the designs at http://www.pugetsoundnearshore.org/conceptual_design.htm.)

Both PSNERP co-leads (the state Department of Fish and Wildlife and the U.S. Army Corps of Engineers) closely reviewed these CDR designs. The federal Corps based its restoration projects' cost estimates, and its complete cost effectiveness analyses, on the designs. WDFW will use remaining appropriated funds to pay to complete the plans for, and to document the outcomes of, approximately 12 cost-effective projects WDFW expects to advance through the U.S. Army Corps of Engineers' federal funding process.

Washington State Department of Health — $3.8 Million – State Toxics

Chemicals and environmental contaminants that can harm the people of Washington are found in our water, air, soil, and sediments; they're 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 interest communities, to prevent or minimize human exposures to such contaminants. Activities included:

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

During the 2009–11 Biennium, the Department of Health received a combined appropriation of $4,348,000 from the State Toxics Control Account.

The funding supported health assessments, education, and monitoring programs. DOH's goal was to protect the public—especially children—from exposure to legacy (long-lasting) and emergent (suspected or recently identified) toxic chemicals and from other hazardous environmental contaminants.

Highlights from DOH's 2009–2011 Biennial efforts follow.

Did you know. . .

- Sampling showed many private wells in Washington were tainted by excess levels of arsenic.
- Indoor air can be two to five times more polluted than outdoor air in the same geographic area.
- Pesticide drift contributes to half of all pesticide-related illness cases reported to the DOH.
- High fish consumption rates among women of Japanese descent led to half of them carrying unsafe mercury levels.
- Most of Washington's fish advisories are compelled by PCB, mercury, and DDT content.

Toxic Sites: DOH assessed exposures and public health hazards

Department of Health's Site Assessment program staff work closely with staff of Ecology's Toxics Cleanup Program to assess exposure to chemicals released from hazardous site cleanup projects. Funding for DOH comes primarily from the federal Agency for Toxic Substances and Disease Registry (ATSDR), but additional MTCA funding helps to support our Site Assessment activities. DOH Site Assessment staff conduct health consultations, provide technical assistance, and perform related community education and outreach to protect Washington residents from exposures to site-specific contaminants.

During the 2009–11 Biennium, DOH's Site Assessment staff completed 16 health consultations and 41 technical assistance projects. Below are three examples. We have posted the completed consultations on the website at http://www.doh.wa.gov/ehp/oehas/consults.htm.

Milton's Dry Cleaner, Vancouver

Problem: Releases of the dry cleaning chemical tetrachloroethylene (commonly known as PCE) contaminated soil and groundwater. PCE and its breakdown products threatened nearby drinking water supplies; they also posed an indoor-air health threat to building occupants, through vapor intrusion.

Response: DOH's Site Assessment staff recommended ways for Ecology and the Clark County Health Department to improve their vapor intrusion investigation plans and data evaluation methods for each of the five buildings.

Result: Site Assessment staff conducted outreach to the occupants of each building, as test results determined.

Port Gardner Bay, Whidbey Basin / Everett area

Problem: A century of commercial and industrial land uses such as saw mills, paper production, boat building, and waste disposal contributed the Whidbey Basin's contamination. Past sediment investigations detected concentrations of chlorinated aromatics, PAHs, metals, miscellaneous extractables (such as resin acids and guaiacols), pesticides, phenols, and phthalates that exceed the limits imposed by the Ecology's Sediment Management Standards (SMS) at numerous locations throughout Port Gardner.

Port Gardner and Lower Snohomish River Estuary

Response: At Ecology's request, DOH staff evaluated surface sediments and fish, shellfish, and plant tissue data, to determine the possible human health threat from contaminants. DOH Site Assessment Program staff concluded:

- Exposure through touching, breathing, or eating *sediment* from Port Gardner was not expected to harm people's health.
- Eating *bottom fish or shellfish* from Port Gardner was not expected to harm people's health among the general population. But eating bottom fish or shellfish from Port Gardner at a subsistence rate (frequently and regularly) could harm people's health.
- DOH lacked data to evaluate potential exposure rates for *plant tissue*; DOH staff could not determine whether touching, eating, or accidentally breathing in plant tissue might harm people's health.

Site Assessment staff participated in public meetings, attended community events, and mailed fact sheets about details of the health assessment and fish consumption advisories, for interested persons in the area.

Oakland Bay, South Puget Sound (Oakland Bay, Shelton Harbor, and Hammersley Inlet)

This site is one of the most productive commercial shellfish-growing areas in the country. It is known worldwide for its Manila clams. Pacific oysters, Kumamoto oysters, and mussels also grow in the area.

Problem: Historical and current industrial land uses contaminated sediment in and around Shelton Harbor. Ecology's sediment sampling showed the presence of dioxins/furans and carcinogenic polycyclic aromatic hydrocarbons that posed a potential health threat to the people who live, work, and recreate around the bay.

Response: Staff worked with Ecology, the Squaxin Island Tribe, and other stakeholders to collect and test samples of all four commonly eaten shellfish species (listed above). Our tests found that low levels of contaminants in sediments did not pose a health concern for people.

Result: DOH concluded that eating shellfish from the Oakland Bay site was unlikely to produce harmful health effects—even among people who eat a lot of these products. At public meetings and community events, staff described the assessment process and result. DOH provided fact sheets and education materials to the community.

Toxics exposure pathways: fish consumption

Fish and shellfish contain high-quality protein, omega-3 fatty acids, and other essential nutrients, while they are low in saturated fat. A well-balanced diet that includes a variety of fish and shellfish contributes to human heart health and to children's proper growth and development. Some fish harvested from Washington waters, however, contain harmful chemicals. The Department of Health gathers data and publishes information to help people gain the health benefits of fish consumption while minimizing their risks of toxics exposures.

DOH scientists work closely with scientists from Ecology to identify and measure toxic contaminants found in the tissue of fish from our marine and fresh water bodies. Ecology uses the 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 locations throughout the state, as the basis for its fish consumption safety guidance to individuals, community groups, and government entities.

Fish Consumption Advisories Program

DOH staff from the Fish Consumption Advisories Program published healthy fish eating guidelines, fact sheets, and health assessment reports, and posted them on the agency's website, Fish Facts for Healthy Nutrition. Program staff distributed outreach materials through health practioners, Child Profile Health Promotion mailings, and the Women Infant Child Nutrition Program; supplied the information to WDFW for inclusion in its fishing pamphlet; and addressed community groups and responded to individual questions and requests. DOH continues to work with other local and state health departments, and attends public events, to ensure consistent and accurate statewide messaging.

STCA-funded fish consumption activities during the 2009–2011 Biennium included:

Informing communities to minimize their exposures:

- Contaminants in Lake Roosevelt/Upper Columbia River – mega-site with legacy contamination
- Background levels of PCBs and dioxins in freshwater fish – prioritizing 303(d) listings
- Okanogan River Fish Advisory – PCBs and DDT
- Duwamish River Fish Advisory – updated signs in eight languages

Advising local, state, and national government entities:

- National Forum on Contaminants in Fish (Portland, Oregon)
- Tribal Rights and Fish Consumption Conference (University of Washington)
- Pacific Northwest Airborne Contaminants (National Park Service)

Model Toxics Control Act and Sediment Management Standards Advisory Group

Ecology established this group to provide advice and feedback on issues pertaining to updating the MTCA environmental cleanup rules and the SMS rule. Ecology sought the group's technical, scientific, and policy expertise to:

- Establish clear policies and methods for setting sediment cleanup standards.
- Update requirements to reflect new scientific information, and revised state and federal rules.
- Revise cleanup requirements to address concerns about achieving the purpose of MTCA and SMS.
- Revise the rules to incorporate new statutory requirements legislated since the 2001 amendments.

Indoor Air Quality Program: protecting health and safety

Indoor air can be two to five times more polluted than ambient air at the same locale. Those persons most often exposed to indoor air pollutants tend to be people who are the most susceptible to air-borne toxics. They include children, elders, chronically ill persons, and other people living with respiratory or cardiovascular disease.

Prevent Carbon Monoxide (CO) Poisoning

Scope of the toxics problem: During the time from 1990 until 2005, a span of only 15 years, 1,197 Washington residents died from acute exposure to CO—an average of 79 deaths per year. Another 53 residents per year were hospitalized with CO poisoning symptoms.

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.

Response: DOH's own Indoor Air Quality staff workgroup identified ways to reduce the numbers of CO-related poisonings in Washington through education and outreach efforts, including:

1. Anti-idling campaigns aimed at drivers of (1) vehicles stopping near schools, and (2) commercial-grade diesel trucks.
2. Developed industry-awareness campaigns about the risks of carbon monoxide poisoning from driving combustion-powered equipment inside warehouses or ice-skating rinks.
3. Worked closely with the State Building Code Council to create rules that define how to fulfill the 2009 law requiring CO alarms in residences.

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 passing illnesses, and could be left untreated. Symptoms of CO poisoning include:

- Shortness of breath
- Mild nausea
- Mild headaches

Moderate levels of CO exposure can pose long-term health problems and prove fatal if the exposure persists.

- Headaches
- Dizziness
- Nausea
- Light-headedness

Exposure to high levels of CO can cause death within minutes.

Protect Children by Assuring Safe Indoor Air Quality

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, volatile organic compounds
- Human behavior choices/responses to environmental or natural events, such as flood/storm hazards, mercury release, mold, ozone, poor ventilation, radon, tobacco or wood smoke particulates

Response: DOH educated people in communities about ways to protect or improve indoor air quality (IAQ), by answering questions from building tenants, property owners/landlord associations, public/private schools, and local health jurisdictions. DOH focused on key issues identified through collaborative relationships with local and state health authorities, environmental agencies, and local professional organizations and entities.

1. Developed and conducted nine workshops, for school and local health jurisdiction staff, on designing and implementing IAQ assurance programs in their communities.
2. Answered questions about hazardous chemicals, safe cleaning products and methods, and the IAQ Monitoring Station Loan Program.
3. Improved the "Indoor Air Quality" and the "School and Environmental Health & Safety" program websites.
4. Established a "mold and landlord-tenant information" phone line; callers could request a packet of materials such as (1) U.S. EPA's brochure, *A Brief Guide to Mold, Moisture, and Your Home*, (2) *Landlord/Tenant Resources in Washington State*, and (3) The Northwest Clean Air Agency's DVD, *Attack Asthma at Home/Mold in Your Home* (resources (1) and (3) were available in both English and Spanish language editions).

Partnerships and Collaborations

DOH identified and reported chemicals having the potential to harm people, and helped devise strategies to prevent or minimize environmental exposures to them. Listed below and on the following page are examples of important DOH collaborations and partnerships.

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.)

MTCA funding supported the following DOH collaborative staff activities:

- Helped revise the Environmental Carcinogens chapter for the 2009–2013 Comprehensive Cancer Control Plan.
- Provided health impacts statements for a press briefing related to the Senate Bill about decommissioning Washington's only coal-fired power plant.
- Used the U.S. EPA's Environmental Benefits Mapping and Analysis Program Model to estimate human health effects and the health care costs of treating disease resulting from fine particle air pollution.
- Chaired the Internal Air Quality and Health Issues Team meetings focused on air quality issues that impact human health in Washington State.
- Issued Air Quality news releases relating to winter-specific and summer-specific air pollution.
- Presented "Air Quality and Health Effects: Thurston County" that considered possible human health effects from biomass facility emissions. Thurston County posted our presentation on its website: http://www.co.thurston.wa.us/planning/biomass/docs/Air-Quality-and-HealthEffects-FINAL-BoH-2-1-11.PDF
- Drafted a strategic plan for improving ambient air quality and human health in Washington State.

Chemical Action Plans: Partnering with Ecology, DOH proposed strategies to reduce exposures to lead and to PAHs that pervade our environment—occurring in complex mixtures and as byproducts of burning organics.

Children's Safe Products Act: DOH contributed its expertise to the Act that (1) imposes limits on lead, cadmium, and phthalates—content in children's products sold in Washington, and (2) requires manufacturers to report to Ecology any of 60 defined chemicals of concern in their products.

Columbia River Basin Toxics Reduction Action Plan: The Plan uses monitoring, multi-agency research, and data sharing to promote public understanding of—and commitment to reducing—human and ecosystem exposures to toxics found within the River Basin. Visit http://yosemite.epa.gov/r10/ecocomm.nsf/Columbia/SoRR/.

Cyanobacteria Testing Protocols: Washington has become a national leader in recognizing toxic blue-green algae as a serious public health problem. DOH's statewide strategy walks local health jurisdictions through a three-tiered response, testing for exposures to microcystin and anatoxin-a in affected lakes, ponds, or rivers.

Pesticide Illness – Surveillance and Prevention: DOH staff investigated between 200 and 300 cases per year of pesticide-related illness; pesticide "drift" was the leading cause. DOH partnered with three other state agencies to produce pesticide licensing training, and work with industry leaders to improve supervision and monitoring of pesticide applications. Find our report on line: http://www.doh.wa.gov/ehp/Pest/pest-illness-data.htm.

Department of Natural Resources — $0.7 Million – State Toxics

During the 2009-11 Biennium, the Department of Natural Resources (DNR) expended funds from the State Toxics Control Account to remove creosote-treated pilings, structures, and beach debris at sites around Puget Sound.

DNR worked with local, state, tribal, and private partners to accomplish its goals:

- Reduce creosote and treated wood contamination in the sediments and water column of marine and estuarine environments.
- Reduce the potential for human exposure to those contaminants on public beaches.
- Educate the public about impacts of creosote in the marine and estuarine environment.
- Remove dilapidated pilings and structures.
- Encourage the replacement of creosote treated wood with non-toxic materials.

The main resources at risk from exposure to creosote and its primary compounds (PAHs) include herring spawn, English sole, other forage fish, juvenile salmonids, and area marine sediments. Human exposure could occur at public beaches where people might sit on creosote-treated logs or unknowingly use the logs in beach fires.

Program Priorities / Project Selection Criteria

DNR focused piling removal activities on sites where additional restoration activities were planned or underway:

1. DNR's Aquatic and Natural Areas programs teamed up to remove a derelict creosote-treated trestle, and the pilings, dolphins (spars for mooring boats), and associated structures in the waters surrounding Woodard Bay Natural Resources Conservation Area (NRCA - Henderson Inlet, Chapman Bay and Woodard Bay) in Thurston County. Working together, the team removed a total of 907 pilings and 12,000 square feet of overwater structure from the site; in all, 1,450 tons of creosote-treated debris were removed. The project also salvaged old Purple Martin nest boxes from the pilings to be removed, modified an existing bat house, and installed new nest boxes and signs on pilings that remain on site. A diverse array of habitats within the Woodard Bay NRCA are now recovering after years of previous use as a barrier to navigation. The partial removal of these overwater structures is just one step toward restoration of this site.
2. DNR partnered with the South Puget Sound Salmon Enhancement Group and the Squaxin Island Tribe to complete the removal of a creosote-treated dock located in Peale Passage, on the eastern side of Squaxin Island. The dock had afforded access by tribal members to an old long house on the island; it was the last remaining overwater structure on Squaxin Island. DNR removed 48 pilings and 3,150 square feet of overwater structure—a total of 5 tons of creosote-treated debris. Combined with the removal of a 400-foot-long rock bulkhead (funded through a Salmon Recovery Funding Board grant), the joint effort completely restored the shoreline, and thereby improved connectivity, shoreform diversity, and water and sediment quality; and the joint effort increased the spawning opportunity for forage fish.
3. The piling removals around Cypress Island completed one of DNR's management objectives for the Cypress Island Aquatic Reserve. This objective was to "Inventory and remove derelict creosote piles, other derelict structures, and debris from Cypress Island's beaches." From four locations around the island, DNR removed a total of 61 pilings—79 tons of creosote-

treated debris. DNR will follow up this project by removing a dike, fill, and culverts to restore Secret Harbor, and reconnect freshwater and tidal systems.

4. DNR partnered with the Suquamish Tribe to remove more than 350 tons of creosote and other treated debris from the Doe-Kag-Wats estuary and salt marsh (the site of the 2003 Foss-Pt. Wells oil spill). This was the largest beach debris removal project completed to date. This pocket estuary provides critical nearshore habitat for juvenile salmonids, for marine and shorebirds, and for an array of other intertidal organisms. The adjacent beach is also a documented forage fish spawning area. During Fiscal Year 2012, DNR will use Natural Resources Damage Assessment funds to complete a second phase of removals on site.

DNR also focused piling removal activities on sites that could yield economic efficiencies. DNR combined projects with other DNR piling and dock removal plans to minimize the mobilization expenses. The project at Squaxin Island was contracted with a large dock and piling removal project at DNR's Marine Station in Olympia; the piling removals around Cypress Island were completed under the same contract as a dock removal within the same area.

DNR and Suquamish crew assess creosote-treated debris at the Doe-Kag-Wats Estuary and salt marsh.

Program Accomplishments

DNR measured its progress in "tons of creosote-treated materials removed" from the beach or in "number of pilings (and square footage of overwater structures)" removed (it's not always possible to quantify the total volume of creosote compounds found in each piece of debris or piling that might be leaching toxics into the environment).

- Total Number of Piling Removal Project Sites: 3
- Total Tons of Creosote-Treated Material Removed: 1,608.6
- Total Number of Pilings Removed: 1,116
- Total Square Feet of Overwater Structure Removed: 15,150
- Total Number of Beach Debris Removal Project Sites: 1
- Total Tons of Creosote-Treated Material Removed: 351

Projects Funded

DNR staff planned and supervised all project work. Staff used marine contractors obtained through the Public Works bid process, to remove pilings and overwater structures. EarthCorps and DNR recreation and fire staff worked with "Hi Line Helicopters" and "Trees and Dirt Excavating" to complete the debris removal at Doe-Kag-Wats. Suquamish foresters also provided in-kind support on the project.

DNR initially assumed only one piling removal project at Woodard Bay and a few small beach debris projects could be completed with the funding provided by MTCA funding. The original estimate for the full Woodard Bay project—based on an engineer's estimate from the Woodard Bay Restoration Feasibility Study, and on previous creosote removal project costs—exceeded $2 million. That's why DNR opted to phase the Woodard Bay project and only bid a portion of the work. The economic downturn, however, increased competition among marine contractors, who lowered their cost estimates for these projects.

When project bids came in at nearly half of the amount we had projected, we added tasks to the scope of work for the Woodard Bay project and added the two piling removal projects at Squaxin Island and Cypress Island. Adding the two new projects gained efficiencies on other planned projects within their respective geographic areas, realized through shared mobilization costs.

Removing the source of contaminants at these sites reduced toxic compounds, which (1) benefits the habitat, organisms, and marine shorelands, as (2) the actions increased human safety by reducing exposure pathways.

Puget Sound Partnership — $0.8 Million – State Toxics

Created in 2007 with bipartisan legislative support, the Puget Sound Partnership is charged with overseeing the restoration and protection of Puget Sound. During the 2009–11 Biennium, the Puget Sound Partnership used State Toxics Control Account funding to protect the Sound against damage caused by stormwater runoff, and to evaluate existing methods or actions designed to prevent major oil spills.

Toxics carried by stormwater

Stormwater runoff from developed areas may be the biggest cause of the decline in Puget Sound's health. Toxic compounds that reach the sound via surface water runoff affect many species—salmon are threatened and bottom-dwelling species, such as English sole, also bear a toxic burden from the chemicals stormwater carries.

One successful response to the damage caused by stormwater runoff has been Low Impact Development (LID) practices. The Pollution Control Hearings Board issued a series of decisions in 2008 and 2009 directing the Department of Ecology to require, rather than merely encourage, LID provisions in municipal stormwater permits for Western Washington communities. Ecology added such LID requirements into stormwater permits written for those municipalities.

From 2005 through 2009, the Puget Sound Partnership offered detailed recommendations to 36 local governments on ways they could surmount barriers to LID. State Toxics Control Account funding paid the costs for professionals to design or develop all aspects of Low Impact Development within participating communities. In collaboration with Washington State University Extension – Puyallup, four workshops on the topic of Low Impact Development attracted 260 attendees.

The Partnership will rely upon MTCA funding to pay the costs to publish a new "*LID Technical Guidance Manual for Puget Sound*," to update the region's technical reference (first published in 2005). The new manual is in draft form; with help from the Washington State University Extension – Puyallup, it will be published in June 2012.

Oil spill programs

A major hazard threatening Puget Sound is the potential for a major oil spill. In 2009, our Washington State Legislature directed the Puget Sound Partnership to assess Washington State's oil spill programs and recommend any necessary improvements. During summer 2010 the Partnership contracted with an oil spill policy specialist, and invited a broad base of stakeholders, to form a Cross Partnership Oil Spill Work Group.

The Partnership convened Oil Spill Work Group meetings, beginning in September 2010 and ending in May 2011. Recommendations coming from those meetings led to legislation that was signed into law in April 2011. The law improved oil-spill reduction measures and strengthened marine safety standards. The Puget Sound Partnership incorporated those measures and standards into our latest draft version of the Puget Sound Partnership's Action Agenda,* due for publication in 2012.

*The Partnership's Action Agenda contains singular directions to prioritize and focus recovery and protection efforts. The Agenda informs government entities and scientists, environmental groups, and business and agricultural organizations based in the Puget Sound's 12-county region.

Washington State Parks — $0.01 Million – State Toxics

The Washington State Parks and Recreation Commission works to protect natural and cultural resources, while providing recreation opportunities.

The Washington State Parks and Recreation Commission (Commission) is committed to reducing the amount of pollution entering fresh and marine waters from state park lands. The Commission fulfills our commitment by (1) repairing or replacing ineffective waste-water treatment systems, (2) constructing stormwater control solutions, using low-impact development techniques when possible, and (3) removing creosote-treated pilings from marine structures under our purview.

State Toxics Control Account funding allowed the Commission to complete more projects than its operating budget could support, to benefit the environment and the people of Washington State. During Fiscal Year 2010, the Commission completed a waste-water treatment project at Ike Kinswa State Park, started in the previous Biennium. This project applied low-cost techniques to improve the quality of outflow over waste-water treated by standard methods. The Commission spent the remaining $12,870 in the STCA funding appropriation to complete the project. No additional STCA funds were appropriated to the Commission for the 2011 Fiscal Year.

Washington State Patrol — $0.5 Million – State Toxics

The Washington State Patrol Fire Protection Bureau receives funds from the State Toxics Control Account to maintain a clean and safe training facility in North Bend, Washington. The mission of the Fire Training Academy (FTA) 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 provide firefighters with technical knowledge and training needed to recognize and contain hazardous materials incidents. Success at the Academy translates to reduced risks to first responders, to the people and property they protect, and to the environment.

Posted by Cole Cosgrove –
May 22, 2010 – Lakewood

3 firefighters, 1 civilian transported to hospital after chemical exposure

A mixture of common cleaning chemicals is being blamed for sending three Lakewood firefighters and a cleaning person to a hospital Saturday afternoon. The firefighters were evaluated and released. The condition of the fourth person wasn't available Saturday.

Lakewood firefighters responded to a smoke alarm activation about noon at the Lakewood Professional Center, a two-story office building at 7502 Lakewood Drive W.

"They went inside, saw a white cloud, assumed it was smoke, and quickly realized it wasn't," Hallie McCurdy, assistant Fire Marshal, said Saturday afternoon at the scene. She said firefighters felt nauseated and dizzy, so they left the building. As a precaution, all three firefighters and the civilian were transported to a hospital.

The civilian in the office building was cleaning at the time of the incident. [Responders] believed that cleaning solutions were the cause [of the white smoke].

Crews from the Pierce County Hazardous Incident Team and the McChord Fire Department Hazardous Materials Response Team responded, entered the building, and packaged the materials. They also ventilated the building, making it safe to re-enter.

The haze found inside [was] evaluated by the McChord Fire Department HazMat Team and the Pierce County Hazardous Incident Team and they… determined the haze was caused by mixing numerous cleaning chemicals together. The chemicals will be sent to the Department of Ecology for proper disposal, McCurdy said.

Lt. Col. Leslee Bechtel is commander of the Washington National Guard 10th Civil Support Team, which is trained to respond statewide to terrorist attacks and other chemical, biological, or nuclear incidents. She happened to be shopping at Lakewood Town Center when she was notified of the incident, so she drove over to the scene and worked with crews to help identify the chemicals.

"It shows how a lot of agencies can work together," Bechtel said.

During the 2009–11 Biennium, the legislature appropriated $509,000 from the State Toxics Control Account to the Fire Training Academy. This funding paid for toxics control operations by Academy staff, such as the following:

1. Conducting hazards monitoring, and hazardous substance containment processes, on site;
2. Removing, transporting, and disposing of hazardous waste by-products that result from live fire training; and
3. 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. The funding also paid for supplies used to prevent an accidental release of contaminated water from the on-site retention pond system. This practice of using reclaimed water to replenish the amount lost to evaporation avoided drawing from the well water supply.

Vacuum truck cleaning FTA drains

FTA Waste Water Treatment Facility

During the 2009–2011 Biennium, the Fire Training Academy provided training to 9,479 students in areas including:

- Flammable liquids,
- Portable fire extinguishers,
- Liquid petroleum gas,
- Airport rescue firefighting,
- Hazardous materials training,
- Marine firefighting, and
- 10 firefighter recruit academies.

FTA Training Ground

Find descriptions of these and other courses offered at FTA: http://www.wsp.wa.gov/fire/openroll.htm#schedule

The influx of hazardous materials in consumer products, combined with the limits on access to live fire training, create continued demand for the Fire Training Academy's services. The State Toxics Control Account provides the most significant funding to pay for on-going control and disposal of hazardous by-products from the delivery of live fire training at the Academy.

Part 3 : Funding for Local Government Projects

Toxics Control Accounts were created to support specific environmental protection work.

RCW 70.105D.070(3) directs that the Department of Ecology use moneys deposited in the **Local Toxics Control Account** for grants or loans to local government for the following purposes (in descending order of priority):

1. Remedial actions (remove or isolate contamination, prevent its spread or exposure)
2. Hazardous waste plans and programs (reduce toxics uses, collect and dispose of waste)
3. Solid waste plans and programs (reduce waste, recycle, and safely dispose of refuse)
4. Assist to assess methamphetamine production sites and facilitate cleanup
5. Clean up and dispose of hazardous substances from abandoned or derelict vessels

Hazardous Waste and Toxics Reduction Program — $2.7 Million – Local Toxics

Toxic chemicals can harm the environment and people's health. Reducing the potential threat of toxics contamination is a priority for the Department of 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 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 Hazardous Waste and Toxics Reduction 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 certain local governments from Spokane County, and from twelve Puget Sound area counties, to reach out to businesses that produce small 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, those 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 helped protect our land, our waterways, and our people.

Local Source Control Specialist Lori Clark advises Don Barrows, of Don's Automotive Service, on the best ways to manage used oil and other hazardous substances.

Shorelands and Environmental Assistance Program — $3.0 Million – Local Toxics

Combined State and Local Toxics Accounts – Support for Shoreline Master Programs (SMPs)

During the 2009–11 Biennium, the legislature appropriated funds to Ecology's SEA Program from the Local Toxics Control Account (LTCA) for the first time.** The Model Toxics Control Act 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 Shoreline Master Programs:

- 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. The $3 million, drawn from the Local Toxics Control Account, were spent to (1) provide grant funds to local governments needing to update their SMPs, and (2) support Ecology staff people who provide technical assistance, financial accountability, and final review/approval of all SMP updates.

The State Toxics Control Account provided $383,545 and the **Local Toxics Control Account provided $3,000,000** to enable communities throughout our state to update their local Shoreline Master Programs and thereby protect environmental assets and public health.

**In previous years, Shoreline Master Program grant dollars came from the State general fund.
Find lists of SMP grants on line: http://www.ecy.wa.gov/programs/sea/grants/smp/jurisdiction.html

Spill Prevention, Preparedness and Response Program — $3.3 Million – Local Toxics

Vessel Safety – Emergency Response Tug

During the past 11 years, the state funded an emergency response tug, stationed at Neah Bay. The tug provided a "safety net" by preventing disabled ships and barges from running aground in the western Strait of Juan de Fuca, or off our outer coast.

Since 1999, the tug has deployed to stand by or directly assist 46 vessels that were either completely disabled or operating with reduced maneuvering ability. On eight of these responses, the tug took the disabled vessels in tow to prevent them from drifting onto the rocks and spilling oil. The actions taken in those eight cases helped prevent a combined spill potential of nearly 6 million gallons of oil. Within the past year, the response tug was dispatched twice to tow or escort private vessels safely to ports inside the entrance of the Strait of Juan de Fuca.

Until 2009 the tug was only on station during the harshest winter season and has now been funded to be on-station and ready to respond year-round. **During FY 2010, $3.6 million in toxics funding was appropriated by the legislature specifically for the Neah Bay Emergency Response tug.** Beginning July 1, 2010, financial responsibility for maintaining this emergency response capability shifted from Washington taxpayers to the maritime industry.

Waste 2 Resources Program — Remedial Action Grants

The legislature appropriates Local Toxics Control Account funding to the Department of Ecology for a 2-year period. The amount appropriated to Ecology for the 2009-11 Biennium was approximately $75.6 million. The Model Toxics Control Act, at RCW 70.105D.070, allocates the money for distribution to local governments as grants or loans. Remedial Action Grants pay costs of investigating and cleaning up publicly owned contaminated sites. Ecology awarded approximately $67.8 million in Remedial Action Grants to local governments during the 2009-11 Biennium. The Toxics Cleanup Program provides policy and prioritization for publicly-owned sites. It also provides project oversight. Waste 2 Resources is responsible for grant program administration.

Categories of Remedial Action Grants

When local governments need to clean up contaminated sites, the Department of Ecology offers Remedial Action Grants to encourage and expedite cleanup activity. These grants lessen the 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 at publicly owned land known to be contaminated with hazardous substances.
- ***Site Hazard Assessment***: Grants help a local health department/district pay the 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 to both address contaminated site cleanup and embrace broader property redevelopment opportunities.
- ***Safe Drinking Water Actions***: Grants provide financial assistance to a local government, applying on behalf of a purveyor of safe drinking water, where a hazardous substance has contaminated the local drinking water supply/source.
- ***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. Funding awards to pay to conduct such independent site cleanup projects cap at $300,000 per site.
- ***Methamphetamine Labs***: Grants can help fund a local government's initial investigation and assessment of suspected methamphetamine laboratories, and pay costs of cleanup activities conducted on property within the local jurisdiction.
- ***Derelict Ships:*** Ecology makes funding available to local governments to remove and dispose of hazardous substances from derelict or abandoned vessels.

Remedial Action Grant Agreements – 2009-11 Biennium					
Grant Number	**Recipient**	**County**	**SBCA Funding**	**LTCA Funding**	**Total Cost ($)**
Contaminated Site Remedial Action Oversight Projects					
G1000039	Port of Seattle-Terminal 91	King	110,319		220,638
G1000044	Port of Ridgefield	Clark	7,369,790		11,388,139
L1000001	Port of Ridgefield	Clark	3,968,349		
G1000059	Port of Seattle-East Waterway	King	590,975		1,181,950
G1000090	Grant County	Grant	1,700,000		3,400,000
G1000104	City of Tacoma	Pierce	1,350,000		2,700,000
G1000347	Port of Everett	Snohomish	985,916		1,971,832
G1000570	City of Olympia	Thurston	1,100,000	900,000	4,000,000
G1000572	Port of Seattle	King		1,500,000	3,000,000
G1000573	Port of Tacoma	Pierce		87,500	175,000
G1100159	Port of Tacoma	Pierce		634,000	1,268,000
G1100182	City of Olympia	Thurston		877,466	1,754,932
G1100188	City of Bellingham	Whatcom		2,500,000	5,000,000
G1100201	Bremerton School District	Kitsap		1,800,000	2,000,000
G1100200	City of Bellingham	Whatcom		300,000	
G1100254	Port of Seattle	King		1,500,000	3,000,000
G1100263	City of Bothell	King		2,828,726	5,657,452
G1100264	King County	King		403,038	806,076
Fiscal Year 2010 Amendments to Existing Agreements					
G0400049	Port of Bellingham	Whatcom	57,050		114,100
G0400141	Port of Bellingham	Whatcom	-32,050		-64,100
G0600051	Port of Olympia	Thurston		1,605,812	3,211,624
G0700055	Port of Pasco	Franklin	133,036	131,000	528,072
G0700287	Port of Bellingham	Snohomish		4,030,462	8,060,924
G0800557	Port of Seattle	King	516,573		1,033,146
G0800558	Seattle Public Utilities	King	400,000	1,000,000	2,800,000
G0800584	Seattle City Light	King	700,307	1,250,000	3,900,614
G0800608	Port of Everett-Everett Shipyard	Snohomish	-310,234.90		-620,470
G0900024	Port of Everett	Snohomish	-339,048		-678,096
G0900054	Seattle Public Utilities	King	125,851		251,702
G0900075	City of Olympia	Thurston	1,000,000		2,000,000
G0900082	Port of Anacortes	Skagit	10,103,569	3,359,960	24,207,138
G0900086	King County International Airport	King	43,117		86,234
G0900087	Seattle City Light	King	43,117	1,925,000	2,086,234
G0900088	Seattle Public Utilities	King	43,117	75,000	236,234
G0900104	Port of Bellingham	Whatcom	-25,000		-50,000
G0900182	Port of Olympia	Thurston		402,750	805,500
G0900217	Seattle Public Utilities	King	562,586	300,000	3,839,092
G0900218	City of Olympia	Thurston	1,000,000		2,000,000
G0900223	City of Bremerton	Kitsap	233,400		466,800

Remedial Action Grant Agreements – 2009-11 Biennium					
Grant Number	**Recipient**	**County**	**SBCA Funding**	**LTCA Funding**	**Total Cost ($)**
G0900224	City of Bremerton	Kitsap	-233,400		-466,800
G0900245	City of Bothell	King	220,000	171,273	782,546
G0900246	Port of Skagit County	Skagit	150,000	949,913	2,199,826
G0900249	Port of Seattle-Terminal 30	King	42,107		84,214
G0900251	Port of Tacoma	Pierce	545,483		1,090,966
G1000044	Port of Ridgefield	Clark		677,950	1,355,900
G1000347	Port of Everett	Snohomish	649,283		1,298,566
G1000570	City of Olympia	Thurston		-262,184	-524,368
G1100200	City of Bellingham	Whatcom	53,723	50,000	207,446
L1000001	Port of Ridgefield	Clark		365,050	730,100
Contaminated Site Cleanup Oversight Subtotal			**32,857,935**	**29,359,716**	**108,497,163**
Funds for Independent Hazardous Site Cleanup Projects					
G1000354	Town of Wilkeson	Pierce	8,130		16,260
G1000571	Steilacoom Historical School District #1	Pierce		193,375	386,750
G1100228	City of Tacoma Rescue Mission	Pierce		200,000	400,000
G1000087	Kiona-Benton School District	Benton	39,419		78,838
G1000088	City of Everett	Snohomish	200,000		400,000
G1000089	Port of Everett	Snohomish	200,000		400,000
G1000105	City of Redmond	King	200,000		400,000
G1000128	City of Redmond	King	22,177		44,354
G1000296	Port of Everett	Snohomish	43,943		87,886
G1000312	Klickitat County Port District No. 1	Klickitat	27,908		55,816
G1000554	Bremerton Housing Authority	Kitsap	15,307		30,614
G1100230	Everett School District	Snohomish		200,000	400,000
G1100290	City of Everett	Snohomish		200,000	400,000
Independent Site Cleanup Projects Subtotal			**756,884**	**793,375**	**3,100,518**
Funds for Site Hazard Assessment Projects					
G1100294	Benton-Franklin HD	Benton-Franklin	27,349		27,349
G1000145	Northeast Tri County Health District	Stevens	114,000		114,000
G1000146	Jefferson County Public Health	Jefferson	32,000		32,000
G1000136	Skagit County Public Health Dept	Skagit	43,800		43,800
G1000134	Spokane Regional Health District	Spokane	90,000		90,000
G1000147	Lewis County Health & Social Services	Lewis	61,970		61,970
G1000135	Whatcom County Health Department	Whatcom	112,000		112,000
G1000131	Thurston Co Public Health & SS	Thurston	145,500		145,500
G1000132	Kitsap County Health District	Kitsap	168,250		168,250
G1000133	Clark County Public Health	Clark	180,500		180,500

Remedial Action Grant Agreements – 2009-11 Biennium					
Grant Number	**Recipient**	**County**	**SBCA Funding**	**LTCA Funding**	**Total Cost ($)**
G1000148	Snohomish Health District	Snohomish	121,500		121,500
G1000143	Tacoma-Pierce Co. Health Department	Pierce	502,200		502,200
G1000144	Public Health - Seattle & King County	King	445,750		445,750
G1000504	Island County Public Health	Island	18,750		18,750
Fiscal Year 2010 Amendments to Existing Agreements					
G0500087	Benton-Franklin Health District	Benton-Franklin	-27,349		-27,349
G0800027	Clallam Co. Dept of Health & Human Services	Clallam	31,236		31,236
G1000136	Skagit County Public Health	Skagit		7,000	
G1000132	Kitsap County Health District	Kitsap		15,000	
Site Hazard Assessment Subtotal			**2,067,456**	**0**	**2,067,456**
Drug Lab Cleanup Projects					
G1000145	Northeast Tri County Health District	Stevens	15,000		15,000
G1000146	Jefferson County Public Health	Jefferson	764		764
G1000136	Skagit County Public Health Dept	Skagit	2,000		2,000
G1000134	Spokane Regional Health District	Spokane	50,000		50,000
G1000147	Lewis County Health & Social Services	Lewis	10,530		10,530
G1000135	Whatcom County Health Department	Whatcom	22,000		22,000
G1000130	Grays Harbor County Dept of Public Services	Grays Harbor	12,500		12,500
G1000131	Thurston Co Public Health & SS	Thurston	40,000		40,000
G1000132	Kitsap County Health District	Kitsap	28,000		28,000
G1000133	Clark County Public Health	Clark	5,000		5,000
G1000148	Snohomish Health District	Snohomish	75,000		75,000
G1000143	Tacoma-Pierce County Health Department	Pierce	140,000		140,000
G1000504	Island County Public Health	Island	18,750		18,750
Amendments to Fiscal Year 2010 Agreements					
G0800027	Clallam County Dept of Health & Human Services	Clallam	3,000		3,000
Drug Lab Subtotal			**432,544**	**0**	**432,544**
Integrated Planning Grants					
G1000355	Port Angeles Harbor Works Development Authority	Clallam	200,000		200,000
G1000353	City of Ridgefield	Clark	100,000		100,000

Remedial Action Grant Agreements – 2009-11 Biennium					
Grant Number	**Recipient**	**County**	**SBCA Funding**	**LTCA Funding**	**Total Cost ($)**
G1000475	City of Spokane	Spokane	200,000		100,000
G1100285	City of Kelso	Cowlitz		200,000	200,000
G1000561	City of Wenatchee	Chelan	150,000		150,000
Integrated Planning Grants Subtotal			**650,000**	**200,000**	**750,000**
Tacoma Smelter Plume					
G1000131	Thurston Co Public Health & SS	Thurston	15,000		15,000
G1000129	Public Health - Seattle & King Co.	King	920,000		920,000
G1000129	Public Health - Seattle & King Co.	King	-485,566		**-485,566
G1000052	Tacoma-Pierce County Health Department	Pierce	755,000		755,000
G1000052	Tacoma-Pierce County Health Department	Pierce	-575,221		**-575221
Tacoma Smelter Plume Subtotal			**629,213**	**0**	**1,690,000**
Local Remedial Action Project Funding – 2009-11 Biennium			**37,394,032**	**30,353,091**	**116,537,681**

**Project shifted from a grant to an Interagency Agreement.

Waste 2 Resources Program — Public Participation Grants

Under Chapter 170.105D RCW, the Model Toxics Control Act, state law reserves funding for a grant program that enables people to assume an active role in solving waste management problems. Funding for these grants comes from 1 percent of the revenue collected under the Hazardous Substance Tax, for appropriation to the State and the Local Toxics Control Accounts.

The Public Participation Grant Program receives funding from both the State and Local Toxics Accounts.

Characteristics of the MTCA Public Participation Grant (PPG) Program

- ***Community Benefit– PPG Applicant Qualifications:*** Non-government entities, not-for-profit organizations, or public interest groups may submit project plans or proposals for engaging interest communities in a proposed 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 of the prohibition against using public moneys to enrich private entities.
- ***Competition – PPG Award Qualifications:*** Each biennium, eligible PPG Applicants submit proposals that (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 the 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).
- ***Public Investment – PPG Recipient Selection:*** A panel comprised of Ecology experts from different disciplines, reviews and ranks all the timely submittals. PPG Applicants whose proposed projects rank highest among competing proposals, are invited to meet with the PPG Project Officer to discuss available funding.
- ***Allocation – PPG Award Administration:*** Each Public Participation Grant Agreement is Ecology's promise to reimburse certain noncapital costs of conducting a successful PPG proposal. The PPG Agreement defines eligible costs/estimated amounts as discrete tasks within the PPG project plan. As each task is completed, the PPG Recipient submits receipts with a Request for Reimbursement form; the PPG Project Officer approves reimbursement of eligible project costs, up to the amount budgeted (for that task) in the Agreement.

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".

1. ***Contaminated Site Cleanup Projects*** encourage people to educate themselves, and advise Ecology, about details of any planned investigation and cleanup of a contaminated site. 2010 PPG Project Examples included community oversight at the continued Hanford, Duwamish River, and Spokane River cleanup projects.
2. ***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.

In 2010, Ecology's PPG Program reimbursed $1.78 million in eligible costs of conducting a total of 32 Contaminated Site Cleanup or Waste Management projects, located in communities around our

state. A recipient could have received a promised maximum $120,000 budget to conduct a 2-year project. In the 2009–2011 Biennium funding cycle, the average PPG award was approximately $56,000. In 2010, in addition to PPG's traditional MTCA funding, the U.S. Department of Energy supplemented this program with $512,000 dedicated to outreach about the Hanford Cleanup.

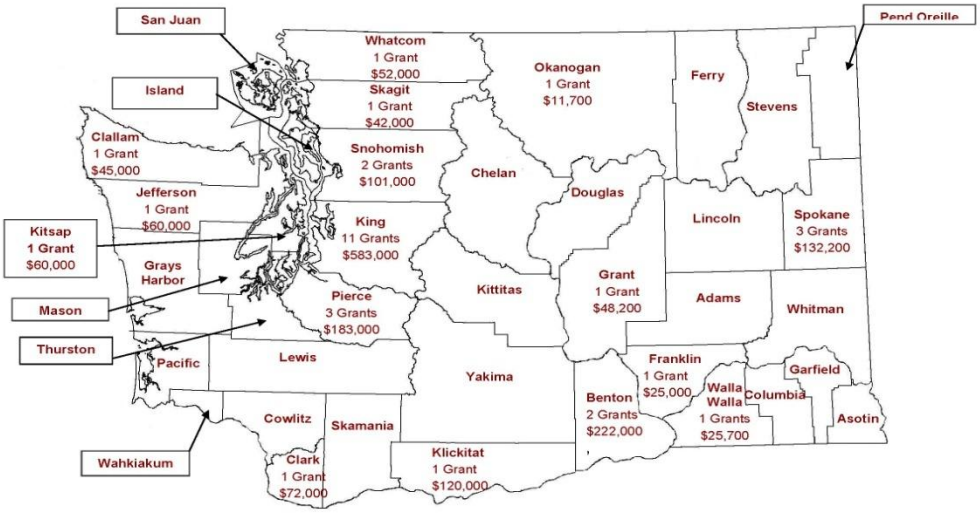
The following list contains all PPG projects begun during FY 2010:

Round 17 Public Participation Grant Projects Begun During Fiscal Year 2010

One Percent of the Toxics Control Account (STCA & LTCA)					**$1,271,000**
One-time Grant from the U.S. Department of Energy					**$512,000**
Grant Number	**Recipient**	**Category**	**Region**	**County**	**Total $1,783,000**
G1000110	Methow Recyles	PPBW	CRO	Okanogan	$11,700
G1000111	Walla Walla Area Resources Cons Comm	PPBW	ERO	Walla Walla	$25,700
G1000154	Facing the Future	PPBW	NWRO	King	$80,000
G1000153	Habitat for Humanity for WA State	PPBW	SWRO	Pierce	$75,000
G1000277	Sustainable Connections	BG	NWRO	Whatcom	$52,000
G1000280	Evergreen Habitat for Humanity	BG	SWRO	Clark	$72,000
G1000281	Puget Soundkeeper Alliance	PP	NWRO	King	$53,000
G1000288	Stilly-Snohomish Fisheries Enhance Task Force	PP	NWRO	Snohomish	$65,000
G1000289	Washington Agricultural Family Assistance	PP	ERO	Grant	$48,200
G1000295	YMCA Tacoma Pierce County		SRO	Pierce	$66,000.00
G1000313	Port Gamble S'Klallam Foundation	CS	NWRO	Kitsap	$60,000
G1000314	Citizens for a Healthy Bay	CS	SWRO	Pierce	$42,000
G1000309	Olympic Environmental Council	CS	SWRO	Clallum	$45,000
G1000319	Re Sources	CS	NWRO	Skagit	$42,000
G1000318	The Lands Council	ORI	ERO	Spokane	$45,000
G1000321	Skykomish Environmental Coalition	CS	NWRO	King	$20,000
G1000320	WA Physicians for Social Responsibility	CS	CRO	Benton	$102,000
G1000327	Spokane Neighborhood Action Partners	PPBW	ERO	Spokane	$40,000
G1000335	Columbia Riverkeepers	CS	CRO	Klickitat	$120,000
G1000328	Brackett's Landing Foundation	CS	NWRO	Snohomish	$36,000
G1000336	Hanford Challenge	CS	CRO/ERO	Benton	$120,000
G1000337	Lake Roosevelt Forum	CS	ERO	Spokane	$47,200
G1000338	Salish Sea Expeditions	PSI	NWRO	King	$45,000
G1000339	Port Townsend Marine Science Center	PPBW	SWRO	Jefferson	$60,000
G1000343	Heart of America Northwest	CS	NWRO	King	$120,000
G1000344	WA State Hotel and Lodging Association	BG	NWRO	King	$53,000
G1000348	WA Citizens for Resource Conservation	BW	NWRO	King	$50,000
G1000356	Georgetown Community Council	OG	NWRO	King	$42,000
G1000372	Duwamish River Cleanup Coalition	OG	NWRO	King	$45,000
G1000454	People for Puget Sound	ORI	NWRO	King	$50,000
G1000551	Heart of America Northwest	OG	NWRO	King	$25,000
G1000553	Hanford Challenge	CS	CRO/ERO	Benton, Franklin	$25,000

PPG Project categories key: BG = Built Green/Green Building Projects; CS = Contaminated Sites; OG = Cleanup Oversight; ORI = Other River Initiatives; PP = Pollution Prevention; PPBW = Pollution Prevention Beyond Waste; PSI = Puget Sound Initiatives

The map below highlights by county the distribution of PPG projects begun during FY 2010:



Selected Recipients for the 2011–2013 PPG Funding Cycle

In 2010, Ecology's PPG Program selected 40 project proposals, and offered a total $2.5 million in promised reimbursement, for PPG recipients to conduct projects during the 2011–2013 funding cycle. Of the 40 successful project proposals, 17 focused on Contaminated Site Cleanup and 23 on Waste Management projects. The average award will be $62,750.

Fewer organizations (77) applied in 2010 for 2011–2013 Public Participation Grant funding than had applied during the previous Biennium (121). The number of applications decreased approximately 36 percent. Our subsequent post-application analysis suggests fewer not-for-profit organizations are applying, due to the cut in PPG funding during the 2009–2011 funding cycle. Not-for-profit organizations chose to dedicate their grant research and application writing efforts to programs with more stable funding.

A five-person panel reviewed the grant applications. Additionally, a technical expert reviewed each submission and commented on the specific elements of each application. The review panel read and rated each project based on the following criteria:

- The quality of the application,
- The administrative capacity of the applicant,
- The quality of the project proposal versus the cost,
- The project's measurable outcomes,
- Consideration of Environmental Justice issues,
- Level of need for the geographic area served,
- Past performance history of returning applicants, and
- Organizational Environmentally Preferable Practices of the applicants.

Waste 2 Resources Program — Coordinated Prevention Grants

The Coordinated Prevention Grants (CPG) program supports household hazardous waste collection, ongoing waste reduction and recycling programs, and regulatory oversight operations. Beyond Waste grants encourage communities to design innovative programs to reduce toxic threats, to divert organic waste from landfills to beneficial uses, to reuse or repurpose manufactured materials, and to increase green building practices and low impact development projects. These local initiatives also help reduce greenhouse gas emissions statewide.

Without LTCA funding, these protections and programs would cease to exist in many small communities across Washington. The goal of CPG projects is to move communities toward wiser use of our natural resources, to reduce or prevent uses of toxic substances in consumer products, and to adopt less wasteful personal habits—while recognizing that we will always have to manage some wastes.

Categories of Coordinated Prevention Grants

Waste Management

***Landfills*:** Local Health Authorities regulate all 700 solid waste facilities in Washington State. Local Health officials permit and enforce compliance at those facilities, oversee construction at solid waste landfills, and review environmental monitoring data. Up to 15 landfills currently need either construction of new waste disposal cells and leachate collection systems or closure of existing waste disposal cells. During the Biennium, CPG funding supported the following:

- Local health officials conducted about 2,459 facility inspections statewide.
- Additionally, local health officials resolved about 10,000 illegal dumping and illegal waste storage complaints, and provided technical assistance to more than 32,400 businesses and individuals.

***Household Hazardous Waste*:** Collection and disposal events do not prevent waste, but CPG-funded collection activities remove more than 19,000 tons of hazardous materials from homes and businesses annually. Many household hazardous waste programs collect waste oil for energy recovery. Some other waste materials contain PBTs (thermostats, fluorescent bulbs), while others contain toxic chemical combinations and carcinogens (pesticides, cleaning agents, solvents). Some collected hazardous materials (e.g., paint) can be safely reused or recycled, but more must be disposed of at special hazardous waste landfills.

Recycling or Energy Recovery

***Recycling prevents waste and saves energy*:** Manufacturing processes that use recycled materials replace the need for resource extraction—generally a wasteful and energy-intensive process. Typically processes that use recycled materials consume between 10 and 50 percent less energy and water than amounts required by manufacturers using extracted resource materials. CPG plays a pivotal role in financing the local programs that now recycle and reuse 1.5 million tons of residential material annually. CPG funding supports on-going recycling operations, community education, and recycling promotion.

- During the Biennium, CPG-supported local programs collected more than half a million tons of recyclable and organic materials.

- Applying the U.S. EPA's formula, recycling reduced greenhouse gas emissions by 266,252 metric tons of carbon equivalent.* In addition, recycling saved energy* equivalent to 1 million barrels of oil or the annual energy consumption of 60,000 households).

Closing the Loop on Organics

Reducing waste and adding value: Many CPG organics projects focus on taking materials out of the waste stream and putting them to beneficial use as a component of a product such as compost or garden mulch. Using either product 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 are now supporting a broad base of organics projects that move our state toward "closed loop" organics cycles. CPG-funded projects range from small to large—from home composting workshops and back-yard compost bin distribution, to building and operating regional composting facilities.

- During the 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.* 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 the organics and buying chemical products to perform the same function in yards and fields.

*Calculated using the U.S. EPA's Waste Reduction Model applied to 05-07 CPG biennial outcomes.

Waste Prevention and Green Building

The most cost-effective way to reduce waste is not a matter of using technology to handle it, but of avoiding making waste in the first place. One industry with a large capacity to reduce amounts of materials, chemicals, and energy needed to produce and transport components—and to operate healthy products—is building construction. When buildings are deconstructed, many materials can be salvaged for reuse or for repurposing. But perhaps the greatest potential benefits lay in "green building"— employing building practices that allow less waste during construction, designs that capture natural light and promote passive heating and ventilation systems, and substituting non-toxic alternatives for toxics commonly found in building materials. CPG funding supports local government technical assistance programs aimed at residential and commercial builders, and collaborations between local governments' and industry's design-build demonstration projects.

To view details of CPG projects funded in calendar year 2010, visit the Solid Waste Information Clearinghouse at https://fortress.wa.gov/ecy/swicpublic/. Select "CPG" and 1/1/2010 in the "Dates Project Active" fields.

Example CPG Projects

Lewis County Solid Waste Utility (G1000500) used CPG funds to expand recycling, create a composting demonstration site at the Central Transfer Station, and coordinate with Washington State University Cooperative Extension to manage the local Master Recycler Composter volunteers. Volunteers assist with community outreach activities.

Lincoln County Public Works (G1000461) Solid Waste Coordinator, Rory Wintersteen, used CPG funding to support collection of household hazardous waste and recyclables from residents and small businesses. Lincoln County Public Works also conducted waste management education and outreach. Here, Rory shows plastic to be baled, bundled, and recycled.

CPG Funding Allocation

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

1. During the *regular cycle* (a two-calendar-year period that starts in January each even-numbered year) Ecology distributes funding based upon an allocation formula published in the rule. This is not a competitive cycle.
2. During the *offset cycle* (a two-calendar-year period that starts in January each odd-numbered year) Ecology awards funding based upon a competitive process.

Local Toxics Control Account funds Ecology had requested for CPG expenditure from January 1, 2011, through June 30, 2011, were among those dollars transferred to the State General Fund. During the 2009–11 Biennium, Ecology did not run a CPG offset cycle or award funding from the LTCA.

January 1, 2010, through December 31, 2011, Regular Cycle Awards

In the past, the CPG Program received a full 2-year allocation of approximately $21 million, and at the end of the Biennium the legislature re-appropriated unspent CPG funds to Ecology for existing grant projects where performance extended beyond the biennial end-date. Resulting uncertainties created accounting challenges and blurred performance deadlines, so Ecology decided to end that practice.

The legislature appropriated only 10 million LTCA dollars to Ecology for the Coordinated Prevention Grant Program in the 2009–11 Biennium. The amount would fund estimated spending between January 1, 2010, and December 31, 2010, according to the plans submitted with local governments' CPG applications, but left calendar year 2011 unfunded. Ecology allocated unspent funds (promised for the January 1, 2009, through December 31, 2010, offset cycle) and re-appropriated LTCA funds, to cover local governments' project costs from January 1 through June 30, 2011. The remaining CPG project costs (incurred between July 1 and December 31, 2011) were paid out of the 2011-2013 appropriation from the legislature.

State Building and Construction Account: Between January 1, 2011, and June 30, 2011, Ecology awarded 118 grants to Washington counties, cities, and health agencies, totaling $14,773,589 toward the costs of regular-cycle projects left unfunded by the transfer of LTCA dollars. This sum came as a one-time appropriation out of the State Building and Construction Account allocation in the State General Fund.

Coordinated Prevention Grants – Regular Cycle	
Funded by State Building and Construction Account (rounded to nearest hundred-thousand)	
Moderate-Risk Waste	$ 6.6
Waste Reduction/Recycling	$ 4.1
Solid Waste Enforcement	$ 2.4
Organics (agricultural, yard, and food waste)	$ 1.5
Green Building (energy efficient, low-toxicity)	$ 0.1
Other	$ 0.1
Total SBCA Funds	**$14.8**

Coordinated Prevention Grants 2010 (Regular Cycle) Project List

Grant Number	Recipient	County	Description	State Share (SBCA and LTCA Funds from 1/1/2010 through 6/30/2011	Maximum Eligible Cost (State Share plus 25% local match)
G1000446	Adams Co. Health Dept	Adam	Solid Waste Enforcement	$62,681.00	83,574.67
G1000490	Adams Co.	Adams	Hazardous Waste Collection and Disposal, Recycling Program, Green	$95,425.00	127,233.33
G1000470	Asotin Co. Health	Asotin	Solid Waste Enforcement	$54,938.00	73,250.67
G1000447	Asotin Co. Regional	Asotin	Hazardous Waste Collection Facility Operation and Education, Recycling	$117,880.00	157,173.33
G1000433	Benton Co.	Benton	Moderate Risk Waste Collection and Disposal, Organics Public Education and Outreach, Waste Reduction and	$246,596.00	328,794.67
G1000435	Benton-Franklin Health	Benton	Solid Waste Enforcement	$77,002.00	102,669.33
G1000409	Chelan Co.	Chelan	Community Recycling Infrastructure Improvements, Moderate Risk Waste	$179,349.00	239,132.00
G1000450	Chelan Co. Health Dept	Chelan/Doug	Solid Waste Enforcement	$126,248.00	168,330.67
G1000473	City of Port Angeles	Clallam	MRW Collection & Disposal, WRR Education & Outreach, Business Waste Audits, Yard Waste Disposal, Backyard	$117,286.00	156,381.33
G1000373	Clallam Co. Enviro	Clallam	MRW education and outreach, Hazardous Waste Plan Update, Green	$33,359.00	44,478.67
G1000384	Clallam Co. Enviro	Clallam	Solid Waste Enforcement	$92,692.00	123,589.33
G1000483	Clark Co.	Clark	MRW Collection, Food Composting at Schools, Computer Reuse, Education and Marketing, Master	$826,861.00	1,102,481.33
G1000457	Clark Co. Public Health	Clark	Solid Waste Enforcement	$84,682.00	112,909.33
G1000495	Columbia Co.	Columbia	Waste Reduction and Recycling, Hazardous Waste Collection and Disposal	$85,425.00	113,900.00
G1000438	Columbia Co. Health	Columbia	Solid Waste Enforcement	$18,000.00	24,000.00
G1000374	City of Kelso	Cowlitz	Residential Recycling Drop Box Program	$14,925.00	19,900.00
G1000407	City of Longview	Cowlitz	Residential Recycling Program	$45,000.00	60,000.00
G1000467	Cowlitz Co. Bldg & Plan	Cowlitz	Solid Waste Enforcement	$64,080.00	85,440.00
G1000387	Cowlitz Co. Public	Cowlitz	Moderate Risk Waste Collection and Disposal, Backyard Composting	$112,400.00	149,866.67
G1000381	Douglas Co.	Douglas	Community Recycling Infrastructure, Moderate Risk Waste Collection and	$124,840.00	166,453.33
G1000460	Ferry Co. WM	Ferry	Solid Waste Management Plan Update, Hazardous Waste Collection, Disposal and Education, Waste Reduction and	$64,141.00	85,521.33
G1000499	Franklin Co. Solid Waste	Franklin	Haz Waste Education and Outreach, Collection and Disposal, Organics Public Ed & Outreach, Christmas Tree	$139,273.00	185,697.33
G1000428	Garfield Co. Health	Garfield	Solid Waste Enforcement	$3,639.00	4,852.00
G1000480	Garfield Co. Public Works	Garfield	Waste Reduction and Recycling Education and Outreach, Drop Box Recycling Operations, Drop Box Recycling	$68,773.00	91,697.33
G1000464	Grant Co. Health Dept	Grant	Solid Waste Enforcement	$71,213.00	94,950.67
G1000491	Grant Co. Public Works	Grant	Organics Collection, Public Education and Outreach, Waste Reduction and Recycling Education and Outreach, Hazardous Waste Collection,	$121,009.00	161,345.33
G1000388	Grays Harbor Co.	Grays	Hazardous Waste Collection and Disposal	$134,258.00	179,010.67
G1000417	Grays Harbor Co.	Grays	Solid Waste Enforcement	$92,473.25	123,297.67
G1000390	Island Co.	Island	Hazardous Waste Collection and Disposal	$182,584.00	243,445.33
G1000416	Island Co.	Island	Solid Waste Enforcement	$85,446.00	113,928.00
G1000400	Jefferson Co. Dept	Jefferson	MRW Collection and Disposal	$80,670.00	107,560.00
G1000404	Jefferson Co. Public	Jefferson	MRW Education and Outreach, Green Business and Public Outreach	$40,099.00	53,465.33
G1000406	Jefferson Co. Public	Jefferson	Solid Waste Enforcement	$71,024.00	94,698.67
G1000442	City of Algona	King	Recycling Collection Events-Residential	$4,430.00	5,906.67
G1000380	City of Auburn	King	Multifamily Education and Outreach, School Education and Outreach,	$55,377.00	73,836.00
G1000371	City of Bellevue	King	Natural Yard Care Research and Program Development, Commercial Organics Recycling Assistance Program, Used	$95,591.64	127,455.52
G1000441	City of Black Diamond	King	Recycling Collection Events-Residential	$6,200.00	8,266.67
G1000391	City of Bothell King Co.	King	Recycling Collection Events-Residential, Reuse of Building Materials,	$30,801.00	41,068.00
G1000369	City of Carnation	King	Special Recycling Collection Event	$3,385.00	4,513.33

Coordinated Prevention Grants 2010 (Regular Cycle) Project List

Grant Number	Recipient	County	Description	State Share (SBCA and LTCA Funds from 1/1/2010 through 6/30/2011	Maximum Eligible Cost (State Share plus 25% local match)
G1000423	City of Covington	King	Recycling Collection Events-Residential, Recycling Collection Events-	$15,547.00	20,729.33
G1000430	City of Des Moines	King	Recycling Collection Events-Residential	$28,144.00	37,525.33
G1000440	City of Enumclaw	King	Recycling Collection Events-Residential, Recycling Collection Events-	$12,589.00	16,785.33
G1000394	City of Federal Way	King	Recycling Collection Events-Residential, Recycling Container Distribution-Multi and Single Family, Compost Bin and Scrap Bucket Distribution-Residential, Community Facility and Parks Recycling, Commercial	$111,207.00	148,276.00
G1000383	City of Issaquah	King	Business Food Waste Recycling	$33,946.00	45,261.33
G1000424	City of Kenmore	King	Recycling Collection Events-Residential, Recycling Collection Events-	$18,437.00	24,582.67
G1000443	City of Kent	King	Recycling Collection Events-Residential, Recycling Collection Events-Commercial, Waste Reduction & Recycling	$87,380.00	116,506.67
G1000403	City of Kirkland SW	King	Recycling Collection Events-Commercial, Commercial Recycling and	$35,799.00	47,732.00
G1000378	City of Lake Forest Park	King	Low Impact Develepment and Green Building	$14,677.00	19,569.33
G1000395	City of Maple Valley	King	Recycling Collection Events-Residential, Recycling Collection Events-	$18,684.00	24,912.00
G1000418	City of Newcastle	King	Recycling Collection Events-Residential	$9,874.00	13,165.33
G1000425	City of Normandy Park	King	Recycling Collection Events-Residential, Recycling Collection Events-	$35,143.00	46,857.33
G1000389	City of North Bend	King	Special Recycling Event	$6,896.00	9,194.67
G1000437	City of Pacific	King	Recycling Collection Events-Residential	$4,330.00	5,773.33
G1000414	City of Redmond	King	Commercial Organics Recycling Outreach, Commercial Recycling Outreach, Special Collection and Recycling Event	$48,975.00	65,300.00
G1000432	City of Sammamish	King	Recycling Collection Events-Residential, Recycling Collection Events-	$33,361.00	44,481.33
G1000420	City of Sea Tac	King	Seatac Residential Recycling	$24,897.00	33,196.00
G1000465	City of Shoreline	King	Recycling Collection Events-Residential, Residential and Commercial Education and Outreach -Green Building, Natural Yard Care Outreach		
G1000393	City of Snoqualmie	King	Special Recycling Collection Event	$6,226.00	8,301.33
G1000415	City of Tukwila	King	Business waste reduction and recycling outreach and assistance,Special	$23,632.00	31,509.33
G1000408	City of Woodinville	King	Yard Waste Chipping	$14,219.00	18,958.67
G1000452	King Co. SW	King	Food Scraps and Food Soiled Paper Recycling, Take Back the Bag	$511,113.00	681,484.00
G1000382	Public Health Seattle &	King	Moderate Risk Waste Disposal and Collection	$1,056,638.00	1,408,850.67
G1000449	Public Health Seattle &	King	Solid Waste Enforcement	$113,916.00	151,888.00
G1000466	Renton Solid Waste	King	In House Recycling	$18,750.00	25,000.00
G1000482	Seattle Public Utilities	King	Master Composter & Natural Yard Care Outreach, Commercial Ed. and	$560,954.00	747,938.67
G1000436	Town of Skykomish	King	Recycling Collection Events-Residential	$631.00	841.33
G1000451	Kitsap Co. Health Dept	Kitsap	Solid Waste Enforcement	$113,917.00	151,889.33
G1000448	Kitsap Co. PW	Kitsap	MRW Collection & Disposal, MRW Education & Outreach, Waste Red. &	$417,750.00	557,000.00
G1000426	Kittitas Co. Public	Kittitas	Solid Waste Enforcement	$73,734.00	98,312.00
G1000419	Kittitas Co. Solid Waste	Kittitas	Moderate Risk Waste Collection and Disposal, Waste Reduction and	$109,965.00	146,620.00
G1000431	Klickitat Co. Solid Waste	Klickitat	Hazardous Waste Collection and Disposal, Hazardous Waste Education and Outreach, Organics Public Education and Outreach, Waste Reduction and Recycling Education and Outreach, Solid Waste	$77,017.00	102,689.33
G1000405	Lewis Co. H & SS	Lewis	Solid Waste Enforcement	$68,409.00	91,212.00
G1000500	Lewis Co. SW Utility	Lewis	Master Recycler/Composter Program, Organics Collection, Scrap Metal Drop Box, Recycling Collection Events- Residential, Public Areas Recycling, Business Recognition Program, Construction, Demolition	$176,616.75	235,489.00
G1000429	Lincoln Co. HD	Lincoln	Solid Waste Enforcement	$18,218.00	24,290.67
G1000461	Lincoln Co. PW	Lincoln	Waste Reduction and Recycling, Composting, Household Hazardous	$90,050.00	120,066.67
G1000402	City of Shelton	Mason	Organics Collection and Composting, Curbside Recycling Program	$67,424.00	89,898.67
G1000392	Mason Co. Public Health	Mason	Solid Waste Enforcement	$80,943.00	107,924.00

Coordinated Prevention Grants 2010 (Regular Cycle) Project List

Grant Number	Recipient	County	Description	State Share (SBCA and LTCA Funds from 1/1/2010 through 6/30/2011	Maximum Eligible Cost (State Share plus 25% local match)
G1000497	Mason Co. Utilities & WM	Mason	Hazardous Waste Collection and Disposal, Waste Reduction and Recycling Education and Outreach, Organic Public	$85,050.00	113,400.00
G1000412	Okanogan Co. Dept PW	Okanogan	Hazardous Waste Collection and Disposal, Waste Reduction Education and	$136,039.00	181,385.33
G1000434	Okanogan Co. Public	Okanogan	Solid Waste Enforcement	$71,526.00	95,368.00
G1000399	Pacific Co. Dept Com	Pacific	MRW Collection and Disposal, Drop Box Recycling, Recycling Collection	$103,965.25	138,620.33
G1000468	Pacific Co. Dept Com	Pacific	Solid Waste Enforcement	$85,233.00	113,644.00
G1000481	Pend Oreille Co. Solid	Pend Oreille	Household Hazardous Waste Collection and Disposal, Recycling	$101,950.00	135,933.33
G1000496	City of Tacoma Solid Waste	Pierce	Recycling Center Staffing, Hazardous Waste Facility Staffing, Compost Bin Distribution, Northwest Natural Yard Care, Hazards on the Homefront	$328,750.00	438,333.33
G1000503	Pierce Co.	Pierce	MRW Collection and Disposal, Commercial Recycling and Composting,	$587,190.00	782,920.00
G1000398	Tacoma-Pierce Co.	Pierce	Solid Waste Enforcement	$56,959.00	75,945.33
G1000502	Tacoma-Pierce Co. Health Dept	Pierce	Hazardous Waste Plan Update, Used Oil Program, MRW Education and Outreach, SQG Technical Assistance	$130,346.00	173,794.67
G1000444	San Jaun Co. H & CS	San Juan	Solid Waste Enforcement	$47,691.10	63,588.13
G1000472	San Jaun Public Works	San Juan	Zero Waste Waldron Island, Mercury Collection and Hazardous Waste Education, Recycling Container Purchase, Solid and Hazardous Waste	$121,742.00	162,322.67
G1000459	Skagit Health	Skagit	Solid Waste Enforcement	$94,931.00	126,574.67
G1000462	Skagit Public Works	Skagit	Hazardous Waste Collection, Disposal and Outreach, Public Education and	$232,348.00	309,797.33
G1000361	Skamania Co. Comm	Skamania	Solid Waste Enforcement	$18,750.00	25,000.00
G1000370	Skamania Co. Solid	Skamania	Drop Box Recycling	$120,679.50	160,906.00
G1000439	City of Arlington	Snohomish	Commercial Waste Reduction and Recycling, Multi-family Property Waste Reduction and Recycling, Public Area and	$13,050.00	17,400.00
G1000397	City of Edmonds	Snohomish	Waste Reduction and Recycling Education and Outreach, Commercial	$31,737.00	42,316.00
G1000422	City of Everett	Snohomish	Multi-family Property Waste Reduction and Recycling, Commercial Waste Reduction and Recycling, Residential Food	$85,647.00	114,196.00
G1000456	City of Lake Stevens	Snohomish	Event Recycling	$10,362.00	13,816.00
G1000396	City of Lynnwood	Snohomish	Waste Reduction and Recycling Education and Outreach, Commercial	$27,800.00	37,066.67
G1000453	City of Sultan	Snohomish	Recycling Collection Events-Residential	$4,723.00	6,297.33
G1000445	Snohomish Co. SW	Snohomish	Moderate Risk Waste Collection and Disposal	$818,577.00	1,091,436.00
G1000469	Snohomish Health Dept	Snohomish	Solid Waste Enforcement, MRW Education and Outreach, Food /Yard Waste Collection Composting Study, Pharmaceuticals Take-	$174,959.00	233,278.67
G1000458	Spokane Reg Health	Spokane	Solid Waste Enforcement	$113,916.00	151,888.00
G1000463	Spokane Reg Solid Waste	Spokane	Haz Waste Implementation, Household Haz Waste Collection and Disposal, Small Business Haz Waste Collection and Outreach, City of Cheney Recycling, City of Medical Lake Recycling Facility, Spokane	$898,051.00	1,197,401.33
G1000492	Stevens Co. Dept Pub Wks	Stevens	Hazardous Waste Education and Outreach, Hazardous Waste Collection and Disposal, Waste Oil, Antifreeze and Battery Collection and Disposal, Recycling Collection Facility Operations and Maintainance,Waste Reduction and Recycling Education and Outreach, Community yard	$156,124.00	208,165.33
G1000427	NE Tri-Co. Health Dept	Stevens/ Pend Oreille/Ferry	Solid Waste Enforcement	$69,314.00	92,418.67
G1000401	Thurston Co. P H SS	Thurston	Solid Waste Enforcement	$85,436.00	113,914.67
G1000484	Thurston Co. P H SS	Thurston	School Programs, Pesticide and Fertilizer Reduction, Small Quantity Generator Technical Assistance, Used Oil	$215,287.00	287,049.33
G1000410	Thurston Co. Public	Thurston	Public Area and Event Recycling, Commercial Outreach and Assistance,	$220,366.00	293,821.33
G1000360	Wahkiakum Co.	Wahkiakum	Recycling Facility Operations	$49,000.00	65,333.33
G1000375	Wahkiakum Co.	Wahkiakum	Solid Waste Enforcement	$31,480.00	41,973.33
G1000471	City of Walla Walla	Walla Walla	Solid Waste Enforcement	$85,792.00	114,389.33

Coordinated Prevention Grants 2010 (Regular Cycle) Project List					
Grant Number	**Recipient**	**County**	**Description**	**State Share (SBCA and LTCA Funds from 1/1/2010 through 6/30/2011**	**Maximum Eligible Cost (State Share plus 25% local match)**
G1000498	City of Walla Walla	Walla Walla	Hazardous Waste Collection and Disposal, Waste Reduction and Recycling Education and Outreach, Recycling	$160,431.0	213,908.00
G1000421	Whatcom Co. Health	Whatcom	Solid Waste Enforcement	$85,437.00	113,916.00
G1000379	Whatcom Co. Public	Whatcom	Hazardous Waste Collection and Disposal	$349,577.0	466,102.67
G1000474	Whitman Co. Health	Whitman	Solid Waste Enforcement	$25,125.00	33,500.00
G1000493	Whitman Co. Public Works	Whitman	Hazardous Waste Collection, Disposal and Education, Waste Reduction and Recycling Activities, Yard Waste	$152,638.0	203,517.33
G1000455	Yakima Health District	Yakima	Solid Waste Enforcement	$104,657.0	139,542.67
G1000411	Yakima Solid Waste	Yakima	Hazardous Waste Collection and Disposal	$371,250.0	495,000.00

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