

Cleanup Settlement Account

Fiscal Year 2012 Annual Report



DEPARTMENT OF
ECOLOGY
State of Washington

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Washington State Department of Ecology's Mission

The mission of the Department of Ecology is to protect, preserve, and enhance Washington's environment. The Department fulfills its mission by promoting the wise management of the state's natural resources for the benefit of current and future generations.

Purpose of this Report

The main purpose of this report is to meet the statutory requirement per RCW 70.105D.130 (7) and to share the work accomplished during the 2012 fiscal year, using funds from the Cleanup Settlement Account. This is the first annual report for the newly-established account. As a result, it covers the financial activity since inception through June 30, 2012 timeframe, as well as a broader background on each cleanup project.

The following cleanup projects are funded through the Cleanup Settlement Account:

- B&L Woodwaste (Tacoma), Louisiana Pacific trust
- BNSF Skykomish
- Cholette Mine(Stevens County)
- City Parcel (Spokane)
- Everett Smelter
- Golden King Mine (Chelan County)
- Lilyblad (Tacoma)
- Monte Cristo Mine (Snohomish County)
- Tacoma Smelter Plume
- Van Stone Mine (Stevens County)

This report is required by RCW 70.105D.130 (7): "The department shall provide the office of financial management and the fiscal committees of the legislature with a report by October 31st of each year regarding the activity within the cleanup settlement account during the previous fiscal year".

Message From the Program Manager

Account ensures funds will be used for intended cleanup projects

I am pleased to present the Washington Legislature with this report on how the Washington Department of Ecology uses the Cleanup Settlement Account to direct cleanup funds to specific projects that protect the state's environment and people. By doing so, these cleanup projects enhance the quality of life for specific communities and for Washington as a whole.

Under the state's cleanup law, the Model Toxics Cleanup Act (MTCA), Ecology oversees cleanup work performed by liable parties or conducts cleanups and recovers its costs for the work. But that isn't feasible when a company declares bankruptcy or does not have the financial means to pay the full cleanup cost.

Working with the Attorney General's Office, Ecology can agree to a settlement in which the liable party contributes money for future cleanup work in exchange for settling its liability. Cleanup settlements may also contribute money for future natural resource restoration work at a particular site. You will find examples of such settlements in the following pages.

The Legislature created the Cleanup Settlement Account in 2008 in recognition of a unique problem—the amount of funds recovered from a bankrupt party or a party with a limited ability to pay was not likely to cover all cleanup costs. And the state did not have an account where deposited funds could generate interest to use for cleanup.

Thanks to the Legislature's recognition of this problem, and its subsequent action, the Cleanup Settlement Account now is an important tool as we all work together toward a healthier environment and a more vibrant economy for the State of Washington.

Jim Pendowski, Manager
Toxics Cleanup Program
Washington Department of Ecology

History of the Cleanup Settlement Account

The account's purpose is to hold funds from settlements or court orders that resolve liability for cleanup or natural resource damages.

During the 2008 legislative session, the legislature approved Senate Bill 6722 which created the Cleanup Settlement Account. The Department of Ecology requested this legislation to create an interest-bearing account in the state treasury to manage money from settlements or court orders in cases of bankruptcy, limited ability to pay, or natural resource damages. This new account ensures that settlement funds are linked to specific site cleanup activities or to address injuries to natural resources.

Ecology needed this new account because it anticipated several large settlements. Although large settlements and court orders are rare, they do pose a unique problem for the state. By accepting the settlement funding, the state agrees to manage the funds and use them as intended in the settlement agreement or court order. However, the funds recovered from a bankrupt party or a party with a limited ability to pay typically does not cover the entire cost of cleanup. Therefore, it is important to set aside the funds from the settlement for that particular cleanup, even if it could take several years to accomplish.

The Cleanup Settlement Account allows interest earned on settlement funds be retained in the account. Without the interest earnings, the state will not have the full amount of money required to complete the work. The State Toxics Control Account (STCA) does not retain interest earnings and there is no other appropriate interest-bearing account into which these funds can be deposited. There is also no assurance that settlement funds deposited in the STCA will be retained for that specific site.

Cleanup Settlement Account Fund Sources

The following is a summary of settlements, by site, which were originally deposited into the Cleanup Settlement Account before any interest was earned or expenditures made. Displays on pages 3, 4, and 5 are intended to show activity in the account after the settlement was deposited.

Settlement	Amount
Burlington Northern Sante Fe - Skykomish	\$ 5,050,000
City Parcel Site	\$ 270,000
Louisiana Pacific - B & L Woodwaste Site	\$ 1,000,000
Lilyblad Petroleum Site	\$ 800,000
Asarco - Natural Resource Damages	\$ 8,236,782
Asarco - Tacoma Smelter Plume	\$ 94,554,730
Asarco - Everett Smelter Site	\$ 33,888,476
Asarco - Monte Cristo Mine	\$ 6,471,758
Asarco - Van Stone Mine	\$ 3,530,050
Asarco - Cholette Mine	\$ 353,005
Asarco - Golden King Mine	\$ 470,673
Asarco Subtotal	\$ 147,505,474
Total Settlement Funding	\$ 154,625,474

Cleanup Settlement Account Cash Balance

As of June 30, 2012

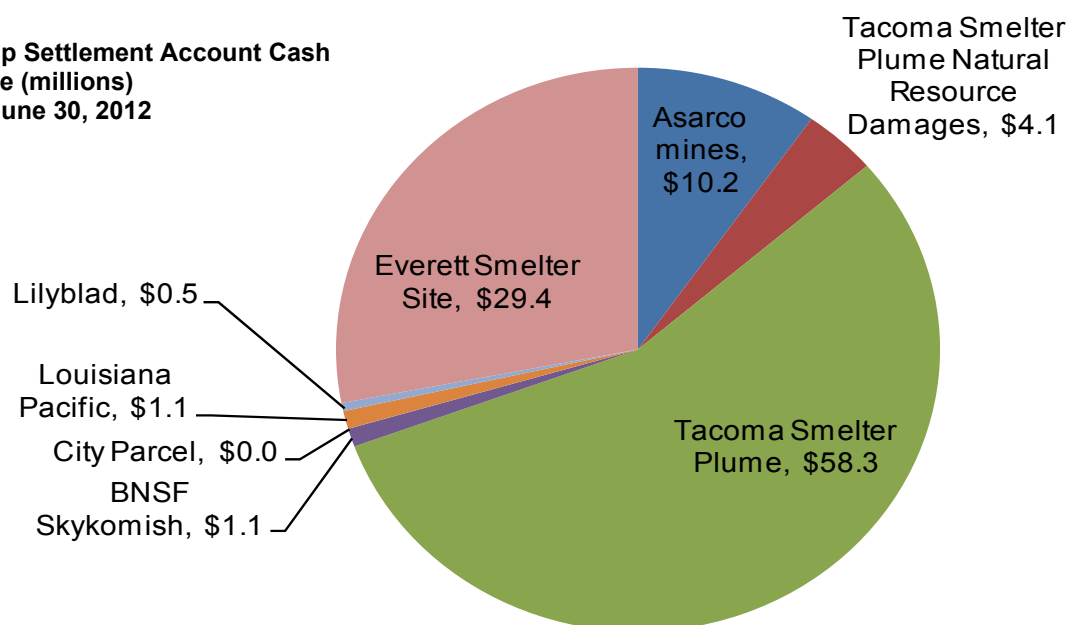
Cleanup Site	Cash Balance
BNSF Skykomish	\$ 1,095,016
City Parcel (Spokane)	\$ 8,136
Louisiana Pacific (B&L Woodwaste site, Milton)	\$ 1,068,712
Lilyblad (Tacoma)	\$ 490,265
Tacoma Smelter Plume Natural Resource Damages	\$ 4,143,801
Tacoma Smelter Plume	\$ 58,301,783
Everett Smelter Site	\$ 29,350,130
Monte Cristo Mine	\$ 6,300,878
Van Stone Mine	\$ 3,047,154
Cholette Mine	\$ 362,027
Golden King Mine	\$ 480,391
Cash Balance June 30, 2012	\$ 104,648,293

Loans Payable

State Efficiency and Restructuring Account Loan*	\$ 34,649,787
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*The Cleanup Settlement Account legislation includes a provision to transfer excess fund balances the State Efficiency and Restructuring Account and repay them with interest.

**Cleanup Settlement Account Cash Balance (millions)
As of June 30, 2012**



Cleanup Settlement Account Sites

Summary of fiscal year settlements, expenditures, and interest earnings schedule

	BNSF Skykomish [^]	City Parcel (Spokane) [^]	Louisiana Pacific	Lilyblad	Natural Resource Damages*
FY 2009					
Settlements received	\$ 5,123,309	\$ 247,431	\$ 1,000,000	\$ -	\$ -
Ecology expenditures	\$ (2,642,568)	\$ -	\$ -	\$ -	\$ -
Interest earnings	\$ 148,085	\$ 8,229	\$ 31,474	\$ -	\$ -
FY balance	\$ 2,628,826	\$ 255,660	\$ 1,031,474	\$ -	\$ -
FY 2010					
Settlements received	\$ -	\$ 27,563	\$ -	\$ 800,000	\$ 8,236,782
Ecology expenditures	\$ (762,509)	\$ (277,000)	\$ -	\$ -	\$ -
Interest earnings	\$ 45,360	\$ 1,789	\$ 20,996	\$ 13,849	\$ 82,138
FY balance	\$ 1,911,676	\$ 8,012	\$ 1,052,471	\$ 813,849	\$ 8,318,920
FY 2011					
Transfer to State Efficiency and Restructuring Account (SERA)	\$ -	\$ -	\$ -	\$ -	\$ -
Ecology expenditures	\$ (842,506)	\$ -	\$ -	\$ (98,290)	\$ (4,100,000)
Dept. of Natural Resources Asarco Dock Removal	\$ -	\$ -	\$ -	\$ -	\$ -
Interest earnings	\$ 14,580	\$ 71	\$ 9,388	\$ 7,140	\$ 60,844
FY balance	\$ 1,083,750	\$ 8,083	\$ 1,061,859	\$ 722,699	\$ 4,279,764
FY 2012					
SERA transfer repayment	\$ -	\$ -	\$ -	\$ -	\$ -
Ecology expenditures	\$ (244,722)	\$ -	\$ -	\$ (235,836)	\$ -
Interest earnings	\$ 7,170	\$ 52	\$ 6,880	\$ 4,507	\$ 26,945
FY balance	\$ 846,198	\$ 8,136	\$ 1,068,739	\$ 491,371	\$ 4,306,709

[^] Settlements received for BNSF Skykomish and City Parcel do not match the actual settlement amounts report in the table on page 2 because the initial payments included interest due or were made in installments with interest.

* Tacoma Smelter Plume Natural Resource Damages

Note: Totals will not add due to rounding. Fiscal year balances will not equal cash balances on page 3 because cash balances are as of June 30, 2012 and do not include fiscal year closing transactions.

Asarco-Related Sites							Account Total
Tacoma Smelter Plume	Everett Smelter	Monte Cristo Mine	Van Stone Mine	Cholette Mine	Golden King Mine		
FY 2009							
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,370,740
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,642,568)
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 187,788
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,915,960
FY 2010							
\$ 94,554,730	\$ 33,888,476	\$ 6,471,758	\$ 3,530,050	\$ 353,005	\$ 470,673	\$ -	\$ 148,333,037
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,039,509)
\$ 938,957	\$ 336,552	\$ 64,537	\$ 35,202	\$ 3,520	\$ 4,694	\$ -	\$ 1,547,594
\$ 95,493,687	\$ 34,225,028	\$ 6,536,295	\$ 3,565,252	\$ 356,525	\$ 475,367	\$ -	\$ 152,757,081
FY 2011							
\$ (39,480,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (39,480,000)
\$ (1,218,236)	\$ (1,213,009)	\$ (89,521)	\$ (97,253)	\$ -	\$ (2,123)	\$ -	\$ (7,660,937)
\$ (1,029,660)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,029,660)
\$ 699,741	\$ 298,082	\$ 58,245	\$ 31,755	\$ 3,180	\$ 4,227	\$ -	\$ 1,187,255
\$ 54,465,532	\$ 33,310,101	\$ 6,505,019	\$ 3,499,754	\$ 359,706	\$ 477,470	\$ -	\$ 105,773,739
FY 2012							
\$ 5,487,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,487,000
\$ (2,293,914)	\$ (5,071,552)	\$ (264,595)	\$ (596,570)	\$ -	\$ (190)	\$ -	\$ (8,707,378)
\$ 375,069	\$ 209,853	\$ 41,551	\$ 21,982	\$ 2,331	\$ 3,094	\$ -	\$ 699,433
\$ 58,033,688	\$ 28,448,401	\$ 6,281,975	\$ 2,925,166	\$ 362,036	\$ 480,374	\$ -	\$ 103,252,794

Fund Transfers and Repayments

Fund Transfers: State Efficiency and Restructuring Account

Fiscal year 2011 \$39,480,000 transfer

In the 2010 supplemental budget, the legislature authorized the transfer of \$39.48 million from the Cleanup Settlement Account to the State Efficiency and Restructuring Account. The legislature provided a payback provision in the budget requiring the funds to be repaid over an eight year period with an interest rate that is five tenths of a percent higher than the interest rate the funds would have earned without the transfer.

2011-13 Biennium Repayment Appropriations

FY 2012 \$5,487,000

Balance Remaining after FY 2012 Payment \$34,649,787

Next Repayment FY 2013 \$5,487,000

In the 2011-13 biennial budget, the legislature appropriated \$10,974,000 from the General Fund to the Cleanup Settlement Account. This is a repayment of funds which were transferred to the State Efficiency and Restructuring Account in the 2010 supplemental budget.

Repayments: Point Ruston Sediment Capping and Shoreline Restoration

Fiscal year 2012 \$7,200,000 transfer

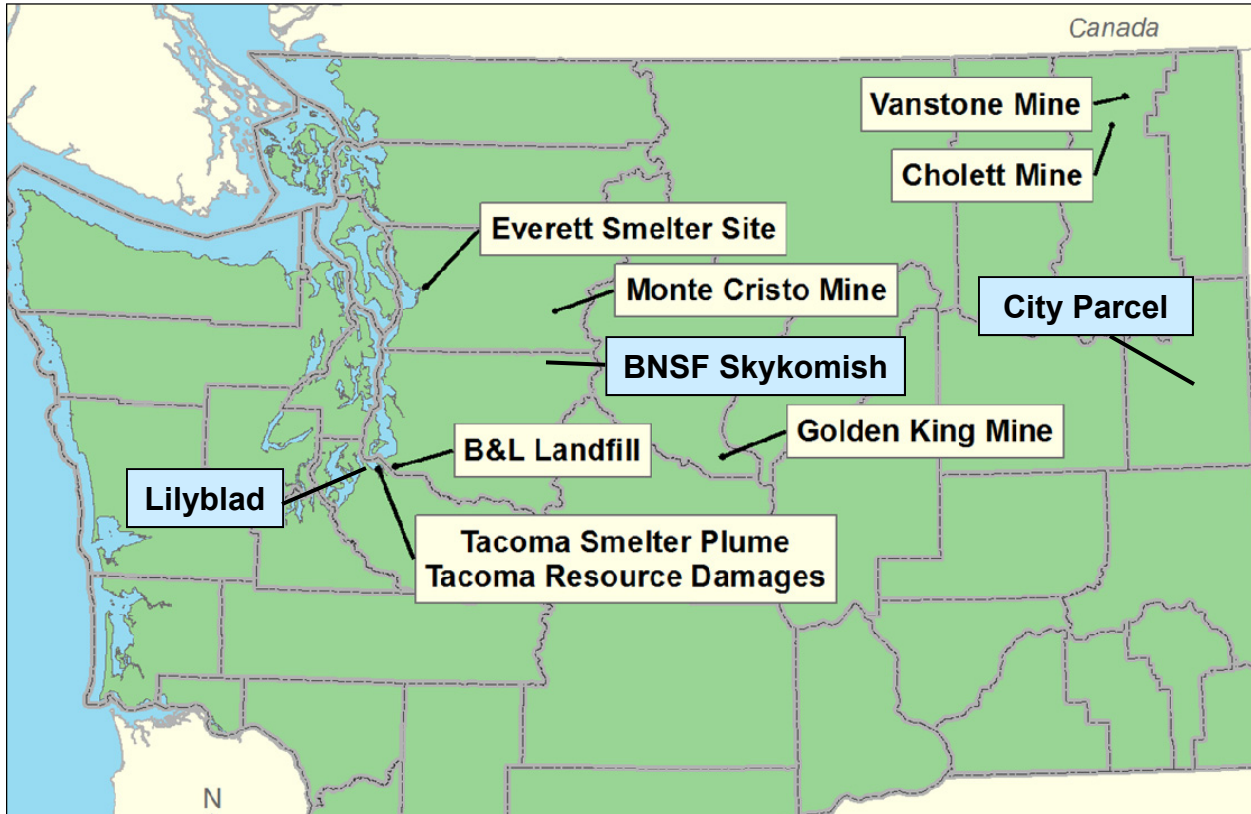
In the 2012 supplemental budget, the legislature appropriated \$7.2 million from the cleanup settlement account to the Washington Department of Natural Resources (DNR) for the Point Ruston Sediment Capping and Shoreline Restoration project. The funding is for completing sediment capping and shoreline stabilization on aquatic lands located adjacent to the Asarco cleanup site in Commencement Bay.

The funding is restricted, to be used only if DNR enters into agreements with the U.S. Environmental Protection Agency or the land owner, Point Ruston LLC, to fully relieve the state from any further liability or contributions relating to the cleanup of these aquatic lands.

This appropriation from the cleanup settlement account is a loan payable over an eight year period. Half will come from the Aquatic Lands Enhancement Account (ALEA) and half from the State Toxics Control Account (STCA). The repayment includes interest, which is five-tenths of one percent higher than what the funds would have normally earned on deposits in the state treasury.

No funds were spent in FY2012. Beginning in FY2013, Ecology will report a loan repayment schedule and interest due.

Cleanup Site Overview



- Asarco-related sites
- Other sites

Asarco Settlement

Asarco's Legacy in Washington

Contamination from smelters and mines

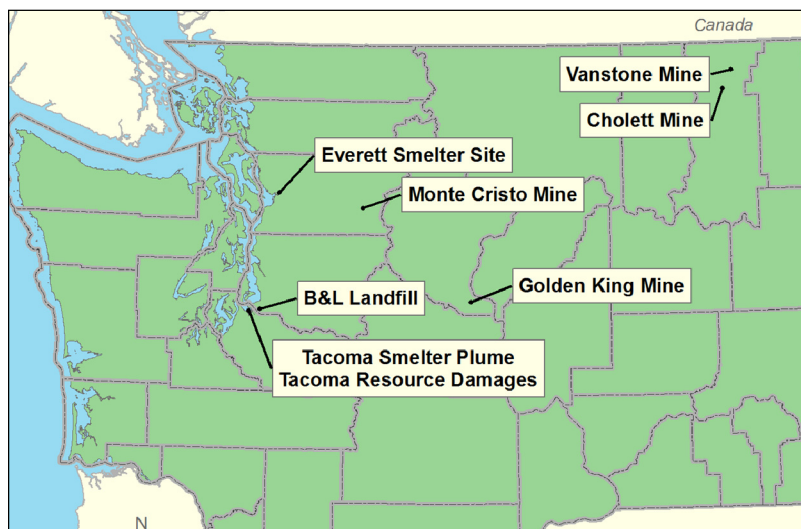
The American Smelting and Refining Company (Asarco) was founded in 1899, with refineries and smelters across the country and in Mexico. Asarco operated two smelters and four mines in Washington, leaving a legacy of contamination.

The **Everett smelter** operated from 1894 to 1912, and a neighborhood was later built over the site. In 1990, Ecology discovered high levels of arsenic and other heavy metals in soil and groundwater.

The **Tacoma smelter** operated far longer—from 1890 to 1986—and the Town of Ruston grew up around it. Air emissions from the smelter contaminated over 1,000 square miles of soils in the Puget Sound region.

The former **mines** are in remote areas of Chelan, Stevens, and Snohomish counties. Remaining mine tailings pose a threat to local ecosystems, polluting waterways and soil.

The **B&L Woodwaste Landfill** site, on the border of Fife and Milton, has arsenic contamination. Slag from the Asarco plant leached arsenic into groundwater, threatening a nearby wetland.



The 2009 Asarco Bankruptcy Settlement

Washington becomes part of the nation's largest environmental settlement in history.

In 2005, Asarco declared bankruptcy, largely due to environmental liabilities from its nearly 100 cleanup sites across the country. The State of Washington joined the federal government and other states in a suit against Asarco that spanned four years.

In November 2009, Asarco emerged from bankruptcy, having paid out the largest environmental settlement in U.S. history. The total settlement was \$1.79 billion for past and future cleanup costs, as well as interest earned over the four years. Washington's share, deposited into the Cleanup Settlement Account in December of 2009, was \$188.5 million—nearly 90 cents for every dollar claimed.

Years of planning and a vision for cleanup set the stage for a successful settlement.

A key to Washington's success was having management plans in place for both smelter sites, and a clear vision for how to address "area-wide" arsenic and lead contamination. From 2001-2003, the Area Wide Soil Contamination Task Force developed recommendations that were the basis for Ecology's management strategies. These included soil cleanup for the most highly contaminated areas, a focus on protecting children, and broad-based education and outreach—all pieces now funded by the settlement.

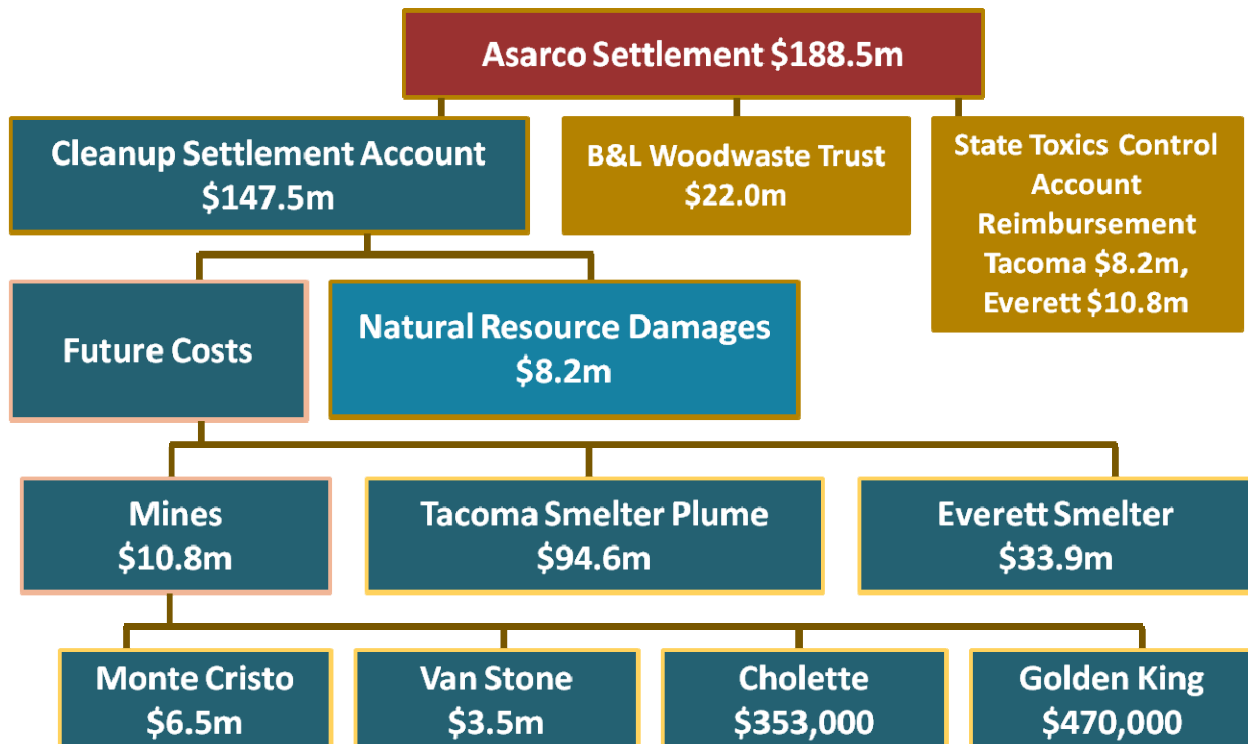
State of Washington Asarco Settlement Breakdown

Smelter cleanups comprise the largest cleanup costs.

Of the \$188.5 million received by the state, \$22 million went to a trust to pay for the B&L Woodwaste Landfill cleanup, and the remainder went to the two smelter sites and four mine sites (figure below).

Settlement funds reimbursed the State Toxics Control Account for past cleanup costs for the Everett Smelter and Tacoma Smelter Plume. It also provided \$8.2 million for natural resource damages from the Tacoma smelter.

The majority of the settlement will cover soil cleanup and outreach work for the two smelter sites. Everett cleanup costs are high due to deep, concentrated contamination close in the to former smelter property. The Tacoma Smelter Plume contamination is shallower and less concentrated, but covers a much larger area.



Everett Smelter

Everett Smelter at a Glance

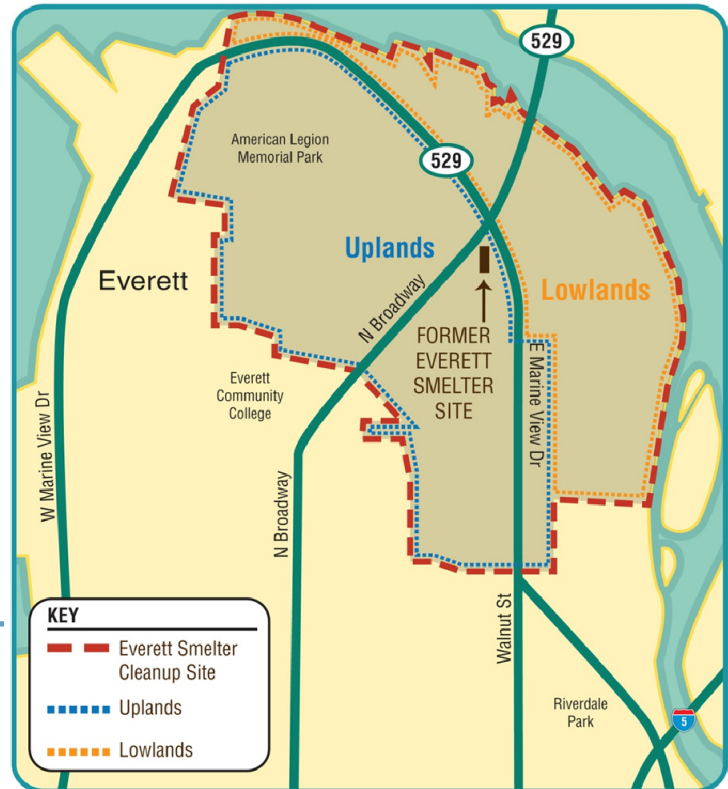
Total Settlement: \$33.9 million

County: Snohomish

Total size: 1.1 square miles

Cleanup focus: Soils and groundwater

The Everett smelter operated from 1894 to 1912 in northeast Everett. Smelter operations caused widespread arsenic and lead contamination of soil and groundwater. Particles from the smokestacks settled on surface soils over a 1.1 square mile area (map to the right).



Everett Smelter cleanup area.

Ten-Year Settlement Plan

In 2000, Ecology developed a cleanup plan for the Everett Smelter using public input. On receiving the Asarco settlement, Ecology created a ten-year plan (pie chart on facing page) based on the original cleanup plan and input from the community. The plan addresses two areas impacted by the Everett Smelter operations—the mostly residential uplands area on the west side of the site, and the mostly industrial lowlands area east of East Marine View Drive, bordering the Snohomish River.

Ecology’s plan includes:

- **Residential soil sampling and cleanup program:** This voluntary program provides free sampling and cleanup of accessible soils down to 2-3 feet. This continues cleanup work started in 1999.
- **Education and outreach:** This program serves both the general community and homeowners participating in the cleanup program.
- **Lowlands investigation:** Ecology is investigating soil, surface water and groundwater contamination in the lowlands area. Ecology will remove or contain contamination and do long-term monitoring.
- **Park cleanup program:** Ecology will work with the City of Everett to remove accessible contaminated soils from areas of city parks. This program protects children, park workers, and other park users.

Cleanup Focuses on Those Most at Risk

The Everett Smelter cleanup protects residents who are most at risk. People who live in the cleanup area are most likely to come into contact with contaminated soil while working or playing in their yards. Children are especially vulnerable. Sampling and cleanup began in areas closest to the former smelter site and will move outwards, removing soil with higher levels of contamination first to protect those most at risk.

Accomplishments Through Fiscal Year 2012

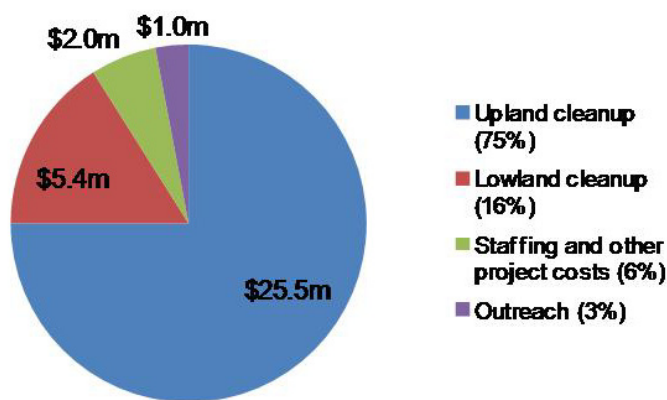
Year	Accomplishments
Year 1 (2010-11)	<ul style="list-style-type: none"> • Sampled seven acres (25 properties) for arsenic. • Expanded outreach program to reach homeowners eligible for cleanup over the next several years. • Completed a lowland data summary and data gaps report. • Hired 2.5 FTEs to manage uplands and lowlands portions of the site.
Years 2 & 3 (2011-13)	<ul style="list-style-type: none"> • Sampled 54 acres for arsenic, including homes and city parks. • Cleaned up 30 acres, including 62 homes and Everett Housing Authority's Grandview Neighborhood. • Held meetings with homeowners and public events to update the community on cleanup work.

Yard cleanups continue to reduce risks to residents in the Uplands area

In 2012, Ecology began the second year of uplands cleanups, removing soil from 20 acres. Activities included cleanup in the Everett Housing Authority's Grandview Neighborhood, which houses close to 450 people on 10 acres.

Cleanup work for 2013 will cover eight acres.

Each year, Ecology works with two groups of homeowners, one for sampling and a second for cleanup. Work will continue for several years, until levels drop below state cleanup levels or all properties in the cleanup site are cleaned up.



Ten year spending plan for the \$33.9m Everett Smelter portion of the Asarco settlement

Investigation wraps up over the next year in the Lowlands Area

Ecology continues to investigate a groundwater plume, which extends from the former smelter site east towards the Snohomish River. Recent data confirmed the plume has not yet reached the river. However, Ecology needs more data to find the location of source material. Data collection should finish in 2013. A Feasibility Study will then examine possible containment and cleanup options. Ecology will continue with efforts to protect the river and wildlife that depend on it.

Tacoma Smelter Plume

Tacoma Smelter Plume at a Glance

Total Settlement: \$94.6 million

Counties: Thurston, Pierce, King

Total size: Over 1,000 square miles

Cleanup focus: Surface soils

The Tacoma smelter operated from 1890 to 1986, on the border of north Tacoma and Ruston. Its smokestack emissions dispersed arsenic, lead, and other heavy metals across an 1,000 square mile area now called the Tacoma Smelter Plume.



Tacoma Smelter Plume (partially shown in light orange) and high estimated arsenic zone (darker orange)

Ten-Year Settlement Spending Plan

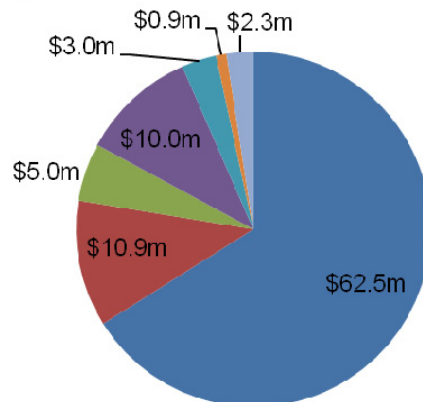
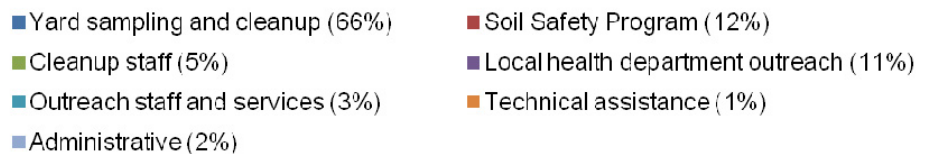
Using lessons from early cleanup work, Ecology developed a ten-year plan for the Asarco settlement (chart below). It has four main strategies:

- **Yard cleanups:** Soil sampling and cleanup for existing residential yards in areas of highest contamination (map to right).
- **Soil Safety Program:** Continue sampling and cleaning up school, childcare, park, and camp play areas.
- **Outreach and education:** Continue health department “Dirt Alert” programs in King, Pierce, and Thurston counties.
- **Technical assistance:** Work with local governments and developers to encourage voluntary cleanup during grading.

Cleanup protects those at greatest risk.

A two-pronged approach addresses both geographic areas and populations at greatest risk. Yard cleanups will begin in neighborhoods with the highest estimated arsenic levels. Meanwhile, the Soil Safety Program reduces the potential for exposure in the places where many children regularly spend time.

\$94.6m Tacoma Smelter Plume Settlement Breakdown



Accomplishments Through Fiscal Year 2012

	Accomplishments
Soil Safety Program (STCA)	<p>Sampled soils at 143 park, childcare, school, camp, and public housing play areas.</p> <p>Cleaned four parks, three childcares, and one school.</p>
Year 1 (2010-2011)	<p>Began design of the residential yard sampling and cleanup program (see text below).</p> <p>Developed a database for tracking sampling and cleanup information.</p> <p>Updated the plume map using new data and statistical modeling.</p> <p>Funded Dirt Alert outreach programs in Pierce and Thurston counties, reaching thousands of residents with messages about reducing soil exposure.</p>
Years 2-3 (2011-2013)	<p>Made over 500 technical assistance contacts with local governments, developers, and landowners.</p> <p>Provided technical assistance for Voluntary Cleanup Program sites.</p> <p>Ran TV and online ads in King and Pierce counties.</p>

*Since 2006, Ecology has used funds from the State Toxics Control Account (STCA) to clean up play areas in the Soil Safety Program. Ecology received its first settlement appropriation July 1, 2010 (Year 1). Much of the Year 1 funds carried over into the 2011-2013 biennium (Years 2-3).

Work begins on designing a residential yard cleanup program

In early 2012, Ecology began designing a program to clean up yards in the most highly contaminated areas of the Tacoma Smelter Plume. The design describes a systematic approach to soil sampling and guidelines for cleaning up and restoring properties. Work will begin with several hundred yards in the Ruston/North Tacoma Superfund area that were never cleaned up by the U.S. Environmental Protection Agency.

The settlement will likely cover cleanup costs for all yards with average arsenic over an action level of 100 parts per million (ppm). However, the state cleanup level for arsenic is 20 ppm. All residents with arsenic between 20 and 100 ppm will receive education about how to reduce exposure to contaminated soils.

Soil Safety Program begins major park cleanup work

The Asarco settlement enabled Ecology to expand the Soil Safety Program which was previously funded by the State Toxics Control Account to include play areas at parks, camps, and multi-family public housing. The program found 22 parks that needed soil cleanup and completed three of those. Ecology spent the first half of 2012 designing and preparing for the next round of 10+ cleanups.

The settlement also allows Ecology to continue free soil sampling and cleanup for new childcares. This program is important because the Department of Early Learning now requires soil sampling before a childcare can become licensed.

Maury Island Open Space Acquisition

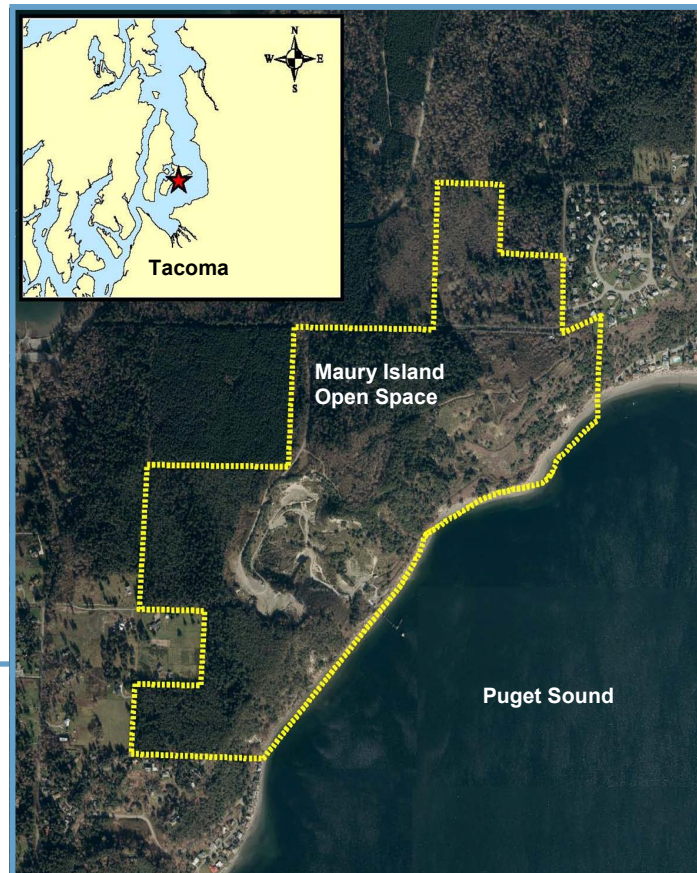
Maury Island Open Space

Funding Source: Tacoma Smelter Plume Natural Resource Damage settlement

County: King

Maury Island is in a highly-contaminated area of the Tacoma Smelter Plume (pages 14-15). Ecology has found high levels of arsenic and lead in forest soils on Vashon-Maury Island.

The Maury Island Open Space is a 250-acre site along about one mile of shoreline (see map). King County owns the site and is now planning to clean up arsenic and lead under Ecology oversight.



King County Site Acquisition

In the 2010 supplemental budget, the legislature appropriated \$15 million to assist King County in acquiring the site. The appropriation included:

- \$4.1 million from the Cleanup Settlement Account.
- \$10.9 million from the State Toxics Control Account (STCA).

This funding came from the portion of the Asarco bankruptcy settlement that provided compensation for damages to natural resources from the Tacoma Smelter Plume.

Maury Island Open Space

The 250 acres of open space includes pure madrone forests and other habitats that support endangered species in Puget Sound, such as Chinook Salmon, Orca, and Bull Trout. The site's nearly one mile of shoreline is the longest undeveloped stretch of shore in King County. When combined with the County's nearby 320 acre Maury Island Marine Park, the two properties represent the largest public holding of protected marine shoreline in Puget Sound.

Soil Cleanup

King County is cleaning up soil contamination at the site under Ecology's formal cleanup program. King County and Ecology are entering into a legal agreement that will require the county to investigate the site and develop a cleanup plan.

B&L Woodwaste (Louisiana Pacific)

B&L Woodwaste Site

Total Settlement: \$ 1.0 million

County: Pierce

Total size: 11 acres + wetlands

Cleanup focus: Groundwater

In the 1970s and '80s, the B&L Woodwaste landfill received woodwaste, soil, and slag from log sort yards in Commencement Bay. The slag—a byproduct of Asarco's Tacoma smelter—leached arsenic into soils and groundwater. This contamination poses a threat to nearby Hylebos Creek.



Cleanup Liability and Funding

Asarco, Murray Pacific, and Louisiana Pacific Corp. were among the parties found liable to the state for cleanup. When Asarco went into bankruptcy in 2005, the other two companies pursued settlements jointly with the state. A \$22 million trust is funding the majority of current cleanup work.

The Cleanup Settlement Account holds an additional \$1 million for future work. Ecology expects it will fund several years of operating the groundwater treatment system described in Phase 3 below. There were no expenditures in the 2012 fiscal year.

Cleanup Accomplishments and Remaining Work

The B&L Woodwaste cleanup has three phases:

- **Phase 1, completed 1992.** Asarco consolidated the original 18-acre site to an 11-acre landfill. It then installed a cap to minimize rainfall flushing metals and contaminated groundwater out of the landfill.
- **Phase 2, 2008—early 2013.** A slurry wall was installed around the edge of the landfill (shown in the photo above). This underground barrier minimizes the flow of contaminated groundwater from the landfill. A facility was then built to extract and treat groundwater from inside the slurry wall and from the nearby wetlands. Finally, contaminated sediments were excavated from the drainage ditches bounding the site on three sides.
- **Phase 3.** Future Plans involve Ecology operating the new groundwater treatment system using funds from the Cleanup Settlement Account. Also, a second groundwater cleanup technology will treat lower levels of arsenic in groundwater outside of the slurry wall and in the surrounding wetlands. Treatment will happen in place rather than extracting the water first.

Golden King Mine

Golden King Mine at a Glance

Total Settlement: \$ 0.5 million

County: Chelan

Total size: 13 acres

Cleanup focus: Stream water quality

The Lovitt/Golden King Mine is located near Wenatchee, on the west side of the Squillchuck Creek Drainage. There are an estimated 450,000 cubic yards of tailing deposited in a tailings impoundment in the bottom of Squillchuck Creek.



Ten-Year Settlement Spending Plan

Years	Activity
2014	Negotiate access with private land owners
2014-2016	Remedial Investigation and Feasibility Study
2016-2017	Cleanup Action Plan
2016-2021	Water quality treatment monitoring
	Institutional controls to protect human health
	Engineered controls such as capping and slope stabilization

Accomplishments Through Fiscal Year 2012

Ecology did not begin spending settlement funds on the Golden King Mine site until later in 2012.

Monte Cristo Mine

Monte Cristo Mine at a Glance

Total Settlement: \$6.5 million

County: Snohomish

Total size: Fifty-four mine entries along

Cleanup focus: Soil and surface water

In the summer of 1889, settlers discovered the site and quickly established a townsite. In 1893, the railroad was completed to transport ore to the smelter in Everett (see page 10).

Mineral production flourished for a few years until massive floods destroyed rail access in 1897. Mining became intermittent, operated by a number of smaller companies until 1920.

The site is in the Henry Jackson wilderness area and is a popular hiking destination.



Ten-Year Settlement Spending Plan

Years	Activity
2011-2016	Remedial Investigation and Feasibility Study
2012-2013	Environmental review, public outreach, and bat habitat and topographic survey
2013-2019	Construction of an access route and onsite repository
2014-2019	Removal of dangerous waste to the onsite repository
2014-2021	Repository operations and maintenance, water quality treatment
2014-2021	Water quality treatment and sediments monitoring
2016	Cleanup Action Plan (state) or Record of Decision (federal cleanup plan)

Accomplishments Through Fiscal Year 2012

In 2011, Ecology began investigating the nature and extent of contamination. The contaminants of concern were mainly metals. In 2013, Ecology will begin assessing stream water quality throughout three watersheds. Stream sampling locations have been chosen, and pre-sampling documents are currently being produced. This work will enable the U.S. Forest Service to do a “removal action” to dig up contamination and put it in an onsite repository.

Van Stone Mine

Van Stone Mine at a Glance

Total Settlement: \$ 3.5 million

County: Stevens

Total size: ~150 acres

Cleanup focus:

Soil, sediment, surface water

The Van Stone Mine was the state's largest open-pit mine. It operated from 1951 to 1994 under several owners, including Asarco. Around 270,000 tons of ore were extracted from 1.3 million tons of rock. The Upper Tailings Pile has breached twice, with the most recent event occurring in 2012.



Ten-Year Settlement Spending Plan

Years	Activity
2011-2013	Remedial Investigation and Feasibility Study for soils, sediments, wastes, groundwater, and surface water.
2012	Emergency cleanup action on the Upper Tailings Pile erosion area.
2013	Engineering design for cleanup and cover systems at the upper and lower tailings piles and other areas identified during the investigation.
2013	Cleanup and building the cover systems.
2014	Remaining cleanup work at the upper and lower tailings piles and Onion Creek drainage. Cleanup work in and around the waste rock piles.
2016	Start of operations and maintenance for the cover systems.

Accomplishments Through Fiscal Year 2012

The settlement funded sampling work for the Remedial Investigation. Ecology will use data from this study to do a feasibility study, select a remedy, and plan for cleanup.

Cholette Mine

Cholette at a Glance

Total Settlement: \$ 0.3 million

County: Stevens

Total size: N/A

Cleanup focus: None

In 1951, Asarco conducted mineral exploration work on the Cholette property. Asarco did trenching and core drilling on a possible zinc mineral deposit. The work confirmed the presence of zinc under thick soil, but it was not of commercial grade or quantity.



Ecology Use of the Settlement Funds

In 2009, Ecology did a field examination of the site. There was no sign that the site was further developed for minerals other than the six exploration trenches described in a 1955 report. Ecology did not find any shafts, adits, dumps, mill or tailings. No surface or ground water problems were observed.

Ecology is planning to transfer these funds to the Van Stone Mine cleanup (previous page), where costs are expected to exceed the settlement funds received for that site.

BNSF Skykomish Natural Resource Damage Settlement

BNSF at a Glance

Total Settlement: \$ 5.05 million

County: King

Total area: Town of Skykomish

Cleanup focus: Soil, groundwater

Great Northern Railway, later Burlington Northern Santa Fe (BNSF) Railway, ran a fueling and maintenance facility in Skykomish. As far back as the 1920s, activities at the site released petroleum and heavy metals into the environment.



BNSF and Ecology have nearly completed site cleanup.

Since the 1990s, BNSF Railway has spent around \$100 million cleaning up the town of Skykomish and the surrounding environment. The cleanup strategy included oil removal, soil cleanup, and water treatment. BNSF moved 21 structures, including the Skykomish Hotel in the photo above. Cleanup removed 350,000 tons of contaminated soil and 218,000 gallons of oil.

The Cleanup Settlement Account received \$5.05 million in natural resource damages for restoration work.

In addition to posing a risk to human health, contamination often damages natural resources. Natural resources include fish, wildlife habitat, water quality, and much more. The settlement, combined with \$450,000 in direct expenditures by BNSF, covers the following work:

- **\$2.5 million for aquatic habitat restoration.** Work with natural resource trustees to restore and protect habitat in the Skykomish and Snohomish watersheds.
- **\$1.5 million for water quality protection.** Construct and operate a wastewater treatment system to improve the town's sanitary sewer system and protect water quality.
- **\$1.5 million for recreational and terrestrial restoration.** Enhance, restore, and protect terrestrial and waterfowl habitat in and around the town. Compensate for lost recreational use.

Accomplishments Through Fiscal Year 2012

Nearly \$4 million of the settlement have been spent. In 2010, BNSF completed the wastewater treatment system and cleaned up Maloney Creek. BNSF also did cleanup and restoration of some wetlands, using additional funds outside of the settlement.

Lilyblad Petroleum Insurance Settlement

Lilyblad at a Glance

Total Settlement: \$ 800,000

County: Pierce

Total area: Two acres

Cleanup focus: Soil, groundwater

In 1972, Lilyblad Petroleum, Inc. opened a business at 2244 Port of Tacoma Road. From 1978 to 1988, it ran a spent solvent and dangerous waste recycling operation at the site.

Since then, Lilyblad has dissolved and Pacific Functional Fluids now operates the facility. Soil and groundwater at the site are contaminated with petroleum and chlorinated solvents.



The Cleanup Settlement Account received an \$800,000 insurance settlement for cleanup work.

In 2009, Old Republic Insurance Company paid \$800,000 on an excess liability policy held by Lilyblad Petroleum. This funding paid for cleanup work over the past three years. From 2007 up until that time, Ecology paid for the cleanup using the State Toxics Control Account because Lilyblad had failed to comply with a 2007 enforcement order.

Accomplishments Through Fiscal Year 2012

- **July 2008—October 2009:** Well drilling, and installing and starting up a system to pump and treat contaminated groundwater.
- **November 2009—June 2010:** Pump and treat system shut down due to lacking of funding.
- **July 2010—June 2011:** Maintenance and repairs to restart the system. System removed 6,800 lbs of diesel range petroleum as of September 2011.
- **July 2011—June 2012:** Treatment and groundwater and soil monitoring continue.

City Parcel

City Parcel at a Glance

Total Settlement: \$ 0.3 million

Counties: Spokane

**Total size: 31,000 sq. ft.
(0.7 acres)**

Cleanup focus: Soils

City Parcel is located at 708 North Cook Street in Spokane. From 1961 to 1979, Spokane Transformer, Inc. ran an electrical transformer repair and recycling business at the site.



Past business practices released polychlorinated biphenyls (PCBs) into structures and underlying soils. In 2007, Ecology reached a settlement agreement with the Potentially Liable Parties (PLPs). The PLPs paid a small portion of the cleanup costs and Ecology led the cleanup work.

Accomplishments Through Fiscal Year 2012

This project is complete. Cleanup occurred in two phases, conducted between June and August of 2009.

Phase one included:

- Removal and disposal of asbestos-containing materials.
- Demolition of the former City Parcel Building.
- Disposal of PCB-contaminated building materials at a Subtitle D facility.

Phase two included:

- Removal of the concrete building floor and foundation.
- Excavation and removal of dry wells, floor drains, and underground storage tanks.
- Excavation of PCB-contaminated soils (photo above).
- Disposal of excavated soils and materials at a Subtitle-D facility.
- Backfilling with clean, imported soil.

In total, Ecology removed around 1,050 tons of PCB-contaminated materials and 7,182 tons of PCB-contaminated soils.

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Cleanup Site Information

Cleanup site search page: <https://fortress.wa.gov/ecy/gsp/SiteSearchPage.aspx>

Everett Smelter website: http://www.ecy.wa.gov/programs/tcp/sites_brochure/asarco/es_main.html

Tacoma Smelter Plume website: <http://www.ecy.wa.gov/toxics/tacoma-smelter.html>

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