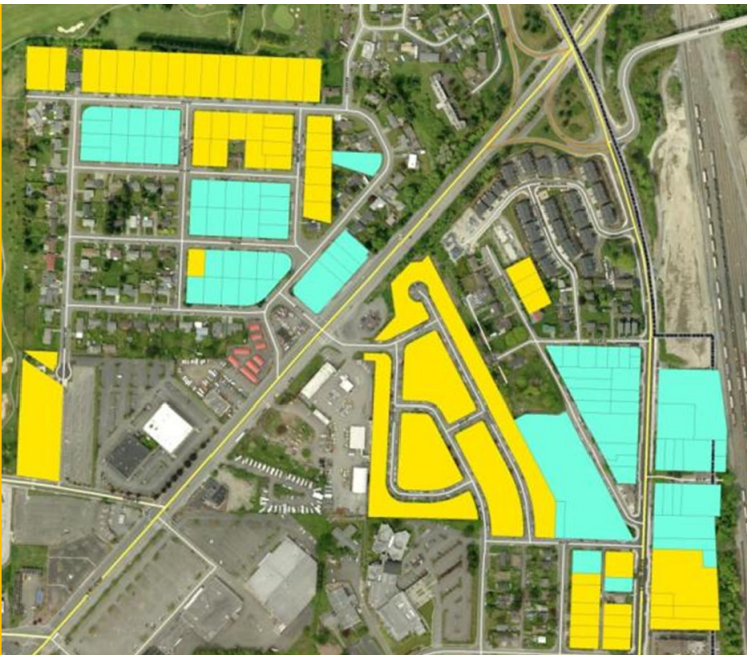
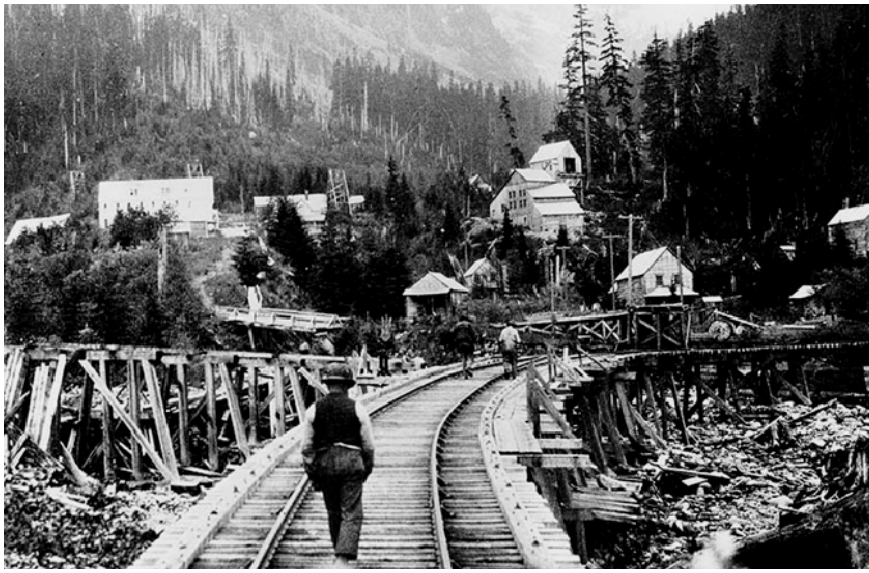
Cleanup Settlement Account

Fiscal Year 2013 Annual Report





DEPARTMENT OF
ECOLOGY
State of Washington

Ecology Publication No. 14-09-083

Table of Contents

Washington State Department of Ecology's Mission

The mission of the Department of Ecology is to protect, preserve, and enhance Washington's environment. 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 2013 fiscal year, using funds from the Cleanup Settlement Account. This is the second annual report for this account. It covers the financial activity from July 1, 2012 through June 30, 2013, and background on each cleanup project.

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

- B&L Woodwaste (Tacoma), Louisiana Pacific trust
- BNSF Skykomish
- 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

Cleanup Settlement Account focuses on key projects

I am pleased to once again provide the Washington Legislature with a report on how the Washington Department of Ecology uses the Cleanup Settlement Account to benefit and protect the state's environment and people.

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.

The Legislature created the Cleanup Settlement Account 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.

Ecology, in conjunction with the Attorney General's Office, can now agree to settlements 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.

In the following pages, you will find examples of how Ecology is putting such settlements and funds to use. Several of these key cleanup projects are in process.

One such example is the Asarco bankruptcy court settlement. We are fully engaged in cleanup work within the areas encompassed by the Tacoma and Everett smelter plumes. We are cleaning up yards in residential neighborhoods and at child-care facilities and soil in parks; sampling other properties for potential cleanup; and educating people about potential impacts.

This is possible because the Legislature recognized a problem and created the Cleanup Settlement Account. We are pleased to use this valuable tool as we all work together for a healthier environment, an enhanced quality of life for our communities, 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. The display on page 3 is 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**

* Sites not covered in the report because no further cleanup work is needed.

Cleanup Settlement Account Cash Balance

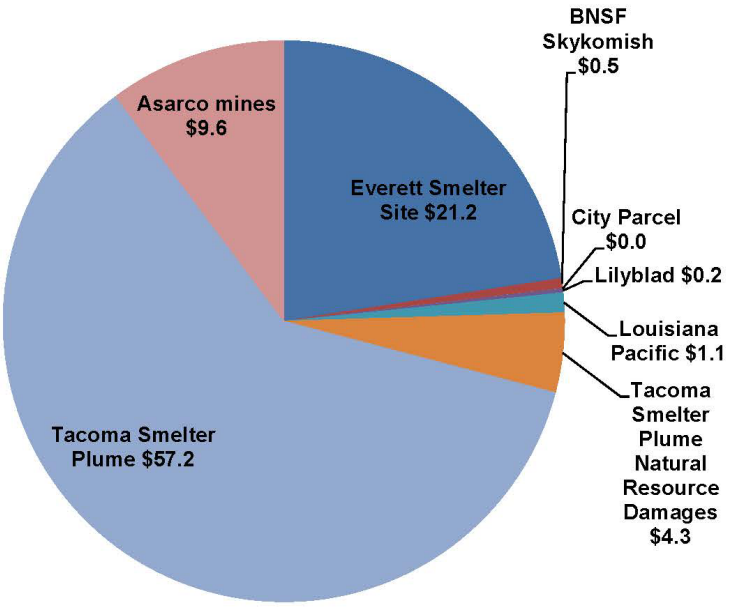
As of June 30, 2013

Cleanup Site	Cash Balance
BNSF Skykomish	$ 543,888
City Parcel (Spokane)	$ 8,157
Louisiana Pacific (B&L Woodwaste site, Milton)	$ 1,071,494
Lilyblad (Tacoma)	$ 220,845
Tacoma Smelter Plume Natural Resource Damages	$ 4,318,546
Tacoma Smelter Plume	$ 57,158,852
Everett Smelter Site	$ 21,244,279
Monte Cristo Mine	$ 6,187,971
Van Stone Mine	$ 2,590,931
Cholette Mine	$ 362,969
Golden King Mine	$ 476,688
Cash Balance June 30, 2013	**$ 94,184,620**

Loans Payable	
State Efficiency and Restructuring Account Loan	**$ 29,387,540**
Total Point Ruston Sediment Capping and Shoreline Restoration Loan *	**$ 3,120,514**
Aquatic Lands Enhancement Account	$ 1,560,257
State Toxics Control Account	$ 1,560,257

* Total loan is $7.2 million. The amount on this table reflects a portion of the loan repayment because the entire loan amount had not been spent (borrowed) by the Department of Natural Resources as of June 30, 2013.

Cleanup Settlement Account Cash (millions) As of June 30, 2013



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

FY 2013 $5,487,000

Balance Remaining as of June 30, 2013 $29,387,540

Next Repayment FY 2014 $4,981,000

In the 2013-15 biennial budget, the Legislature appropriated $9,962,000 from the General Fund-State to the Cleanup Settlement Account.

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.

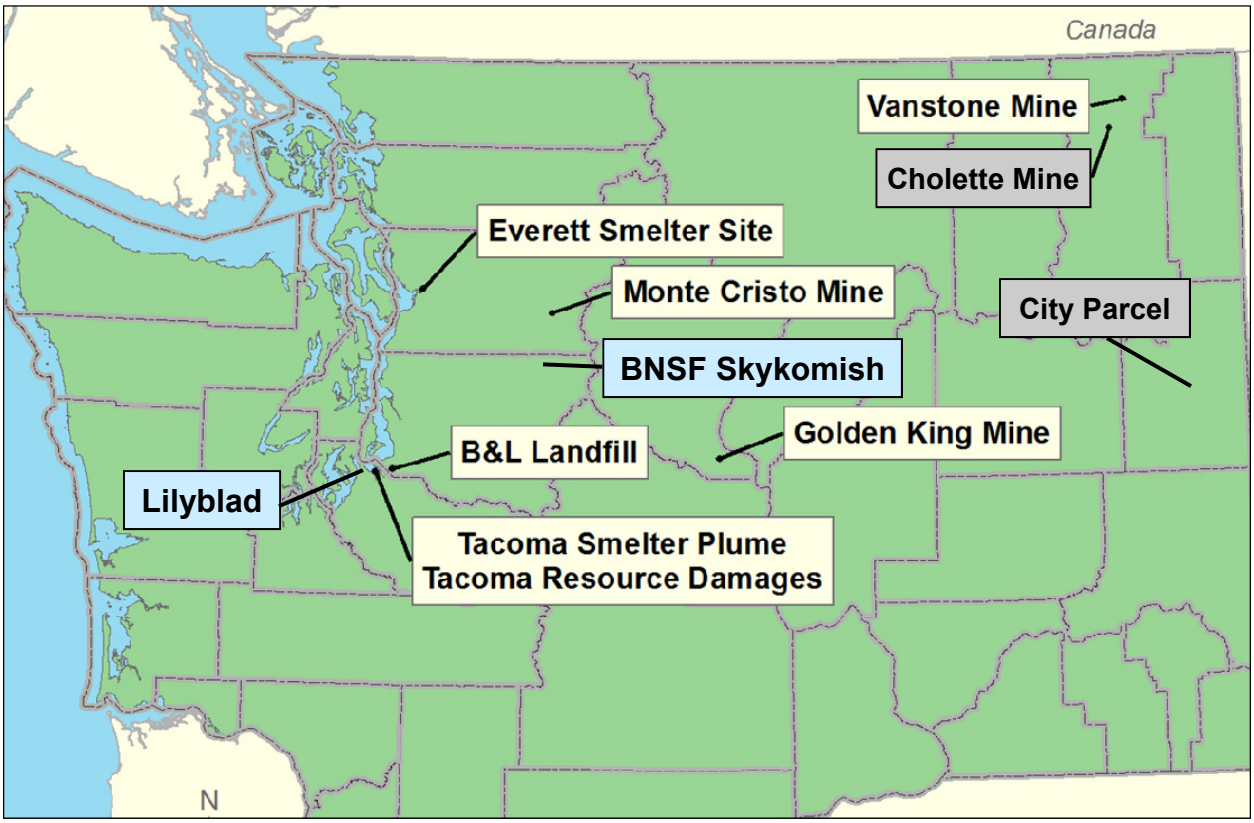
The funding is restricted, to be used only if DNR enters into agreements with the U.S. Environmental Protection Agency or the land owner, Point Ruston LLC, to fully relieve the state from any further liability or contributions relating to the cleanup of these aquatic lands.

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 is five-tenths of one percent higher than what the funds would have normally earned on deposits in the state treasury.

2011-13 Biennium Repayment Appropriations

There were no repayments appropriated for 2011-13. DNR began making expenditures and the loan repayment as of June 30, 2013 was $3.1 million.

Cleanup Site Overview



Asarco-related sites

Other sites

No further cleanup

Asarco Settlement

Asarco's Legacy in Washington

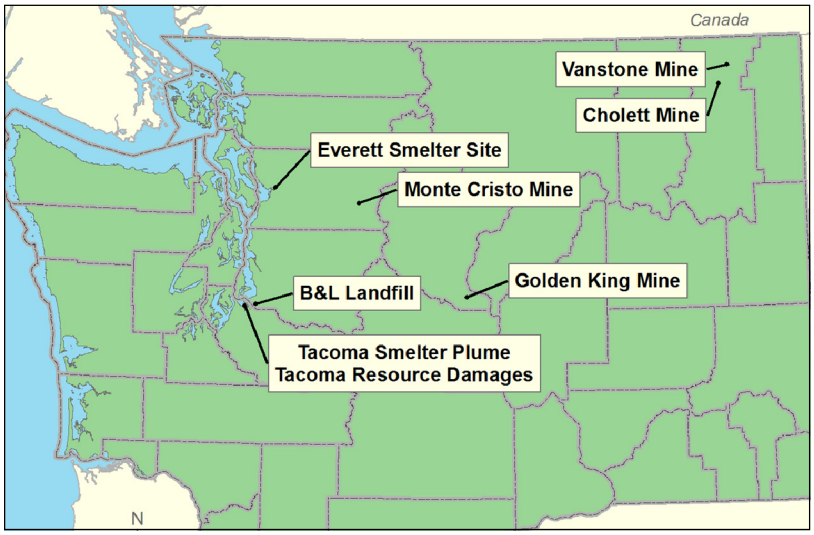
Contamination from smelters and mines

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 a $1.79 billion settlement. The settlement covered 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.

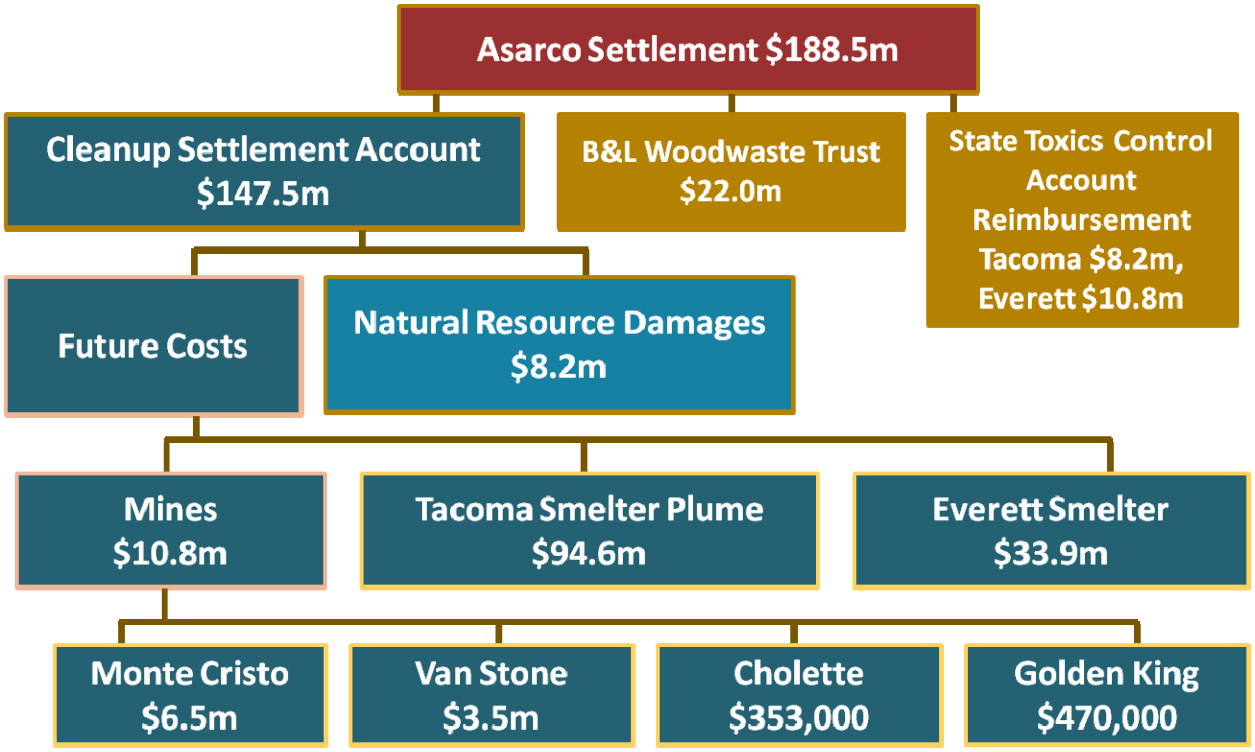
State of Washington Asarco Settlement Breakdown

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 Wood-waste 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 to the 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

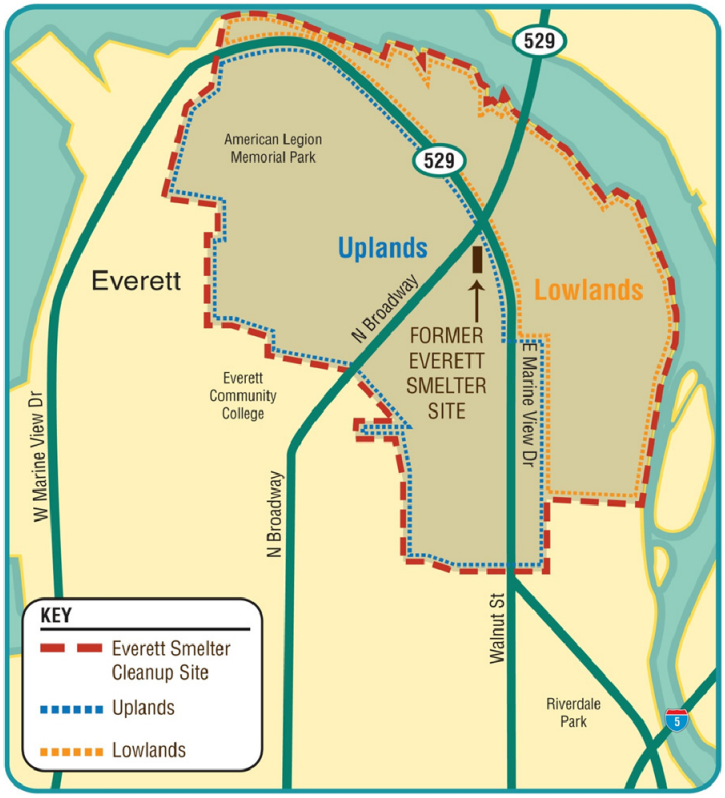
Total Settlement: $33.9 million

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 page 9) 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.
- **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 2013

Yard cleanups started in FY 2012 continue

In FY 2013, Ecology finished removing contaminated soil from 20 acres. The cleanup area included private properties and the Everett Housing Authority's Grandview Neighborhood, which houses close to 450 people on 10 acres.

Over 200 of the residents are children that will now be protected from contaminated soil in their play areas and yards.

Cleanup in Everett's Grandview Neighborhood

Cleanup planning for 2014

Planning also began for fall 2013 yard cleanups and 2014 park cleanups. Fall 2013 cleanups covered six acres. Ecology is planning to American Legion Memorial and Wiggums Hollow Parks.

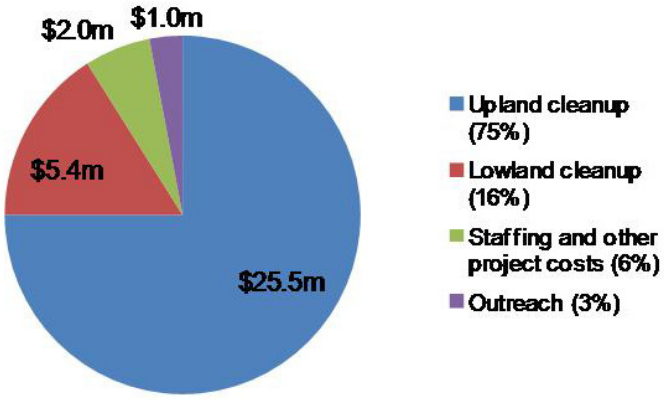
Homes are grouped for soil sampling and cleanup

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

Investigation to continue in the Lowlands Area

Ecology is continuing a supplemental investigation of contamination in the Lowlands area (map on page 8) through FY 2014. A groundwater contamination plume stretches from the former smelter site east towards the Snohomish River. Data show the plume has not reached the river.

Soil, groundwater, seep and surface water sampling continued this year. Ecology expects to complete sampling and data analysis around then end of 2013. Ecology will then begin work on a Feasibility Study, which will examine options for addressing the groundwater arsenic plume and other contamination found in the Lowlands area. Ecology will continue with efforts to protect the river and wildlife that depend on it.



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

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.

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).

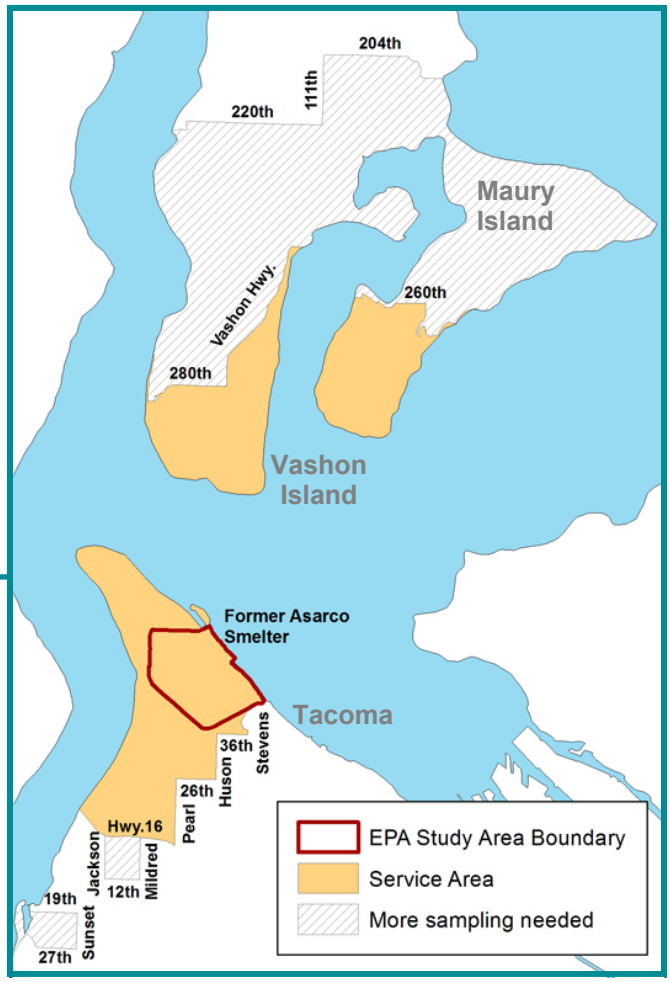
Soil Safety Program: Continue sampling and cleaning up school, childcare, park, and camp play areas.

Outreach and education: Continue "Dirt Alert" programs at health departments in King, Pierce, and Thurston counties.

Technical assistance: Work with local governments and developers to encourage voluntary cleanup during grading.

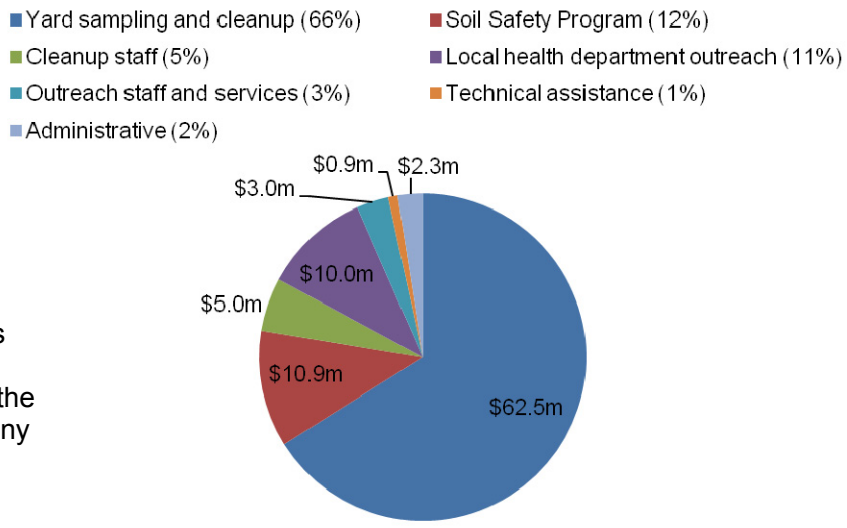
Cleanup protects those at greatest risk.

Ecology's cleanup programs address both geographic areas and populations at greatest risk. Yard cleanups will start 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.



Residential Yard Sampling and Cleanup Program

$94.6m Tacoma Smelter Plume Settlement Breakdown



Accomplishments in Fiscal Year 2013

Residential Yard Sampling and Cleanup Program underway

In March of 2013, Ecology released the draft design for a program to clean up yards in the most highly contaminated areas of the Tacoma Smelter Plume. The program provides free soil sampling for around 4,700 homes in the service area shown on page 12. Ecology expects around 1,200 homes will qualify for cleanup—soil removal and replacement.

Ecology is offering cleanup for yards with average arsenic over a threshold of 90 parts per million (ppm). However, the state cleanup level for arsenic is 20 ppm. All residents with arsenic between 20 and 90 ppm will receive outreach and education. Work on a pilot group of eight homes finished in the fall of 2013.

Cleanup planning underway for 58 yards in north Tacoma

Cleanup work is starting in the Ruston/North Tacoma Superfund area. Over the past 20 years, the U.S. Environmental Protection Agency cleaned up nearly 2,500 yards. Ecology is now cleaning up 700 yards with arsenic remaining over the 90 ppm cleanup threshold. Ecology is working with 58 homeowners to plan for summer 2014 cleanup work.

Soil Safety Program completes five park cleanups

Sampling completed in 2011 identified 22 parks needing soil cleanup. Ecology has completed 11 of those.

In the fall of 2012, cleanup finished at five parks in Burien, SeaTac, Federal Way, and on Vashon Island. Ecology also worked on three other parks, completed in the fall of 2013.

Ecology continues to offer soil sampling and cleanup for new childcares. Department of Early Learning requires soil sampling before a childcare can become licensed.

Cleanup involves soil removal, replacement, and re-landscaping

New outreach programs begin in King County

In 2012, Public Health—Seattle & King County (PHSKC) began rebuilding its Dirt Alert outreach program after a two-year break. In the spring of 2013, PHSKC hired a new educator and began reaching out to communities through mailings, events, and advertising. Target areas in King County are Federal Way, Des Moines, Burien, Normandy Park, and Vashon Island.

Dirt Alert reaches 30,000 families with soil safety messages

Local health departments in Pierce and Thurston counties also have Dirt Alert programs. The program goals are to raise awareness and promote behaviors like hand washing and taking off shoes at the door, which can reduce soil exposure. During FY 2013, across the three programs, outreach staff tested soils at 400 homes, talked to 3,000 people at events, and reached 28,000 families through mailings.

Maury Island Open Space Acquisition

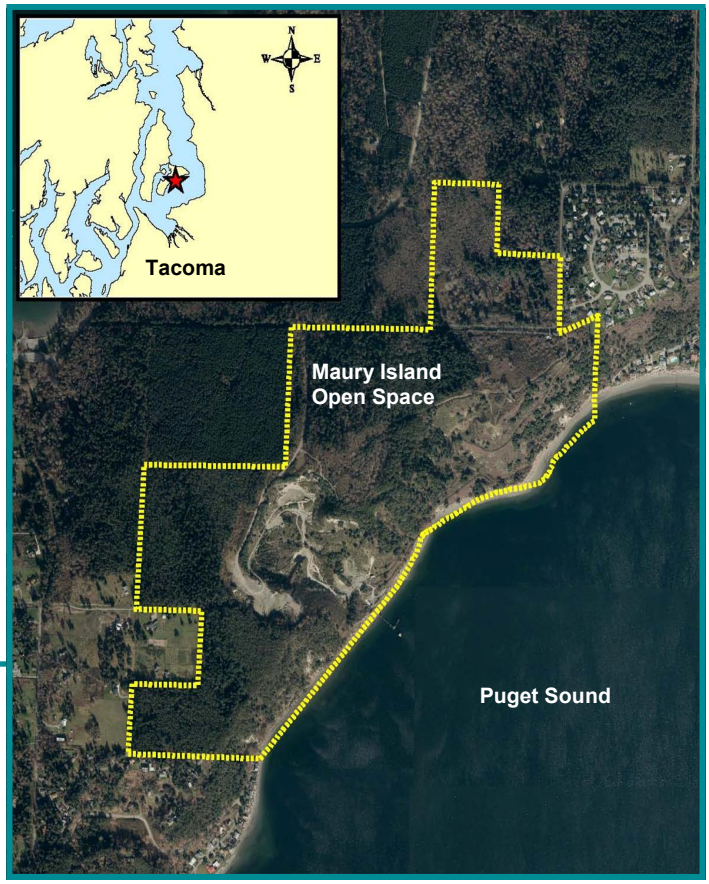
Maury Island Open Space

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 10-11). 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 (Maury Island Site Natural Area)

King County calls this site the Maury Island Site Natural Area. 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.

Fiscal Year 2013 Cleanup Progress

King County is addressing soil contamination at the site under Ecology's formal cleanup program. In FY 2013, King County and Ecology entered into a legal agreement that requires the county to investigate the site and develop a cleanup plan. King County sampled soils throughout the site and prepared a draft Remedial Investigation report. Some data gap investigations are continuing.

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. The majority of Murray Pacific's $22 million settlement is held in a trust that 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 2013 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, 2013+.** The new groundwater treatment system will continue to operate using funds from the trust. A second groundwater cleanup technology will treat lower levels of arsenic in groundwater outside of the slurry wall and in the surrounding wetlands. This secondary 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

Monte Cristo Mine

Monte Cristo Mining Area at a Glance

Total Settlement: $6.5 million

County: Snohomish

Total size: Fifty-four mines and one mill

Cleanup focus: Soil, surface water, and sediment

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 in Fiscal Year 2013

In 2012, Ecology collected data needed to determine the impact of elevated metals on plants and animals. Ecology also started monitoring water and sediment quality to evaluate the potential impact on aquatic organisms from historical mining and mill operations. The monitoring will help establish baseline conditions for evaluating effectiveness of planned and potential remedial actions. The U.S. Forest Service began construction of the access route for cleanup work starting in 2014.

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.
2014	Engineering design for cleanup and cover systems at the upper and lower tailings piles and other areas identified during the investigation.
2014	Cleanup and building the cover systems.
2015	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 2013

The settlement funded sampling work for the Remedial Investigation, which will be finalized in 2013. Ecology is using data from this study to do a feasibility study, select a remedy, and plan for cleanup.

Ecology plans to transfer the $0.3m from the Cholette mine to Van Stone mine's cleanup. A 2009 survey found that the Cholette mine site was never developed and therefore did not need cleanup.

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 four 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 2013

- **July 2008—October 2009:** Well drilling (photo above), 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.

  July 2012 – June 2013: Reduced pump and treat system by around 50% by only operating the wells on the northern part of the Lilyblad property. These wells continue pumping to maintain hydraulic control and prevent migration of contaminated groundwater toward the Blair Waterway.

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 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, sometimes requiring moving structures.

As of the end of 2013, cleanup will have removed around 360,000 tons of contaminated soil and 225,000 gallons of oil. Most recently, in the summer of 2013, the Skykomish Schoolyard underwent cleanup. Ecology is working with BNSF and the school to schedule cleanup of the property beneath the school building in 2014.

Natural resource damage restoration work continues.

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 BNSF 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 2013

Nearly $5 million of the settlement has 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.

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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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