

DEPARTMENT OF  
**ECOLOGY**  
State of Washington

**House Bill 1761**  
**Model Toxics Control Accounts**  
**Ten-Year Financing Plan**  
**2010 Report**

---

*Clean Up, Manage, and Prevent Toxic Threats*

June 2011  
Publication No. 11-09-045

# Publication and Contact Information

This report is available on the Department of Ecology's Web site at:

[www.ecy.wa.gov/biblio/1109045.html](http://www.ecy.wa.gov/biblio/1109045.html)

For more information contact:

Toxics Cleanup Program  
Financial Services  
P.O. Box 47600  
Olympia, WA 98504-7600

Phone: (360) 407-7170

Washington State Department of Ecology – [www.ecy.wa.gov](http://www.ecy.wa.gov)

- Headquarters, Lacey (360) 407-6000
- Northwest Regional Office, Bellevue (425) 649-7000
- Southwest Regional Office, Lacey (360) 407-6300
- Central Regional Office, Yakima (509) 575-2490
- Eastern Regional Office, Spokane (509) 329-3400

*If you need this publication in an alternate format, call Toxics Cleanup Program Receptionist at (360) 407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.*

**House Bill 1761**  
**Model Toxics Control Accounts**  
**Ten-Year Financing Plan**  
**2010 Report**

---

*Clean Up, Manage, and Prevent Toxic Threats*

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

June 2011  
Publication No. 11-09-045

*This page intentionally blank.*

## Table of Contents

List of Figures .....	ii
About This Report.....	1
Summary of House Bill 1761 .....	2
Assumptions.....	3
Background .....	4
Summary Ten-Year Financing Plan for STCA and LTCA .....	5
Revenue/Working Capital Reserves.....	5
Remedial Action Grants .....	6
State and Local Toxics Control Accounts Summaries .....	7
Stakeholder Involvement and Coordination .....	10
Local Government Input.....	10
State Agencies Receiving MTCA Funding .....	10
Project Lists and Financing Plans .....	11
Cleanup – Project Lists and Financing Plans.....	13
Background .....	13
Emerging Issues .....	13
Remedial Action Grant Program .....	17
Background.....	17
Findings .....	17
Conclusions .....	18
Clean Sites Initiative Program .....	25
Background.....	25
Findings .....	25
Conclusions .....	26
Safe Soils Program.....	29
Background.....	29
Findings .....	29
Conclusions .....	30
Puget Sound Cleanups .....	33
Background.....	33
Findings .....	33
Conclusions .....	33
Toxic Treatment, Storage, and Disposal (TSD) Cleanup Program .....	39
Prevention – Ten-Year Financing Plans .....	41
Ten-Year Financing Plan and the Beyond Waste Plan.....	42
Prevent Hazardous Waste and Reduce Toxics Use.....	43
Beyond Waste and Funding Priorities .....	44
Toxic Diesel and Wood Smoke Emission Reduction.....	45
Waste Management Ten-Year Financing Plans.....	49
Manage Solid Waste .....	49
Expand Compliance and Local Source Control Specialists.....	50
Appendix A: House Bill 1761 – in its entirety .....	51

# List of Figures

	<b><u>Page</u></b>
Figure 1: Hazardous Substance Tax Revenue	5
Figure 2: Remedial Action Grant New Appropriations	6
Figure 3: Remedial Action Grant Applications and Expenditures	7
Figure 4: State Toxics Control Account Ten-Year Financing Plan	7
Figure 5: Local Toxics Control Account Ten-Year Financing Plan	9
Figure 6: Ten-Year Remedial Action Grant Needs List	19
Figure 7: Ten-Year Clean Sites Initiatives Projects	27
Figure 8: Safe Soils Projects	30
Figure 9: Puget Sound Cleanup and Restoration Projects	35
Figure 10: Ranked List of TSD Projects	40
Figure 11: Prevention: Future Needs Beyond 2011-2013 Budget	44

# **About This Report**

This is the second report prepared under the requirements of House Bill 1761. The report includes a summary of House Bill 1761 (a full copy of the bill is included in the appendix), a summary of the assumptions that guided the development of the report, background information on the Model Toxic Control Act (MTCA), and a high-level summary of the ten-year financing plan for the State Toxic Control Account (STCA) and the Local Toxic Control Account (LTCA). The data and information in this report were collected and analyzed in late 2010. Consequently, it represents the needs and financial plans as they were at that time. The budget and revenue information reflects the 2011-13 Biennial Budget and the June 2011 Department of Revenue forecasts.

The report is divided into three sections: (1) Cleanup, (2) Prevention, and (3) Waste Management. More specific information for major activities within each section is summarized, including: ten-year needs assessments, findings, conclusions, and financing plans. In addition to this report, Ecology is required to develop an annual MTCA report that provides detailed fiscal year information about the LTCA and STCA fund sources. Specifically, this annual report provides a review of accomplishments by state agencies and programs that rely on MTCA funding. It includes a summary of how much revenue was generated, which agencies received funding and for what purposes, and what results were obtained. The Model Toxics Control Account Annual Report is available at the following address on the Ecology Web site

([www.ecy.wa.gov](http://www.ecy.wa.gov)):

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

# Summary of House Bill 1761

In the 2007 session, the Legislature passed Substitute House Bill 1761 directing the Department of Ecology to prioritize MTCA funding to clean up hazardous waste sites and prevent the creation of future hazards due to improper disposal of toxic wastes. The law requires Ecology to submit, by December 20 in even-numbered years, a comprehensive ten-year MTCA financing report to the Legislature in coordination with local governments that have cleanup responsibilities. This report is designed to provide more planning certainty for the state, local jurisdictions, and ports regarding future hazardous waste cleanup, and toxics release and waste prevention needs.

The report includes:

- Identification of long-term hazardous waste cleanup needs for local governments and projections of future costs for programs and activities funded under the LTCA.
- Identification of the projected remedial action needs for orphaned, abandoned, and other cleanup sites eligible for funding from the STCA.
- Identification of projected solid and hazardous waste planning, prevention, reduction and recycling, and solid waste facility compliance and enforcement needs eligible for funding from LTCA and STCA.
- Long-term projections of the remedial action need, cost, revenue, and capital reserve estimates for both the LTCA and the STCA.
- Ranked lists of remedial action projects under both accounts.



# Assumptions

The following summary of Key Assumptions guided the development of the ten-year financing report to the Legislature:

- Current law and current rule provide the basis for programs, initiatives, activities, financial information, and project lists included in this report. Current law and current rule are defined as included in statute Revised Code of Washington (RCW), Washington Administrative Code (WAC), Ecology program's plans, and proposed budget.
- This second MTCA ten-year financial planning effort and report to the Legislature focuses on core hazardous waste cleanup, prevention, and waste management activities, based on the intent of SHB 1761.
- The Governor's Priority of Government budget activities provide a uniform, generally accepted way of summarizing MTCA programs and initiatives. Ecology's biennial budget is developed in this framework, and it provides important focus for the MTCA ten-year financial plan and report to the Legislature.
- This report to the Legislature contains cleanup cost estimates for known contaminated sites in Washington State. It also includes an estimate for the number of contaminated sites that may be orphaned and/or abandoned and the eventual need for public funding for cleanup. Cost estimates were developed using current site information and will change as more information becomes available as further investigations are conducted.
- Cost estimates for most programs or beyond the 2011-2013 budget for operating expense activities, were inflated using project cost escalation factors from the Remedial Action Cost Engineering and Requirement (RACER) software program. RACER provides cost to complete estimates for all phases of cleanup. RACER is used by the U.S. Environmental Protection Agency, Department of Defense, Department of Energy, other state environmental agencies and private environmental consultants to develop long term cleanup cost estimates.
- Ten-year Hazardous Substance Tax revenue forecasts and distributions to State and Local Toxics Accounts were prepared by the Department of Revenue and are included in the financial information summaries. Other ten-year State Toxics Control Account revenue estimates (Voluntary Cleanup, Cost Recovery, and Miscellaneous Revenues) were prepared by Ecology staff.
- Ten-year LTCA cost estimates for contaminated site cleanup work was prepared by Ecology staff in conjunction with local governments or a contractor.

# Background

The Model Toxics Control Act, or MTCA, (RCW 70.105D) was established through a citizen initiative (Initiative 97) in November 1988. The law funds hazardous waste cleanup and prevention activities through a tax on the wholesale value of hazardous substances. This tax (the Hazardous Substances Tax, or HST) is imposed on petroleum products, pesticides, and certain chemicals at a rate of \$7 per \$1,000 of wholesale value.

Revenues from the HST are deposited in the State Toxics Control Account (STCA) and the Local Toxics Control Account (LTCA). The STCA is used to support toxic waste cleanup; hazardous waste planning; hazardous waste prevention; solid waste planning; waste management and technical assistance; and other programs at Ecology and other state agencies. The LTCA is used primarily to support local efforts to clean up hazardous waste sites, plan for solid and hazardous waste management, prevent contamination, and reduce and recycle solid and hazardous wastes.

For the purposes of this report, MTCA funds are broken down into three main categories of use as follows:

- **Cleanup activities** remove or immobilize hazardous substances at contaminated sites, keep hazardous substances out, and provide opportunities for habitat restoration, economic development, and public recreation.
- **Waste management activities** focus on making sure toxic chemicals and hazardous wastes are safely stored, treated, recycled, or disposed properly.
- **Pollution prevention activities** focus on changes to process, practice, materials, and energy to minimize or eliminate the creation of hazardous waste or use of toxic chemicals.

Washington State has made a lot of progress in the past 25 years when it comes to cleaning up, handling, reducing, and recycling toxic chemicals. Thousands of cleanups have been completed or are underway, most hazardous wastes from industry are managed well, and the volume of hazardous waste has dropped considerably. In 2005, Ecology reached a 1990 legislative goal of reducing hazardous waste in the state by 50 percent. The state continues to maintain one of the highest recycling and diversion rates in the nation.

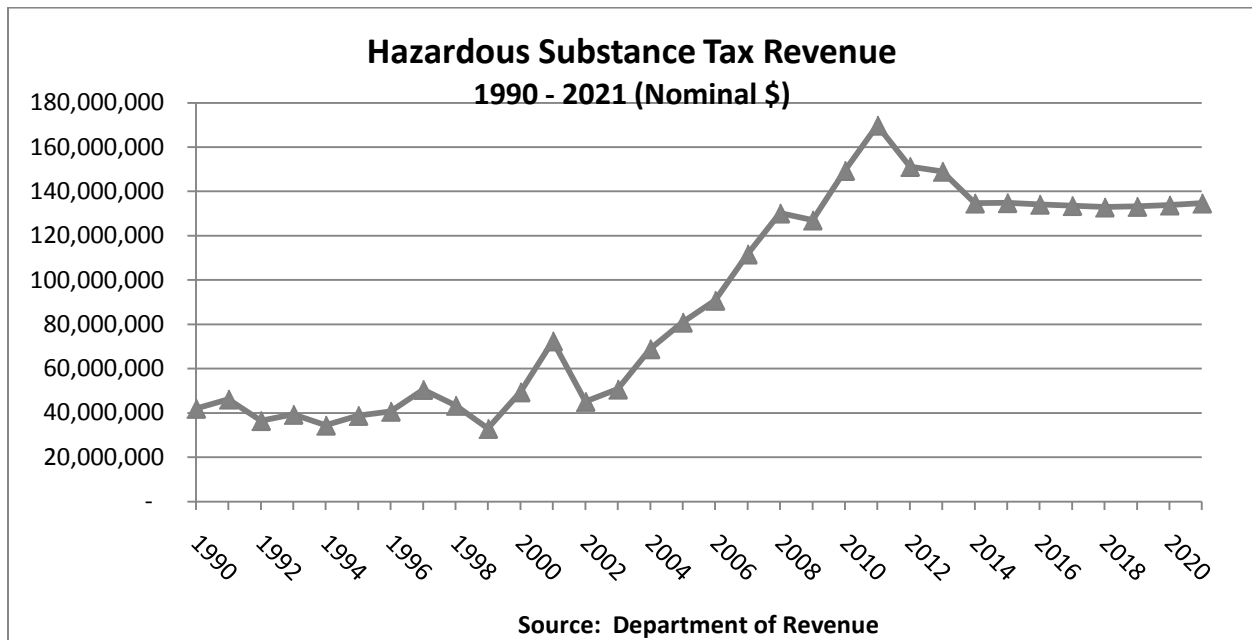
Approaches that anticipate and prevent the creation of pollutants and wastes are preferred to management methods, such as treatment, re-use, and recycling. Safe management is still important in overall environmental protection efforts, but even the best waste management practices are not the same as avoiding the creation of waste in the first place. Avoiding the use of toxic chemicals is the smartest, cheapest, and healthiest approach. Efforts to streamline business production and reduce toxic chemicals also lead to significant energy, water, and money savings for Washington manufacturers. Hundreds of businesses in Washington have saved money and increased their competitive advantage through reducing their use of toxic chemicals; and often, the more significant the reduction effort - the more the cost savings.

# Summary Ten-Year Financing Plan for STCA and LTCA

## Revenue/Working Capital Reserves

The flow from the Hazardous Substance Tax can be extremely volatile. As oil prices and demand changes, Hazardous Substance Tax (HST) revenue can increase or decrease dramatically. Over the past few biennia, oil prices have increased which has significantly increased the available revenue to the Local and State Toxics Control Accounts. The figure below shows HST revenue since 1990 and includes a 10 year forecast of future revenues for 2011 - 2021.

Figure 1. Hazardous Substance Tax Revenue



To sustain funding for long-term needs and mitigate for revenue volatility, it is important to not over-commit the accounts. Historically, this has been accomplished by funding one-time projects (primarily capital projects) and activities at a conservative level to maintain sustainable funding of ongoing activities. The ten-year financing plan includes a reserve of \$3.0 million in both the STCA and LTCA to mitigate for short-term fund volatility due primarily oil price fluctuations and tax refunds. Working capital reserves are intended to cover fluctuations in cash flow. For most funds, a reasonable amount would be sufficient to cover two month's worth of cash expenditures.

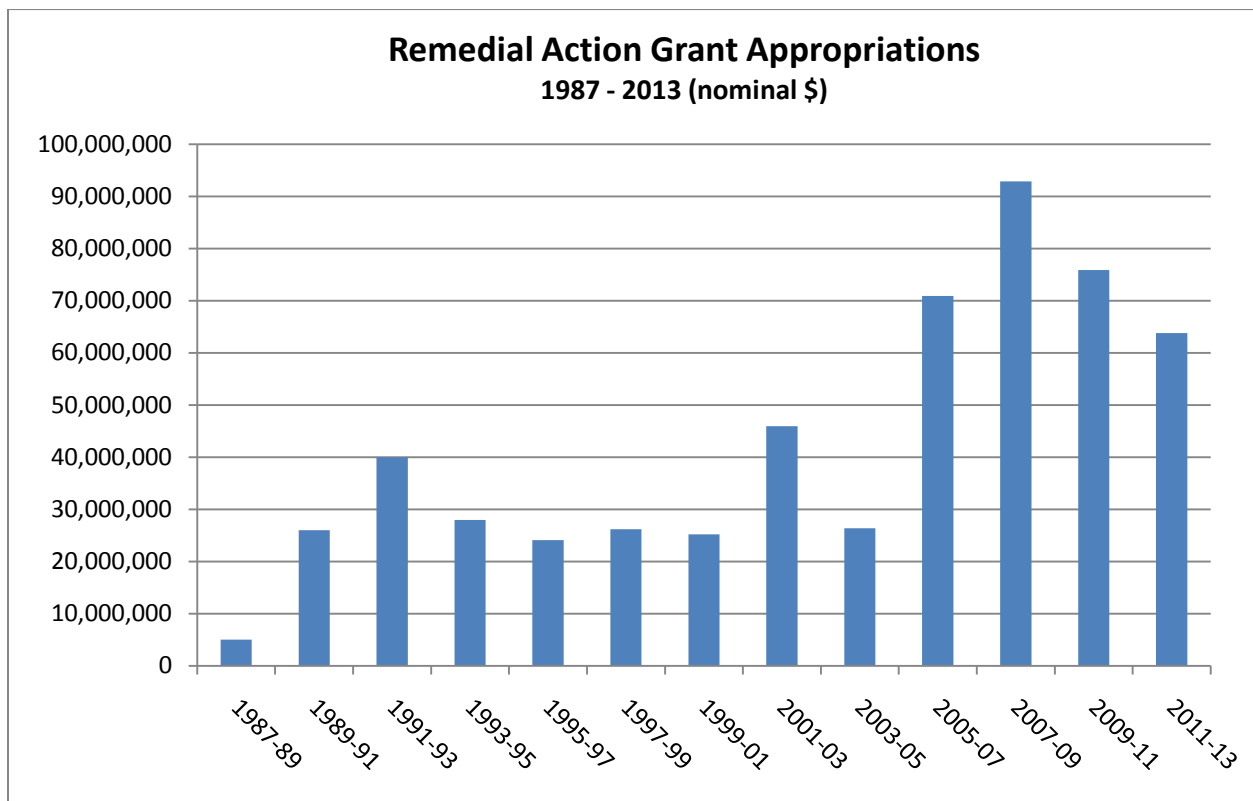
HB 1761 requires Ecology to work with local governments on developing working capital reserves to be incorporated in the 10 year report. Estimates in this report reflect that work with local governments.

# Remedial Action Grants

As revenue increased, the legislature has increased funding for remedial action grants (RAG). This trend is shown in Figure 2. This increase in funding has allowed Ecology to provide larger grant funding to local governments for large, complex cleanup projects. These projects increasingly are taking several biennia to complete, resulting in a need for large re-appropriations to be carried from one biennium to the next.

Figure 3 below compares the RAG capital appropriations to actual expenditures over the past several biennia. The data shows a reduction in the percentage of expenditures compared to appropriation authority. This reduction is mainly due to larger scale projects being funded which often take several biennia to complete.

Figure 2. RAG New Appropriations



**Figure 3. Remedial Action Grant Applications & Expenditures: Larger scale projects take several biennia to complete.**

Funding is acquired so that these projects can be completed, once started. Figure 6 shows the projected costs.

Biennium	RAG Appropriations (\$)	RAG Expenditures (\$)	Percent Expended in Biennium
1997-99	\$ 26,226,000	\$ 21,024,000	80%
1999-01	\$ 25,233,000	\$ 17,058,000	68%
2001-03	\$ 45,982,000	\$ 38,318,000	83%
2003-05	\$ 26,380,000	\$ 25,855,000	98%
2005-07	\$ 70,900,000	\$ 35,956,000	51%
2007-09	\$ 92,875,000	\$ 45,816,000	49%
2009-11	\$ 75,911,000	\$ 27,787,000	37%
2011-13	\$ 63,834,000	\$ -	

## State and Local Toxics Control Accounts Summaries

The following two charts summarize the MTCA ten-year financing plans for revenue, including working capital or contingency reserves, and expenditures from the STCA and LTCA. Budget information from other state agencies that receive MTCA funding is included in this and figure 5. The summary represents the 2011-13 biennial operating and capital budget enacted June 2011.

**Figure 4. State Toxics Control Account Ten-Year Financing Plan - 2011-13 Biennial Budget**

State Toxics Control Account 2011-2013 Budget & 2013-2021 Projected Needs						
	2011-13	2013-15	2015-17	2017-19	2019-21	Ten-Year Total
<b>Ecology Revenue</b>						
Mixed Waste Fees (MWF) -02-09	13,245,157	13,245,157	13,245,157	13,245,157	13,245,157	66,225,785
TCP/HWTR/IND/Spills Cost Recovery 04-34	13,193,891	13,193,891	13,193,891	13,193,891	13,193,891	65,969,455
Voluntary Cleanups 04-34	1,205,253	1,205,253	1,205,253	1,205,253	1,205,253	6,026,264
Penalties/Fines/Other 04-05	438,335	438,335	438,335	438,335	438,335	2,191,673
Recovered LUST (Private Local) 05-41	220,000	220,000	220,000	220,000	220,000	1,100,000
Local Interest/Invest Income 04-09	147,658	147,658	147,658	147,658	147,658	738,290
<b>Total Ecology Revenue</b>	<b>\$28,450,293</b>	<b>\$28,450,293</b>	<b>\$28,450,293</b>	<b>\$28,450,293</b>	<b>\$28,450,293</b>	<b>\$142,251,467</b>
<b>Other Revenue</b>						
Hazardous Substance Tax (DOR Forecast - GAAP, June 2011)	141,138,424	126,705,805	125,850,289	125,082,568	126,214,662	644,991,748
<b>Total Projected Revenue</b>	<b>\$169,588,717</b>	<b>\$155,156,098</b>	<b>\$154,300,582</b>	<b>\$153,532,861</b>	<b>\$154,664,955</b>	<b>\$787,243,215</b>
<b>Operating Budget</b>						
Ecology ML-State Toxics	101,949,000	101,949,000	101,949,000	101,949,000	101,949,000	509,745,000
Ecology ML-State Toxics-Priv-Loc	395,000	395,000	395,000	395,000	395,000	1,975,000

<b>State Toxics Control Account</b>						
<b>2011-2013 Budget &amp; 2013-2021 Projected Needs - continued</b>						
	<b>2011-13</b>	<b>2013-15</b>	<b>2015-17</b>	<b>2017-19</b>	<b>2019-21</b>	<b>Ten-Year Total</b>
<b>Ecology policy level budget/fund shifts</b>						
Pollution Liability Agency Tenancy	(28,000)	(28,000)	(28,000)	(28,000)	(28,000)	(140,000)
Cont'd Pollution Control Fund Shift	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000
Stabilize Oil Spill Prevention Acct	5,000,000	7,000,014	7,000,014	7,000,014	7,000,014	33,000,056
Implementing the Ban on Bisphenol A	90,000	89,402	89,402	89,402	89,402	447,608
Brake Friction Material Ban	288,000	221,298	167,832	167,832	167,832	1,012,794
Complying w/ Air Quality Standards	1,280,000	1,280,000	1,280,000	1,280,000	1,280,000	6,400,000
Pre-Payment Agreement Authority-Priv-Loc	588,000	588,000	588,000	588,000	588,000	2,940,000
Teck Cominco Litigation Support	500,000					500,000
Keeping Toxins Out of Puget Sound	996,000	2,576,288	2,576,288	2,576,288	2,576,288	11,301,152
Mercury-Containing Lights	18,000	56,312	56,312	56,312	56,312	243,248
Protecting Washington Shorelines	558,000	558,000	558,000	558,000	558,000	2,790,000
Oil Spill Program	463,000	463,000	463,000	463,000	463,000	2,315,000
PPG Reduction	(924,000)					(924,000)
Suspend COLA, Data Center Increase and 3% Salary Reduction	(2,693,000)					(2,693,000)
<b>Total Ecology policy level budget/fund shifts</b>	<b>\$11,136,000</b>	<b>\$17,804,314</b>	<b>\$17,750,848</b>	<b>\$17,750,848</b>	<b>\$17,750,848</b>	<b>\$82,192,858</b>
<b>Total Ecology Operating Budget</b>	<b>\$113,480,000</b>	<b>\$120,148,314</b>	<b>\$120,094,848</b>	<b>\$120,094,848</b>	<b>\$120,094,848</b>	<b>\$593,912,858</b>
<b>Other Agency Operating Budgets</b>						
Revenue (140)	87,000	87,000	87,000	87,000	87,000	435,000
Health (303)	3,649,000	3,649,000	3,649,000	3,649,000	3,649,000	18,245,000
DNR (490)	80,000	80,000	80,000	80,000	80,000	400,000
Agriculture (495)	5,116,000	5,116,000	5,116,000	5,116,000	5,116,000	25,580,000
Puget Sound Partnership (478)	665,000	665,000	665,000	665,000	665,000	3,325,000
State Patrol (225)	505,000	505,000	505,000	505,000	505,000	2,525,000
<b>Total Other Agency Operating Budgets</b>	<b>\$10,102,000</b>	<b>\$10,102,000</b>	<b>\$10,102,000</b>	<b>\$10,102,000</b>	<b>\$10,102,000</b>	<b>\$50,510,000</b>
<b>Total Operating Budget</b>	<b>\$123,582,000</b>	<b>\$130,250,314</b>	<b>\$130,196,848</b>	<b>\$130,196,848</b>	<b>\$130,196,848</b>	<b>\$644,422,858</b>
<b>Capital Budget</b>						
<b>Ecology Appropriations</b>						
Centennial Clean Water Program 30000208	34,100,000					34,100,000
Eastern WA Clean Sites Initiative 30000217	6,000,000	4,000,000	4,000,000	4,000,000	4,000,000	22,000,000
Safe Soils Remediation Program Central Washington 30000263	3,711,000	2,000,000	2,000,000	2,000,000	2,000,000	11,711,000
<b>Total Ecology Capital Budget</b>	<b>\$43,811,000</b>	<b>\$6,000,000</b>	<b>\$6,000,000</b>	<b>\$6,000,000</b>	<b>\$6,000,000</b>	<b>\$67,811,000</b>
Department of General Administration - Capitol Lake Dredging 30000571	200,000					200,000
<b>Total Other Agency Capital Budget</b>	<b>200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>200,000</b>
<b>Total Capital Budget</b>	<b>44,011,000</b>	<b>6,000,000</b>	<b>6,000,000</b>	<b>6,000,000</b>	<b>6,000,000</b>	<b>68,011,000</b>
<b>Total Operating &amp; Capital Budgets</b>	<b>\$167,593,000</b>	<b>\$136,250,314</b>	<b>\$136,196,848</b>	<b>\$136,196,848</b>	<b>\$136,196,848</b>	<b>\$712,433,858</b>

**Figure 5. Local Toxics Control Account Ten-Year Financing Plan - 2011-13 Biennial Budget**

<b>Local Toxics Control Account 2011-2013 Budget &amp; 2013-2021 Projected Needs</b>						
	<b>2011-13</b>	<b>2013-15</b>	<b>2015-17</b>	<b>2017-19</b>	<b>2019-21</b>	<b>Ten-Year Total</b>
<b>Other Revenue</b>						
Hazardous Sub Tax (DOR Forecast - GAAP, June 2011)	159,156,084	142,881,004	141,916,274	141,050,546	142,327,162	727,331,070
<b>Operating Budget</b>						
Ecology ML-Local Toxics	19,319,000	19,081,000	19,081,000	19,081,000	19,081,000	95,643,000
<b>Ecology policy level budget/fund shifts</b>						
Keeping Toxins Out of Puget Sound	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
Protecting Washington Shorelines	3,000,000	2,300,000	2,300,000	2,300,000	2,300,000	12,200,000
Local Shoreline Grants Fund Shift	4,500,000	4,500,000	1,400,000			10,400,000
PPG Reduction	(231,000)					(231,000)
Suspend COLA, Data Center Increase and 3% Salary Reduction	(204,000)					(204,000)
<b>Total Ecology policy level budget/fund shifts</b>	<b>\$8,065,000</b>	<b>\$7,800,000</b>	<b>\$4,700,000</b>	<b>\$3,300,000</b>	<b>\$3,300,000</b>	<b>\$27,165,000</b>
<b>Total Ecology Operating Budget</b>	<b>\$27,384,000</b>	<b>\$26,881,000</b>	<b>\$23,781,000</b>	<b>\$22,381,000</b>	<b>\$22,381,000</b>	<b>\$122,808,000</b>
<b>Capital Budget</b>						
Reducing Health Threats from Wood Stove Pollution (30000211)	3,000,000	2,000,000	1,000,000			6,000,000
Reducing Health Threats from Diesel Emissions (30000212)	7,000,000	4,000,000	4,000,000	4,000,000		19,000,000
Coordinated Prevention Grants (30000214)	28,610,000	30,180,000	31,920,000	33,810,000	35,680,000	160,200,000
Remedial Action Grant Program (30000216)	63,834,000	65,000,000	65,000,000	65,000,000	65,000,000	323,834,000
Cleanup Toxics Sites - Puget Sound 30000265	16,400,000					16,400,000
Storm water (30000294)	30,000,000	40,000,000	40,000,000	40,000,000	40,000,000	190,000,000
<b>Total Ecology Capital Budget</b>	<b>\$148,844,000</b>	<b>\$141,180,000</b>	<b>\$141,920,000</b>	<b>\$142,810,000</b>	<b>\$140,680,000</b>	<b>\$715,434,000</b>
<b>Total Operating and Capital Budgets</b>	<b>\$176,228,000</b>	<b>\$168,061,000</b>	<b>\$165,701,000</b>	<b>\$165,191,000</b>	<b>\$163,061,000</b>	<b>\$838,242,000</b>

As noted above, the LTCA and STCA financing plans (figures 4 and 5) summarize the 2011-13 biennial operating and capital budget requests. These summary tables include both short and long-term estimated funding levels of MTCA needs and cost estimates for cleanup, prevention, and waste management activities and initiatives. The ten-year tables include short-term prioritized needs associated with 2011-2013 maintenance level and policy level budget requests, along with estimated long-term (out-biennia) needs based on new or expanded program activities and initiatives.

The major fund source for the operating and capital budgets is the HST. The revenue projections included in figures 4 and 5 are based on the Department of Revenue's HST June 2011 forecast for the 2011-13 Biennium and projections for the 2013-15 Biennium and beyond.

# **Stakeholder Involvement and Coordination**

The MTCA ten-year financing report is intended to provide more planning and funding certainty by identifying future hazardous waste cleanup, prevention, and waste prevention needs. Stakeholder participation in the process and input on cost estimates is critical for providing a comprehensive and credible report.

In preparing this report, Ecology coordinated and consulted with business organizations, and local governments (cities, counties, local air agencies, and ports) that receive MTCA funds.

## **Local Government Input**

Local governments, through activities and initiatives funded largely by appropriations from the LTCA, are critical to delivering the environmental benefits of hazardous waste cleanup, prevention, and waste management strategies. LTCA grant programs generally require matching funds from local governments, increasing the total resources available to support cleanup, prevention, and waste management initiatives. Ecology worked closely with local governments to prioritize uses of MTCA resources, consistent with requirements of the law. Ecology provides ongoing technical assistance, and administers local government grants and loans.

For this report, local government coordination provided opportunities for input on the MTCA ten-year financing report assumptions. Local governments also provided insight into more technical issues related to toxic waste cleanup cost estimates; solid and hazardous waste planning; waste prevention and reduction; recycling and solid waste facility compliance and enforcement needs; and remedial action project lists, cost estimates, and prioritization.

## **State Agencies Receiving MTCA Funding**

Ecology coordinated with other agencies to prepare needs and cost estimates for this report. During late 2010, Ecology staff coordinated with other state agencies that receive MTCA funds for hazardous waste cleanup, prevention, and management activities. They include the Department of Health, Department of Agriculture, Department of Natural Resources, Washington State Patrol, Washington State Department of Transportation, and the Puget Sound Partnership. The budgets shown on in figures 4 and 5 represents the 2011-13 Biennium operating and capital budget with cost estimates for future biennia.



# Project Lists and Financing Plans

Project lists and financing plans are organized around Ecology's three basic strategies to reduce toxic threats to human health and the environment:

- **Cleanup activities** remove or immobilize hazardous substances at contaminated sites, keep hazardous substances out, and provide opportunities for habitat restoration, economic development, and public recreation.
- **Pollution prevention activities** focus on changes to process, practice, materials, and energy to minimize or eliminate the creation of hazardous waste or use of toxic chemicals.
- **Waste management activities** focus on making sure toxic chemicals and hazardous wastes are safely stored, treated, recycled, or disposed properly.

*This page intentionally blank.*

# **Cleanup – Project Lists and Financing Plans**

## **Background**

Ecology’s goal is to remove contaminants from the environment and keep them out. Ecology has identified over 11,660 toxic contaminated sites since the mid-1980s, and 57 percent of these sites have been cleaned up or require no further action. Another 2,870 are currently in the process of being cleaned up by site owners (including government) or through the orphaned site (clean sites) program. Roughly 2,100 sites still need to begin clean up actions. The majority of sites are contaminated with petroleum, usually from leaking underground storage tanks.

Over the past ten years, over 300 new sites have been reported to the agency each year. Most of these sites are simpler sites and less costly cleanups that are done voluntarily by the site owner.

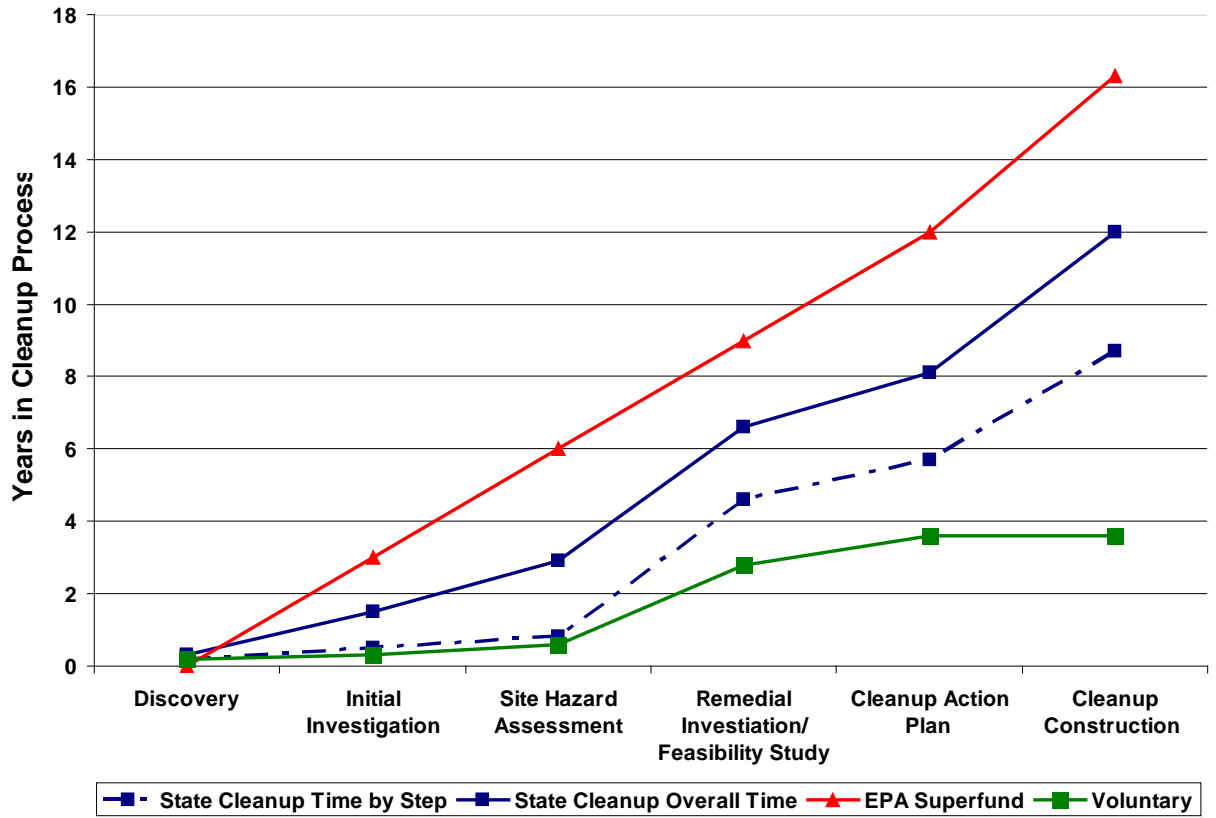
Once a site is contaminated with toxic chemicals, it can take on average 3 to 12 years to clean it up, depending on the regulatory process used (formal versus Voluntary); nature of the contaminants, and number of media and exposure pathways. The longer time frame sites tend to have contaminated water (surface or ground) or marine sediment. Ecology makes every attempt to locate and hold liable individuals and businesses – both private and government – responsible for the site cleanup. Ecology works with potentially liable parties to:

- Investigate the extent of contamination.
- Develop feasible approaches for cleanup.
- Develop cleanup plans and conduct the cleanup construction.

## **Emerging Issues**

There continue to be two significant issues creating challenges for cleaning up contaminated sites. The financial mechanisms to pay for large, complex cleanup projects and additional “area-wide” type contamination that will create new sites or threaten to re-contaminate sites already cleaned up.

In addition, sites that have sediment contamination, as do most of the remedial action grant sites, are more complex and take longer to cleanup. See the chart showing average cleanup times of sites within one-half mile of Puget Sound.



## **Funding Large Cleanup Projects**

Today's contaminated site cleanups are much larger than in the past, and the complexity at sites is increasing. For instance, marine ports with sediment contamination are very expensive to clean up and currently use most of the available LTCA grant funding. Port sites commonly take ten years or more to clean up. The current model for financing these longer-term cleanup projects is tied to the state's biennial funding and expenditure plan. This model does not provide long-term funding certainty for local government once they begin the cleanup process using state grants.

The ten-year financing plan proposal will provide greater clarity and hopefully more certainty for communities such as Bellingham Bay, Lower Duwamish, Commencement Bay, and the Port of Ridgefield as they pursue economic planning and development.

## **Area-wide Contamination**

Traditionally, the state has cleaned up contamination one site at a time. Technology and knowledge about the science of contamination is improving. This is leading to an increased awareness of contamination that is more widespread. For instance, Ecology is working with local governments to address lead and arsenic contamination from the historical use of smelters and former orchard lands that are now schools and playgrounds. Broad areas of land have been contaminated from these sources.

Nonpoint source pollution, such as stormwater, is causing contamination and re-contamination of already cleaned up sites. Source control of pollution is becoming a major focal point in the use of funds to prevent site contamination.

Four ranked and prioritized project lists are included in this report. The first list is for RAG local government sites eligible for funding from the LTCA. The remaining lists are from the STCA and are comprised of sites that include "Safe Soils," "Puget Sound Initiative," and "orphaned, abandoned, or other eligible sites." Orphaned and abandoned sites are ones where the site owner has been unable or unwilling to pay for the cleanup costs. These are sites where the state steps in and begins cleanup actions. The state retains the option to cost recover cleanup and oversight costs. Several factors were considered in developing criteria for the contaminated site lists:

- Discussions with local governments.
- Hazard ranking of contaminated sites.
- Length of time the site has been waiting to be cleaned up.
- Contaminated site priority of local governments.
- Readiness of local government or private site to proceed with a cleanup.

A steady number of sites are reported to Ecology each year. It is likely that sites more hazardous to human health and the environment will be reported and moved up in priority for cleanup actions in the future.

# Remedial Action Grant Program

## Background

Through Ecology, the state offers remedial action grants and loans to local governments to encourage and expedite cleanup activity. “Local government” means any political subdivision, regional-government unit, district, or municipal or public corporation, including cities, towns, and counties. The grants and loans lessen the impact of the cost to rate payers and taxpayers and remove harmful substances from the environment.

This list does not include all of the sites that will need cleanup and some of the sites listed in this report will have cleanup activities that go beyond 2021. An additional column has been added to show project cleanup costs beyond 2021.

The Puget Sound Partnership (Partnership) is now responsible for ensuring grant and loan programs give preference to certain projects in Puget Sound. Preference must be given to Puget Sound projects that support the Partnership’s Action Agenda to clean up the Sound, specific projects listed in the Action Agenda, and Puget Sound Partners.

Projects in Puget Sound that don’t support the Action Agenda to clean up the Sound are ineligible.

Specific projects listed in the Action Agenda will receive funding to continue contaminated site cleanup. This biennium, those projects are in Bellingham Bay and in the Lower Duwamish Waterway.

We review all grant funded projects to ensure they support the Partnership’s goal to clean up Puget Sound. All Remedial Action Grant projects are ranked as high, medium, or low. They are also ranked based on requirements from WAC 173-322. Sites that are ranked “high” pose the highest risk to human health and the environment; are ready to proceed with a cleanup; and the grant is necessary to expedite the cleanup.

Currently, the application procedure remains an open process and the Remedial Action Grant Program remains a response program. Newer projects may take priority over other projects depending on their risk and ability to proceed with a cleanup.

## Findings

- RCW 70.105D provides for a minimum 50 percent matching grant program to reimburse local government costs for federal (Superfund) and state (MTCA) remedial action sites. Recent changes to the statute allow for raising the state share for fund contributions to expedite cleanups and encourage revitalizing properties where contamination has hindered reuse.
  - The total ten-year estimated cost to complete remediation at these sites is \$1.8 billion.

- The state share of these costs is estimated at a minimum of \$925.1 million.
- Of the reported 104 sites, 60 are high priority (57 percent), and 88 percent are in the Puget Sound Basin.
- The cost range is between \$34,000 and \$350,020,000 per site cleanup, indicating variability in the size and nature of cleanups being conducted under the RAG program.

## Conclusions

- The RAG program estimated need for state matching funds for all projects currently identified is \$925.1 million or an average \$185.0 million per biennium (2011-13 biennium – 2019-21 biennium). Operating the program at this level would provide the resources to meet current local government estimates for site cleanups under the RAG program during the next ten years. This is based on Ecology estimates for the state portion of RAG cleanups, which is 50 percent in most cases.
- The state portion of the 2011-13 RAG need for high priority projects is estimated at \$123.6 million including a mix of on-going cleanups at current sites and new projects. The legislature provided \$63.8 million in funding in the 2011-13 capital budget to continue the RAG program.

Estimating costs accurately for these sites is based largely on the degree of project definition. Some sites have had an initial investigation which provides only enough information to determine if the site needs further investigation, emergency cleanup, or no further action. Other sites have been assessed and the presence of hazardous substances has been confirmed as well as the site risk. Sites that have begun a formal investigation will have the most project definition. Generally, sites that receive initial cost estimates have minimal project definition. The best estimate is developed based on available information. The RACER model is one method to estimate site cleanup costs based on typical costs for variables at the site. Most estimates will likely move up or down as actual remedial investigations get underway at the contaminated site. We will continue to refine cost estimates for those sites that take several biennia to complete.



Figure 6. Ten-Year Remedial Action Grant Needs List

Remedial Action Grants

Grantee	Project	TCP Rank	Region	County	Total Estimated Project Cost 2010	Inflation Factors					Future Biennia Costs (Past 19-21)	Total	State	Local	Total	
						1.0405	1.0783	1.1175	1.15805	1.2001						1.2889
						Project Costs with Inflation	Total Project Costs Requested 13-15	Total Project Costs Requested 15-17	Total Project Costs Requested 17-19	Total Project Costs Requested 19-21						
Port of Ridgefield	Pacific Woodtreating	H	SWRO	Clark	\$8,000,000	\$ 8,324,000	\$ -	\$ -	\$ -	\$ -	\$ -	8,324,000	4,162,000	4,162,000	\$ 8,324,000	
Port of Pasco	Bulk Fuel Terminal - remediation and monitoring	H	ERO	Franklin	855,000	468,230	307,320	134,100	0	0	0	909,650	454,825	454,825	\$ 909,650	
Grant County	Ephrata Landfill	H	ERO - W2R	Grant	7,850,000	3,901,880	1,725,280	1,285,130	868,540	720,060	0	8,500,890	4,250,445	4,250,445	\$ 8,500,890	
Seattle Public Utilities	North Boeing Field/Georgetown Steamplant	H	NWRO	King	260,000	270,530	0	0	0	0	0	270,530	135,265	135,265	\$ 270,530	
Port of Seattle	T-30	H	NWRO	King	680,000	114,460	90,580	89,400	69,480	415,230	0	779,150	389,575	389,575	\$ 779,150	
City of Seattle	Sternoff Metals	H	NWRO	King	1,000,000	0	539,150	558,750	0	0	0	1,097,900	548,950	548,950	\$ 1,097,900	
King county	Denny Way CSO	H	NWRO	King	1,285,000	1,248,600	91,660	0	0	0	0	1,340,260	670,130	670,130	\$ 1,340,260	
City of Bothell	Crossroads	H	NWRO	King	3,220,000	2,081,000	1,315,530	0	0	0	0	3,396,530	1,698,265	1,698,265	\$ 3,396,530	
Port of Seattle	Lora Lake Apartments	H	NWRO	King	4,037,000	2,639,750	1,617,450	0	0	0	0	4,257,200	2,128,600	2,128,600	\$ 4,257,200	
King County Airport	North Boeing Field/Georgetown Steamplant (KC Airport)	H	NWRO	King	4,200,000	4,370,100	0	0	0	0	0	4,370,100	2,185,050	2,185,050	\$ 4,370,100	
Seattle City Light	North Boeing Field/Georgetown Steamplant	H	NWRO	King	4,200,000	4,370,100	0	0	0	0	0	4,370,100	2,185,050	2,185,050	\$ 4,370,100	
Seattle Public Utilities	South Park Landfill - Seattle Public Utilities	H	NWRO	King	5,880,000	2,913,400	3,234,900	44,700	46,320	0	0	6,239,320	3,119,660	3,119,660	\$ 6,239,320	
City of Seattle	Lower Duwamish Waterway Phase 1	H	NWRO	King	6,000,910	4,584,610	1,246,780	277,700	220,030	0	0	6,329,120	3,164,560	3,164,560	\$ 6,329,120	
City of Seattle	Union Ship Canal	H	NWRO	King	7,250,000	0	1,293,960	2,682,000	4,226,880	0	0	8,202,840	4,101,420	4,101,420	\$ 8,202,840	
Port of Seattle	LDW (Port of Seattle)(includes 2M for Dallas St as part of T117, and 11-13 includes T117 Sediments cleanup \$ for all the LDWG partners)	H	NWRO	King	12,000,000	7,283,500	3,234,900	1,117,500	1,158,050	0	0	12,793,950	6,396,975	6,396,975	\$ 12,793,950	
City of Seattle	Lower Duwamish Waterway (Includes 3 M for Dallas St. as part of T117)	H	NWRO	King	12,000,000	7,283,500	3,234,900	1,117,500	1,158,050	0	0	12,793,950	6,396,975	6,396,975	\$ 12,793,950	
City of Seattle	Gas Works Park	H	NWRO	King	19,787,000	1,478,550	19,674,660	67,050	69,480	0	0	21,289,740	10,644,870	10,644,870	\$ 21,289,740	
Port of Seattle	T-91	H	NWRO	King	22,765,320	6,243,000	8,626,400	8,940,000	886,280	0	0	24,695,680	12,347,840	12,347,840	\$ 24,695,680	
Port of Seattle	East Waterway	H	NWRO	King	128,290,000	20,810,000	23,722,600	40,230,000	52,112,250	6,348,530	0	143,223,380	71,611,690	71,611,690	\$ 143,223,380	
City of Seattle	Lower Duwamish Waterway Riverwide Cleanup	H	NWRO	King	350,020,000	8,324,000	116,891,310	190,019,700	73,624,960	0	0	388,859,970	194,429,985	194,429,985	\$ 388,859,970	
King County	Lower Duwamish Waterway Riverwide Cleanup	H	NWRO	King	350,020,000	8,324,000	116,891,310	190,019,700	73,624,960	0	0	388,859,970	194,429,985	194,429,985	\$ 388,859,970	
Port of Seattle	Cleanup - Lower Duwamish Waterway (POS)	H	NWRO	King	350,020,000	8,324,000	116,891,310	190,019,700	73,624,960	0	0	388,859,970	194,429,985	194,429,985	\$ 388,859,970	
Kitsap County	Hansville Landfill	H	NWRO	Kitsap	1,144,000	261,690	299,010	397,550	300,460	0	0	1,258,710	629,355	629,355	\$ 1,258,710	
Port of Tacoma	Hylebos: Segments 3, 4 & 5	H	SWRO	Pierce	210,000	135,270	43,130	44,700	0	0	0	223,100	111,550	111,550	\$ 223,100	
Port of Tacoma	Head of Hylebos Cleanup	H	SWRO	Pierce	250,000	104,050	107,830	55,880	0	0	0	267,760	133,880	133,880	\$ 267,760	
City of Tacoma	Dock Street (4th - 11th)	H	SWRO	Pierce	500,000	520,250	0	0	0	0	0	520,250	260,125	260,125	\$ 520,250	
City of Tacoma	Foss Waterway Site 6	H	SWRO	Pierce	500,000	520,250	0	0	0	0	0	520,250	260,125	260,125	\$ 520,250	
City of Tacoma	Foss Waterway Site 8	H	SWRO	Pierce	500,000	520,250	0	0	0	0	0	520,250	260,125	260,125	\$ 520,250	
City of Tacoma	Foss Waterway Site 9	H	SWRO	Pierce	500,000	520,250	0	0	0	0	0	520,250	260,125	260,125	\$ 520,250	

Remedial Action Grants

						Inflation Factors									
						1.0405	1.0783	1.1175	1.15805	1.2001	1.2889				
						Project Costs with Inflation									
Grantee	Project	TCP Rank	Region	County	Total Estimated Project Cost 2010	Total Project Costs Requested 11-13	Total Project Costs Requested 13-15	Total Project Costs Requested 15-17	Total Project Costs Requested 17-19	Total Project Costs Requested 19-21	Future Biennia Costs (Past 19-21)	Total	State	Local	Total
City of Tacoma	Jones(Head of Foss Waterway)	H	SWRO	Pierce	600,000	624,300	0	0	0	0	0	624,300	312,150	312,150	\$ 624,300
Port of Tacoma	Parcel 2/ American Fastfreight	H	SWRO	Pierce	1,000,000	1,040,500	0	0	0	0	0	1,040,500	520,250	520,250	\$ 1,040,500
Port of Tacoma	Pier 24/25	H	SWRO	Pierce	1,000,000	1,040,500	0	0	0	0	0	1,040,500	520,250	520,250	\$ 1,040,500
Port of Tacoma	Dunlap Mound/Atofina Chemical 3009 Taylor Way log yard - 1219	H	SWRO	Pierce	1,090,970	1,135,150	0	0	0	0	0	1,135,150	567,575	567,575	\$ 1,135,150
Port of Tacoma	Kaiser	H	SWRO	Pierce	4,634,000	4,821,680	0	0	0	0	0	4,821,680	2,410,840	2,410,840	\$ 4,821,680
Port of Tacoma	Hylebos: Pier 25 Bank Cleanup	H	SWRO	Pierce	5,429,000	5,554,190	54,990	44,700	0	0	0	5,653,880	2,826,940	2,826,940	\$ 5,653,880
Port of Tacoma	Arkema	H	SWRO	Pierce	27,118,500	10,661,480	8,688,940	9,772,540	79,910	0	0	29,202,870	14,601,435	14,601,435	\$ 29,202,870
Port of Skagit County	Skagit County Port	H	NWRO	Skagit	2,799,830	2,913,220	0	0	0	0	0	2,913,220	1,456,610	1,456,610	\$ 2,913,220
Skagit County	Whitmarsh Landfill	H	LALC	Skagit	5,384,670	467,370	762,600	4,193,840	550,530	0	0	5,974,340	2,987,170	2,987,170	\$ 5,974,340
Port of Anacortes	Focus Fidalgo - Scott Paper, Shell Tank Farm, and Pier 2	H	LALC	Skagit	17,955,000	18,682,180	0	0	0	0	0	18,682,180	9,341,090	9,341,090	\$ 18,682,180
Port of Everett	Port Gardner Bay - Baywood, Mill A, West End, Ameron/Hulbert, Everett Shipyard	H	LALC	Snohomish	29,292,500	7,803,750	3,342,730	13,410,000	7,643,130	111,010	0	32,310,620	16,155,310	16,155,310	\$ 32,310,620
City of Olympia	Former Safeway/New City Hall	H	SWRO	Thurston	500,000	520,250	0	0	0	0	0	520,250	260,125	260,125	\$ 520,250
Port of Olympia	Cascade Pole	H	SWRO	Thurston	500,000	520,250	0	0	0	0	0	520,250	260,125	260,125	\$ 520,250
City of Olympia	Percival Landing	H	SWRO	Thurston	800,000	832,400	0	0	0	0	0	832,400	416,200	416,200	\$ 832,400
City of Olympia	Hands on Museum	H	SWRO	Thurston	1,000,000	1,040,500	0	0	0	0	0	1,040,500	520,250	520,250	\$ 1,040,500
City of Olympia	West Bay Park	H	SWRO	Thurston	1,000,000	1,040,500	0	0	0	0	0	1,040,500	520,250	520,250	\$ 1,040,500
Port of Olympia	East Bay Remediation	H	SWRO	Thurston	20,780,000	21,413,490	215,660	0	0	0	0	21,629,150	10,814,575	10,814,575	\$ 21,629,150
City of Walla Walla	Sudbury Landfill	H	ERO - W2R	Walla Walla	5,490,940	3,133,010	1,299,220	1,424,810	0	0	0	5,857,040	2,928,520	2,928,520	\$ 5,857,040
City of Bellingham	Eldridge Municipal Landfill	H	NWRO	Whatcom	200,000	208,100	0	0	0	0	0	208,100	104,050	104,050	\$ 208,100
City of Bellingham	RG Haley	H	NWRO	Whatcom	300,000	312,150	0	0	0	0	0	312,150	156,075	156,075	\$ 312,150
Port of Bellingham	Marine Services NW	H	NWRO	Whatcom	759,600	111,790	703,220	0	0	0	0	815,010	407,505	407,505	\$ 815,010
Port of Bellingham	Port of Bellingham - Weldcraft	H	NWRO	Whatcom	1,000,000	1,040,500	0	0	0	0	0	1,040,500	520,250	520,250	\$ 1,040,500
Port of Bellingham	I & J Waterway	H	NWRO	Whatcom	2,065,220	1,285,650	894,570	0	0	0	0	2,180,220	1,090,110	1,090,110	\$ 2,180,220
Port of Bellingham	Harris Ave Shipyard	H	NWRO	Whatcom	2,198,320	1,293,580	1,029,870	0	0	0	0	2,323,450	1,161,725	1,161,725	\$ 2,323,450
Port of Bellingham	Cornwall Av Landfill	H	NWRO	Whatcom	4,541,500	2,847,530	1,946,130	0	0	0	0	4,793,660	2,396,830	2,396,830	\$ 4,793,660
Port of Bellingham	Central Waterfront	H	NWRO	Whatcom	4,672,520	1,507,720	3,475,890	0	0	0	0	4,983,610	2,491,805	2,491,805	\$ 4,983,610
City of Bellingham	S State Street Manufactured Gas Plant	H	NWRO	Whatcom	8,150,000	6,399,080	2,156,600	0	0	0	0	8,555,680	4,277,840	4,277,840	\$ 8,555,680
Port of Bellingham	G-P West	H	NWRO	Whatcom	17,036,990	17,726,990	0	0	0	0	0	17,726,990	8,863,495	8,863,495	\$ 17,726,990
Port of Bellingham	Whatcom Waterway	H	NWRO	Whatcom	51,888,630	0	0	19,034,510	31,812,720	8,862,220	0	59,709,450	29,854,725	29,854,725	\$ 59,709,450
City of Yakima	Old Yakima Landfill	H	CRO	Yakima	21,408,420	10,405,000	6,469,800	3,352,500	2,789,070	0	0	23,016,370	17,262,278	5,754,093	\$ 23,016,370
Bremerton School District	Crown Hill Elementary School	H	NWRO	Kitsap	5,042,910	2,081,000	2,156,600	1,165,450	0	0	0	5,403,050	2,701,525	2,701,525	\$ 5,403,050
City of Othello	CMC Real Estate Othello	L	ERO	Adams	6,255,960	0	1,848,210	4,058,170	942,350	116,110	0	6,964,840	3,482,420	3,482,420	\$ 6,964,840
Port of Grays Harbor	Hungry Whale	L	SWRO	Grays Harbor	750,000	312,150	485,240	0	0	0	0	797,390	398,695	398,695	\$ 797,390
Island County	Hwy 20 & Sleeper Road	L	NWRO	Island	1,208,000	0	1,078,300	232,440	0	0	0	1,310,740	655,370	655,370	\$ 1,310,740

Remedial Action Grants

						Inflation Factors									
						1.0405	1.0783	1.1175	1.15805	1.2001	1.2889				
						Project Costs with Inflation									
Grantee	Project	TCP Rank	Region	County	Total Estimated Project Cost 2010	Total Project Costs Requested 11-13	Total Project Costs Requested 13-15	Total Project Costs Requested 15-17	Total Project Costs Requested 17-19	Total Project Costs Requested 19-21	Future Biennia Costs (Past 19-21)	Total	State	Local	Total
King County	Lander CSO	L	NWRO	King	2,706,000	0	2,820,830	100,580	0	0	0	2,921,410	1,460,705	1,460,705	\$ 2,921,410
King County	Hanford CSO	L	NWRO	King	14,216,000	0	15,183,540	150,860	0	0	0	15,334,400	7,667,200	7,667,200	\$ 15,334,400
Kitsap County	Olalla Landfill	L	NWRO	Kitsap	1,000,000	0	0	279,380	289,510	300,030	322,230	1,191,150	595,575	595,575	\$ 1,191,150
Lewis County	Central Shop - Lewis County	L	SWRO	Lewis	440,500	458,340	0	0	0	0	0	458,340	229,170	229,170	\$ 458,340
Mason County Fire District	Station 5 - Mason County Fire District	L	SWRO	Mason	34,000	0	36,660	0	0	0	0	36,660	18,330	18,330	\$ 36,660
Mason County	Mason County Wood Recyclers	L	SWRO	Mason	2,236,300	0	971,120	1,420,970	74,280	0	0	2,466,370	1,233,185	1,233,185	\$ 2,466,370
Port of Ilwaco	Lyles Cannery	L	SWRO	Pacific	970,100	0	215,640	684,010	183,010	0	0	1,082,660	541,330	541,330	\$ 1,082,660
Port of Tacoma	US Gypsum Cleanup Investigation (Thermafiber LLC)	L	SWRO	Pierce	200,000	208,100	0	0	0	0	0	208,100	104,050	104,050	\$ 208,100
City of Tacoma	19th & D (BNSF Oil Pipeline)	L	SWRO	Pierce	800,000	832,400	0	0	0	0	0	832,400	416,200	416,200	\$ 832,400
Port of Tacoma	Prologis/Don Oline	L	SWRO	Pierce	1,497,000	101,970	1,475,110	34,640	0	0	0	1,611,720	805,860	805,860	\$ 1,611,720
Port of Tacoma	PRI Cleanup (Glenn Springs Holdings)	L	SWRO	Pierce	2,123,000	0	258,790	2,104,250	0	0	0	2,363,040	1,181,520	1,181,520	\$ 2,363,040
Port of Tacoma	Portac Removal Action - 1215	L	SWRO	Pierce	2,721,000	0	2,863,960	72,640	0	0	0	2,936,600	1,468,300	1,468,300	\$ 2,936,600
Port of Edmonds	Edmonds Port W Dayton	L	NWRO	Snohomish	2,966,960	0	0	1,876,570	1,363,330	132,540	0	3,372,440	1,686,220	1,686,220	\$ 3,372,440
Spokane Transit Authority	Spokane Transit Auth Bus Barn	L	ERO	Spokane	950,440	0	333,570	611,470	44,710	66,370	0	1,056,120	528,060	528,060	\$ 1,056,120
City of Cheney	Cheney Super Stop Lots 8 & 9	L	ERO	Spokane	1,006,490	0	280,670	620,910	147,910	75,440	0	1,124,930	562,465	562,465	\$ 1,124,930
City of Olympia	Boulevard Nursery	L	SWRO	Thurston	130,400	135,680	0	0	0	0	0	135,680	67,840	67,840	\$ 135,680
City of Olympia	Columbia Street Parking Lot	L	SWRO	Thurston	200,000	208,100	0	0	0	0	0	208,100	104,050	104,050	\$ 208,100
City of Olympia	Old Olympia Landfill	L	SWRO	Thurston	300,000	0	323,490	0	0	0	0	323,490	161,745	161,745	\$ 323,490
City of Olympia	Public Plaza	L	SWRO	Thurston	400,000	416,200	0	0	0	0	0	416,200	208,100	208,100	\$ 416,200
Port of Bellingham	Other Port of Bellingham Sites	L	NWRO	Whatcom	4,176,790	686,250	1,110,570	1,545,840	1,278,510	0	0	4,621,170	2,310,585	2,310,585	\$ 4,621,170
Chelan County	Pacific Pride Tanker Fire	M	CRO	Chelan	50,000	0	53,920	0	0	0	0	53,920	26,960	26,960	\$ 53,920
City of Castle Rock	Maintenance Shop	M	SWRO	Cowlitz	290,000	0	0	189,980	138,970	0	0	328,950	164,475	164,475	\$ 328,950
King County	Chelan CSO	M	NWRO	King	365,000	348,570	32,350	0	0	0	0	380,920	190,460	190,460	\$ 380,920
King County	King Street CSO	M	NWRO	King	2,916,000	1,801,110	1,234,650	44,700	0	0	0	3,080,460	1,540,230	1,540,230	\$ 3,080,460
King County	Brandon CSO	M	NWRO	King	4,375,000	1,352,650	3,278,030	39,110	0	0	0	4,669,790	2,334,895	2,334,895	\$ 4,669,790
City of Seattle	Seattle S Transfer Station	M	NWRO	King	5,779,530	0	3,578,590	2,506,650	252,120	0	0	6,337,360	3,168,680	3,168,680	\$ 6,337,360
Port of Seattle	Chevron Seattle Terminal 4097 (T108)	M	NWRO	King	9,712,480	0	6,886,380	3,444,890	281,950	0	0	10,613,220	5,306,610	5,306,610	\$ 10,613,220
Pierce County	Puget Creek Beach	M	SWRO	Pierce	750,000	780,380	0	0	0	0	0	780,380	390,190	390,190	\$ 780,380
Port of Tacoma	Early Business Center	M	SWRO	Pierce	6,241,000	650,310	5,981,330	77,110	0	0	0	6,708,750	3,354,375	3,354,375	\$ 6,708,750
City of Tacoma	Dickman Mill	M	SWRO	Pierce	6,470,500	0	4,208,500	2,705,530	169,700	0	0	7,083,730	3,541,865	3,541,865	\$ 7,083,730
Spokane County Water Dist. 3	Spokane County Water Dist. 3	M	ERO	Spokane	2,033,930	0	671,820	1,332,480	194,710	60,450	0	2,259,460	1,129,730	1,129,730	\$ 2,259,460
City of Olympia	Former DOT Site	M	SWRO	Thurston	1,888,700	1,965,190	0	0	0	0	0	1,965,190	982,595	982,595	\$ 1,965,190
Port of Olympia	Marine Terminal Mid Section Remediation	M	SWRO	Thurston	3,786,000	104,050	3,866,780	111,750	0	0	0	4,082,580	2,041,290	2,041,290	\$ 4,082,580
Port of Olympia	Marine Terminal Dredging	M	SWRO	Thurston	10,500,000	260,130	10,783,000	279,380	0	0	0	11,322,510	5,661,255	5,661,255	\$ 11,322,510

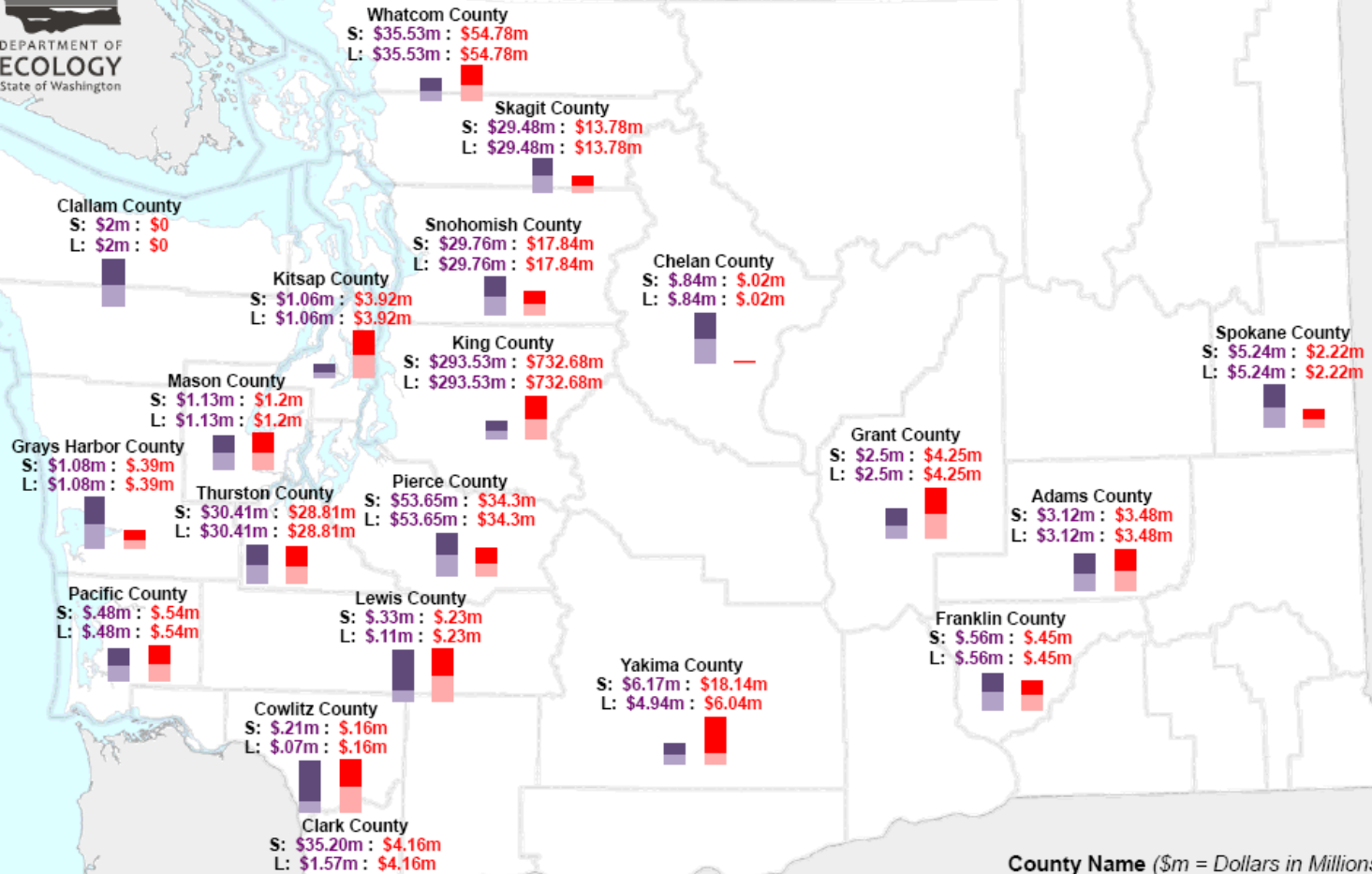
**Remedial Action Grants**

						Inflation Factors									
						1.0405	1.0783	1.1175	1.15805	1.2001	1.2889				
						Project Costs with Inflation									
Grantee	Project	TCP Rank	Region	County	Total Estimated Project Cost 2010	Total Project Costs Requested 11-13	Total Project Costs Requested 13-15	Total Project Costs Requested 15-17	Total Project Costs Requested 17-19	Total Project Costs Requested 19-21	Future Biennia Costs (Past 19-21)	Total	State	Local	Total
Port of Olympia	Marina Dredging	M	SWRO	Thurston	12,500,000	104,050	9,866,450	3,631,880	0	0	0	13,602,380	6,801,190	6,801,190	\$ 13,602,380
Port of Bellingham	Northwest Fuels	M	NWRO	Whatcom	500,000	520,250	0	0	0	0	0	520,250	260,125	260,125	\$ 520,250
Port of Bellingham	Blaine Sediments	M	NWRO	Whatcom	732,580	157,490	371,890	264,100	0	0	0	793,480	396,740	396,740	\$ 793,480
Port of Bellingham	Westman Marine	M	NWRO	Whatcom	908,360	207,430	427,940	348,810	0	0	0	984,180	492,090	492,090	\$ 984,180
West Valley School District	West Valley High School Yakima Auto Shop	M	CRO	Yakima	69,510	72,330	0	0	0	0	0	72,330	54,248	18,083	\$ 72,330
City of Sunnyside	Sunnyside Municipal Well	M	CRO	Yakima	400,000	416,200	0	0	0	0	0	416,200	312,150	104,050	\$ 416,200
City of Yakima	Yakima Trolley Barn (3rd & Walnut)	M	CRO	Yakima	666,700	693,700	0	0	0	0	0	693,700	520,275	173,425	\$ 693,700
<b>Total</b>					<b>\$1,667,087,980</b>	<b>\$247,196,060</b>	<b>\$534,804,120</b>	<b>\$ 708,268,510</b>	<b>\$ 330,227,120</b>	<b>\$ 17,207,990</b>	<b>\$322,230</b>	<b>\$1,838,026,030</b>	<b>\$ 925,062,665</b>	<b>\$ 912,963,365</b>	<b>\$1,838,026,030</b>

Regions: CRO – Central Region Office    ERO – Eastern Region Office    NWRO – Northwest Region Office    SWRO – Southwest Region Office    LALC – Lands and Aquatic Lands - Lacey Headquarters  
W2R – Waste 2 Resource Program, Lacey Headquarte

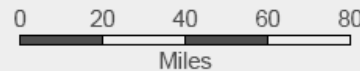


# Comparison of 2008 to 2010 Ten Year Remedial Action Grant Needs



County Name (\$m = Dollars in Millions)

State funding: 2008 Amount : 2010 Amount  
 Local funding: 2008 Amount : 2010 Amount



Note: The bar chart dollar amounts are not proportional between counties. Dollar amounts are rounded down.

*This page intentionally blank.*

# Clean Sites Initiative Program

## Background

There are properties in Washington contaminated with hazardous wastes that have been abandoned or have owners unwilling or unable to pay for site investigation and cleanup. Without cleanup, these sites pose threats to public health, the environment, groundwater, and fish and wildlife resources. The Clean Sites Initiative supports cleaning up orphaned or abandoned contaminated sites, using a "worst-first" approach.

Ecology has historically funded the Clean Sites Initiative Program from its operating budget appropriations but has proposed an expansion of the program by requesting capital funding to be used exclusively in Eastern Washington. The legislature has provided \$6.0 million in new capital funding in the 2011-13 budget for this expansion. These new funds will allow Ecology to more effectively address the cleanup needs of central and eastern Washington.

Ecology expects sites that are more hazardous to human health and the environment will be reported and moved up in priority for cleanup actions. Based on best available information, we developed a specific project list and cost estimates for sites that could reasonably undergo cleanup actions in ten years. This project list is comprised of known orphaned and abandoned sites with their ranking (High, Medium and Low).

In the state of Washington, there are currently over 11,660 sites that have been confirmed or suspected of having contamination at them. Over half (57%) of these sites have been cleaned up or reported cleaned up, another 25% are in the process of being cleaned up. Of the remaining sites waiting to be cleaned up, approximately 5 percent (107) are publicly-owned and 95 percent (nearly 2,000) are privately owned. Orphaned, abandoned, and other eligible sites are a subset of the privately owned sites, and are primarily defined as sites where the owner is unwilling or unable to pay for the cleanup.

## Findings

Ecology estimates that 590 of the 1,970 (about 30%) private sites waiting to begin cleanup actions are orphaned and abandoned and eligible for state funding. The 590 sites are five percent of all contaminated sites that have been reported to Ecology.

- Of these 590 sites, 48 are estimated to be high priority (eight percent). Highly-ranked sites are those of greatest concern. Ranking is based on risk to human health and the environment using the Washington Ranking Method.
- Modeling under the Remedial Action Cost Engineering and Requirements system (RACER) tool was used to estimate costs for 22 sites. The cost distribution is \$26,000 to \$7.4 million per site cleanup, indicating variability in the size and nature of cleanups being conducted. The average cost in this group of sites under the model is \$1.04 million per site. The RACER system has been shown to be within ten percent accuracy.

- Currently, Ecology allocates Clean Site Initiative resources to several sites that urgently need action to protect the environment and the public. Remediation at these sites often takes several biennia, which means we may not be able to complete cleanup actions at all sites each biennium. These sites represent a mix of high-priority and other sites ready to proceed with cleanup actions. Over 300 new sites have been reported to the program each year for the past decade. It is likely new sites that include those more hazardous to human health and the environment will be reported and moved up in priority for cleanup actions.

## Conclusions

- \$49.9 million is the estimated need to address all currently known high-priority orphaned and abandoned sites, at an estimated average cost of \$1.04 million per site (Based on the average cleanup cost estimates from Figure 7).
- There is potential to cost recover state resources at these sites (note: cost recovery is intrinsically labor intensive, and may not always be successful at an abandoned site).

Sites and cost estimates were developed based on a reasonable expectation of the work Ecology could do in ten years with projected resources. The following chart shows the current ten-year project list for planned orphaned and abandoned site cleanups.

As noted, estimating costs accurately for these sites is based largely on the degree of project definition. Most estimates will likely move up or down as actual remedial investigations get underway at the contaminated site. We will continue to refine cost estimates for those sites that take several biennia to complete.



Figure 7. Ten-Year Clean Sites Initiative Projects

Project Name	TCP Rank	Region	County	Estimate 11-13	Estimate 13-15	Estimate 15-17	Estimate 17-19	Estimate 19-21	Total
Caribou Realty	H	SWRO	Clark	\$358,460	\$431,320				\$789,780
Cle Elum LUST sites	H	CRO	Kittitas	\$208,100					\$208,100
Maralco (AG needed)	H	NWRO	King	\$2,869,070					\$2,869,070
Most Western Laundry	H	SWRO	Grays Harbor	\$364,180	\$431,320				\$795,500
Park Laundry	H	SWRO	Clark	\$312,150	\$370,880				\$683,030
Phillips Residential Property	H	SWRO	Thurston	\$52,030					\$52,030
Schwerin Concaves	H	ERO	Walla Walla	\$1,232,990					\$1,232,990
Sunnydell Dryke Shooting Range	H	SWRO	Jefferson	\$506,430	\$431,320	\$447,000			\$1,384,750
Tony's Auto Repair	H	CRO	Yakima	\$190,060					\$190,060
Spokane River Beach Cleanups	H	ERO	Spokane	\$624,300					\$624,300
Aladdin Plating	M	SWRO	Pierce	\$260,130					\$260,130
Colville Post and Pole	M	ERO	Stevens		\$318,800	\$330,390	\$342,380	\$354,810	\$1,346,380
HECLA Mining Assessment	M	CRO	Ferry	\$26,010					\$26,010
Malcolm Montague	M	SWRO	Clark	\$312,150	\$343,590				\$655,740
Marshall Landfill	M	ERO	Spokane		\$972,530	\$1,486,280	\$4,590,170	\$353,480	\$7,402,460
Okanogan County Mines - Brook, Black Bear, Ruby, and Four Metals	M	CRO	Okanogan	\$520,250					\$520,250
Richland LUST sites	M	CRO	Richland	\$208,100					\$208,100
Rule/EIS - MT CA/Sediment Mgmt Standards		HQ		\$104,050			\$347,420		\$451,470
Skyline Fluid Power Inc	M	ERO	Columbia		\$180,200	\$881,670			\$1,061,870
Buena LUST Sites	L	CRO	Yakima	\$52,030	\$53,920				\$105,950
Hauser	L	NWRO	King	\$520,250	\$539,150				\$1,059,400
Monroe Auto Salvage Sites (Parcel 3 and 6)	L	NWRO	Snohomish	\$520,250	\$539,150				\$1,059,400
<b>TOTAL</b>				<b>\$9,240,990</b>	<b>\$4,612,180</b>	<b>\$3,145,340</b>	<b>\$5,279,970</b>	<b>\$708,290</b>	<b>\$22,986,770</b>

Escalation Factor

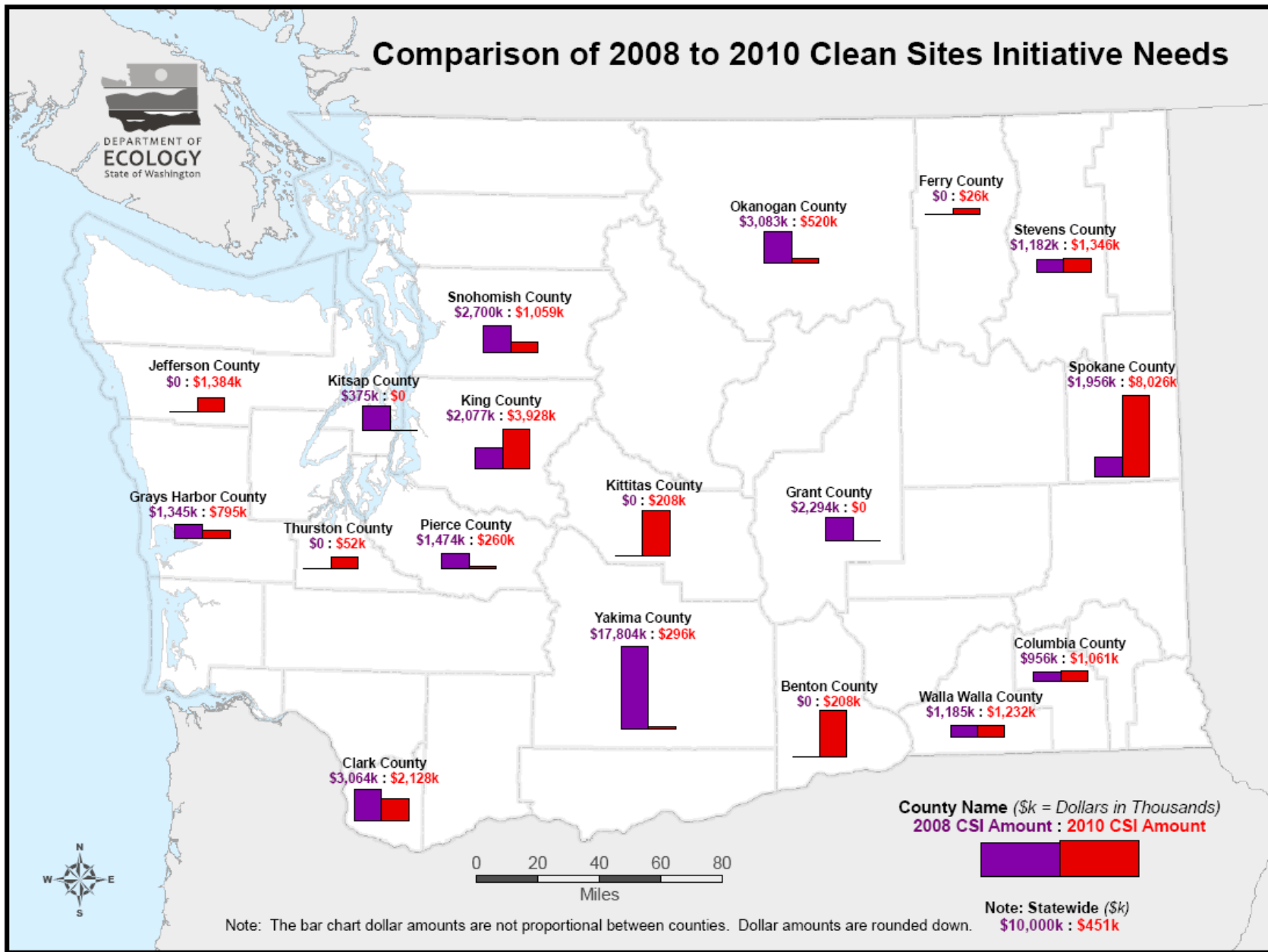
1.0405

1.0783

1.1175

1.1581

1.2001



# Safe Soils Program

## Background

Industrial air emissions and pesticides used in farming have polluted large areas of soil in Washington with arsenic and lead. This type of pollution, called area-wide soil contamination, puts many of our communities at risk. Arsenic and lead are toxic metals that can be harmful to human health – and children are especially vulnerable.

Ecology is working with communities, local health departments, and other government agencies to reduce exposure to polluted soils in several parts of Washington.

- The Tacoma Smelter Plume covers large areas of Pierce, King, and Thurston counties and puts thousands of children at risk. A 2005 law helped create the Soil Safety Program, which provides soil testing and resources for schools, childcares, and other areas where these children play.
- The Everett Smelter in Snohomish County was sold as residential and commercial land in the 1920s-1930s. Today, this 600-acre site is being cleaned up to protect the community from high levels of lead and arsenic.
- Former orchard lands can have soil pollution from past use of lead arsenate pesticides. Some of the largest affected areas are in central Washington.

A statewide strategy was developed to address arsenic and lead soil contamination. Ecology developed a priority list and financing plan for childcare facilities and schools.

This biennium, arsenic and lead soil contamination in western Washington will be financed through a settlement reached with Asarco. These western Washington schools, childcares, and other areas where children play will no longer have cleanups funded by the Local Toxics Control Account. Soil contamination in eastern Washington will continue to be funded through state funds and those remaining schools are listed below.

## Findings

- Over 120 public schools located in Douglas, Chelan, Spokane, Yakima, and Okanogan counties have been sampled for lead and arsenic contamination.
- 33 schools have been identified as requiring further action. As of 2010, 13 of those schools still need additional protective measures or cleanups.

## Conclusions

The legislature has provided \$3.7 million in the 2011-13 Capital Budget to continue cleanup work at schools in eastern and central Washington. This funding will support cleanup at an additional three schools furthering Ecology's goal to complete all school cleanups in the summer of 2013.

To ensure a successful cleanup, Ecology works with its partner schools to:

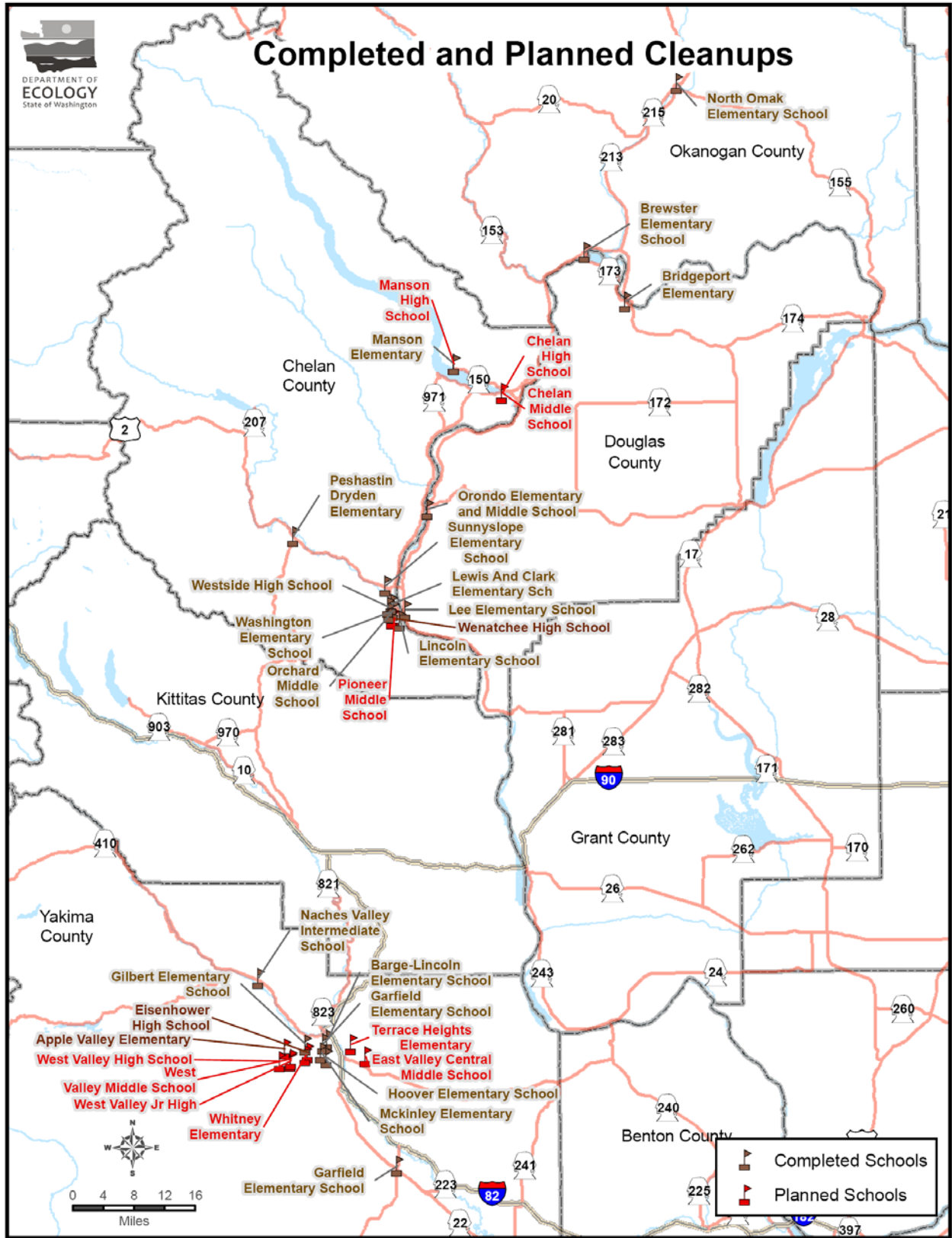
- Schedule cleanups to efficiently complete the projects during times that minimize exposure;
- Schools typically move summer school classes to accommodate the cleanup activities;
- All schools scheduled for cleanups have been provided with precautionary measures to take until the cleanup actions occur.

**Figure 8. Safe Soils Projects**

School	Location	School District	Summer Construction Schedule	Estimated Cost
East Valley Intermediate	Yakima	East Valley School District	2011	\$ 800,000
Whitney Elementary/Wilson Middle School	Yakima	Yakima School District	2011	\$ 1,000,000
Apple Valley Elementary	Yakima	West Valley School District	2012	\$ 600,000
Terrace Heights Elementary	Yakima	East Valley School District	2012	\$ 600,000
Eisenhower High School	Yakima	Yakima School District	2012	\$ 1,200,000
West Valley Middle School	Yakima	West Valley School District	2012	\$ 600,000
West Valley Junior High	Yakima	West Valley School District	2012	\$ 900,000
West Valley High School	Yakima	West Valley School District	2012	\$ 700,000
Chelan Middle School	Chelan	Lake Chelan School District	2013	\$ 50,000
Chelan High School	Chelan	Lake Chelan School District	2013	\$ 50,000
Pioneer Middle School	Wenatchee	Wenatchee School District	2013	\$ 900,000
Manson High School	Wenatchee	Manson School District	2013	\$ 300,000
Wenatchee High School	Wenatchee	Wenatchee School District	2013	\$ 900,000



# Completed and Planned Cleanups



*This page intentionally blank.*

# Puget Sound Cleanups

## Background

Ecology has been identifying and cleaning up contaminated sites in the Puget Sound area through MTCA for many years. As this work continues, new resources allow us to focus additional efforts to clean up and restore bays within Puget Sound. Through the Puget Sound Initiative, Washington State has committed the resources and funding for a healthier Puget Sound and surrounding communities. The Puget Sound Initiative is a collaborative effort – by local, tribal, state, and federal governments; business; agricultural and environmental interests; and the public – to restore and protect the Sound. The Puget Sound Initiative provides full funding to clean up and restore contaminated sites that impact Puget Sound when no other funding is available. This is different from the Remedial Action Grant program that provides funding matches to local governments to clean up their contaminated sites.

A leading source of pollution to the Sound is contaminated sites around its shorelines. Ecology identified contaminated sites within one-half mile of the Sound. In response to the Puget Sound Initiative and with increased funding, we accelerated efforts to clean and restore contaminated sites within identified priority bays. These areas are one of the cornerstones of Ecology's approach to protect and restore Puget Sound.

This bay-wide approach, in addition to site-specific cleanups, will result in larger areas of usable shoreline habitat for fish, wildlife, and people. Ecology negotiated numerous cleanup agreements to meet Puget Sound Initiative objectives. The table (Figure 9) summarizes these cleanup project needs for the next ten years and ranks the sites within each project.

## Findings

- Modeling under the Remedial Action Cost Engineering and Requirements system (RACER) tool was used to estimate costs for 40 sites. Project costs range from \$208,100 to \$23.4 million per site cleanup, indicating variability in the size and nature of cleanups being conducted. The average cost in this group of sites under the model is \$2.5 million per site. The RACER system has been shown to be within ten percent accuracy.
- In the 2011-13 budget, the legislature has provided Ecology with \$16.4 million in the capital budget to address cleanup of contaminated sites on Puget Sound. Remediation at these sites often takes several biennia, which means we may not be able to complete cleanup actions at sites funded under the 2011-13 biennium. These sites represent a mix of high-priority and other sites ready to proceed with cleanup actions.

## Conclusions

- \$98.6 million is the estimated need to address this group of Puget Sound sites at an estimated average cost of \$2.5 million per site.

- There is potential to cost recover state resources at some of these sites (note: cost recovery is intrinsically labor intensive and may not always be successful at an abandoned site).

Sites and cost estimates were developed based on a reasonable expectation of the work Ecology could do in ten years with projected resources. The following chart shows the current ten-year project list for Puget Sound contaminated site cleanup.

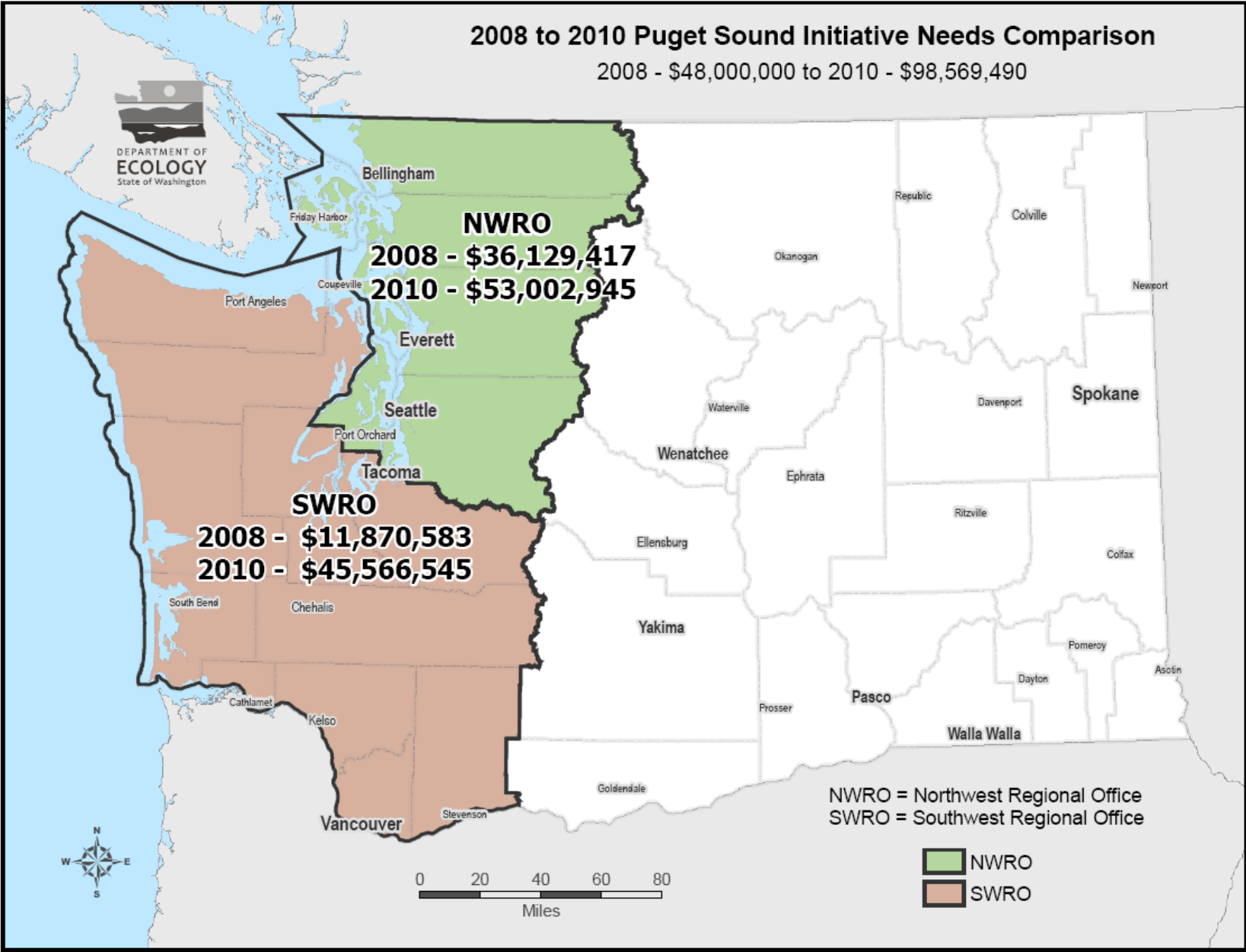
As noted - estimating costs accurately for these sites is based largely on the degree of project definition. Most estimates will likely move up or down as actual remedial investigations get underway at the contaminated site. We will continue to refine cost estimates for those sites that take several biennia to complete.



Figure 9. Puget Sound Cleanup & Restoration Projects

Project Name	Rank	Region	County	Estimate 11-13	Estimate 13-15	Estimate 15-17	Estimate 17-19	Estimate 19-21	Estimate Future Biennia	Total
<b>Escalation Factor</b>				1.0405	1.0783	1.1175	1.1581	1.2001	1.2437	
Airo Services, Cleanup Action	M	SWRO		\$217,470	\$138,250	\$136,240	\$47,320	\$ -	\$ -	<b>\$539,280</b>
Asarco Ruston Superfund Remedial Action 10% match	H	LACS	Pierce	520,250	-	-	-	-	-	<b>520,250</b>
Basin Oil-next to T117	H	NWRO	King	563,140	-	-	-	-	-	<b>563,140</b>
Bellingham Bay	H	NWRO		1,560,750	-	-	-	-	-	<b>1,560,750</b>
BP Oil Station, Bothell Ecology	H	NWRO	King	1,040,500	-	-	-	-	-	<b>1,040,500</b>
Bremerton Landfill aka Gorst Landfill	H	NWRO		1,318,810	1,366,720	-	-	-	-	<b>2,685,530</b>
Cornet Bay-Mixed Funding	H	NWRO	Island	2,601,250	2,156,600	1,583,840	-	-	-	<b>6,341,690</b>
Gas Works Park-Upland Remedial Investigations	H	NWRO	King	520,250	-	-	-	-	-	<b>520,250</b>
Irondale Iron & Steel, RI/FS	M	SWRO		4,162,000	528,370	-	-	-	-	<b>4,690,370</b>
Jacobsen Property	M	NWRO	King	520,250	735,800	-	-	-	-	<b>1,256,050</b>
Lamberts Radiator Shop	L	NWRO	Kitsap		1,569,590	388,380	149,700	-	-	<b>2,107,670</b>
Lower Budd Inlet-Bay-wide Remedial Action	H	SWRO	Thurston	334,690	351,330	122,040		-	-	<b>808,060</b>
Lower Budd Inlet-Remedial Investigation	H	SWRO	Thurston	140,920	147,930	51,380		-	-	<b>340,230</b>
Lower Budd Inlet-West Bay Marina	H	SWRO	Thurston	824,950	-	-	-	-	-	<b>824,950</b>
Lower Duwamish Waterway Source Control and Cleanup	H	NWRO	King	3,849,850	4,313,200	4,470,000	3,474,150	3,600,300	3,731,100	<b>23,438,600</b>
Marine Criteria Update	H	I&P		156,080	161,750	335,250		-	-	<b>653,080</b>
NMFS PSI Assistance	H	LACS		104,050	107,830	111,750	115,810	120,010		<b>559,450</b>
Oakland Bay	H	SWRO	Mason	313,190	-	-	-	-	-	<b>313,190</b>
Olympia Dry Cleaner	M	SWRO	Thurston			706,790	179,520	-	-	<b>886,310</b>
Port Angeles – Rayonier, Cleanup	M	SWRO	Clallam	520,250	-	-	-	-	-	<b>520,250</b>

Project Name	Rank	Region	County	Estimate 11-13	Estimate 13-15	Estimate 15-17	Estimate 17-19	Estimate 19-21	Estimate Future Biennia	Total
Port Angeles Harbor-Cleanup	H	SWRO	Clallam	884,430	-	-	-	-		884,430
Port Angeles Harbor-Ennis Creek Restoration-NRDA	H	SWRO	Clallam	260,130	-	-	-	-		260,130
Port Gamble-Cleanup	H	LACS	Kitsap	-	539,150	-	-	-		539,150
Port Gardner/Snohomish River Estuary-Bay-wide Sediment Study Follow-Up	H	LACS	Snohomish	208,100				-		208,100
Port Gardner/Snohomish River Estuary-New Site Focused Sampling	H	LACS	Snohomish	260,130	53,920			-		314,050
Port of Anacortes/Fidalgo Bay-Custom Plywood - On-going Cleanup	H	LACS	Skagit	10,405,000	-	-	-	-		10,405,000
Port of Anacortes/Fidalgo Bay-New Site Focused Sampling	H	LACS	Skagit	208,100	-	-	-	-		208,100
Port of Anacortes/Fidalgo Bay-Whitmarsh Landfill - sampling	H	LACS	Skagit	208,100				-		208,100
Puget Sound Initiative Technical & Scientific Support	H	I&P		1,040,500	1,078,300	1,117,500	1,158,050	1,200,100		5,594,450
Puget Sound Public Involvement/Engagement Assistance	H	LACS		312,150	323,490	335,250	347,420	-		1,318,310
Sinclair Dyes Inlet NRD	H	LACS	Kitsap	260,130	269,580	279,380	289,510	300,030		1,398,630
Spikes Hydraulic	H	SWRO		208,100	-	-		-		208,100
Tribal Northwest Indian Fisheries	H	LACS		182,090	107,830	111,750	115,810	120,010		637,490
Trident Metals	H	SWRO	Pierce	1,562,780	1,619,560	-	-	-		3,182,340
USFWS PSI Assistance	H	LACS		104,050	107,830	111,750	115,810	120,010		559,450
Well 12A Superfund O & M	H	LACS	Pierce	-	161,750	167,630	231,610	240,020		801,010
Well 12A Superfund Remedial Action 10% match	H	LACS	Pierce	1,560,750	-	-	-	-		1,560,750
Wyckoff/Eagle Harbor O & M	H	LACS	Kitsap	2,081,000	2,695,750	1,117,500	-	-		5,894,250
Wyckoff/Eagle Harbor Superfund Remedial Action 10% match	H	LACS	Kitsap	2,081,000	5,391,500	5,587,500	1,158,050	-		14,218,050
<b>Total</b>				<b>\$41,095,190</b>	<b>\$23,926,030</b>	<b>\$16,733,930</b>	<b>\$7,382,760</b>	<b>\$5,700,480</b>	<b>\$3,731,100</b>	<b>\$98,569,490</b>



*This page intentionally blank.*

# Toxic Treatment, Storage, and Disposal (TSD) Cleanup Program

Ecology issues permits to facilities that treat, store and/or dispose of hazardous wastes. We also oversee closure and needed corrective action at these facilities. Sixty facilities that operated over the past 20 years are contaminated and require some form of cleanup. Completion of cleanup is required at 34 medium- or high-priority sites because of their significance, as designated by the Environmental Protection Agency. TSD cleanups deal with complex contamination problems and require 10-12 years to complete.

Additional funding in Ecology’s 2009-11 budget to “*Accelerate Toxic TSD Cleanups*” (\$810,600 from the STCA and 2.3 FTEs) puts the program on track to have 34 cleanups finished or in maintenance mode by 2020. Most of these costs are recoverable from property owners. All these sites, the majority of which are near Puget Sound, have documented soil and groundwater contamination and potential or actual impact to surface waters.

Ecology’s ten-year TSD plan maintains staff to accelerate completion of cleanup at the contaminated TSD sites listed in Figure 10.

## State Toxics Control Account

Fund Source & Activity	2011-13	2013-15	2015-17	2017-19	2019-21	10-Year Sum
Total Carry Forward Level (CFL)	\$3,577,300	\$3,546,300	\$3,753,000	\$3,605,000	\$3,605,000	\$18,086,600

**Figure 10. State Toxics Control Account**

<b>Facility or Site</b>	<b>Priority (H/M)</b>	<b>County</b>	<b>Intended Use after Cleanup</b>
Bay Zinc Company, Inc.	H	Yakima	Recycle or Transfer
Boeing – Everett	H	Snohomish	Other business use
Boeing – Renton	H	King	Other business use
Boeing A&M Developmental Center	H	King	Other business use
Cameron Yakima, Inc.	H	Yakima	Recycle or Transfer
CleanCare Corporation	H	Pierce	Other business use
ConocoPhillips Company, Ferndale Refinery	H	Whatcom	Remain TSD—own use only
Emerald Kalama Chemical, LLC (formerly Noveon Kalama, Inc.)	H	Cowlitz	Other business use
General Electric Aviation Division (aka General Electric Dawson Plant)	H	King	Other business use
International Paper, Longview	H	Cowlitz	Other business use
McFarland Cascade Pole and Lumber Company, Tacoma	H	Pierce	Other business use
Occidental Chemical Corporation (formerly Pioneer Americas Inc.)	H	Pierce	Other business use
Pacific Functional Fluids (formerly Lilyblad Petroleum, Inc.)	H	Pierce	Recycle or Transfer
Port of Seattle, Pier 91 (formerly PSC/Burlington Environmental Inc.)	H	King	Other business use
PSC/Burlington Environmental LLC – Georgetown	H	King	Recycle or Transfer
PSC/Burlington Environmental LLC – Tacoma	H	Pierce	Remain TSD
PSC/Burlington Environmental LLC – Washougal	H	Clark	Recycle or Transfer
Schwerin Concaves, Walla Walla	H	Walla Walla	Other business use
Shell OPUS Puget Sound Refinery	H	Skagit	Remain TSD—own use only
SSA Containers Inc. (formerly Reichhold Inc., Tacoma)	H	Pierce	Other business use
TOXGON Corporation Seattle	H	King	Other business use
US Army Headquarters I Corps & Fort Lewis	H	Pierce	Other use
Boeing – Auburn	M	King	Other business use
BP Cherry Point Refinery	M	Whatcom	Remain TSD—own use only
BSB Diversified Company, Inc.	M	King	Other business use
Emerald Services, Inc. - Alexander Avenue	M	Pierce	Remain TSD
Fuel Processors	M	Cowlitz	Recycle or Transfer
Petroleum Reclaiming Services, Inc.	M	Pierce	Recycle or Transfer
PSC/Burlington Environmental LLC – Kent	M	King	Remain TSD
Safety Kleen Systems Inc. Auburn	M	King	Recycle or Transfer
Safety Kleen Systems Inc. Lynnwood	M	King	Recycle or Transfer
Tesoro Refining and Marketing Company	M	Skagit	Remain TSD—own use only
University of Washington - Tacoma Branch Campus	M	Pierce	Other business use
US Army Yakima Training Center, Bldg. T14	M	Yakima	Other use

## **Prevention – Ten-Year Financing Plans**

Reducing the use of toxic chemicals avoids the creation of costly new cleanup sites, restores and protects Washington's waters, reduces health risks and costs, and saves money for businesses and taxpayers. The risk from toxic chemicals doesn't begin with a leaking drum at an industrial site; it begins when products that contain toxic chemicals are manufactured, bought, and used.

Washington citizens generate more than twice the amount of hazardous waste generated by Washington industry. According to a 2007 statewide survey, nearly 40 percent of Washington citizens are concerned about toxic products they have or use in their homes.

Getting toxics out of what we use, make, and buy is the wave of the future - yet chemical producers aren't required to provide information on the health and environmental safety of 80,000 chemicals in use in Washington. Reducing toxic chemical use by creating and implementing an action plan, one chemical at a time, does not address the health and environmental risks in a timely manner. Ecology's chemical action plans (CAPs) for chemicals with tremendous legacy problems, like lead and mercury, take several years to develop and implement. This approach is appropriate for these "worst of the worst" chemicals, but more systemic pollution prevention strategies are needed for other types of chemicals of concern.

Pollution prevention activities examine processes, practices, materials, and use of energy. Activities identify approaches that avoid or minimize the creation of pollutants and waste and that reduce the use of toxic chemicals in the first place. Reduced use leads to less waste to manage or clean up. Captured under this category is technical assistance, education, pollution prevention planning, regulatory actions, incentives that result in less waste, and reducing or eliminating the use of toxic substances. Prevention that focuses on eliminating toxic substances will protect Washington's water, soil, air, and citizens. It involves continual improvements through design, technical, operational, and behavioral changes.

# Ten-Year Financing Plan and the Beyond Waste Plan

Ecology's ten-year financing plan builds capacity to prevent pollution by implementing the Beyond Waste plan recommendations to eliminate use of toxic substances by:

- Providing assistance to businesses and governments, including identification of high-priority hazardous substances; assistance with chemical substitution and assessments; on-site technical assistance; workshops; and participation in interstate chemical clearinghouses.
- Increasing technical assistance to businesses regarding use of alternatives to toxic chemicals and improving processes that result in cost and environmental savings.
- Increasing environmentally-preferred purchasing by citizens, businesses, and governments.
- Implementing producer responsibility/product stewardship programs, especially for discarded products containing toxic materials.
- Improving citizen and business access to and use of information about toxic chemicals in products, safer alternatives, and safe use and safe disposal methods. Reducing household use of toxic chemicals is key to restoring and protecting Puget Sound.
- Adopting regulations requiring companies to report the use of toxic chemicals in children's products and to seek less toxic alternatives.
- Developing and implementing Chemical Action Plans (CAP) for reducing the use of persistent, bioaccumulative and toxic chemicals, similar to CAPs for mercury and lead.
- Implementing the 2008 Children's Safe Products Act.
- Developing tools to assess alternatives to priority chemicals of concern.
- Providing programs for the collection of hazardous materials such as electronics and mercury containing-lights.
- Supporting the implementation of hazardous waste management plans.
- Ensuring that facilities handling hazardous waste are in compliance with environmental laws and regulations.



## Prevent Hazardous Waste and Reduce Toxics Use

Ecology developed a 30-year Beyond Waste plan with the goal to eliminate most wastes and recycle the remaining wastes in a closed-loop system. Closed-loop recycling is making an old product into the same thing again, like turning old aluminum cans into new aluminum cans. In this way, previously discarded products are taken back by producers as a valuable resource, preventing the release of toxic chemicals in landfills. This direction is critical to avoid recontamination of sites that have already been cleaned up. The Beyond Waste vision supports the three main types of activities Ecology does – prevention, waste management, and cleanup.

Ecology has a goal of working more with manufacturers to reduce toxic substances used to make products. The 2008 Legislature required Ecology to evaluate pollution prevention plan requirements currently in law and other prevention methods for their ability to help meet the goal of reducing the use of toxic chemicals in the state by 50 percent by 2020. The Legislature directed Ecology to convene a balanced stakeholder group and report its findings and recommendations by the end of 2008 (Enacted Supplemental Operating Budget, ESHB 2687.SL, Section 302, Subsection 38). Findings and recommendations from this report are folded into the ten-year financing projections. The Toxics Reduction Advisory Committee Findings and Recommendations report is publication 08-04-029 ([www.ecy.wa.gov/biblio/0804029.html](http://www.ecy.wa.gov/biblio/0804029.html)). In 2008, the Legislature also passed the Children's Safe Products Act (ESSHB 2647) requiring Ecology to work with the Department of Health to develop a list of chemicals of high concern for children. Manufacturers are required to report to Ecology on their use of these chemicals in children's products. Rules to implement the act are expected to be adopted in spring, 2011. Manufacturer reporting on the use of toxic chemicals will fill a critical data gap and allow the agency to better focus where safer alternatives are needed.

Reducing toxic substances will involve researching hazardous substances and their alternatives, then providing this information to businesses, state, local agencies, and consumers. Additional resources, as aligned with stakeholder recommendations in future biennia for the following focus areas, would contribute toward achieving this goal:

- More research on safer chemical alternatives.
- More technical assistance to businesses through programs like TREE (Technical Resources for Engineering Efficiency) and “lean” manufacturing.
- More communication and outreach.

## Beyond Waste and Funding Priorities

One of the goals of Ecology’s Beyond Waste plan is to reduce the amount and toxicity of waste. A key goal to reducing toxic threats and future cleanup sites is to build our capacity to effectively prevent the uses and releases of toxic chemicals. This will require some refocusing of available MTCA dollars to prevention. Currently, 60 percent of the Coordinated Prevention Grants (CPG) funding is used for waste management activities. Over ten years, Ecology plans to shift existing resources toward 40 percent waste management and 60 percent prevention in support of the Beyond Waste plan.

New green building, toxics reductions, and organics projects aimed at reducing toxic chemical use and eliminating wastes through prevention, reduction, reuse, and recycling strategies, would be eligible for funding.

MTCA funding for management and prevention is often the sole funding for many small and rural local governments. Ecology is currently working with local governments to determine whether alternate funding sources are available for solid waste prevention and management. In the meantime, during these tough economic times, reliance on grant funding by local governments has increased. Without full funding for CPG programs, many local health departments would not have sufficient funding to conduct solid waste enforcement activities which could lead to illegal disposal and future cleanup sites.

Many local governments may not be able to take advantage of grants and programs offered through the MTCA account, due to match requirements. While Ecology believes there needs to be a local investment in these programs, we are exploring methods to provide relief to local governments - including reducing or eliminating match requirements.

Reducing small-volume hazardous materials and wastes (known as moderate risk waste – MRW) is one of the five initiatives in the Beyond Waste Plan. But recommendations in the MRW initiative go beyond safe handling and disposal. They involve reviewing how hazardous substances are regulated, optimizing reuse and recycling, and increasing the use of safer products and services.

**Figure 11. Prevention: Future Needs Beyond 2011-2013 Budget**

Account	2011-13	2013-15	2015-17	2017-19	2019-21	Total
FTE	0	4.0	5.0	9.0	9.0	
<b>State Toxics Control Acct Total</b>	<b>\$0</b>	<b>\$5,431,000</b>	<b>\$6,162,000</b>	<b>\$3,899,000</b>	<b>\$4,177,000</b>	<b>\$19,669,000</b>
Local Toxics Activities						
Reduce Generation of Hazardous Waste & Use of Toxic Chemicals	\$0	\$3,760,000	\$4,230,000	\$1,700,000	\$1,700,000	<b>\$11,390,000</b>
Chemical Action Plans	\$0	\$204,000	\$423,000	\$650,000	\$886,000	<b>\$2,163,000</b>
Policy & Coordination	\$0	\$657,000	\$672,000	\$685,000	\$699,000	<b>\$2,713,000</b>
Tech Asst for Mod Risk Waste	\$0	\$810,000	\$837,000	\$864,000	\$892,000	<b>\$3,403,000</b>
<b>Local Toxics Control Acct Total</b>	<b>\$0</b>	<b>\$5,431,000</b>	<b>\$6,162,000</b>	<b>\$3,899,000</b>	<b>\$4,177,000</b>	<b>\$19,669,000</b>

# Toxic Diesel and Wood Smoke Emission Reduction

Air quality in Washington has greatly improved since 1991, when the state Legislature expanded air quality safeguards. However, hundreds of scientific studies now show air pollution levels are routinely measured in Washington at harmful levels for people, even when those levels don't violate federal standards. The primary cause is toxics in the air. Ecology has determined that soot from diesel engines is the greatest toxic health threat from air pollution, followed by fine particle pollution from smoke.

Ecology's ten-year financing plan for air pollution focuses on diesel soot and wood smoke reduction strategies. Diesel and wood smoke pollution are known to cause significant adverse human health effects, including premature death, and impose hundreds of millions of dollars annually in health care costs from pollution-caused disease on residents, governments, and businesses. The California Air Resources Board (CARB) estimates \$8 is saved in health and societal costs for each \$1 spent on diesel emission reductions. Retrofitting the dirtiest diesel engines with improved emission controls and replacing the dirtiest woodstoves where this equipment is operated in densely populated areas can reduce public exposure to the pollutants - reducing the risk of disease and death, and decreasing health care costs. Retrofit projects and woodstove replacements also help the economy by creating installation jobs and increasing sales of certain equipment in Washington State.

In addition to health concerns, a number of areas in Washington will violate new, tougher national air quality standards for harmful air pollutants. Federal law requires communities that violate these health-based standards to bring down air pollution levels. Ecology must identify all sources that contribute to each community's high pollution levels and develop and implement strategies that will bring air quality back into compliance with federal law. Failure to meet these federal Clean Air Act requirements subjects the state and communities to severe financial penalties and sanctions, as well as the negative public health implications of continued exposure to these toxic contaminants.

## **Diesel Emissions**

In the 2011-13 biennial budget, Ecology proposes long-term funding strategies to address diesel emissions; \$22 million over ten years, with \$10 million from the Local Toxics Control Account in 2011-13. Funding is "front-loaded" in order to quickly implement strategies that improve public health and bring areas back into compliance with federal standards. Projects will include grants to local agencies for the purchase and installation of technologies on public sector engines and equipment to reduce diesel engine idling - reducing emissions of toxic pollutants and greenhouse gases as well as saving fuel, fuel costs and preserving equipment life. The Legislature provided \$7,000,000 from Local Toxics Control Account funds in the 2011-13 Biennium. Maintaining the planned expenditure level requires a modest increase in out-biennia.

<b>Biennium</b>	<b>2011-13</b>	<b>2013-15</b>	<b>2015-17</b>	<b>2017-19</b>	<b>2019-21</b>
<b>FTEs</b>	1.6	1.6	1.6	0	0
<b>LTCA</b>	\$7,000,000	\$5,000,000	\$5,000,000	\$5,000,000	0

## **Woodstove Emissions**

In the 2011-13 biennial budget, Ecology proposes long-term funding strategies to address wood smoke emissions; \$10 million over ten years, with \$2 million from the Local Toxics Control Account and \$2 million from the State Toxics Control Account in 2011-13. Funding is “front-loaded” in order to quickly implement strategies that improve public health and bring areas back into compliance with federal standards. Funds will be used to implement wood smoke reduction strategies in areas that do not comply with federal standards as well as in other high-exposure, high health-risk communities. The Legislature provided \$3 million from Local Toxics Control Account funds in the 2011-13 Biennium. Maintaining the planned expenditure level requires a modest increase in out-biennia.

<b>Biennium</b>	<b>2011-13</b>	<b>2013-15</b>	<b>2015-17</b>	<b>2017-19</b>	<b>2019-21</b>
<b>FTEs</b>	0	0	0	0	0
<b>LTCA</b>	\$3,000,000	\$2,000,000	\$2,000,000	0	0
<b>STCA</b>	\$0	\$2,000,000	\$1,000,000	0	0
<b>Total</b>	\$3,000,000	\$4,000,000	\$3,000,000	0	0

## **Complying with Tough New Air Quality Laws**

A number of areas in Washington will violate new, tougher national air quality standards for harmful air pollutants. Federal law requires communities that violate these health-based standards to bring down air pollution levels. Ecology must identify all sources that contribute to each community's high pollution levels and develop and implement strategies that will bring air quality back into compliance with federal law. Failure to meet these federal Clean Air Act requirements subjects the state and communities to severe financial penalties and sanctions, as well as the negative public health implications of continued exposure to these toxic contaminants. Ecology requires substantial new resources to address this new work.

Ozone and fine particle pollution present significant, wide-spread health risks to people in Washington. Human health risks of short- and long term exposure to these pollutants include acute and chronic heart and lung diseases, sometimes resulting in death. These two pollutants already are being measured in many areas throughout Washington at levels that can harm people. Ecology estimates fine particle related diseases contribute to 1,100 deaths and close to \$200 million in health care and societal costs of disease in Washington each year. A toughened ozone standard will place the greater Puget Sound area, and possibly Spokane and Clark counties, in violation. A toughened fine particle standard (yet to be proposed) will place Yakima and Darrington, and likely several other communities throughout the state, in violation. An area in and around Tacoma already violates the existing standard for fine particles.

The additional, critical work required to bring areas back into compliance. includes: understanding each pollution source and sector and how it contributes to the air quality problem; analyzing strategies and alternative combinations of solutions for cost, effectiveness, ease of implementation, and viability; creating a defensible and legally enforceable plan that solves the

problem; and ensuring the plan is approved by EPA, carried out, and that clean air is achieved by the federal deadline and maintained into the future. Failure to complete these tasks, as well as create and implement plans to guarantee clean air, can subject the state to sanctions including loss of federal clean air grants, additional constraints on businesses wishing to expand and loss of federal transportation dollars.

A separate plan and series of implementation actions is required for each area and for each pollutant that violates the standards. Passage of I-695 in 1999 eliminated a major source of revenue for the state’s air quality work - the \$2 Clean Air Excise Tax. Today, state air quality efforts are principally paid for from the state’s General Fund. Given the dire projections for General Fund revenue in 2011-13 and ensuing biennia; the emergent, critical need to help local communities clean up air pollution problems; the economic consequences of failure; and the strong nexus between the hazardous substances tax and air pollution in Washington, Ecology is proposing on-going funding for 10.4 new FTEs and \$2.805 million from the State Toxics Control Account to address violations of national air quality standards and to help prevent at-risk communities from violating federal law. The Legislature provided 5.8 FTEs and \$1.5 million from State Toxic Control Account funds in the 2011-13 Biennium. This amount is adequate to begin the efforts to analyze areas that are out of compliance. On-going efforts to return areas to compliance with federal standards will require additional resources in out-biennia.

Biennium	2011-13	2013-15	2015-17	2017-19	2019-21
FTEs	5.8	10.4	10.4	10.4	10.4
STCA*	\$1,504,000	\$2,805,000	\$2,805,000	\$2,805,000	\$2,805,000

\* Amount needed from State Toxics Control Account if Legislature removes existing General Fund subsidies to fee-related programs.

*This page intentionally blank.*

# **Waste Management Ten-Year Financing Plans**

As we move toward the goals of the Beyond Waste plan, reducing the amount and toxicity of waste, there are still wastes that need to be managed properly.

Waste management includes programs, activities, assistance, and grants. These are provided with the primary purpose of safely managing toxic substances and harmful wastes in the air, water, and soil to minimize or eliminate the impacts of discharges and emissions of pollutants. This includes permitting and compliance activities, developing and enforcing environmental standards, collecting and analyzing data, education, and technical assistance.

Local governments are required to plan for prevention and management of solid waste and moderate risk waste (hazardous waste from households and businesses producing small amounts) by preparing both local solid waste and hazardous waste plans.

## **Manage Solid Waste**

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

Ecology is making progress toward its Beyond Waste goal to reduce the amount and toxicity of waste. However, there are still wastes from households, businesses, industry, and government that need to be properly managed. A key aspect of managing solid waste is providing grants to local governments through Coordinated Prevention Grants (CPG).

Local governments are required to plan for prevention and management of solid waste and moderate risk waste. The CPG program funds collection of hazardous waste from citizens and businesses that produce small quantities. CPG funds are also used in constructing and managing various solid waste handling and management facilities including compost facilities, transfer stations, and material recovery facilities.

Currently, 60 percent of the CPG funding is used for waste management activities. Over ten years, Ecology plans to shift existing resources toward 40 percent management and 60 percent prevention in support of the Beyond Waste plan. Considering the substantial investment in these facilities, Ecology needs to examine how the role of these facilities might evolve as more emphasis is placed on prevention activities.

# Expand Compliance and Local Source Control Specialists

Mismanagement of hazardous waste lets toxic chemicals into our water, soil, and air. Current hazardous waste inspections result in a 57 percent rate of finding a significant environmental threat. Ecology’s ten-year financing plan builds capacity to make sure that hazardous waste is safely managed by:

- Immediately increasing capacity to inspect, at least once every three years, businesses that produce large amounts of hazardous waste. Our records show that facilities have more spills and other serious hazardous waste violations if not inspected every three years. During an economic downturn, businesses often cut back, and the first place they often cut is their environmental safety program. We expect to find more, not less, spills and other environmental threats during these tough economic times.
- Providing local governments, primarily within the Puget Sound Region, positions to inspect the large number of businesses that produce smaller volumes of hazardous waste. These positions also provide pollution prevention and multi-media technical assistance.

## Waste Management: Future Needs Beyond 2011-2013 Budget Requests (Figures 4 and 5)

Biennium	2011-13	2013-15	2015-17	2017-19	2019-21	Total
FTE	0	0	2.0	2.0	2.0	
State Toxics Control Acct Total	0	0	\$600,000	\$600,000	\$600,000	\$1,800,000
Local Toxics Control Acct Total	0	\$2,000,000	\$2,300,000	\$2,300,000	\$2,300,000	\$8,900,000



# Appendix A: House Bill 1761 – in its entirety

---

## SUBSTITUTE HOUSE BILL 1761

---

AS AMENDED BY THE SENATE

Passed Legislature - 2007 Regular Session

**State of Washington 60th Legislature 2007 Regular Session**

**By** House Committee on Capital Budget (originally sponsored by Representatives Linville, Hunter, Priest, Hunt, B. Sullivan, Upthegrove, Kessler, Sump, Hankins, Jarrett, Fromhold, Appleton, Rolfes, Darneille, Campbell, Conway, Green, O'Brien, Schual-Berke, Simpson, Ormsby and Chase)

READ FIRST TIME 3/5/07.

1 AN ACT Relating to expediting the cleanup of hazardous waste  
and

2 creating incentives for Puget Sound cleanups; and amending RCW  
3 70.105D.030 and 70.105D.070.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 **Sec. 1.** RCW 70.105D.030 and 2002 c 288 s 3 are each amended to  
6 read as follows:

7 (1) The department may exercise the following powers in  
addition to

8 any other powers granted by law:

9 (a) Investigate, provide for investigating, or require  
potentially

10 liable persons to investigate any releases or threatened  
releases of

11 hazardous substances, including but not limited to  
inspecting,

12 sampling, or testing to determine the nature or extent of any  
release

13 or threatened release. If there is a reasonable basis to  
believe that

14 a release or threatened release of a hazardous substance may  
exist, the

15 department's authorized employees, agents, or contractors may  
enter

16 upon any property and conduct investigations. The department shall  
17 give reasonable notice before entering property unless an emergency  
18 prevents such notice. The department may by subpoena require the  
p. 1 SHB 1761.SL  
1 attendance or testimony of witnesses and the production of documents or  
2 other information that the department deems necessary;  
3 (b) Conduct, provide for conducting, or require potentially liable  
4 persons to conduct remedial actions (including investigations under (a)  
5 of this subsection) to remedy releases or threatened releases of  
6 hazardous substances. In carrying out such powers, the department's  
7 authorized employees, agents, or contractors may enter upon property.  
8 The department shall give reasonable notice before entering property  
9 unless an emergency prevents such notice. In conducting, providing  
10 for, or requiring remedial action, the department shall give preference  
11 to permanent solutions to the maximum extent practicable and shall  
12 provide for or require adequate monitoring to ensure the effectiveness  
13 of the remedial action;  
14 (c) Indemnify contractors retained by the department for carrying  
15 out investigations and remedial actions, but not for any contractor's  
16 reckless or wilful misconduct;  
17 (d) Carry out all state programs authorized under the federal  
18 cleanup law and the federal resource, conservation, and recovery act,  
19 42 U.S.C. Sec. 6901 et seq., as amended;  
20 (e) Classify substances as hazardous substances for purposes of RCW

21 70.105D.020(7) and classify substances and products as  
hazardous  
22 substances for purposes of RCW 82.21.020(1);  
23 (f) Issue orders or enter into consent decrees or agreed  
orders  
24 that include, or issue written opinions under (i) of this  
subsection  
25 that may be conditioned upon, deed restrictions where  
necessary to  
26 protect human health and the environment from a release or  
threatened  
27 release of a hazardous substance from a facility. Prior to  
28 establishing a deed restriction under this subsection, the  
department  
29 shall notify and seek comment from a city or county  
department with  
30 land use planning authority for real property subject to a  
deed  
31 restriction;  
32 (g) Enforce the application of permanent and effective  
33 institutional controls that are necessary for a remedial  
action to be  
34 protective of human health and the environment and the  
notification  
35 requirements established in RCW 70.105D.110, and impose  
penalties for  
36 violations of that section consistent with RCW 70.105D.050;  
37 (h) Require holders to conduct remedial actions necessary to  
abate

SHB 1761.SL p. 2

1 an imminent or substantial endangerment pursuant to RCW  
2 70.105D.020(12)(b)(ii)(C);  
3 (i) Provide informal advice and assistance to persons  
regarding the  
4 administrative and technical requirements of this chapter.  
This may  
5 include site-specific advice to persons who are conducting or  
otherwise  
6 interested in independent remedial actions. Any such advice or  
7 assistance shall be advisory only, and shall not be binding on  
the

8 department. As a part of providing this advice and assistance  
for  
9 independent remedial actions, the department may prepare  
written  
10 opinions regarding whether the independent remedial actions  
or  
11 proposals for those actions meet the substantive requirements  
of this  
12 chapter or whether the department believes further remedial  
action is  
13 necessary at the facility. The department may collect, from  
persons  
14 requesting advice and assistance, the costs incurred by the  
department  
15 in providing such advice and assistance; however, the  
department shall,  
16 where appropriate, waive collection of costs in order to  
provide an  
17 appropriate level of technical assistance in support of  
public  
18 participation. The state, the department, and officers and  
employees  
19 of the state are immune from all liability, and no cause of  
action of  
20 any nature may arise from any act or omission in providing,  
or failing  
21 to provide, informal advice and assistance; and  
22 (j) Take any other actions necessary to carry out the  
provisions of  
23 this chapter, including the power to adopt rules under  
chapter 34.05  
24 RCW.  
25 (2) The department shall immediately implement all provisions  
of  
26 this chapter to the maximum extent practicable, including  
investigative  
27 and remedial actions where appropriate. The department shall  
adopt,  
28 and thereafter enforce, rules under chapter 34.05 RCW to:  
29 (a) Provide for public participation, including at least (i)  
public  
30 notice of the development of investigative plans or remedial  
plans for

31 releases or threatened releases and (ii) concurrent public  
notice of  
32 all compliance orders, agreed orders, enforcement orders, or  
notices of  
33 violation;  
34 (b) Establish a hazard ranking system for hazardous waste  
sites;  
35 (c) Provide for requiring the reporting by an owner or  
operator of  
36 releases of hazardous substances to the environment that may  
be a  
37 threat to human health or the environment within ninety days  
of  
p. 3 SHB 1761.SL

1 discovery, including such exemptions from reporting as the  
department  
2 deems appropriate, however this requirement shall not modify  
any  
3 existing requirements provided for under other laws;  
4 (d) Establish reasonable deadlines not to exceed ninety days  
for  
5 initiating an investigation of a hazardous waste site after  
the  
6 department receives notice or otherwise receives information  
that the  
7 site may pose a threat to human health or the environment and  
other  
8 reasonable deadlines for remedying releases or threatened  
releases at  
9 the site;  
10 (e) Publish and periodically update minimum cleanup standards  
for  
11 remedial actions at least as stringent as the cleanup  
standards under  
12 section 121 of the federal cleanup law, 42 U.S.C. Sec. 9621,  
and at  
13 least as stringent as all applicable state and federal laws,  
including  
14 health-based standards under state and federal law; and  
15 (f) Apply industrial clean-up standards at industrial  
properties.

16 Rules adopted under this subsection shall ensure that  
industrial  
17 properties cleaned up to industrial standards cannot be  
converted to  
18 nonindustrial uses without approval from the department. The  
19 department may require that a property cleaned up to  
industrial  
20 standards is cleaned up to a more stringent applicable  
standard as a  
21 condition of conversion to a nonindustrial use. Industrial  
clean-up  
22 standards may not be applied to industrial properties where  
hazardous  
23 substances remaining at the property after remedial action  
pose a  
24 threat to human health or the environment in adjacent  
nonindustrial  
25 areas.

26 (3) To achieve and protect the state's long-term ecological  
health,  
27 the department shall prioritize sufficient funding to clean  
up  
28 hazardous waste sites and prevent the creation of future  
hazards due to  
29 improper disposal of toxic wastes, and create financing tools  
to clean  
30 up large-scale hazardous waste sites requiring multiyear  
commitments.

31 To effectively monitor toxic accounts expenditures, the  
department  
32 shall develop a comprehensive ten-year financing report that  
identifies  
33 long-term remedial action project costs, tracks expenses, and  
projects  
34 future needs.

35 (4) Before ((November 1st)) December 20th of each even-  
numbered  
36 year, the department shall ((develop, with public notice and  
hearing,  
37 and submit to)):

SHB 1761.SL p. 4

1 (a) Develop a comprehensive ten-year financing report in  
2 coordination with all local governments with clean-up  
responsibilities  
3 that identifies the projected biennial hazardous waste site  
remedial  
4 action needs that are eligible for funding from the local  
toxics  
5 control account;  
6 (b) Work with local governments to develop working capital  
reserves  
7 to be incorporated in the ten-year financing report;  
8 (c) Identify the projected remedial action needs for orphaned,  
9 abandoned, and other clean-up sites that are eligible for  
funding from  
10 the state toxics control account;  
11 (d) Project the remedial action need, cost, revenue, and any  
12 recommended working capital reserve estimate to the next  
biennium's  
13 long-term remedial action needs from both the local toxics  
control  
14 account and the state toxics control account, and submit this  
15 information to the ((ways and means and)) appropriate  
standing fiscal  
16 and environmental committees of the senate and house of  
representatives  
17 ((a ranked list of projects and expenditures recommended for  
18 appropriation from both the state and local toxics control  
accounts.  
19 The department shall also)). This submittal must also include  
a ranked  
20 list of such remedial action projects for both accounts; and  
21 (e) Provide the legislature and the public each year with an  
22 accounting of the department's activities supported by  
appropriations  
23 from the state and local toxics control accounts, including a  
list of  
24 known hazardous waste sites and their hazard rankings,  
actions taken  
25 and planned at each site, how the department is meeting its  
((top two))  
26 waste management priorities under RCW 70.105.150, and all  
funds  
27 expended under this chapter.

28 ((4)) (5) The department shall establish a scientific advisory board to render advice to the department with respect to the hazard ranking system, cleanup standards, remedial actions, deadlines for remedial actions, monitoring, the classification of substances as hazardous substances for purposes of RCW 70.105D.020(7) and the classification of substances or products as hazardous substances for purposes of RCW 82.21.020(1). The board shall consist of five independent members to serve staggered three-year terms. No members may be employees of the department. Members shall be reimbursed for travel expenses as provided in RCW 43.03.050 and 43.03.060.

p. 5 SHB 1761.SL

1 ((5)) (6) The department shall establish a program to identify potential hazardous waste sites and to encourage persons to provide information about hazardous waste sites.

4 **Sec. 2.** RCW 70.105D.070 and 2005 c 488 s 926 are each amended to read as follows:

6 (1) The state toxics control account and the local toxics control account are hereby created in the state treasury.

8 (2) The following moneys shall be deposited into the state toxics control account: (a) Those revenues which are raised by the tax imposed under RCW 82.21.030 and which are attributable to that portion of the rate equal to thirty-three one-hundredths of one percent; (b) the costs of remedial actions recovered under this chapter or chapter 70.105A RCW; (c) penalties collected or recovered under this chapter;



14 and (d) any other money appropriated or transferred to the  
account by  
15 the legislature. Moneys in the account may be used only to  
carry out  
16 the purposes of this chapter, including but not limited to  
the  
17 following activities:  
18 (i) The state's responsibility for hazardous waste planning,  
19 management, regulation, enforcement, technical assistance,  
and public  
20 education required under chapter 70.105 RCW;  
21 (ii) The state's responsibility for solid waste planning,  
22 management, regulation, enforcement, technical assistance,  
and public  
23 education required under chapter 70.95 RCW;  
24 (iii) The hazardous waste cleanup program required under this  
25 chapter;  
26 (iv) State matching funds required under the federal cleanup  
law;  
27 (v) Financial assistance for local programs in accordance  
with  
28 chapters 70.95, 70.95C, 70.95I, and 70.105 RCW;  
29 (vi) State government programs for the safe reduction,  
recycling,  
30 or disposal of hazardous wastes from households, small  
businesses, and  
31 agriculture;  
32 (vii) Hazardous materials emergency response training;  
33 (viii) Water and environmental health protection and  
monitoring  
34 programs;  
35 (ix) Programs authorized under chapter 70.146 RCW;  
36 (x) A public participation program, including regional  
citizen  
37 advisory committees;

SHB 1761.SL p. 6

1 (xi) Public funding to assist potentially liable persons to  
pay for  
2 the costs of remedial action in compliance with cleanup  
standards under

3 RCW 70.105D.030(2)(e) but only when the amount and terms of  
such  
4 funding are established under a settlement agreement under RCW  
5 70.105D.040(4) and when the director has found that the  
funding will  
6 achieve both (A) a substantially more expeditious or enhanced  
cleanup  
7 than would otherwise occur, and (B) the prevention or  
mitigation of  
8 unfair economic hardship; and  
9 (xii) Development and demonstration of alternative management  
10 technologies designed to carry out the ((top two)) hazardous  
waste  
11 management priorities of RCW 70.105.150.  
12 (3) The following moneys shall be deposited into the local  
toxics  
13 control account: Those revenues which are raised by the tax  
imposed  
14 under RCW 82.21.030 and which are attributable to that  
portion of the  
15 rate equal to thirty-seven one-hundredths of one percent.  
16 (a) Moneys deposited in the local toxics control account  
shall be  
17 used by the department for grants or loans to local  
governments for the  
18 following purposes in descending order of priority: (i)  
Remedial  
19 actions; (ii) hazardous waste plans and programs under  
chapter 70.105  
20 RCW; (iii) solid waste plans and programs under chapters  
70.95, 70.95C,  
21 70.95I, and 70.105 RCW; (iv) funds for a program to assist in  
the  
22 assessment and cleanup of sites of methamphetamine  
production, but not  
23 to be used for the initial containment of such sites,  
consistent with  
24 the responsibilities and intent of RCW 69.50.511; and (v)  
cleanup and  
25 disposal of hazardous substances from abandoned or derelict  
vessels  
26 that pose a threat to human health or the environment. For  
purposes of

27 this subsection (3)(a)(v), "abandoned or derelict vessels"  
means  
28 vessels that have little or no value and either have no  
identified  
29 owner or have an identified owner lacking financial resources  
to clean  
30 up and dispose of the vessel. Funds for plans and programs  
shall be  
31 allocated consistent with the priorities and matching  
requirements  
32 established in chapters 70.105, 70.95C, 70.95I, and 70.95  
RCW. During  
33 the 1999-2001 fiscal biennium, moneys in the account may also  
be used  
34 for the following activities: Conducting a study of whether  
dioxins  
35 occur in fertilizers, soil amendments, and soils; reviewing  
36 applications for registration of fertilizers; and conducting  
a study of  
37 plant uptake of metals. During the 2005-2007 fiscal biennium,  
the  
38 legislature may transfer from the local toxics control  
account to the  
p. 7 SHB 1761.SL

1 state toxics control account such amounts as specified in the  
omnibus  
2 capital budget bill. During the 2005-2007 fiscal biennium,  
moneys in  
3 the account may also be used for grants to local governments  
to  
4 retrofit public sector diesel equipment and for storm water  
planning  
5 and implementation activities.  
6 (b) Funds may also be appropriated to the department of health  
to  
7 implement programs to reduce testing requirements under the  
federal  
8 safe drinking water act for public water systems. The  
department of  
9 health shall reimburse the account from fees assessed under  
RCW  
10 70.119A.115 by June 30, 1995.

11 (c) To expedite cleanups throughout the state, the department shall  
12 partner with local communities and liable parties for cleanups. The  
13 department is authorized to use the following additional strategies in  
14 order to ensure a healthful environment for future generations:  
15 (i) The director may alter grant-matching requirements to create  
16 incentives for local governments to expedite cleanups when one of the  
17 following conditions exists:  
18 (A) Funding would prevent or mitigate unfair economic hardship  
19 imposed by the clean-up liability;  
20 (B) Funding would create new substantial economic development,  
21 public recreational, or habitat restoration opportunities that would  
22 not otherwise occur; or  
23 (C) Funding would create an opportunity for acquisition and  
24 redevelopment of vacant, orphaned, or abandoned property under RCW  
25 70.105D.040(5) that would not otherwise occur;  
26 (ii) The use of outside contracts to conduct necessary studies;  
27 (iii) The purchase of remedial action cost-cap insurance, when  
28 necessary to expedite multiparty clean-up efforts.  
29 (4) Except for unanticipated receipts under RCW 43.79.260 through  
30 43.79.282, moneys in the state and local toxics control accounts may be  
31 spent only after appropriation by statute.  
32 (5) One percent of the moneys deposited into the state and local  
33 toxics control accounts shall be allocated only for public  
34 participation grants to persons who may be adversely affected by a  
35 release or threatened release of a hazardous substance and to not-for-

36 profit public interest organizations. The primary purpose of these

37 grants is to facilitate the participation by persons and organizations

38 in the investigation and remedying of releases or threatened releases

SHB 1761.SL p. 8

1 of hazardous substances and to implement the state's solid and  
2 hazardous waste management priorities. However, during the  
1999-2001

3 fiscal biennium, funding may not be granted to entities  
engaged in

4 lobbying activities, and applicants may not be awarded grants  
if their

5 cumulative grant awards under this section exceed two hundred  
thousand

6 dollars. No grant may exceed sixty thousand dollars. Grants  
may be

7 renewed annually. Moneys appropriated for public participation  
from

8 either account which are not expended at the close of any  
biennium

9 shall revert to the state toxics control account.

10 (6) No moneys deposited into either the state or local toxics  
11 control account may be used for solid waste incinerator  
feasibility

12 studies, construction, maintenance, or operation.

13 (7) The department shall adopt rules for grant or loan  
issuance and

14 performance.

15 (8) During the 2005-2007 fiscal biennium, the legislature may  
16 transfer from the state toxics control account to the water  
quality

17 account such amounts as reflect the excess fund balance of  
the fund.

Passed by the House April 14, 2007.

Passed by the Senate April 10, 2007.

Approved by the Governor May 11, 2007.

Filed in Office of Secretary of State May 11, 2007.