Report to the Legislature

Washington State Model Toxics Control Act Accounts

As required by Chapter 35, Laws of 2016, 1st Special Session

Budget Division
Office of Financial Management
November 2016

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Executive Summary

The Model Toxics Control Act (MTCA) was enacted by initiative in 1988. It authorized the state to impose a tax on hazardous substances to fund a broad range of toxics cleanup, control and prevention activities. During the past decade, revenue generated through the state hazardous substance tax (HST) and other revenue sources has funded about $1.73 billion in MTCA-related expenses in the state operating and capital budgets.

Under MTCA, thousands of toxic sites across the state have been cleaned up, or are in the process of being cleaned up; toxic and solid wastes have been managed to avoid contamination to the state's land, air and water; use of some toxic chemicals has been avoided, minimized or replaced with safer alternatives; water and environmental health protection and monitoring programs have been successfully carried out; and many longstanding environmental and public health activities across Washington have been funded through multiple agencies.

In recent years, however, MTCA-related needs have exceeded available funding. HST collections increased to an all-time high between 2011 and 2014, when oil prices were high. However, HST revenues have declined significantly since 2014 when oil prices fell. By 2018, the Department of Revenue (Revenue) forecasted MTCA receipts would return to pre-2011 levels. During the past two biennia, the state began overappropriating the account. In addition, after State General Fund (General Fund) revenue fell during the Great Recession, the Legislature opted to use some of the revenue for nontraditional MTCA activities.

As a result, the state has had to dramatically reduce its MTCA-related capital budget appropriations — from $297.5 million in the 2013–15 biennium to $137.7 million in the current two-year budget. Likewise, the uncertainty surrounding HST revenue makes it difficult for local governments to plan or complete MTCA-related projects.

In the 2016 supplemental capital budget (Section 6020, Chapter 35, Laws of 2016, 1st Special Session), the Legislature directed the Office of Financial Management (OFM) to analyze and make recommendations on strategies to stabilize the Model Toxics Control Act accounts revenues and provide more reliable funding for the purposes under RCW 70.105D.070:

> *The office of financial management shall analyze and make recommendations on strategies to stabilize revenue and provide more reliable funding for the purposes under RCW 70.105D.070. The agency must consult with the department of revenue, the department of ecology, fiscal and budget staff of the house of representatives and the senate, and independent policy experts and practitioners. A report must be submitted to the legislature no later than November 1, 2016, and must include the following information:*
> *(1) Historic spending rates and trends for cleaning up toxic sites, preventing and controlling pollution, and splits between operating and capital spending;*
> *(2) Recommendations on prioritizing funding under RCW 70.105D.070 and budget strategies to meet existing and projected needs;*
> *(3) An evaluation of options to increase the sustainability and decrease the volatility of the revenue from the hazardous substance tax;*
> *(4) An analysis of revenue for toxic cleanup and prevention purposes in other states; and*
> *(5) Measures to improve transparency, efficiency, and budget accountability.*

This report explains the method and outcome of OFM's analysis and explores options to stabilize the use and sources of the MTCA accounts.

The conclusions and recommendations in the report are general in nature and do not preempt the governor's funding recommendations for the 2017–19 budget, which is required by law to be submitted to the Legislature no later than Dec. 20, 2016.

Process

OFM worked with the Department of Ecology (Ecology) and Department of Revenue to analyze expenditure amounts, rates, categorization and MTCA revenue options. In addition, OFM met with and interviewed experts and practitioners to collect information to address the budget proviso requirements. Over the course of the study, OFM also consulted with legislative fiscal and budget staff to analyze policy and revenue options for increasing sustainability and reducing volatility in the state's MTCA accounts.

Through the summer of 2016, the work group interviewed 15 MTCA experts and practitioners from a number of environmental organizations. Appendix A is the form given to these individuals to help them prepare for in-person and over-the-telephone interviews. Interviewees included city, port, county and business associations; academic institutions; and the public. A group meeting was subsequently held in September. Appendix B summarizes discussion from the individual interviews and the group meeting.

The work group also conducted a survey to learn how other states generate revenue for toxics cleanup and prevention activities.

Conclusions

The funding mechanism for MTCA is unique to Washington — other states do not have a similar tax structure related to toxic cleanup, prevention and control. While the HST has been successful at generating revenue for MTCA-related activities, its revenue has declined sharply in recent years, leaving prioritized capital projects and other important activities without sufficient funding.

Available MTCA resources can be best used to reduce legacy and new environmental and public health risks when all three categories of expenditures (cleanup, prevention and control) are funded and work together.

Stability

A majority of study group participants believe that the HST — MTCA's primary revenue source — is volatile. And there is consensus that funding for MTCA programs should be more stable to balance needs with the available revenue.

Stormwater

Combined with toxics cleanup and prevention activities, the need for stormwater infrastructure far exceeds the capacity of the MTCA accounts. Although MTCA is an appropriate source for stormwater projects, the experts and stakeholders interviewed expressed interest in finding more funds for stormwater control. These could come from a new or expanded fee, tax or other funding structure.

Transparency
Communication about how the MTCA accounts are spent should be improved. There is consensus among stakeholders that although Ecology provides a significant amount of information about the overall spending and activities related to MTCA, it is not widely available or understandable. In particular, the benefits of MTCA spending need to be more clearly communicated to the public and local stakeholders.

Efficiency
Efficiencies are underway with respect to model remedies showing promise in streamlining cleanups of small sites with similar contamination, such as gas stations. Recent reforms at the Pollution Liability and Insurance Agency (PLIA) in addressing petroleum sites within its purview suggest opportunities for collaboration between it and Ecology.

Recommendations
Stability
To achieve stable funding for MTCA projects and activities — to give local governments sufficient planning opportunity and to continue funding longstanding environmental and public health protection work statewide — changes to MTCA revenue and budget strategies need to be explored. Analysis of the options will help determine if the benefits should be pursued.

Options for increasing or stabilizing revenue include expanding or changing the base of the HST, imposing a surcharge on the HST or other tax and fee sources, adjusting the HST based on inflation or a fiscal growth factor and changing to a volumetric tax on hazardous substances.

Imposing a surcharge on the HST is the most direct option of improving revenue stability and reducing volatility of the options considered. Ecology should, using its rulemaking authority, explore increasing the number of substances subject to the HST, particularly those of priority concern.

Budget strategy options include reducing use of MTCA funds for oil spill activities, using other funds for stormwater projects, adding or changing the match requirements for programs and creating a loan program from which funds are repaid to the MTCA accounts.

In addition, consideration should be given to managing the MTCA accounts on a fund, rather than cash basis.

Stormwater
MTCA should continue to pay for the costs of stormwater while the state explores options for a new dedicated funding source, as it has been singled out as a need that significantly exceeds the capacity of MTCA.

Transparency
Because of the lack of understanding of how, when and where MTCA funds are spent, steps should be taken to improve communication and education about MTCA programs. Knowing more about MTCA spending will help the Legislature, stakeholders and the public better understand how MTCA revenues are used and to what benefit. It will also provide feedback to Ecology about MTCA spending practices.

Ecology should add to its periodic reports on MTCA spending information about operating budget activities, including descriptions, results and performance measures, to promote better understanding of how MTCA is used in the operating budget.

Efficiency

In addition to model remedies, Ecology should explore ways to collaborate with PLIA to quicken the pace at which petroleum sites are cleaned up under MTCA.

Background

Model Toxics Control Act: History and Account

The Model Toxics Control Act (MTCA) was created with the passage of Initiative 97 by Washington voters in November 1988; the law went into effect in March 1989. MTCA authorized (Chapter 82.21 RCW) a tax on hazardous substances (HST) to fund a broad range of toxic cleanup, control and prevention activities. The Department of Revenue (Revenue) collects the HST and the Department of Ecology (Ecology) is the agency responsible for the implementation of major MTCA-funded programs.

The HST applies to petroleum products, hazardous substances designated under the federal Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. Sec. 9601(14)) and regulated pesticides (RCW 82.21.020). In addition, the director of Ecology may designate by rule any other substance, category of substance and any product or category of product determined by the director to present a threat to human health or the environment to be subject to the tax. Today there are more than 8,000 hazardous substances subject to the tax.

MTCA led to the creation of the State Toxics Control Account (STCA), the Local Toxics Control Account (LTCA) and the Environmental Legacy Stewardship Account (ELSA). All three accounts receive HST revenues. STCA and LTCA are capped at $140.0 million in revenue per fiscal year. Any revenue greater than $140.0 million is then deposited in the ELSA. (These three accounts are referred to collectively as the MTCA accounts throughout this report.) Their main purposes, found in RCW 70.105D.010, are to raise sufficient funds to clean up all hazardous waste sites in Washington and to prevent the creation of hazards resulting from improper disposal of toxic wastes into the state's land and waters.

Since 1989, several revisions to the MTCA statute have altered the use of the MTCA accounts; major changes occurred in 1994, 2001 and 2013. (See Appendix G for a chronology of changes.) State General Fund (General Fund) revenue losses during the Great Recession of 2007–09 prompted the Legislature to make significant General Fund budget cuts across state government programs. Along with budget reductions, the Legislature transferred money from dedicated funds — including MTCA — into the General Fund. In addition, operating functions typically paid by the General Fund were moved to MTCA accounts. In turn, a portion of the MTCA accounts balances transferred to the General Fund was replaced with general obligation bonds.

Historically, MTCA cleanup projects were funded in their entirety upfront in the state capital budget. But most projects take several biennia to complete, which leaves large cash balances in the accounts from one biennium to the next. When HST revenues dropped, the state in 2013–15 began appropriating the cash balances on other projects — in essence, overappropriating the accounts.

Ninety-five percent of MTCA revenue comes from HST collections on petroleum products. Since August 2014, the price of oil (as measured by the price of Brent crude) has fluctuated from a high of $104 per barrel to a low of $27 per barrel; it stood at about $50 per barrel as of October 2016. This has resulted in a significant decline in actual and projected HST revenue, and an overall reduction in appropriation capacity in the MTCA accounts. In 2016, the Legislature reduced operating and capital appropriations to address the significant revenue declines.

MTCA Collections

Table 1 displays actual biennial MTCA account revenue from 2006 through 2016 for all MTCA accounts and all agencies. In addition to the HST, the major sources of revenue are mixed waste fees that support Ecology's Nuclear Waste Program, recovery of Ecology's hazardous waste cleanup costs, net transfers to and from other accounts and other revenue sources. Total biennial revenue ranged from just under $200.0 million in the 2007–09 biennium to more than $400.0 million during the 2011–13 biennium.

Table 1: Biennial Model Toxics Control Act Account Revenue 2006–15

All agencies

Dollars in thousands

Source	2005-07	2007-09	2009-11	2011-13	2013-15	Total
Net Hazardous Substance Tax	$218,323	$254,649	$325,600	$395,797	$342,948	$1,537,317
Mixed hazardous/nuclear waste fees*	10,082	11,616	12,038	11,132	-	44,868
Hazardous waste cleanup recoveries	7,704	12,199	28,852	11,060	11,245	71,060
Net transfers in and out**	(12,500)	(80,768)	(155,939)	-	(19,782)	(268,989)
All other sources	796	1,074	3,862	1,333	1,702	8,767
Total MTCA Revenue	$224,405	$198,770	$214,413	$419,322	$336,113	$1,393,023

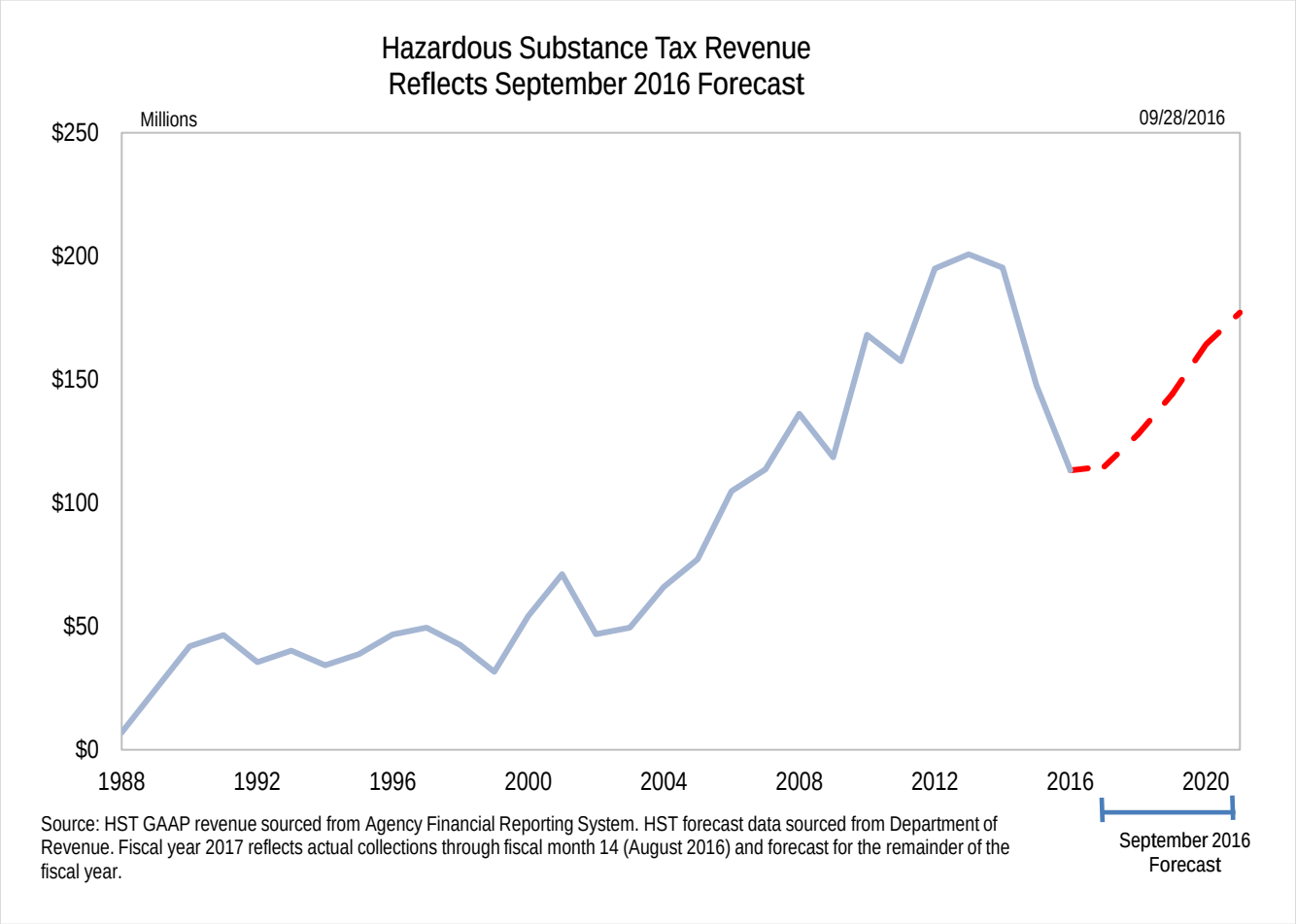
*The Legislature established the Radioactive Mixed Waste Fee Account in 2013, where mixed waste fees are now deposited and expended.

**Negative number indicates transfers out exceed transfers in.

Chart 1 on the following page shows the annual HST revenue collected by the state since the tax was initially levied in 1988. In fiscal year 1990, when the tax was first fully implemented, the state collected almost $42.0 million. At its highest point, the HST revenue averaged $200.0 million each fiscal year between 2012 and 2014. Collections dropped to $113.2 million in fiscal year 2016.

Tax collections have been marked by notable year-to-year changes. On a percentage basis, the largest decrease in revenue occurred in fiscal year 2002 (32 percent). In three additional fiscal years, revenue declined by more than 20 percent. Periods of revenue growth have also occurred; the largest increase (73 percent) occurred in fiscal year 2000. Further, in seven of the years since 1989, annual revenue growth was greater than or equal to 20 percent.

Chart 1: Hazardous Substance Tax Revenue



When compared on the basis of *average annual change* in revenue over time, the HST has shown greater but not inconsistent growth rates with other major tax sources. However, the *variance* in year-to-year revenue has been greater than the variance in major state taxes. Overall, the average annual difference compared with the annual average growth rate (standard deviation) is 23.64 percent for the HST. The real estate excise tax is the only other state tax with volatility close to that of the HST. Other major state tax sources, such as the property tax, business and occupation (B&O) tax, and the retail sales and use tax, have an annual average difference of 2.45 percent, 5.41 percent and 5.00 percent, respectively.

Table 2 on the following page shows the average annual percentage change in revenue since 1990 and the annual variance from the previous year's revenue.

Table 2: Average Annual Percentage Change of Washington Major Tax Sources

Tax	Average Annual Percentage Change	Standard Deviation
Retail sales and use tax	4.38%	5.00%
B & O tax	4.92%	5.41%
Hazardous substance tax	6.55%	23.64%
Insurance premium tax	7.30%	8.82%
Public utilities tax	4.73%	5.28%
Property tax	4.38%	2.45%
Real estate excise tax	6.77%	18.10%

Source: Washington State Budget Publications System, Agency Financial Reporting System

MTCA Appropriations and Expenditures

The MTCA accounts are the largest source of dedicated state environmental funds that support Ecology. They represent 37 percent and 27 percent of Ecology's base 2015–17 operating budget and capital budgets, respectively. They also contribute to the budgets of other state agencies. Since the 2005–07 biennium, 15 agencies received funding from the MTCA accounts. Table 3 below shows agency operating and capital budget appropriations from the MTCA accounts to other state agencies.

Over the past six biennia, the biennial operating appropriations from the MTCA accounts for all state agencies have averaged $153.0 million. This is significantly lower than $201.0 million, which is the projected amount to maintain programs in the 2017–19 biennium. In the capital budget, the biennial appropriation from MTCA accounts for the past six biennia has averaged $166.3 million. However, this amount is driven in large part by the decisions beginning in the 2011–13 and 2013–15 biennia to manage capital appropriations on a cash basis, which leads to higher appropriations. This revision caused capital appropriations to more than double at the beginning of the 2011–13 biennium. During the past two biennia, as MTCA-related needs have exceeded available funding and HST revenues have declined due to falling oil prices, the state began overappropriating the account.

Table 3: 12-Year Operating and Capital Appropriations by Agency

All MTCA Accounts – Appropriations in Operating and Capital Budgets, 2006-17 ($ in millions)									
Budget	Agency/Department	2005-07	2007-09	2009-11	2011-13	2013-15	2015-17	Total	Ave.
Operating	Ecology	$90.1	$120.6	$131.7	$158.0	$174.8	$164.6	$840.0	$140.0
	Natural Resources	2.2	<0.1	0.7	<0.1	4.0	6.4	13.3	3.3
	Agriculture	3.6	4.1	4.7	5.1	5.2	5.9	28.6	4.8
	Health	2.8	3.5	4.1	3.6	3.9	4.0	21.9	3.7
	Fish & Wildlife	0	0	0	0	1.2	2.8	4.0	0.7
	Conservation Commission	0	0	0	0	1.1	1.0	2.1	0.4
	Puget Sound Partnership	0	1.7	0.8	0.7	0.7	0.7	4.6	0.8
	WA State Patrol	0.5	0.5	0.5	0.5	0.5	0.5	3.0	0.5
	Corrections	0	0	0	0	0.1	0.4	0.5	0.1
	Special Appropriations	0	<0.1	0	0	0	0.4	0.4	0.1
	University of Washington	0	0	0	0	1.1	0	1.1	0.2
	Revenue	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	<0.1
	Subtotal	$99.2	$130.6	$142.6	$168.0	$192.7	$186.9	$919.6	$153.3
Capital	Ecology	$133.1	$71.4	$81.5	$250.7	$292.5	$135.8	$965.0	$160.8
	Commerce	0	0	0	1.5	0.5	0	2.0	0.3
	Enterprise Services	0	0	0	0.2	0	0	0.2	0
	University of Washington	4.5	0	1.0	0.7	0	1.0	7.2	1.4
	WA State University	0	0	0	1.3	0	0	1.3	0.2
	Natural Resources	2.0	4.0	0	0	4.5	0.9	11.4	1.9
	State Parks	0.5	0.2	0	0	0	0	0.7	0.1
	Rec. & Conservation Office	0	0	0	10.0	0	0	10.0	1.7
	Fish & Wildlife	0	0	1.0	0	0	0	1.0	0.2
	Subtotal	$132.2	$88.0	$92.3	$264.4	$297.5	$137.7	$998.8	$166.3
Total Operating and Capital		$239.3	$206.2	$226.1	$432.4	$490.2	$324.6	$1,918.8	$319.6

In addition to the MTCA accounts, Washington uses additional non-MTCA funding sources for capital projects that are aligned with the allowable purposes under MTCA. Table 4 below shows that, from the 2005–07 through the 2015–17 biennia, 11 other state and federal accounts paid for more than $500.0 million of capital projects related to MTCA purposes. This included $363.0 million in general obligation bonds (State Building Construction Account).

Table 4: Capital Appropriations for MTCA Purposes for All Agencies by Other Fund Source

Capital Budget Appropriations for MTCA Purposes – By non-MTCA Account, 2006–17 ($ in millions)							
Accounts	2005-07	2007-09	2009-11	2011-13	2013-15	2015-17	Total
Air Pollution Control Account-State			$1.6				$1.6
Cleanup Settlement Account-State		$3.0	34.9	$20.9	$30.7	$12.2	101.7
General Fund-Federal				0.4			0.4
General Fund-Federal ARRA*			5.2				5.2
State Bldg Construction Account-State	$23.2	162.9	134.5	7.3	4.0	31.1	363.0
State/Local Improvement Revolving Account-State			1.3				1.3
Waste Disposal-1980-State			0.3				0.3
Waste Tire Removal Account-State	4.0	5.0	1.0	1.0	1.0	1.0	13.0
Water Quality Account-State	2.5						2.5
Water Quality Capital Account-State	6.5	5.4					11.9
Wood Stove Education Account-State		0.5					0.5
TOTAL	$36.2	$176.8	$178.8	$29.6	$35.7	$44.3	$501.4

*American Recovery and Reinvestment Act of 2009

Categorization

To make it easier to understand how MTCA dollars are used, the Office of Financial Management (OFM) worked with Ecology to categorize expenditures. For simplicity of analysis, "toxics cleanup," "toxics prevention," "toxics control" and "other" categories were assigned to the operating activities and capital project appropriations, based on the item's predominant focus. Program administration amounts for operating activities and capital appropriations were assigned to the relevant category.

Since there is no official definition of what constitutes toxics cleanup, prevention or control work as detailed in the proviso, OFM and Ecology defined each category as follows:

Prevention of toxic releases

- Programs/projects that reduce the use of toxic materials or prevent them from entering into use in homes and industry
- Technical assistance, education and planning activities to prevent improper use and discharge of toxic materials
- Solid waste planning, management, regulation, enforcement, technical assistance and public education

Control of toxics

- Regulation of the use and discharge of point and nonpoint sources of toxic and hazardous materials
- Construction, management, maintenance and operation of stormwater infrastructure and regulatory systems
- Oil and hazardous materials spill prevention, preparedness and training

Cleanup of toxic sites

- Construction-related activities to remove and remediate toxic depositions from the environment (soil, groundwater, surface water and sediment), including studies and planning for specific cleanups as well as oversight and financing of cleanup programs
- Oil and hazardous materials spill response

All other

- Water quality work focused primarily on nutrients, pathogens, nontoxic sediments
- Research and monitoring aimed at adaptive management of toxics
- Other

See Appendices C and D for lists of activities and projects per category. See Appendix E for a description of the methodology used.

10-Year Cumulative Expenditure History

The analysis of capital MTCA expenditures includes all projects that fulfill MTCA purposes whether they are paid for with MTCA or other accounts. The operating analysis is limited to MTCA-funded expenditures only. This analysis covers the 2005–07 through 2013–15 biennia using the methodology described in Appendix E.

Chart 2 below shows that over a 10-year period, approximately 45 percent of total operating and capital expenditures were for toxics cleanup, 25 percent were for toxics control, 4 percent for toxics prevention and the remaining 26 percent for other expenditures. There was a notable spending increase for toxics control from the 2005–07 biennium to the 2013–15 biennium: Relative to overall spending, toxics cleanup and other expenditures declined over 10 years while toxics control increased. Overall, toxics cleanup composed the majority of expenditures.

The MTCA accounts remained the major funding source for capital projects aligned with MTCA purposes. Over this 10-year period, the MTCA accounts funded approximately 76 percent of total expenditures for MTCA-type projects. The remaining capital expenditures were funded by state general obligation bonds at 11 percent and other dedicated accounts at 13 percent. See Table 4 above for the list of "other" funds.

Below are the three key operating budget activities funded from the MTCA accounts, and other accounts, under each category (budget activity identification numbers follow each entry):

Toxics cleanup (all Department of Ecology)

- Clean up the most contaminated sites first (A005)
- Rapidly respond to and clean up oil and hazardous material spills (A054)
- Services to site owners that volunteer to clean up their contaminated sites (A057)

Toxics prevention (all Department of Ecology)

- Reduce the generation of hazardous waste and the use of toxic substances through technical assistance (A052)
- Eliminate waste and promote material reuse (A009)
- Reduce persistent bioaccumulative toxins (PBTs) in the environment (A050)

Toxics control (all Department of Ecology)

- Provide water quality financial assistance (A043)
- Increase safe hazardous waste management (A022)
- Control stormwater pollution (A008)

Other

- Administration (sum of multiple agencies)
- Protect and manage shorelines in partnership with local governments (A036 – Department of Ecology)
- Treat and dispose of Hanford's high-level radioactive tank waste (A016 – Department of Ecology – Most STCA expenditures in this activity were backed by dedicated radioactive mixed waste fee revenue deposited in the STCA and did not rely on HST revenue. The Legislature established the Radioactive Mixed Waste Fee Account in 2013, where radioactive mixed waste fees are now deposited and expended.)

Below are three key capital project investments funded from the MTCA accounts, and other funds, under each category:

Toxics cleanup

- Remedial action grants
- Cleanup toxics sites – Puget Sound
- Eastern Washington Clean Sites Initiative

Toxics prevention

- Reducing toxic diesel emissions
- Reducing toxic wood stove emissions
- Solid waste reduction – compost

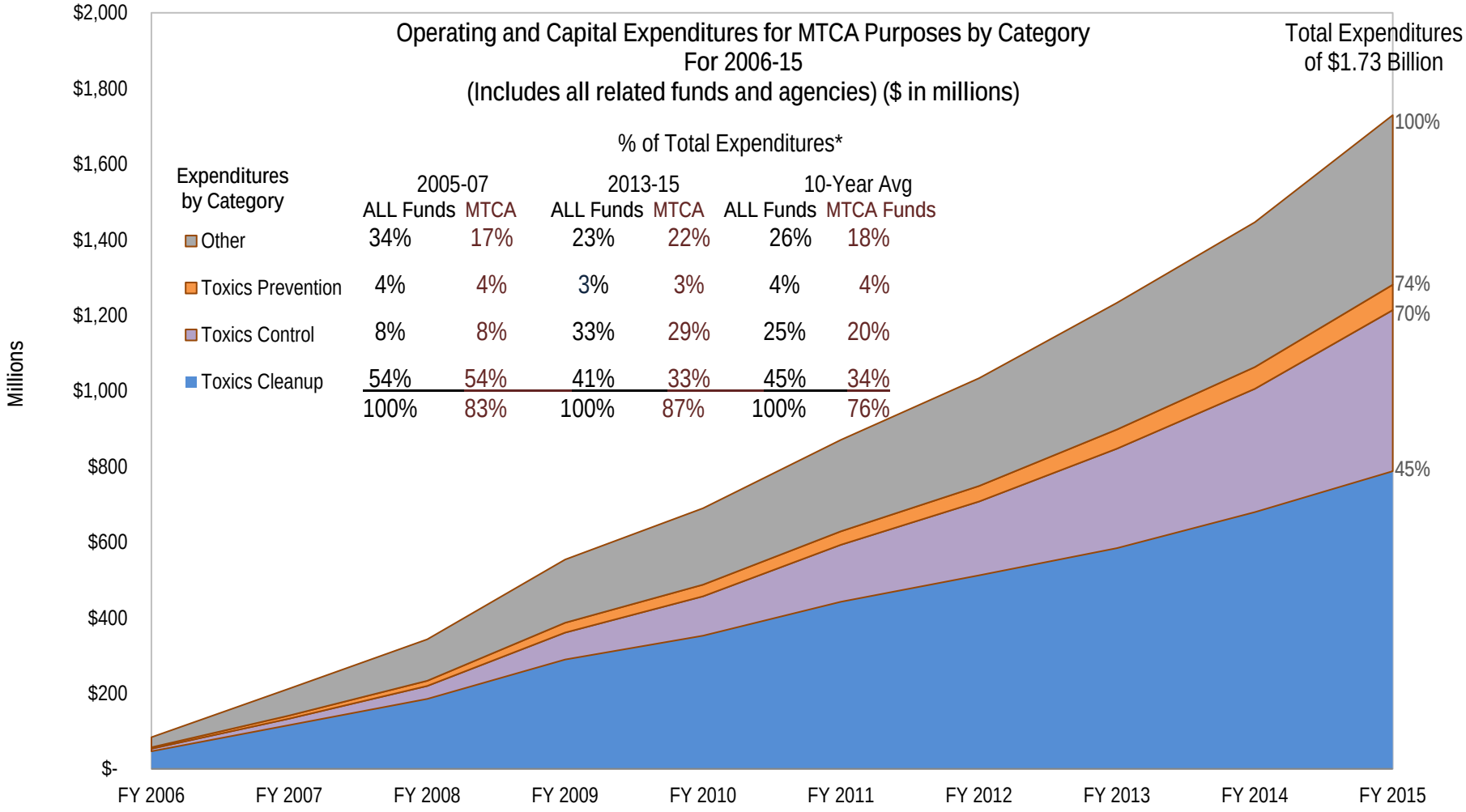
Toxics control

- Stormwater
- Coordinated Prevention Grants
- Mercury switch removal

Other

- Centennial Clean Water Fund
- Flood levee improvements
- Wastewater

Chart 2: Operating and Capital Expenditures for MTCA Purposes by Category



* Includes authorized expenditures at Ecology and other agencies for operating activities and capital projects under MTCA purposes, appropriated or reappropriated using MTCA, accounts, bonds and other funds.

Sources: Washington State Budget Publications System, Agency Financial Reporting System, OFM Activity Inventory System, OFM WinSum budgeting system

Comparing Operating and Capital Expenditures by Fund Source

From the 2007–09 through 2009–11 biennia, the Legislature transferred cash from several dedicated accounts, including the MTCA accounts, to the General Fund to help cover revenue losses caused by the Great Recession, as reflected in Table 5 below. Some MTCA appropriations from prior biennia were replaced with general obligation bonds. This is reflected in a relative decline in MTCA capital expenditures compared with an increase in capital expenditures from bonds in 2009–11.

Table 5: Operating and Capital Expenditures for MTCA Purposes for All Agencies by Fund Source

All Agencies by Fund Source, 2006-15 ($ in millions)						
Fund Source	2005-07	2007-09	2009-11	2011-13	2013-15	TOTAL
MTCA Accounts – Operating	$93.2	$122.7	$131.7	$161.8	$182.3	$691.7
Capital	$83.3	$127.1	$33.6	$125.7	$248.8	$618.5
Subtotal	$176.5	$249.8	$165.3	$287.5	$431.1	$1,310.2
Percentage	*83%*	*73%*	*52%*	*79%*	*87%*	*76%*
GO Bonds – Capital	$0	$27.7	$101.0	$32.7	$30.8	$192.2
Percentage	*0%*	*8%*	*32%*	*9%*	*6%*	*11%*
Other Funds – Capital	$36.1	$64.0	$50.2	$42.4	$34.2	$226.9
Percentage	*17%*	*19%*	*16%*	*12%*	*7%*	*13%*
Total	$212.6	$341.5	$316.6	$362.6	$496.1	$1,729.3
Percentage	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

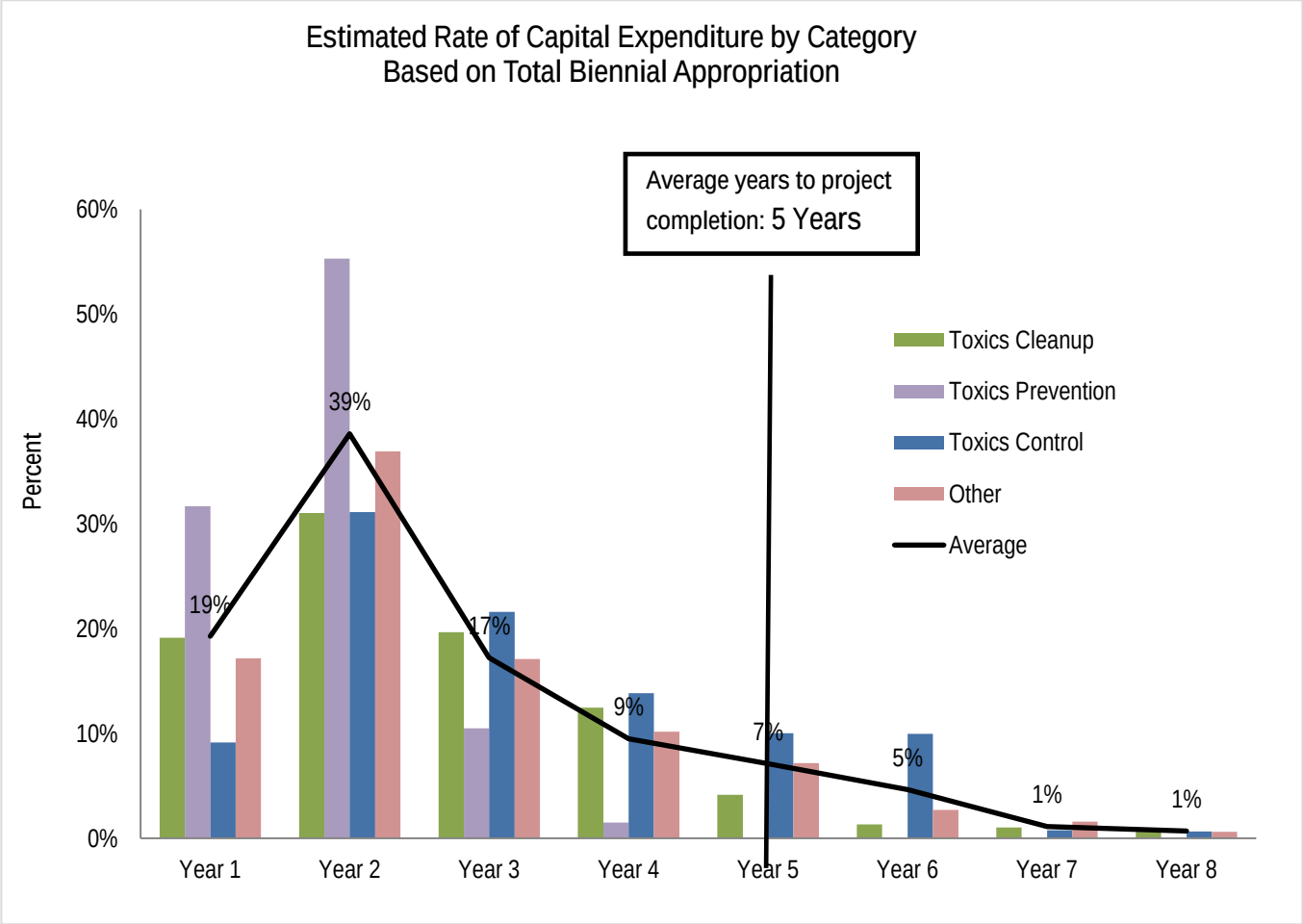
Source: Washington State Budget Publications System, Agency Financial Reporting System
Note: Non-MTCA funding not included in operating amounts.

Expenditure Rates for Capital Projects

OFM calculated the rate of expenditure on MTCA capital projects by using the appropriation year as the start year (year 1) and the year the appropriation was fully spent as the completion date. Chart 3 below shows the fiscal year percentages by category from 2006 through 2015. Overall, 58 percent of funding is expended in the biennium in which capital projects are appropriated. The rest of the funding is slowly being spent. MTCA capital projects from all categories average five years to complete. Toxics cleanup, toxics control and other project categories need as long as eight years to fully spend their appropriations. It is important to note that since the last MTCA amendments in 2013, Ecology requests funding only for phases of cleanups that are ready to proceed and spend each biennium (this is done in close coordination with local funding partners). As time goes on, it will be possible to determine whether the changes result in accelerated capital spending.

Project completion time is influenced by such factors as the budget process, the contracts and project scope of work negotiation, and seasonal construction considerations.

Chart 3: Capital Estimated Rate of Expenditure, All Funds for MTCA Purposes by Category, 2006–15

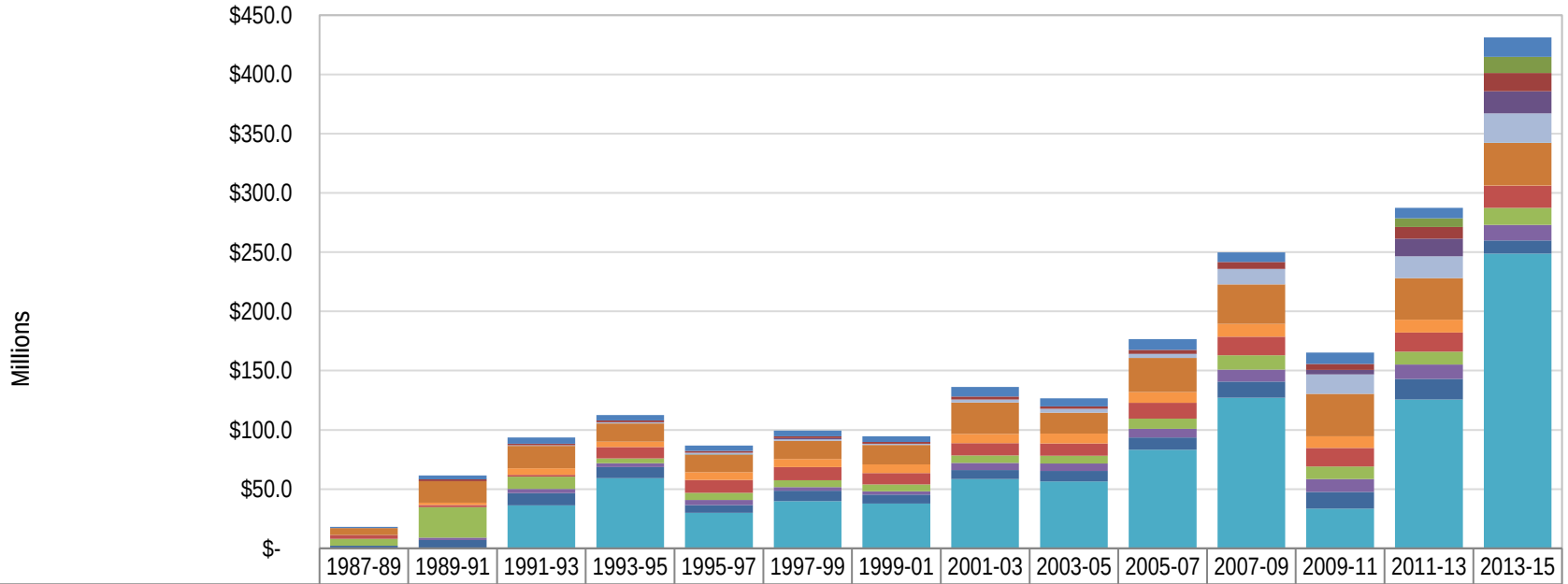


Source: Washington State Budget Publications System, Agency Financial Reporting System

Historical Spending Trend by Agency and Program

Since MTCA's inception, the number of programs in Ecology that are eligible for MTCA funding has expanded to include more of Ecology's environmental work, notably in shorelands and coastal zone management, stormwater management (included in water quality and resources in the following chart) and spill prevention, preparation and response. Chart 4 on the following page lists program expenditures by MTCA accounts since MTCA was established. Toxics cleanup remains the largest expenditure category.

Chart 4: MTCA Historical Expenditure Trend by Agency and Budget Program ($ in millions)



	1987-89	1989-91	1991-93	1993-95	1995-97	1997-99	1999-01	2001-03	2003-05	2005-07	2007-09	2009-11	2011-13	2013-15
Other Agencies	$1.1	$3.4	$5.5	$4.4	$4.4	$4.9	$4.7	$8.0	$6.9	$9.1	$8.1	$9.7	$9.0	$16.2
ECY: Air Quality	$-	$0.0	$-	$-	$-	$-	$-	$-	$-	$-	$-	$-	$7.2	$13.6
ECY: Environmental Assessment	$-	$1.3	$1.2	$1.6	$1.6	$1.5	$1.6	$2.5	$2.0	$3.2	$5.8	$5.1	$10.1	$15.4
ECY: Shorelands & Coastal Zone Mgt	$-	$-	$-	$-	$-	$1.0	$-	$-	$-	$0.1	$0.2	$3.7	$14.7	$18.7
ECY: Water Quality	$-	$0.1	$0.6	$1.0	$1.4	$1.1	$0.9	$2.7	$3.2	$3.4	$12.9	$16.5	$18.6	$24.9
ECY: Water Resources	$-	$-	$-	$-	$0.1	$-	$-	$-	$-	$-	$-	$-	$-	$0.1
ECY: Toxics Clean-Up	$5.7	$18.2	$19.0	$15.3	$14.9	$15.6	$16.4	$26.3	$17.7	$28.7	$33.4	$35.8	$35.1	$36.0
ECY: Nuclear Waste	$-	$2	$5	$5	$7	$7	$7	$8	$8	$9	$11	$10	$11	$0
ECY: Hazardous Waste & Toxics Reduction	$3.3	$1.7	$1.6	$9.6	$10.8	$11.1	$9.7	$10.4	$10.2	$13.4	$15.5	$15.7	$16.2	$18.7
ECY: Waste 2 Resources	$5.9	$25.9	$10.2	$3.9	$6.2	$5.7	$5.6	$6.3	$6.6	$8.6	$12.2	$10.6	$10.9	$14.4
ECY: Spill Prev'n, Preparedness & Response	$-	$2.1	$3.6	$3.4	$4.2	$3.1	$3.0	$5.9	$6.5	$7.4	$9.9	$10.7	$12.0	$13.1
ECY: Admin & Support	$2.2	$6.9	$10.5	$9.3	$6.4	$8.9	$7.5	$7.7	$8.8	$10.1	$13.8	$14.1	$17.4	$11.0
All Agencies: Capital Projects	$-	$-	$36.2	$59.3	$30.1	$39.8	$37.8	$58.5	$56.5	$83.3	$127.1	$33.6	$125.7	$248.8

Sources: Washington State Budget Publications System, Agency Financial Reporting System, OFM Activity Inventory System, OFM WinSum budgeting system

Analysis of Revenue in Other States

With the establishment of the Comprehensive Environmental Response, Compensation and Liability Act by Congress in 1980 (CERCLA, commonly referred to as Superfund), states across the nation became aware of the need to clean up contaminated sites to protect human health and promote economic development. Superfund established a program to clean up the highest-priority sites on the Environmental Protection Agency's National Priorities List (NPL). However, as many sites were not included on the NPL, each state developed its own programs and funding sources to clean up non-NPL sites.

The most recent comprehensive study of state Superfund programs was completed in 2002. It found that in general, states use several funding mechanisms for cleanup and pollution prevention programs; no one mechanism is preferred over another:[1]

- Operating appropriations: direct appropriations from the General Fund or other general revenue account into state cleanup accounts
- Bonds: general obligation bonds, authorized by the Legislature or the voters
- Taxes: dedicated taxes for cleanup activities, usually levied on hazardous substances
- Hazardous waste fees: includes fees levied on hazardous waste producers and/or the production of hazardous waste
- Cost recovery: the recovery of cleanup costs from responsible parties under CERCLA or other state cleanup statutes
- User fees: various levels of fees charged by a state to cover the cost of overseeing voluntary cleanup programs
- Loan repayments: programs where loan repayments are recycled and used for future cleanup activities

To gain a more up-to-date understanding of state programs to finance toxic cleanup, control and prevention work, a review of the practices of other states was conducted for this report. A sampling of comparable states was chosen based on per capita gross domestic product and total production-related waste managed. OFM, with assistance from Ecology, administered a survey to the other 49 states and received responses from 11. Four of the 11 respondent states were judged generally comparable to Washington.

In the survey, states were asked:

- What revenue sources does your state have to prevent or reduce the release of toxic substances or solid waste disposal?
- What revenue sources does your state have to manage or control solid waste and the release of toxic substances?
- What revenue sources does your state have to clean up toxic substances?

States were also asked to provide statutory references and fiscal year 2016 revenues for these items. The following tables summarize information about the four comparable states: Oregon, California, Colorado and Nebraska.

Oregon

- Fiscal year 2016 revenues from sources used to prevent or reduce the disposal or release of solid waste or toxic substances: $7.0 million (fees)
- Fiscal year 2016 revenues from sources used to manage (control) solid waste and toxic substances: $5.0 million (fees)
- Fiscal year 2016 revenues from sources used to clean up toxic substances: $788,000 (bonds), $8.0 million (fees)

Table 6: Revenue for Toxic Cleanup and Prevention Purposes in Oregon

Citation	Revenue Type	Tax Base	Administrator	Description
ORS 453.400, .402	fees	hazardous materials possession	Office of State Fire Marshal	A fee is charged for the possession of a hazardous substance at a facility in amounts above threshold quantities designated by rule. The fee is based on the aggregate amount of the largest annual aggregate substance reported that is manufactured, stored or used at the facility.
ORS 459.235	fees	hazardous substance sites	Department of Environmental Quality (DEQ)	Hazardous substance disposal sites must obtain permits from DEQ. A schedule of fees for permits is established by the Environmental Quality Commission. Fee amounts are based on the anticipated cost of administering the permit. Moneys collected are used to fund oversight activities related to solid waste disposal sites.
ORS 459A.110	fees	hazardous waste disposal sites; persons who transport hazardous waste out of the state	Environmental Quality Commission (EQC)	EQC establishes a schedule of fees for all disposal sites that receive solid waste for final destruction and persons who transport solid waste out of the state for final disposal or destruction. Fees apply to tonnage received in excess of 5,000 tons per year and are based on the tonnage received on site or transported out of state for disposal. Fees are used to assist in the funding of programs to reduce the amount of solid waste generated in Oregon and environmental risks at disposal sites.
ORS 459.730, .750, .765	fees	waste tire storage sites	Department of Environmental Quality (DEQ)	Permits must be obtained from DEQ to operate a waste tire storage site. A permit application fee is charged based on the anticipated cost of administering the permit. A permit application must include a $5,000 bond. In lieu of a bond, an applicant may submit financial assurance acceptable to DEQ. Fees are continually appropriated to carry out the permitting program.
ORS 459A.315	fees	manufacturers	Department of Environmental Quality (DEQ)	Manufacturers of electronic devices sold in the state must register with DEQ every year and pay an annual registration fee. EQC may modify the registration fees so the total of registration fees collected approximately matches the costs of implementing DEQ programs related to the disposal of electronic devices.
ORS 459A.820-.855	fees	producers and retailers	Department of Environmental Quality (DEQ)	Producers and retailers may sell only architectural paint (coatings sold in containers of 5 gallons or fewer) if the producer is participating in a statewide architectural paint stewardship program. A stewardship organization must provide retailers selling architectural paint with information on collection opportunities offered through the stewardship program. The stewardship organization is charged fees paid

				to DEQ, including $10,000 when a plan or updated plan for an architectural paint stewardship program is submitted to DEQ and $40,000 each year that a program is operated.
ORS 465.104, .106	fees	petroleum product withdrawal and delivery	Office of State Fire Marshal; Department of Revenue	A maximum fee of $10 applies to sellers of a petroleum product withdrawn from a bulk facility. A maximum fee of $10 applies to any importer of petroleum products in bulk for delivery into a storage tank. Revenue provides funding for the state's oil, hazardous material and hazardous substance emergency response program.
ORS 465.375-.376	fees	hazardous substance disposal operators	Department of Environmental Quality (DEQ)	A monthly fee is applied to every person who operates a facility for the purpose of disposing hazardous waste or PCBs of $20 per ton, based on the amount of waste brought to the facility during that month. Revenue goes to DEQ to carry out duties related to the management of hazardous waste. Special fees apply to designated waste types.
ORS 465.500	fees	dry cleaners	Department of Environmental Quality	Dry cleaners and dry stores pay annual fees. Funds are used to conduct assessment and cleanup of contaminated dry cleaner sites.
ORS 466.045	fees	construction of hazardous waste or PCB treatment, disposal or storage facility	Department of Environmental Quality (DEQ)	A fee is charged for any person developing or constructing a hazardous waste or PCB treatment, disposal or storage facility. Revenue collected from fees covers DEQ's costs of application review and processing.
ORS 466.077	fees	hazardous waste generators	Department of Environmental Quality (DEQ)	A fee is charged to hazardous waste generators of $130 per metric ton of waste generated during the year. Generators of hazardous waste that are required to obtain a U.S. Environmental Protection Agency identification number from DEQ also pay a processing fee of $200; these fees are used for land use regulation.
ORS 466.160	fees	hazardous waste treatment, storage and disposal	Department of Environmental Quality	A permit fee is required for hazardous waste treatment, storage and disposal sites. Fees are based on the volume of material accepted at the site. Fee amounts should be sufficient to secure performance of permit requirements, close the site, provide monitoring of the site after closure and provide any remedial action by the state necessary after site closure.
ORS 466.165	fees	hazardous waste generators; air and water transporters	Department of Environmental Quality (DEQ)	An annual fee is required of every hazardous waste generator and air and water transporter in an amount adequate to carry out monitoring, inspection and surveillance programming by DEQ.
ORS 466.783, .785, .837	fees	underground storage tank installations	Department of Environmental Quality (DEQ)	Applications for a permit to install an underground storage tank require a fee of $400 per tank. A fee of $75 is required when ownership of the property where the tank is located changes. A fee of $75 is required when the permittee changes. Permittees must pay a fee of $135 per calendar year. Fees are dedicated to DEQ to regulate underground storage tanks. Noncompliance fines are also imposed by the EQC. Penalties may not exceed $500 per violation or $1,500 per facility per inspection date.

ORS 468B.405	fees	onshore and offshore oil facilities; cargo and passenger vessels	Department of Environmental Quality	Fees apply to covered vessels and onshore and offshore facilities. Fees go to recovering costs of implementing oil spill contingency planning. Fees vary and depend on vessel and facility type.
ORS 475.475	fees	liable person	Department of Environmental Quality	The state may require any liable person to pay clean-up costs incurred by the state related to illegal drug manufacturing.

California

- Fiscal year 2016 revenue amount from sources used to prevent and reduce the disposal of toxic substances and to manage solid waste and toxic substances: $47.0 million (fees)
- Did not distinguish between management and cleanup in survey response.

Table 7: Revenue for Toxic Cleanup and Prevention Purposes in California

Citation	Revenue Type	Tax Base	Administrator	Description
PRC 48010-48013	fees	solid waste facility operators	Department of Resources Recycling and Recovery	Solid waste disposal facility operators can elect to participate in the State Solid Waste Postclosure and Corrective Action Trust Fund by paying a quarterly fee of 12 cents per ton of waste disposed. The fee is projected to raise $18 million over 10 years. Fees are used to cover the costs of postclosure activities and corrective actions when owners and operators of waste facilities fail to perform necessary actions.
PRC 42885, 42889	fees	tire retailers	State Board of Equalization; Department of Resources Recycling and Recovery	A fee of $1.75 is imposed on the purchase of new pneumatic tires and includes equipment leased or sold with new tires. The fee is paid by retail purchasers of tires and collected by the retail tire seller. Retail sellers may retain 1.5% of the fee as reimbursement costs associated with collection of the fee. Funds are used to pay administrative costs associated with the tire fee collection and to pay costs associated with the tire recycling program, the storage and hauling of waste tires and remedial actions related to waste tires.
PRC 42464	fees	covered electronic device retailers	Department of Toxic Substances Control; State Board of Equalization; Department of Resources Recycling and Recovery	A fee is charged for the retail purchase or lease of covered electronic devices. The fee varies upon screen size. Retailers may retain 3% of the fee collected and must remit the remainder to the state. Funds go to the collection and recycling of covered electronic devices.
RTC 40016-40105	fees	consumption of electrical energy	State Board of Equalization	A surcharge is imposed on electrical energy purchased from an electric utility. Utilities must remit collections to the state. Funds are appropriated to energy programs and projects deemed appropriate by the legislature.

RTC 43001-43555	fees	hazardous substances	State Board of Equalization	Six hazardous waste fee programs are administered for: 1) permit applications, permit modifications, renewal permits, requests for variance or site mitigation assessments, 2) disposal and treatment and 3) use, generation and storage of hazardous waste. Revenue is distributed to the Hazardous Waste Control Account, Toxic Substances Control Account, Occupational Lead Poisoning Prevention Account, Childhood Lead Poisoning Prevention Fund and Federal Receipts Account.
PRC 48000	fees	solid waste and food waste	State Board of Equalization; Department of Resources Recycling and Recovery	A fee applies to operators of solid waste disposal facilities, based on solid and food waste disposed of at solid waste landfills in the state. The fee provides funding for the reduction and recycling of solid waste.
RTC 46051-46101	fees	terminal and refinery operators	State Board of Equalization	A fee is charged to owners of crude oil and petroleum products for each barrel received and is capped at 5 cents per barrel of crude oil or petroleum product. Fee provides funding for response, containment and cleanup of oil spills into waters of the state as well as for prevention programs.
RTC 50108-50108.2	fees	underground storage tank maintenance	State Board of Equalization; State Water Resource Control Board	A fee is charged to owners of underground storage tanks based on the number of gallons of petroleum placed in the tank during a reporting period. The fee funds financial assistance to the owners of underground storage tanks to remediate conditions caused by leaks and damage.

Colorado

- Fiscal year 2016 revenue amount from sources used to prevent or reduce the disposal or release of solid waste or toxic substances: $28.0 million (fees)
- Fiscal year 2016 revenue amount from sources used to manage (control) solid waste and toxic substances: $5.0 million (fees)
- Does not distinguish between management and cleanup.

Table 8: Revenue for Toxic Cleanup and Prevention Purposes in Colorado

Citation	Revenue Type	Tax Base	Administrator	Description
CRS 25-15-302	fees	hazardous waste treatment, storage and disposal facilities	Department of Public Health and Environment	Facilities that treat, store and dispose hazardous waste are charged an annual fee. Fees apply to facilities that generate an amount of waste greater than 1,000 kilograms of hazardous waste, 1 kilogram of acute hazardous waste or 100 kilograms of any contamination resulting from a spill in a period of 4 months. Fees are established at a level that estimates program costs attributable to such facilities. All fees paid are credited to the Hazardous Waste Service Fund.
CRS 25-16-104.5	fees	waste producers	Department of Public Health and Environment	A user fee is charged to each person disposing of solid waste at a solid waste disposal site. Fees are established at a level that estimates the department's direct and indirect costs associated with implementation of the state's Solid Waste Management Program. An additional fee is charged and dedicated to the Recycling Resources Economic Opportunity Program. This fee is established per load of waste and is 14 cents per cubic yard per load.

Nebraska

- Fiscal year 2016 revenue amount from sources used to prevent or reduce the disposal or release of toxic substances: $6.0 million (other)
- Fiscal year 2016 revenue amount from sources used to manage (control) solid waste and toxic substances: $13.0 million (fees), $20.0 million (loan repayments)
- Fiscal year 2016 revenue amounts from sources used to clean up toxic substances: $13.0 million (fees)

Table 9: Revenue for Toxic Cleanup and Prevention Purposes in Nebraska

Citation	Revenue Type	Tax Base	Administrator	Description
NRS 81-15, 147-158	bonds	construction of wastewater treatment facilities	Department of Environmental Quality	Issuance of revenue bonds to municipalities and counties for the construction, rehabilitation, operation and maintenance of efficient sewer systems and wastewater treatment facilities. Fund composed of federal capitalization grants, state matching appropriations and repayments of principal and interest on loans.
NRS 81-1534-1566	fees	manufacturers and wholesalers	Department of Environmental Quality	An annual litter fee of $175 is charged for each $1 million of gross proceeds of products manufactured and sold in the state. Fee revenue covers the cost of administering the Nebraska Litter Reduction and Recycling Act and the Waste Reduction and Recycling Incentive Fund.
NRS 13-2034, 13-2042, 81-1504-1505	fees	solid waste disposal area owners and operators	Department of Environmental Quality (DEQ)	A fee is charged to owners and operators of municipal solid waste disposal areas. Fee is based on the volume or weight of solid waste entering the disposal area or transported out of the state. Fee is $1.25 for each 6 cubic yards of uncompacted solid waste, $1.25 for each 3 cubic yards of compacted solid waste and $1.25 for each ton of solid waste. Fees are paid to DEQ.
NRS 13-2034, 13-2041, 81-1504-1505	fees	solid waste management facilities owners and operators	Department of Environmental Quality	Owners and operators of solid waste management facilities pay an annual operating fee. Fee amounts depend on type of facility and range from $500 for solid waste transfer stations to $45,000 for delisted waste disposal areas.
NRS 13-2034, 13-2041, 81-1504-1505	fees	solid waste management facilities owners and operators	Department of Environmental Quality	Permit fees are required to be paid by owners and operators of solid waste management facilities. Permits are required for operation of these facilities and any major modification to the design or operation. Fee schedule depends on the type of permitted facility. Initial operating fees range from $500 for solid waste transfer stations to $45,000 for delisted waste disposal areas.
NRS 66-1520	fees	petroleum tank owners	Department of Environmental Quality	An annual fee of $90 per tank is charged to owners of operating petroleum tanks.
NRS 66-1521	fees	petroleum producers, refiners, importers, distributors, wholesalers and suppliers	Department of Revenue	A remedial action fee is charged to petroleum producers, refiners, importers, distributors, wholesalers and suppliers who engage in the sale, distribution, delivery and use of petroleum in the state. The fee is 9/10 of 1 cent per gallon on motor vehicle fuel and 3/10 of 1 cent per gallon in diesel fuel. Fees are used to reimburse owners and operators for investigations of releases and to pay authorized claims.

NRS 81-15, 236-253	fees	private onsite wastewater treatment system certified professionals	Department of Environmental Quality	Construction and modifications on private onsite wastewater treatment systems cannot occur without inspection by a certified professional as required by the Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act. Certified professionals pay a registration fee of $50. Fees cover costs related to regulation of private onsite wastewater systems.
NRS 81-15, 128-143	fees	wastewater treatment facilities	Department of Environmental Quality (DEQ)	Wastewater treatment facilities must be certified by DEQ. A fee is charged for applications for certification no greater than $300. Fees are used to pay certification program costs.

Other Notable States

Programs and revenue for cleanup, management and prevention activities in these additional states were also analyzed, although they did not supply survey responses.

Delaware

Delaware, like Washington, levies a B&O tax on gross receipts of most businesses. In addition to a general B&O tax, the state also levies a 0.90 percent hazardous substance tax on businesses engaged in the business of buying and selling petroleum products, including motor fuel, diesel fuel, aviation fuel, jet fuel, heating oil, motor oil and other petroleum-based lubricants. Crude oil is excluded. This tax generated $12.3 million in fiscal year 2015; funds are used to implement Delaware's Hazardous Substance Cleanup Act.

Florida

Like Washington, Florida imposes a pollutants tax on the production or importation of pollutants, including petroleum products, pesticides, ammonia, chlorine and solvents. However, this tax is based upon a per-gallon or per-barrel charge rather than the value of the product. The tax varies based upon the product, ranging from 2 cents to 80 cents per barrel for petroleum, pesticides, chlorine and ammonia. In addition, taxes are imposed upon certain substances for hazardous waste management, including $5 per gallon of perchloroethylene, used in dry cleaning, 2½ cents per gallon of motor oil and other lubricants and 5 9/10 cents per gallon of solvents. In total, these taxes generate approximately $250.0 million per fiscal year.[2]

Maryland

Maryland's Oil Disaster Containment, Clean-Up and Contingency Fund is used for various oil pollution control programs, including oversight of petroleum storage facilities, administration of oil transfer licenses, and operations permits and spill response. Anyone transferring oil in the state must obtain a license and pay a fee of 7¾ cents per barrel of oil transferred into the state (42 gallons per barrel). These fees, which totaled approximately $7.1 million in fiscal year 2016, are credited to this fund. Fines for oil pollution violations and costs recovered for cleanup expenses are also credited to this fund.

Maryland also administers an Oil Contaminated Site Environmental Cleanup Fund to clean up sites contaminated by oil from leaking underground storage tanks. Owners and operators of tanks, both residential and commercial, are eligible for reimbursement of cleanup and remediation costs. A fee of 25 cents per barrel of oil transferred into the state is credited to this fund. In fiscal year 2017, Maryland raised a total of $2.0 million in revenue.

Massachusetts

Massachusetts implemented the Massachusetts Toxics Use Reduction Act in 1989. The act requires facilities that use large amounts of toxic chemicals to report on their use, conduct planning every two years and pay a fee. Fees are calculated based on the number of people employed by a company and the number of chemicals manufactured or processed. The fees support agencies implementing the Toxic Use Reduction Act for training, technical assistance and grant programs. In fiscal year 2015, revenue from fees totaled $3.0 million.

Pennsylvania

Pennsylvania has used several taxes for the investigation, cleanup and monitoring of contaminated sites. From 2007–15, the state directed $40.0 million of the revenue collected from its capital stock and franchise tax to its Hazardous Sites Cleanup Fund. The capital stock and franchise tax was eliminated at the beginning of 2016. These revenues have been replaced at a lower level from the Marcellus Legacy Fund, which is supported by fees paid by the oil and gas production industry.

Projected Need and Prioritizing Funding Under RCW 70.105D.070

The budget proviso directed OFM to develop recommendations on prioritizing funding under RCW 70.105D.070 and on budget strategies to meet current and projected needs.

Ecology has completed estimates of projected financial needs for MTCA projects and activities. Questions about how MTCA funds should be spent and how the decisions for spending MTCA revenues should be made were posed to experts and practitioners. (Their responses are summarized in Appendix B.) This section provides details on the projected need for MTCA programs and discusses several points of agreement and opinions about how to prioritize MTCA funds. Budget strategy options are discussed in the section "Options for Better MTCA Predictability."

Current and Projected Needs

Ecology prepares a comprehensive 10-year financing report every other year that identifies long-term remedial action project costs and projects needs as required by RCW 70.105D.030(3) and (5). The information below is taken from the 2016 Ten-Year Financing Report, which was released in October 2016.

Ten-Year Funding Estimates for MTCA Toxic Site Cleanup Needs, 2017–27

Ecology estimates that nearly $1.6 billion will be required for locally owned or operated cleanup sites over the next decade.

- Shared responsibility ($1.6 billion). Ecology and local governments identified 103 locally owned cleanup projects for the 10-year period. The agencies estimate that approximately $1.2 billion will be required to complete this work and conduct associated grant management activities. Ecology also anticipates an additional $410.0 million (estimated) will be needed to address currently unidentified needs of locally owned cleanups over the next decade.
- State's share of 103 locally owned cleanups and four grant programs ($811.0 million). For planning purposes, Ecology estimates that at least $811.0 million will be needed to cover the following:
  - State's share of locally owned cleanups ($552.0 million). Local agencies will be responsible for the remaining amount.
  - State's share of four statewide grant programs ($51.0 million). To fund statewide grant programs and associated grant management, including site assessment grants to local health districts; integrated planning grants; area-wide groundwater grants; and reimbursement of independent remedial actions conducted at publicly owned sites, such as voluntary cleanup projects. The majority of these grants are wholly state-funded.
  - State's share of Remedial Action Grant program administration ($3.2 million). At approximately $640,000 per biennium, this represents less than 1 percent of the historical funding level of this program, which has averaged approximately $72.0 million per biennium since 2007.
  - State's share of placeholders for anticipated cleanup needs ($205.0 million). For the 200 to 300 newly reported cleanup sites each year.
- Range of project costs. Estimated project costs over the next 10 years range from $10,000 for the Georgetown Steam Plant cleanup at King County's North Boeing Field to $123.5 million for the Port of Seattle's Harbor Island East Waterway project. This range illustrates the diversity in size and complexity of cleanups that require MTCA funding and are being conducted by local governments and Ecology's Toxics Control Program. However, this range does not encompass the entire cost estimate of large cleanups, such as the Lower Duwamish

Waterway (LDW) in Seattle that will include multiple components and a combination of MTCA, federal and other funds to complete.

Ecology has also identified the following large multi-biennia remedial action grant cleanup project which take longer than 10 years:

- Shared responsibility for large projects ($947.0 million). Ecology and local governments identified 25 cleanup sites with estimated costs exceeding $10.0 million.
- State's share of large project costs ($457.0 million). Local agencies will be responsible for the balance.
- Range of large project costs. Estimated project costs range from $11.0 million for the South Park Landfill and Mount Baker [Dry] Cleaners in King County to nearly $193.0 million for multiple projects related to the LDW Superfund site. The $193.0 million figure includes LDW projects identified by the Port of Seattle, Seattle City Light, Seattle Public Utilities, King County and Ecology.

In addition to locally owned cleanup needs, Ecology's report also estimated the 10-year financing need for state-directed cleanups at $251.0 million.

The MTCA Ten-Year Financing Report is a companion piece to the MTCA Biennial Report produced in alternating years. It describes Ecology's activities that are supported by appropriations from the MTCA accounts. And it outlines the statewide and local progress made in cleaning up hazardous waste sites and contains descriptions of known hazardous waste sites, their hazard ranking and summary of expenditures for each site. The 2016 Ten-Year Financing Report and previous reports are available online.[3] Ecology's MTCA Biennial Reports (2013 and 2015) and MTCA Annual Reports (1986–12) are at:
http://www.ecy.wa.gov/programs/tcp/MTCA_AnnualReport/annualRpt.html.

In addition to Ecology's projections, there is an effort underway to analyze the economic implications relating to water infrastructure, which includes stormwater. The 2016 supplemental capital budget (Sec. 1020, Chapter 35, Laws of 2016), requires OFM to contract for the analysis which must be completed by Jan. 15, 2017.

Other estimates of need exist but they are often dated, approximate and limited in geographic area or programmatic scope. Estimates should be treated as qualitative, order-of-magnitude guides, not precise amounts.

The federal Environmental Protection Agency's (EPA) quadrennial Clean Watersheds Needs Survey 2012 report to Congress detailed the needs identified by managers of Washington's publicly owned treatment works for two types of stormwater-related improvements: combined sewer overflow correction ($1.3 billion) and stormwater management programs ($221.0 million). It is important to note that the EPA estimate excludes retrofits projects, which are generally not required by stormwater permits.

In 2014, the Puget Sound Partnership (Partnership) released its Funding Strategy for the Strategic Initiatives from the 2012-2013 Puget Sound Action Agenda, Volume 1: Summary of Findings and Recommendations, Final Report. It estimated the funding gap for meeting a narrow range of

stormwater needs in Puget Sound (including high-efficiency street sweeping, legacy load removal and highway retrofits) as ranging from $100.0 million to $250.0 million.

A 2010 study prepared for the Partnership (Puget Sound Stormwater Retrofit Cost Estimate, Appendix A) looked at the cost of converting public and private impervious lands in Puget Sound to pervious. The study estimated the potential average capital investment as ranging from $3.0 billion to $15.6 billion, with annual maintenance costs of $111.0 million to $561.0 million.

Funding Priorities

Although there was no agreement among the interviewees about how the MTCA accounts should be spent, there were definite preferences for targeting toxic cleanups over toxics prevention and toxics control programs, with the recognition that the latter are also important activities. Several interviewees believe that funding should be balanced among cleanup, prevention and management work. Toxics prevention and control are important in reducing the possibility of recontamination, the creation of additional toxics sites and costs of cleanup. Stormwater and coordinated prevention grants, for example, reduce human exposure to toxins, cut waste and ensure proper management of solid and household hazardous waste.

Options for Better MTCA Predictability

Since toxic cleanup, control and prevention needs exceed MTCA capacity and revenue has not been stable during the past couple of years, stabilizing the HST and developing new budgeting strategies are needed to increase predictability for MTCA recipients.

Fund Shifts from MTCA back to the General Fund

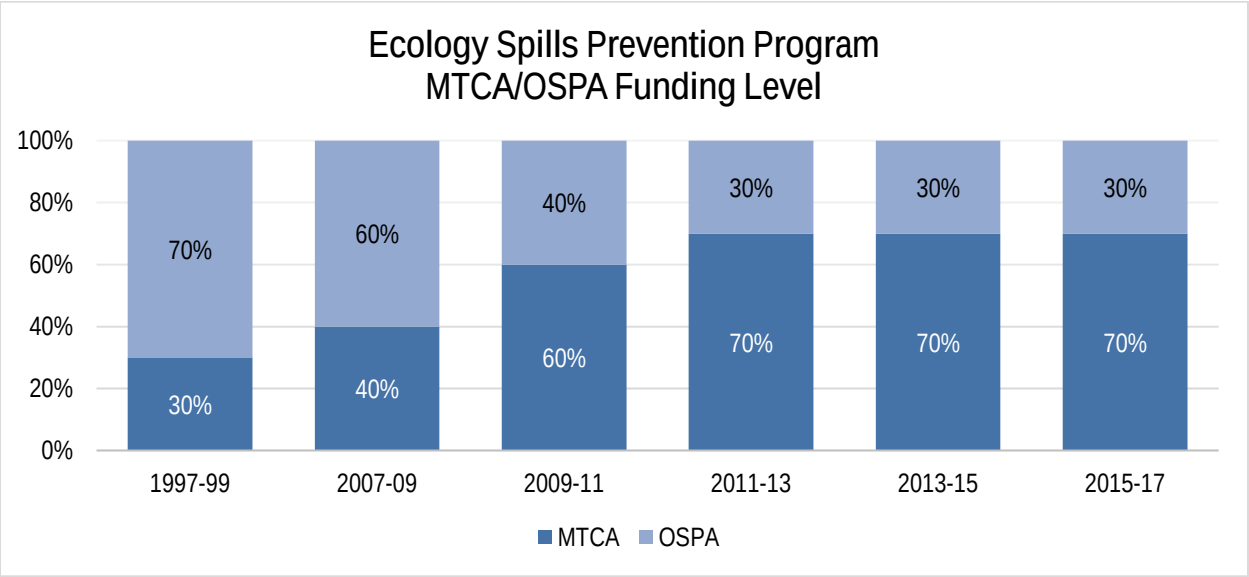
Since the start of the Great Recession, MTCA has supported operating budget programs previously funded with the General Fund. A total of $54.0 million in ongoing funding has been shifted from the General Fund to MTCA in Ecology and other natural resource agencies. (See Appendix F for details.) This includes programs that are consistent with MTCA purposes as well as programs that have a weaker connection to its statutory purposes. Eliminating future fund shifts would help reduce the volatility of funding available for MTCA programs. Shifting some or all these programs back to the General Fund or another revenue source would preserve HST revenues for those programs with the greatest connection to MTCA purposes.

Reduce use of MTCA for Oil Spill Preparedness and Prevention Activities

In 1991, the Legislature established a comprehensive oil and hazardous substance spill prevention and response program. This included a 5 cents per barrel tax on crude oil or petroleum products transported by ship or barge and off-loaded at a marine terminal in the state. This tax was expanded to include oil transported by rail with the passage of the Oil Transportation Safety Act of 2015 (Chapter 274, Laws of 2015), which amended Chapter 90.56 RCW. These revenues are used to fund the spills programs at Ecology and the Department of Fish and Wildlife, as well as emergency preparedness work at the Military Department. These revenues are deposited in the Oil Spill Prevention Account (OSPA) and the Oil Spill Response Account (OSRA).

Although revenues from the OSPA-related barrel tax originally funded most of the operating costs for Ecology's Spills Program's prevention and preparedness work, the gap between program costs and revenues has widened. In response, the governor and Legislature have used increasing amounts of MTCA to fund this work. As shown in Chart 6, MTCA funding for Ecology's Spills Program increased from 30 percent in the 1997–99 biennium to 70 percent in the 2013–15 biennium. At the same time, OSPA funding dropped from 70 percent to 30 percent due to the downturn in revenue caused by the decrease in the volume of oil imported by vessel. (The Oil Transportation Safety Act of 2015 expanded the barrel tax to oil transported by rail and provided a one-time shift of funds from the OSRA to the OSPA.)

Chart 6: Ecology Spills Prevention Program Funded by MTCA and Oil Spill Prevention Account



Because Ecology's spill prevention and preparedness efforts focus on spills of both oil and hazardous substances, the use of the MTCA accounts for efforts related to hazardous substances, which do not contribute to the barrel tax, is an equitable way for the appropriate taxpayers to share the cost of program implementation. From the 2009–11 biennium through the 2013–15 biennium, Ecology estimated that approximately 10 percent of its Spills Program activities funded by MTCA and OSPA were related to hazardous materials.

While the barrel tax was expanded to include oil transported by rail, it does not generate enough revenue to fully fund the program's current work. Ecology is projecting a $3.5 million shortfall in the OSPA for the 2017–19 biennium based on the September 2016 Department of Revenue forecast. Since 2008, the Legislature has provided more than $11.0 million of one-time transfers from General Fund, MTCA and OSRA to OSPA, and nearly $7.0 million of permanent reductions and fund shifts to the MTCA accounts, to maintain a positive balance in OSPA. Additional revenue will help stabilize Ecology's Spills Program funding and prevent shortfalls, which have required significant budgetary interventions.

One option to increase the stability of HST-funded programs would be to raise additional revenue through the barrel tax while reducing reliance on MTCA. Several options would accomplish this. The barrel tax has not been raised since it was established in 1991; a 1 cent increase would generate approximately $800,000 a year, or $1.6 million per biennium. Applying the barrel tax to oil imported by pipeline is estimated to generate an additional $1.2 million per fiscal year.

Shift Stormwater Projects to Alternative Fund Source

Beginning in 2009–11, the state began providing significant grants to local governments for capital projects to reduce stormwater runoff. These have included funding from both the MTCA accounts and state bonds. The MTCA amounts for these grants have ranged from a low of $22.6 million in the 2009–11 biennium to a high of $100.0 million in the 2013–15 biennium. In 2015–17, a total of $31.2 million was provided for these projects.

The cost to complete stormwater retrofits and reduction projects statewide is substantial. The cost to retrofit Puget Sound stormwater infrastructure has been estimated at $8 billion alone.[4] Although there continues to be a need to reduce stormwater impacts, MTCA can cover only a small portion of these costs. Developing alternative funding sources for stormwater grants would reduce pressure on fund sources. As directed by the 2016 supplemental capital budget, OFM has contracted for an economic analysis of water infrastructure investments and a review of state support for local infrastructure projects. This analysis is due Jan. 15, 2017. The analysis includes stormwater, and the results may shed light on future fund sources for stormwater projects.

Restore Managing Capital Appropriations on a Fund Rather than a Cash Basis

Traditionally, state fiscal accounts are managed on a fund basis. In this scenario, appropriations are limited to the amount of current and projected revenues for the biennium in which the appropriations are made. Because capital appropriations are usually expended over several biennia, cash in the account builds up until the expenditures are actually made.

Beginning in the 2013–15 biennium, the Legislature directed Ecology (Chapter 1, Laws of 2013, 2nd Special Session), to manage the MTCA accounts in the capital budget at a pace that matches the estimated MTCA cash resources. This policy allows more projects to be initiated, but presents risks when revenues decline. Under this approach, funds committed to pay for project expenditures in future years remain in the account until the project has incurred expenditures. When projects take several years to complete, the funds, which in previous years would have remained in the account committed to that project, are now used to initiate other projects. As the biennial budget cycles continue, and available cash is committed, the risk increases that, as revenues decline, the account could become unstable because cash balances are not available for previously committed projects.

Recent revenue declines led to the capital appropriations from MTCA accounts being cut in half, from $297.0 million in the 2013–15 biennium to $137.0 million in the 2015–17 biennium. Adopting a traditional fund management policy would result in lower capital appropriations, but preserve a greater cash balance to offset revenue volatility. It would also better ensure that legislative intent is carried out for all appropriated projects.

Adjust Match Requirements

Administered by Ecology to clean up toxic sites, the Remedial Action Grant program requires local governments to match the state grant. Match requirements vary depending upon the type of grant, the economic status of the applicant and applicability of match requirements.

Ecology offers five categories of subgrant programs funded through the Remedial Action Grant Program:

- Oversight Remedial Action Grants – These help local governments study and clean up hazardous waste sites under an Ecology order or legal consent decree.
- Independent Remedial Action Grants – These help offset some of the expense involved in an independent cleanup when a local government enters the agency's Voluntary Cleanup Program.
- Safe Drinking Water Grants –- These help local governments to provide safe drinking water to areas where a hazardous substance has contaminated it. For this type of grant, a local government can apply on behalf of a purveyor.

- Area-wide Groundwater Grants – These enable local governments to assist with cleanup and redevelopment of property within their jurisdictions where groundwater has been contaminated by hazardous substances from multiple sources.
- Integrated Planning Grants – These help local governments to develop integrated project plans for cleanup and reuse of a contaminated site.

Grant matching requirements for oversight remedial action grants have remained fairly constant at 50 percent throughout the program's history. Economic status of the applicant can increase the state share by 25 percent, and the use of an innovative technology can further increase the state share another 15 percent. Following recent legislation, the remedial action grant rule (WAC 173-322A-320(7)(a)(iii) was amended to give the Ecology director the discretion to allow a 90 percent state share grant for projects costing up to $5.0 million where it would help prevent an unfair economic burden due to cleanup liability.

Historically, match requirements for independent remedial action grants have remained fairly constant at 50 percent, too. State safe drinking water grants administered by Ecology require a 10 percent match.

There are no match requirements for site assessment grants, integrated planning grants and area-wide groundwater investigation grants (up to $500,000).

Increasing the match requirements for both oversight and independent remedial action grants would reduce the demand on HST revenues and narrow the funding gap. Increasing match requirements, however, could reduce the number and scope of projects undertaken by local project sponsors, as their costs would increase.

Create a Loan Program(s)

Most capital projects funded with the HST are provided with grants. One way to increase funding stability is to convert all or a portion of capital grants to a loan program. Ecology manages the Clean Water State Revolving Fund, a loan program in which repayments are lent again to additional projects. This characteristic sustains the loan program, funds future projects, is predictable and allows local governments to plan over the long term. It would, however, increase costs to local governments and ports, and likely to the state, to operate.

Expand the Base of Substances Subject to the Hazardous Substance Tax

Imposing the HST on more chemicals of high concern to Washington or other state or federal agencies could raise additional revenue that could stabilize the MTCA accounts. In addition, imposing the tax on harmful substances not now subject to it would provide an incentive to users of these substances to seek nontoxic alternatives. Adding chemicals to the HST tax base is within Ecology's authority and could be done by rule.

About 1,000 chemicals that are not subject to the HST have been identified through rigorous scientific review as hazardous by state or federal environmental agencies. These include chemicals that the U.S. Environmental Protection Agency requires be reported to the Toxics Release Inventory and/or has identified as causing cancer or having other harmful health effects. The California Environmental Protection Agency has created an independent list of chemicals that are known to cause cancer or birth defects or other reproductive harm under California's Safe Drinking

Water and Toxic Enforcement Act of 1986. Other states, including Maine, Minnesota, Oregon and Vermont, have also listed chemicals of concern.

About 20 toxic chemicals that Ecology has identified as posing significant concerns to people and the environment are not subject to the HST. The Legislature has restricted the use of several of these chemicals in selected product categories, including in children's products, through the Children's Safe Products Act (Chapter 70.240 RCW). It has established a process to review and potentially add certain flame retardants to the list of chemicals of high concern for children. Priority chemicals include persistent halogenated flame retardants, such as TCPP; perfluorinated substances that have recently been detected in drinking water, such as perfluorooctane sulfonate PFOS and its associated compounds; surfactants such as nonylphenols; and additional plasticizers, including phthalates and bisphenols.

Many of these hazardous substances are manufactured and used at high volumes in the United States. However, the quantity of these substances is not known in Washington. Although certain taxpayers must compile information on the identity and quantities of each chemical they use to calculate their HST liability, this information is not reported to Revenue or Ecology. Estimating any potential revenue increase from expanding the substances subject to the HST is not possible at this time.

Establish a Differential Tax Based Upon Toxicity

Under current law, all hazardous substances are taxed at the same rate under the HST. Applying HST based on toxicity as a surrogate for potential harm to human health and the environment would allow for more toxic substances to be taxed at a higher rate and so be more equitable. However, less than half the hazardous substances now subject to the HST have an established toxicity value, such as a reference dose or cancer slope factor, and some toxicity values are not up to date. Deriving toxicity values requires a substantial investment of time and resources. Basing a differential tax on toxicity does not consider exposure and therefore is not a perfect surrogate for potential harm. In addition, not all toxicity values are easily compared, and an effort to make comparisons would be a time-consuming process. Another potential drawback is that because the HST is now based on the value of the chemical used and not the amount of the chemical used, a highly toxic, but inexpensive chemical would be taxed on a lower amount.

Increase Efforts to Improve Tax Compliance

Since 2003, Revenue has reported on compliance rates for taxpayers.[5] These reports use the results of a stratified random sample of Revenue audits for a specified number of previous years to estimate noncompliance. Table 10 below shows the estimated noncompliance rates and annual amounts for the HST and the overall tax noncompliance rates.

Table 10: Washington Department of Revenue, Hazardous Substance Tax Noncompliance Estimates

Calendar Year	HST Non-Compliance Rate	Est. Annual HST Noncompliance Loss	USE Tax Noncompliance Rate	Overall Noncompliance Rate **for All Taxes**
2016	2.20%	$4,705,488	21.50%	2.50%
2010	4.60%	$5,490,412	23.00%	2.10%
2008	0.10%	$45,258	25.50%	2.50%
2006	-1.20%	($550,338)	18.10%	1.80%
2005	9.90%	$6,896,733	19.50%	2.20%
1998	14.00%	$5,990,217	27.90%	2.50%
Average	4.93%	$3,762,962	22.58%	2.27%

These reports have shown an average annual noncompliance rate of 4.9 percent and a loss of $3.7 million in annual revenue. Historically, the HST has had the second-highest noncompliance rate, behind the use tax[6] and more than double the overall noncompliance rate for all other taxes. Over time, its noncompliance rate has declined; in 2016, it was 2.2 percent. Revenue indicates that the greatest area of noncompliance concerns the use of chemicals and other nonpetroleum substances, which are used by generally smaller firms that are not as familiar with HST requirements. Although the revenue that could be obtained through improving compliance is small in comparison to total revenues, there is still a potential for several million dollars in more annual revenue. Compliance could be boosted through such means as additional education of taxpayers and more audits of tax returns, though at some cost to the state.

Impose a Business and Occupation Surcharge on Manufacturers of Motor Vehicle Fuel and Special Fuels

Firms that manufacture motor vehicle fuel and special fuels are subject to the manufacturing B&O tax rate of 0.484 percent. Receipts from this tax, which is less volatile than the current HST, are deposited in the General Fund. One option to increase revenue stability is to impose an additional B&O surcharge on manufacturers of gasoline, diesel and other fuels. For instance, imposing a surcharge of 0.516 percent effective July 1, 2017, would raise $82.0 million in the 2017–19 biennium and $112.0 million in the 2019–21 biennium, according to Revenue estimates.

Table 11: Potential Revenue from a 0.516 Percent Business & Occupation Surcharge on Manufacturers of Motor Vehicle Fuels and Special Fuels ($ in Millions)

Fund - Source	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
B&O tax surcharge	$38.0	$44.1	$52.2	$60.0	$66.6	$71.9
Fiscal Year Total	$38.0	$44.1	$52.2	$60.0	$66.6	$71.9
Biennial Total	$82.1		$112.2		$138.5	

This option is similar to the 0.052 percent B&O surcharges imposed on the forest products industry (RCW 82.04.261), proceeds of which are deposited in the Forest and Fish Support Account. Delaware imposes a 0.90 percent B&O surcharge on businesses engaged in buying and selling petroleum products, including motor fuel, diesel fuel, aviation fuel, jet fuel, heating oil, motor oil and other petroleum-based lubricants (Title 30, Delaware Code, Chapters 20-29 and 43). Crude oil is excluded from this tax.

These funds are used to implement Delaware's Hazardous Substance Cleanup Act (Title 7, Delaware Code, Chapter 91). (See "Other States" section for more information on Delaware's program).

Adjust Hazardous Substance Tax for Fiscal Growth Factor

In 1993, Initiative 601 was enacted and set limits on the growth of General Fund expenditures. This initiative also created a fiscal growth factor, which is used to adjust the state expenditure limit on an annual basis. The fiscal growth factor could be used to adjust the HST to provide more revenue and address rising program costs.

The fiscal growth factor is defined as average growth in state personal income for the prior 10 fiscal years and is established by the State Expenditure Limit Committee. At its November 2015 meeting, the committee set its preliminary fiscal growth factors at 4.08 percent for fiscal year 2018 and 3.82 percent for fiscal year 2019. Based upon the Department of Revenue's September 2016 non-General Fund forecast, adjusting the HST for the fiscal growth factors in the upcoming fiscal years would result in an additional $4.8 million in fiscal year 2018 and $11.6 million in fiscal year 2019.

Table 12: Projected Revenue from Adjusting the Hazardous Substance Tax for the State Fiscal Year Growth Factor ($ in Millions)

Fund - Source	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Environmental Legacy Stewardship Account		$11.6	$20.0	$29.1	$40.5	$59.1
Local Toxics Control Account	$2.1					
State Toxics Control Account	$2.7					
Fiscal Year Total	$4.8	$11.6	$20.0	$29.1	$40.5	$59.1
Biennial Total		$16.4		$49.1		$99.6

Permanently or Temporarily Increase the Hazardous Substance Tax Rate

An option to both increase and maintain revenues for MTCA is to simply increase the HST. Based upon the June 2016 non-General Fund forecast, Revenue projects that raising the HST rate from 0.7 percent to 0.8 percent effective July 1, 2017, would increase revenues by $36.2 million in the 2017-19 biennium. The table below shows projected revenue by fund that would result from a 0.1 percent increase in the HST.

Table 13: Projected Revenue from Increasing Hazardous Substance Tax from 0.7 to 0.8 Percent ($ in Millions)

Fund - Source	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Environmental Legacy Stewardship Account	$5.8	$15.6	$22.3	$25.0	$27.8	$32.6
Local Toxics Control Account	$4.8	$1.7	0	0	0	0
State Toxics Control Account	$6.1	$2.2	0	0	0	0
Fiscal Year Total	$16.7	$19.5	$22.3	$25.0	$27.8	$32.6
Biennial Total	$36.2		$47.3		$60.4	

An increase in the HST could be implemented on a permanent or temporary basis. A temporary surcharge would be similar to the petroleum products tax (PPT), which provides reinsurance for owners of underground storage tanks (Chapter 82.23A RCW). The PPT is a 0.3 percent tax imposed on the wholesale value of products derived from crude oil. It includes a "trigger" mechanism where the tax is imposed if the balance in the Pollution Liability Insurance Program Trust Account is less than $7.5 million and no more than $15.0 million.

Impose a Volumetric Tax on Petroleum Products

Washington's HST is imposed upon the value of the first possession of the petroleum or chemical in the state. Rather than imposing the tax on the value of the product, a tax could be imposed upon the amount or volume. Florida imposes a volumetric tax on pollutants (Fla. Stat. § 206.9915-206.9945). This tax applies to many of the same products covered under the HST, including crude oil.

Calculating the revenue from any volumetric tax is not straightforward because data on the volume of petroleum and hazardous substances sold in the state is not collected on a systematic basis. The state tracks the number of gallons of gasoline and diesel consumed as motor fuel as well as the number of gallons sold for use in private aircraft as part of OFM's Transportation Revenue Forecast.[7] However, data is not collected on other fuels and products covered by the HST, such as lubricating oil, crankcase motor oil, gasoline, aviation fuel, kerosene, benzoyl, fuel oil, residual fuel, asphalt base, liquefied or liquefiable gases such as butane, ethane and propane and every other product derived from the refining of crude oil. (See WAC 458-20-252 for definition).

Although the volume of pesticides and other nonpetroleum hazardous substances would be difficult to estimate, the State Energy Office tracks and forecasts energy usage based on the U.S. Energy Information Administration data on energy usage adjusted for Washington state energy consumption. This forecast is included in the State Energy Office Carbon Tax Assessment Model.[8] Extrapolating from the energy usage forecast, a 5 cent tax per gallon applied to petroleum products subject to the HST would generate approximately $190.0 million per year.

Table 14: Projected Revenue from Imposing 5 Cents per Gallon to Petroleum Products ($ in Millions)

Fund - Source	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Environmental Legacy Stewardship Account	$51.0	$55.8	$57.7	$57.8	$53.8	$52.0
Local Toxics Control Account	$61.6	$61.6	$61.6	$61.6	$61.6	$61.6
State Toxics Control Account	$78.4	$78.4	$78.4	$78.4	$78.4	$78.4
Fiscal Year Total	$190.9	$195.7	$197.7	$197.8	$193.8	$192.0
Biennial Total	$387.0		$395.5		$385.8	

This proposal would be very stable in comparison to the current value-based HST, and depending upon the tax rate, could raise significant revenue.

There are administrative concerns with establishing a volumetric HST. Taxpayers would need time to determine how to collect information to calculate their tax obligation. Auditors would have a difficult time reconciling tax returns with other business records because of the scant information collected. Generally, it is easier for Revenue to audit purchases of petroleum products and hazardous substances instead of their volume.

Establish a Hazardous Substance Tax Stabilization Account

One way to address stability would be to establish an account that is not appropriated and could build a balance that is then transferred to the MTCA accounts when certain conditions are met. Fund levels and conditions for such transfers would depend upon the revenue goals for the MTCA accounts. For example, all HST revenue greater than $200.0 million per year could be deposited in an HST stabilization account. When annual revenues fall below a predetermined level, such as $120.0 million, for instance, then balances in the HST stabilization account could be transferred to the MTCA accounts to make up shortfalls.

Under current law, up to $140.0 million per year in HST revenue is deposited in the State and Local Toxics accounts, and revenue greater than $140.0 million is deposited in the ELSA. Although this is similar to a budget stabilization account, the fact that the ELSA account is appropriated prevents the creation of a true budget reserve. Given the significant revenue decline from the HST, setting up a stabilization account under current conditions would be difficult and could exacerbate the revenue shortfall.

However, if a temporary tax surcharge were enacted, it could be used to fill up a stabilization account to a predetermined level and then turned off when a predetermined balance is reached. It's also important to remember that, even if the account is not appropriated, the funds can be transferred and used for other purposes.

Measures to Improve Transparency, Efficiency and Budget Accountability

The legislative proviso directed OFM to propose measures to improve transparency, efficiency and budget accountability. This topic was posed to independent experts and practitioners, whose responses are summarized in Appendix B.

Transparency

Many respondents suggested that transparency is not a problem and cited information that Ecology presents in the form of reports to the Legislature and presentations to legislative committees. Others suggested the need for better communication with the public, particularly with respect to the success of MTCA investments. Ecology programs produce a multitude of reports about site cleanup, toxics control and toxics prevention. These are often very detailed and specific to particular sites, chemicals and pollution prevention initiatives. With respect to overall assessments of MTCA spending, the most relevant information is often contained in reports to the Legislature such as the Ten-Year Financing Report, biennial reports and, more recently, a report on the Voluntary Cleanup Program. These reports are augmented by information on Ecology's website and materials provided directly to legislative committees.

The information highlighted above is clearly useful to knowledgeable practitioners, members of the Legislature and other interested parties. However, it is unlikely it is as successful in educating the public about the impacts of MTCA investments. Site cleanup itself provides distinct opportunities to show the benefit of MTCA spending — sites that are redeveloped after cleanup are visible to communities. Recent examples are the Port Gamble Bay and Hambleton Bros Log Yard cleanups, which were celebrated by federal, state, local and tribal partners. When partners understand the role of MTCA funding, especially as milestones are reached during and at the end of cleanups, they can, in turn, educate the public about how MTCA funding benefits their communities.

The impacts of toxics control and management, on the other hand, are often harder to demonstrate as they aren't so visible. Investments in toxics control and prevention activities include the ban on PBDEs and restriction on copper in vehicle brake pads and lead in wheel weights. Pollution prevention strategies that reduce toxics during manufacturing processes represent another potential use of MTCA. Communicating the benefit of MTCA funds for control and prevention can capitalize, however, on their larger benefit, such as clean waterways, compared with expensive end-of-pipe solutions such as cleanup.

With respect to toxics control strategies, new technologies in stormwater management offer important investment opportunities. The expanding use of, and research into, pervious pavement, rain gardens and roofing materials are topics often discussed by local governments as they seek to meet new municipal stormwater regulations. While education on stormwater prevention and management is a focus at all levels of government, Ecology grant recipients and other stakeholders can emphasize the role of MTCA funds for these activities.

Efficiency

Efficiency was discussed with policy experts primarily in the context of site cleanup. In general, the more complex the site, the longer it takes to complete a project. This dynamic does not lend itself to displaying efficiency, although the projects, despite the time it takes to complete them, may very well be efficient. Thus, discussions focused on less complex sites that are addressed through independent

cleanups or Ecology's Voluntary Cleanup Program. (Independent and voluntary cleanups are described in Appendix I.)

Ecology is developing guidance for model remedies as required in a 2013 update of the MTCA statute. Model remedies are defined as a set of technologies, procedures and monitoring protocols identified by Ecology for use in routine types of cleanup projects at facilities that have common features and lower risk to human health and the environment. Model remedies should accelerate the cleanup process for sites with similar contamination and characteristics, such as small petroleum-contaminated sites. The process underway at Ecology to implement model remedies is a significant step toward boosting efficiency at many sites.

Petroleum contamination of soil and groundwater represents a significant environmental challenge. More than 3,000 petroleum sites in the state lack data necessary to complete cleanup. In addition to Ecology's efforts to clean up these sites in a more efficient way using model remedies, the Pollution Liability and Insurance Agency (PLIA) is also identifying opportunities for more efficiency and better outcomes specifically related to leaking underground storage tanks. Given the sheer number of these sites that require more work, the focus should be on innovative technologies that embrace a risk-based approach to cleanup. PLIA's new grant and loan program will demonstrate the effectiveness of this approach and allow for evaluation of these strategies.

The use of licensed site professionals to manage cleanup sites, an approach used in other states, was also raised in interviews with policy experts. The benefit of such an approach was highlighted by some stakeholders in light of the significant hiring freeze at Ecology prompted by dropping MTCA revenues. While there are advantages to the use of licensed site professionals, creating such a program would be very resource intensive. If this approach were to be pursued, success would likely depend on restricting it to simpler sites such as small petroleum cleanups at gas stations.

Budget Accountability

Washington operates on a biennial budget system; agencies submit operating and capital budget requests to the governor every two years. In the intervening years, agencies make supplemental requests for budget changes.

Agencies, OFM and the Legislative Evaluation and Accountability Program manage systems for the evaluation of requests and the uses of state resources, including MTCA. State budgeting and accounting systems are in place to enact and track the decisions of the Legislature once operating and capital budgets are approved. These systems can evaluate projects and operating performance by comparing budgeted and actual operations.

Policy experts and practitioners believe that capital budget requests for projects and subprojects are easily accessible to public review and provide more detail on what MTCA requests would buy if funded. On the other hand, they believe that the operating budget requests and OFM activity description contain less detail and are more difficult to understand.

OFM activity inventory definitions can be broad, and activity structure and definitions can change from one biennium to the next, with OFM approval. Ecology's data system and the state's budgeting and accounting systems are not equipped to code amounts to categories such as "toxics cleanup," "toxics prevention" or "toxics control," making it difficult to provide consistent data or

analysis. Despite these limitations, it is important for Ecology to continue providing regular reports on MTCA spending, activity and results. The agency could raise the visibility of operating activities by including activity descriptions, performance measures and results in its scheduled MTCA reports.

Conclusions

Overview
The funding mechanism for MTCA is unique; other states do not have a similar structure for toxic cleanup, prevention and control. The HST funding source created through the act is fairly robust: Since the imposition of the tax in 1988, more than $2.4 billion has been collected to fund programs. During the past two biennia, however, the state began overappropriating the MTCA accounts. In addition, when General Fund revenue fell during the Great Recession, the Legislature opted to use some of the revenue for nontraditional MTCA activities.

MTCA collections increased when oil prices were high from 2011 to 2014, then declined when prices dropped. Department of Revenue forecasts now show a return to collections typical during the pre-2011 spike. Capital projects funded by MTCA are usually large and complex, so when revenues fluctuate, funding uncertainty makes it difficult for local governments to continue or initiate new cleanups.

Available MTCA resources can be best used to reduce legacy and new environmental and public health risks when all three categories of expenditures (cleanup, prevention and control) are funded and integrated.

Stability
The majority of work group participants believe that the HST — the main MTCA revenue source — is volatile. A minority believe that the account collections are robust and that the account is not volatile. There is consensus that funding for MTCA programs should be more stable.

Stormwater
Stormwater funding needs far exceed MTCA capacity. Although MTCA is an appropriate source for stormwater projects, the experts and stakeholders interviewed expressed interest in finding additional funds, particularly for stormwater. These could come from a new or expanded fee, tax or funding structure.

Transparency
Ecology provides a significant amount of information on overall spending and activities related to MTCA. However, most of this information is designed for knowledgeable practitioners and legislators. Ecology and stakeholders should expand communication and outreach to the public and the business sector on the benefits of MTCA spending for cleanup, toxics control and prevention.

Efficiency
Efficiencies are underway with the use of model remedies as required in recent amendments to the statute. Model remedies show promise in streamlining cleanups of small sites with similar contamination, such as gas stations. Petroleum-contaminated sites represent a large percentage of total cleanup sites and offer a good opportunity for more efficiency. Recent reforms in the approach taken by PLIA in addressing petroleum sites within its purview suggest opportunities for collaboration between Ecology and PLIA.

Recommendations

Stability

To achieve stable funding for MTCA projects and activities — to give local governments sufficient planning opportunities — changes to MTCA revenue and budget strategies need to be explored. Analysis of the options will help to determine benefits and which options should be pursued.

Options for additional revenues include expanding or changing the base of the HST, imposing a surcharge on the HST or other tax and fee sources, adjusting the HST based on inflation or a fiscal growth factor and changing to a volumetric tax on hazardous substances.

Of the options considered, imposing a surcharge on the HST is the most direct option for improving stability and reducing volatility of MTCA funding. Ecology should also explore using its rule-making authority to increase the number of substances subject to the HST, particularly those that are of priority concern.

Budget strategy options include reducing use of MTCA funds for oil spill activities, using other funds for stormwater projects, adding or changing the match requirements for programs and creating a loan program in which funds are repaid to the MTCA accounts.

In addition, consideration should be given to managing the MTCA accounts on a fund, rather than cash basis.

Stormwater

Stormwater has been singled out as a need that exceeds the capacity of MTCA. Accordingly, options for a dedicated funding source(s) specifically for stormwater projects should be explored. The options should consider the finding of a study required by the 2016 supplemental capital budget, (Sec. 1020, Chapter 35, Laws of 2016) that must be completed by Jan. 15, 2017. It will include an analysis of the economic implications of water infrastructure, including stormwater. MTCA should continue to supplement the costs of stormwater projects while the state explores options for new revenue sources.

Transparency

MTCA grant recipients should communicate the benefit of their activities to the public and local stakeholders, emphasizing the linkage to funding made possible by MTCA.

Ecology should add to its periodic MTCA reports information about operating budget activities, including descriptions, results and performance measures, to promote better understanding of MTCA spending.

Efficiency

In addition to model remedies, Ecology should explore ways to collaborate with PLIA to hasten the pace at which petroleum sites are cleaned up under MTCA.

Appendices

Appendix A: Interview Questions for Experts and Practitioners

1. What is your interest in participating in this interview? What's foremost on your mind?

2. What is your key interest in how the hazardous substance tax (HST) revenues are used?

3. Do you know of any projects or activities that are funded by the Model Toxics Control Act (MTCA) revenues? If so, please provide examples.
   - Based on these examples, which do you consider toxics prevention, toxics cleanup or toxics management?
   - Using low, medium or high rating, where has the MTCA been spent in the past and currently, and where should it be spent in the future?

Current and Past MTCA Spending	MTCA Spending	Desired Future MTCA Spending
Rating: (low, medium, high)		Rating: (low, medium, high)
	toxics prevention (e.g._____)	
	toxics cleanup (e.g._____)	
	toxics management (e.g._____)	
	other spending (e.g._____)	

4. How would you define sustainability as it relates to HST revenue? What are the characteristics of a sustainable HST revenue, how should it be measured and at what level?

5. Do you think HST revenue is too volatile? If so, what do you think the main causes are? What recommendations do you have for making it more stable? Options could include, for instance:
   - volumetric tax
   - temporary surcharges or other surcharge options
   - increase HST tax for inflation or fiscal growth factor
   - expand what is currently taxable (e.g., crude oil, others)
   - other ideas?

6. To increase stability of funding MTCA expenditures, what would you do? Options could include, for instance, establishing a new tax or fee, having a match requirement, reducing overall spending or setting up a loan program. What would you favor or could not support? Other ideas?

7. What are ways that could improve the transparency, efficiency and budgetary accountability of MTCA expenditures?
   - How important do you think it is that the public understands how revenues are spent?
   - What do you think works or is lacking related to transparency, efficiency and accountability in the following key MTCA-related reports?

MTCA Biennial Reports
(http://www.ecy.wa.gov/programs/tcp/MTCA_AnnualReport/annualRpt.html)
MTCA 10-Year Financing Report
(https://fortress.wa.gov/ecy/publications/SummaryPages/1409055.html)
Ecology Budget and Program Overview
(https://fortress.wa.gov/ecy/publications/documents/1501007.pdf)
2015–17 MTCA Cash Management Plan
(http://www.ecy.wa.gov/services/fs/2015_17MTCA_CashMgmntPlanOFMApproved.pdf)

- If you believe that transparency, efficiency and/or accountability is lacking, what do you think should be done to attain those qualities or to close the gap?
- What mechanisms should be put in place for communicating or reporting vital issues and data related to MTCA revenues, projects and programs?

8. What else would you like us to know or consider?

Appendix B: Response Summary of Independent Policy Experts and Practitioners

Questions asked during the interviews can be found in Appendix A. A summary of the interview feedback below was presented and discussed during a MTCA stakeholder meeting on Sept. 20, 2016.

Interviewee agreement:

- MTCA is unique among states
- MTCA is successful
- HST revenue is important to fulfill MTCA purposes
- MTCA funds should not be redirected for non-MTCA purposes
- Reverse ongoing GF-S shift to MTCA
- Stormwater project needs exceed statewide funding available
- MTCA-related needs exceed HST revenue

Interests

Priority

The majority of interviewees identified toxics cleanup as a priority and should be the focus of MTCA funding but recognized that toxics prevention and control remain relatively important. Toxics prevention and control lead the way in reducing the possibility of recontamination and additional toxics sites and costs of cleanup. MTCA experts and practitioners are interested in a reasonable balance between operating and capital, as programmatic capacity is needed to keep programs forward. MTCA practitioners recognized that stormwater is now the biggest threat in contributing toxics but the need far exceeds available funding beyond MTCA.

Improving stability and reducing volatility

Interviewees were interested in the continued implementation of MTCA and that the integrity of law is maintained. HST revenue stability and predictability of funding for MTCA projects and activities are very important. According to experts and practitioners, the state should be more proactive rather than reactive to market volatility, which may require policy and budget decisions and changes to the MTCA law. However, care should be taken when making these changes to make sure they can withstand legal and political challenges.

OFM's questionnaire listed ideas and asked ideas (see below) about how to reduce HST volatility and increase HST sustainability. OFM approached this section by looking into the relationships between HST revenues and MTCA expenditures.

Reducing HST volatility and increasing HST sustainability ideas:

- volumetric tax
- temporary surcharges or other surcharge options
- increase HST tax for inflation or fiscal growth factor
- expand what is now taxable (e.g., crude oil, others)

Increasing stability of MTCA spending ideas:

- establishing a new tax or fee
- having a match requirement
- reducing overall spending or setting up a loan program

Additional ideas:

- Reduce appropriations across the board when revenue is low
- Establish a formula-driven funding distribution for cleanup, prevention and management
- Set up MTCA trust account/reserve
- Require economic and social impact analysis for MTCA projects
- Expand tax based on chemicals/toxics relative hazard, based on tiers
- Get more Superfund designations
- Bond MTCA funding
- Improved cleanup process — explore use of licensed site remediation professional

The majority of experts and practitioners expressed interests in exploring these ideas. In addition, there was a keen interest in finding new revenue source(s) to pay for stormwater needs but recognition that stormwater is within the purposes of MTCA. MTCA funding should continue to supplement stormwater costs with or without the possibility of new revenue.

Revenue options and budget strategies need to be explored. Recognizing that need for toxics cleanup, prevention and control far exceed MTCA funding, MTCA funding should not be used for non-MTCA purposes. Increasing revenues should not be the only the focus, which could include implementing ways to prioritize expenditures that match HST capacity with or without changes. Cost-benefit analysis process should be conducted on these options. Local governments' and local communities' financial and managerial capacity to implement these changes, such as match requirements and loan programs, must be considered when pursuing these options.

There's a difference of opinion as to what "sustainability" means for HST. Some equate sustainability to reliability and funding sufficiency. Revenues from oil will remain reliable for a long time. Natural gas, electric and other green energy alternatives will supplement the use of oil but oil will remain a predominant source of energy. MTCA funding should be sufficient to meet immediate need for MTCA projects and activities and allow for long-term project planning and financing.

Improving Transparency and Accountability

The majority of experts and practitioners agree that budget accountability is not a problem. Auditing, accounting and budgetary laws, rules, tools and systems statewide are established and processes are in place.

There was recognition that Ecology provides many reports, as required by law and for constant updating purposes. However, finding better ways of communication with the public is important, including spending, timing of spending and successes. More reader-friendly means of communication, such as highlights, social media, dashboard, one-pagers are encouraged.

Appendix C: Operating Budget Activities Funded by MTCA, by Category – Total 10-Year Budgeted Amounts 2006–15

Dollars in thousands
Source: OFM, after supplemental budgets

Operating – Toxics Cleanup

Agency	Budget Activity ID	Budget Activity Title	Budgeted MTCA
Ecology	A005	Clean Up the Most Contaminated Sites First (Upland and Aquatic)	$148,977
	A013	Fund Local Efforts to Clean Up Toxic Sites and Manage or Reduce Waste	20,106
	A031	Prevent Hazardous Waste Pollution through Permitting, Closure and Corrective Action	16,036
	A023	Manage Underground Storage Tanks to Minimize Releases	345
	A054	Rapidly Respond to and Clean Up Oil and Hazardous Material Spills	38,926
	A057	Services to Site Owners that Volunteer to Clean Up their Contaminated Sites	29,994
	A002	Administration	29,049
Natural Resources	A003	Aquatic Lands Business Management	1,948
	A044	Aquatic Lands Environmental Management	3,115
Corrections	A001	Confine Convicted Adults in State Prisons	105
Total - Cleanup			$288,601

Operating – Toxics Prevention

Agency	Budget Activity ID	Budget Activity Title	Budgeted MTCA
Ecology	A009	Eliminate Waste and Promote Material Reuse	$11,054
	A050	Reduce Persistent Bioaccumulative Toxins in the Environment	5,789
	A052	Reduce the Generation of Hazardous Waste and the Use of Toxic Substances through Technical Assistance	13,644
	A065	Reduce Toxic Chemicals in Products and Promote Safer Alternatives	2,853
	A002	Administration	3,928
Total - Prevention			$37,268

Operating – Toxics Control

Agency	Budget Activity ID	Budget Activity Title	Budgeted MTCA
Ecology	A006	Clean Up Polluted Waters	$10,360
	A008	Control Stormwater Pollution	21,871
	A010	Prevent and Pick Up Litter	599
	A019	Improve Community Access to Hazardous Substance and Waste Information	6,263
	A021	Increase Compliance and Act on Environmental Threats from Hazardous Waste	20,554
	A022	Increase Safe Hazardous Waste Management	23,463
	A028	Improve Environmental Compliance at State's Largest Industrial Facilities	9,147
	A030	Prepare for Aggressive Response to Oil and Hazardous Material Incidents	2,393
	A032	Prevent Point Source Water Pollution	3,850
	A033	Prevent Oil Spills from Vessels and Oil Handling Facilities	11,357
	A034	Prevent Unhealthy Air and Violations of Air Quality Standards	12,796
	A037	Protect Water Quality by Reviewing and Conditioning Construction Projects	788
	A043	Provide Water Quality Financial Assistance	41,006
	A045	Reduce Air Pollution from Industrial and Commercial Sources	654
	A048	Reduce Health and Environmental Threats from Smoke	1,837
	A049	Reduce Nonpoint-Source Water Pollution	3,883
	A051	Reduce Risk from Toxic Air Pollutants	1,137
	A064	Manage Solid Waste Safely	11,759
	A002	Administration	20,061
Agriculture	A021	Pesticide Regulation	19,522
	A001	Agency Administration	1,184
Washington State Patrol	A013	Specialized Outreach Fire Services	2,491
Total - Control			$226,975

Operating – Other

Agency	Budget Activity ID	Budget Activity Title	Budgeted MTCA
Ecology	A007	Conduct Environmental Studies for Pollution Source Identification and Control	$15,481
	A014	Restore the Air, Soil and Water Contaminated from Past Activities at Hanford*	1,698
	A015	Clean Up and Remove Large, Complex, Contaminated Facilities throughout Hanford*	4,643
	A016	Treat and Dispose of Hanford's High-Level Radioactive Tank Waste*	20,891
	A017	Ensure Safe Tank Operations, Storage of Tank Wastes and Closure of the Waste Storage Tanks at Hanford*	12,896
	A018	Ensure the Safe Management of Radioactive Mixed Waste at Hanford*	12,160
	A020	Improve Quality of Data Used for Environmental Decision Making	760
	A025	Measure Air Pollution Levels and Emissions	5,555
	A026	Measure Contaminants in the Environment by Performing Laboratory Analyses	6,913
	A027	Monitor the Quality of State Waters and Measure Stream Flows Statewide	15,814
	A036	Protect and Manage Shorelines in Partnership with Local Governments	24,309
	A038	Protect, Restore and Manage Wetlands	5,600
	A041	Provide Technical Assistance on State Environmental Policy Act Review	1,282
	A042	Provide Technical Training, Education and Research through Padilla Bay Estuarine Reserve	1,530
	A055	Restore Public Natural Resources Damaged by Oil Spills	1,013
	A056	Restore Watersheds by Supporting Community-Based Projects with the Washington Conservation Corps	3,269
	A060	Provide Regulatory Assistance for Significant Projects and Small Businesses	267
	A067	Support Watershed-Based Water Supply and Resource Stewardship	1,616
	A002	Administration	15,054
Natural Resources	A016	Forest Practices Act and Rules	2,000
Agriculture	A005	Chemistry Laboratory	1,950
Health	A001	Department of Health Administration	1,640
	A003	Protect Drinking Water	2,199
	A005	Protect Community Environmental Health	14,036
	A007	Shellfish and Food Safety	84

Fish & Wildlife	A032	Agency Administration	163
	A041	Fish Production for Sustainable Fisheries	160
	A042	Native Fish Recovery	683
	A045	Habitat Conservation Technical Assistance	218

Operating – Other

Agency	Budget Activity ID	Budget Activity Title	Budgeted MTCA
Conservation Commission	A001	Technical Services and Program Delivery	346
	A002	Conservation District Operations and Accountability	254
	A003	State Conservation Commission Operations and Administration	450
Puget Sound Partnership	A001	Puget Sound Partnership	1,710
	A002	Setting Priorities and Evaluating Progress with Science	876
	A004	Salmon Recovery, Local Integration and Technical Assistance	1,132
	A005	Administration	119
Special Appropriations	A001	Special Appropriations	25
University of Washington	A009	Research	1,120
Revenue	A003	State and Local Revenue Collection and Distribution	426
Total - Other			$180,342
Total - All Categories			$733,186

* Most STCA expenditures in these Nuclear Waste Program activities were backed by dedicated radioactive mixed waste fee revenue deposited in the STCA and did not rely on HST revenue. The Legislature established the Radioactive Mixed Waste Fee Account in 2013, where radioactive mixed waste fees are now deposited and expended.

Appendix D: New Capital Appropriations Funded by MTCA, Bonds and Other Funds by Category – Total 12-Year Appropriations 2006–17

Dollars in thousands
Source: OFM, after supplemental budgets

Capital – Toxics Cleanup

Agency	Project	Account #	Account Name	Total
Commerce	Brownfield Redevelopment Grants (92000100)	174-1	Local Toxics Control - State	$1,500
	Projects that Strengthen Communities and Quality of Life (92000230)	19G-1	Environ Legacy Stwd - State	500
Ecology	ASARCO - Tacoma Smelter Plume and Mines (30000280)	15H-1	Cleanup Settlement - State	$20,647
	ASARCO Cleanup (30000334)	057-1 15H-1 Total	State Bldg Constr - State Cleanup Settlement - State	4,000 30,660 $34,660
	ASARCO Cleanup (30000538)	15H-1	Cleanup Settlement - State	12,146
	Burlington Northern Santa Fe Skykomish Restoration (30000218)	15H-1	Cleanup Settlement - State	284
	Clean Up Toxics Sites - Puget Sound (30000144)	057-1 15H-1 173-1 Total	State Bldg Constr - State Cleanup Settlement - State State Toxics Control - State	511 18,300 22,387 $41,198
	Clean Up Toxics Sites - Puget Sound (30000265)	173-1	State Toxics Control - State	16,400
	Clean Up Toxics Sites - Puget Sound (30000337)	19G-1	Environ Legacy Stwd - State	31,500
	Clean Up Toxics Sites - Puget Sound (91000032)	173-1	State Toxics Control - State	9,270
	Clean Up and Prevention of Waste Tire Piles (30000012)	08R-1	Waste Tire Removal A - State	1,000
	Clean Up Asarco Contamination on Vashon/Maury Islands and Mines (91000009)	15H-1 173-1 Total	Cleanup Settlement - State State Toxics Control - State	4,100 10,900 $15,000
	Clean Up Toxic Sites - Puget Sound (20064001)	173-1	State Toxics Control - State	4,000
	Clean Up Toxic Sites - Puget Sound (20084005)	057-1 173-1 Total	State Bldg Constr - State State Toxics Control - State	5,431 1,336 $6,767
	Clean Up Toxics Sites - Puget Sound (30000542)	173-1	State Toxics Control - State	18,550
	Eastern Washington Clean Sites Initiative (30000217)	173-1	State Toxics Control - State	6,000
	Eastern Washington Clean Sites Initiative (30000351)	19G-1	Environ Legacy Stwd - State	10,300
	Eastern Washington Clean Sites Initiative (30000432)	173-1	State Toxics Control - State	11,000

	Eastern Washington Clean Sites Initiative (91000033)	173-1	State Toxics Control - State	1,545
	Leaking Tank Model Remedies (30000490)	173-1	State Toxics Control - State	2,000
	Leaking Underground Tanks (91000002)	001-8	General Fund - Fed ARRA	3,500
	Local Toxics Grants for Cleanup and Prevention (20064008)	057-1 174-1 Total	State Bldg Constr - State Local Toxics Control - State	21,237 77,663 $98,900
	Orphaned and Abandoned Site Cleanup Initiative (30000018)	057-1 15H-1 Total	State Bldg Constr - State Cleanup Settlement - State	1,000 277 $1,277
	Puget Sound Aquatic Cleanup and Restoration (20061005)	173-1	State Toxics Control - State	5,000
	Puget Sound Aquatic Cleanup and Restoration (20084004)	173-1	State Toxics Control - State	5,000
	Remedial Action Grant Program (30000039)	057-1 174-1 Total	State Bldg Constr - State Local Toxics Control - State	37,700 38,211 $75,911
	Remedial Action Grant Program (30000216)	174-1	Local Toxics Control - State	63,834
	Remedial Action Grants (20084008)	057-1 174-1 Total	State Bldg Constr - State Local Toxics Control - State	54,000 38,875 $92,875
	Remedial Action Grants (30000374)	174-1	Local Toxics Control - State	62,537
	Remedial Action Grants (30000458)	174-1	Local Toxics Control - State	60,050
	Safe Soil Remediation and Awareness Projects (20062001)	173-1	State Toxics Control - State	5,000
	Safe Soils Remediation Grants (20084009)	173-1	State Toxics Control - State	4,500
	Safe Soils Remediation Program (30000019)	057-1 15H-1 Total	State Bldg Constr - State Cleanup Settlement - State	669 1,620 $2,289
	Safe Soils Remediation Program - Central Washington (30000263)	173-1	State Toxics Control - State	3,711
	Settlement Funding to Clean Up Toxic Sites (30000145)	15H-1	Cleanup Settlement - State	8,500
	Skykomish Cleanup (20084020)	057-1 15H-1 173-1 Total	State Bldg Constr - State Cleanup Settlement - State State Toxics Control - State	3,000 3,000 4,000 $10,000
	Skykomish Cleanup and Restoration (30000020)	057-1 15H-1 Total	State Bldg Constr - State Cleanup Settlement - State	2,300 2,050 $4,370
	Swift Creek Natural Asbestos Cleanup (30000015)	057-1	State Bldg Constr - State	1,000

	Upper Columbia River Black Sand Beach Cleanup (30000016)	057-1	State Bldg Constr - State	500
	Waste Tire Pile Cleanup (20084022)	08R-1	Waste Tire Removal A - State	5,000
	Waste Tire Pile Cleanup and Prevention (30000322)	08R-1	Waste Tire Removal A - State	1,000
	Waste Tire Pile Cleanup and Prevention (30000431)	08R-1	Waste Tire Removal A - State	1,000
	Waste Tire Pile Cleanup and Prevention (30000210)	08R-1	Waste Tire Removal A - State	1,000
	Waste Tire Piles (20061002)	08R-1	Waste Tire Removal A - State	4,000
Natural Resources	Creosote Removal in Puget Sound (20082017)	173-1	State Toxics Control - State	$4,000
	Contaminated Sites Cleanup and Settlement (30000240)	19G-1 057-1 Total	Environ Legacy Stwd - State State Bldg Constr - State	856 75 931
	Derelict Vessel Removal and Disposal (91000049)	057-1 19G-1 Total	State Bldg Constr - State Environ Legacy Stwd - State	3,000 4,500 $7,500
State Parks	Minor Works - Facility Preservation (20081001)	173-1	State Toxics Control - State	$200
	Sustainable Development and Restoration (20061011)	173-1	State Toxics Control - State	500
University of Washington	Clean Up More Hall and Other Toxics (20061950)	173-1	State Toxics Control - State	$4,500
	UW Tacoma Campus Soil Remediation (92000002)	057-1 173-1 Total	State Bldg Constr - State State Toxics Control - State	4,300 1,700 $6,000
	UW Tacoma - Soils Remediation (20082852)	173-1	State Toxics Control - State	1,000
Washington State University	WSU Spokane - Riverpoint Biomedical and Health Sciences (20162953)	173-1	State Toxics Control - State	$1,300
			Total - Toxics Cleanup	$792,932
			MTCA Funds	$534,125
			GO Bonds	$140,723
			Other Funds	$118,084

Capital – Toxics Prevention

Agency	Project	Account #	Account Name	Total
Ecology	Diesel Emissions Reduction (30000212)	174-1	Local Toxics Control - State	$7,000
	Diesel Emissions Reduction (91000003)	001-8	General Fund - Fed ARRA	1,730
	Diesel Emissions Reduction (91000024)	001-2	General Fund - Federal	353
	Reduce Health Risks from Toxic Diesel Pollution (20084024)	057-1	State Bldg Constr - State	3,449
		174-1	Local Toxics Control - State	6,761
		Total		$10,210
	Reduce Public Health Risks from Wood Stove Pollution (20084019)	057-1	State Bldg Constr - State	350
		160-1	Wood Stove Education - State	500
		174-1	Local Toxics Control - State	1,150
		Total		$2,000
	Reducing Diesel Particle Emissions in Tacoma (30000139)	216-1	Air Poll Contr Acct - State	1,000
	Reducing Health Threats from Wood Stove Pollution (30000010)	057-1	State Bldg Constr - State	1,000
	Reducing Toxic Diesel Emissions (30000324)	173-1	State Toxics Control - State	4,500
	Reducing Toxic Diesel Emissions (30000428)	173-1	State Toxics Control - State	1,000
	Reducing Toxic Wood Stove Emissions (30000325)	173-1	State Toxics Control - State	4,000
	Reducing Toxic Wood Stove Emissions (30000429)	057-1	State Bldg Constr - State	1,500
		173-1	State Toxics Control - State	2,000
		Total		$3,500
	Reducing Wood Smoke Particle Emissions in Tacoma (30000140)	216-1	Air Poll Contr Acct - State	600
	Solid Waste Reduction - Compost (91000197)	173-1	State Toxics Control - State	1,694
	Wood Stove Pollution Reduction (30000211)	174-1	Local Toxics Control - State	3,000
			Total - Toxics Prevention	$41,587
			MTCA Funds	$31,105
			GO Bonds	$6,299
			Other Funds	$4,183

Capital – Toxics Control

Agency	Project	Account #	Account Name	Total
Ecology	Coordinated Prevention Grants (20084015)	057-1	State Bldg Constr - State	$12,302
		174-1	Local Toxics Control - State	13,198
		Total		$25,500
	Coordinated Prevention Grants (30000013)	057-1	State Bldg Constr - State	10,000
	Coordinated Prevention Grants (30000214)	174-1	Local Toxics Control - State	28,610
	Coordinated Prevention Grants (30000321)	174-1	Local Toxics Control - State	28,186
	Coordinated Prevention Grants (CPG) (30000426)	057-1	State Bldg Constr - State	15,000
	Early Spill Response Equipment Caching (20061003)	174-1	Local Toxics Control - State	1,450
	FY 2012 Statewide Stormwater Grant Program (91000053)	174-1	Local Toxics Control - State	24,073
	Low-Impact Development for Stormwater Management (20062006)	173-1	State Toxics Control - State	2,500
	Mercury Switch Removal (30000323)	173-1	State Toxics Control - State	500
	Motor Vehicle Mercury Removal Program (20062850)	173-1	State Toxics Control - State	1,000
	Puget Sound Stormwater Projects (20082002)	057-1	State Bldg Constr - State	17,483
		174-1	Local Toxics Control - State	438
		Total		$17,921
	Statewide Stormwater Projects (30000294)	174-1	Local Toxics Control - State	30,000
	Stormwater Improvements (92000076)	19G-1	Environ Legacy Stwd - State	100,000
	Stormwater Projects (20082003)	057-1	State Bldg Constr - State	1,792
		173-1	State Toxics Control - State	1,208
		Total		$3,000
	Stormwater Retrofit and Low-Impact Development Competitive Grants (91000054)	174-1	Local Toxics Control - State	14,463
	Stormwater Financial Assistance Program (30000535)	174-1	Local Toxics Control - State	31,200
	Stormwater Retrofit and Low-Impact Development Grant Program (30000097)	051-1	St/Local Imprv Revol - State	1,284
		055-1	Waste Disposal-1980 - State	325
		057-1	State Bldg Constr - State	30,334
		173-1	State Toxics Control - State	15,737
		174-1	Local Toxics Control - State	6,929
		Total		$54,279
			Total - Toxics Control	$388,012
			MTCA Funds	$299,492
			GO Bonds	$86,911
			Other Funds	$1,609

Capital – Other

Agency	Project	Account #	Account Name	Total
Enterprise Services	Capitol Lake Dredging (30000571)	173-1	State Toxics Control - State	$200
Ecology	Centennial Clean Water Program (20064007)	057-1	State Bldg Constr - State	$24,550
		11W-1	Water Quality Cap - State	6,507
		139-1	Water Quality Acct - State	2,493
		173-1	State Toxics Control - State	15,250
		Total		$48,800
	Centennial Clean Water Program (20084010)	057-1	State Bldg Constr - State	58,427
		11W-1	Water Quality Cap - State	5,417
		173-1	State Toxics Control - State	3,039
		Total		$66,883
	Centennial Clean Water Program (30000008)	057-1	State Bldg Constr - State	30,000
	Centennial Clean Water Program (30000208)	173-1	State Toxics Control - State	34,100
	Centennial Clean Water Program (30000326)	19G-1	Environ Legacy Stwd - State	50,000
	Centennial Clean Water Program (30000427)	057-1	State Bldg Constr - State	12,500
		174-1	Local Toxics Control - State	10,000
		Total		$22,500
	Mason County Consortium (20084851)	173-1	State Toxics Control - State	500
	Veterans Conservation Corps (91000237)	19G-1	Environ Legacy Stwd - State	1,000
	Wastewater Regionalization (20082851)	057-1	State Bldg Constr - State	100
	Wastewater Systems Case Studies (20082852)	057-1	State Bldg Constr - State	75
	Wastewater Treatment and Water Reclamation (92000041)	057-1	State Bldg Constr - State	3,430
	Flood Levee Improvements (92000057)	174-1	Local Toxics Control - State	7,000
Fish and Wildlife	PS Gen. Investigation for Nearshore Restoration (92000025)	173-1	State Toxics Control - State	$1,030
RCO	Family Forest Fish Passage Program (91000097)	173-1	State Toxics Control - State	$10,000
Natural Resources	Statewide Aquatic Restoration Projects (20062008)	173-1	State Toxics Control - State	$2,000
			Total - Other	$277,618
			MTCA Funds	$134,119
			GO Bonds	$129,082
			Other Funds	$14,417

TOTAL - All Categories		$1,500,149
	MTCA Funds	$998,841
	GO Bonds	$363,015
	Other Funds	$138,293

Appendix E: Methodology for Categorizing MTCA Appropriations and Expenditures

Methodology for Categorization – Operating

1. Categorized all agencies' MTCA-funded operating budget activities based on criteria outlined above. For Ecology, additionally assigned budget activities to budget programs. The methodology provides a general categorization; MTCA is not budgeted or coded based on these categories. While some activities could fit multiple categories, each activity was placed in a single category for which an estimated minimum of 50 percent would fit the definition, or where multiple categories applied, the category with the largest percentage was assigned to the full dollar amount.
2. Extracted 2006–15 MTCA activity inventory data corresponding to the enacted, even-year supplemental budget, by agency, activity and fiscal year.
3. Applied the above-mentioned activity categorization to all budgeted amounts in the 2006–15 data.
4. Computed agency and Ecology-program budgeted amounts and percentages per category by fiscal year. For Ecology's administration program, assigned amounts to categories in proportion to nonadministration category percentages. Department of Agriculture's administration program amounts were assigned 100 percent to control.
5. Summarized budgeted amounts and percentages for each category by fiscal year and biennium.
6. Applied budgeted percentages by category and account to total MTCA expenditures for all agencies by fiscal year to estimate MTCA expenditures by category.

Methodology for Categorization – Capital

1. Aligned 2006–16 appropriations and actual spending from OFM Agency Fiscal Reporting System. Data included all of Ecology's capital budget projects and MTCA funded projects in other agencies.
2. Identified all of Ecology's appropriations for projects that fulfill MTCA purposes regardless of fund source.
3. The methodology provides a general categorization; MTCA is not budgeted or coded based on these categories. While some projects could fit multiple categories, each project was placed in a single category for which an estimated minimum of 50 percent would fit the definition, or where multiple categories applied, the category with the largest percentage was assigned the full dollar amount.
4. Reconciled with Ecology's categorization for projects.
5. Computed all agencies' MTCA-purpose appropriation amounts and percentages per category by fiscal year and for all funds.
6. Applied percentages to the total 2006–15 historic appropriation and spending by fiscal year.
7. Summarized appropriations, expenditures and percentages by category (excluded 2016 because the fiscal year is not complete).

Appendix F: Ongoing Fund Shifts from General Fund - State to the Model Toxics Control Act Accounts

Ongoing fund shifts from General Fund - State (GF-S) to the Model Toxics Control Act (MTCA) accounts (State Toxics Control (STCA), Local Toxics Control (LTCA) and Environmental Legacy Stewardship (ELSA) from the 2009-11 Biennium through the 2015-17 Enacted Budget.

Budget Level	Budget Item	Description	Account-Type	Budget Level
2015-17 PL	G03 Air Quality & Shorelands Fund Shift	GF-S expenditures for the Department of Ecology's Air Quality program and the Shorelands and Environmental Assistance program are shifted to STCA on an ongoing basis.	173-1 State Toxics Control - State	$9,600,000
2013-15 PL	02 Air Quality Fund Shift	Work in the Air Quality Program related to preventing unhealthy air and violations of federal air quality standards is shifted on an ongoing basis from GF-S to STCA	173-1 State Toxics Control - State	5,130,000
2013-15 PL	04 Fund Shift to Toxics	GF-S expenditures are shifted on an ongoing basis to the STCA for activities in the Air Quality, Water Quality, Environmental Assessment, Shorelands and Environmental Assistance, and Administration Programs	173-1 State Toxics Control - State	24,000,000
2011-13 PL	07 Continued Pollution Control Fund Shift	Continuing a budget change initiated in the 2010 supplemental operating budget, the GF-S portion of activities that support cleaning up polluted waters, controlling stormwater pollution and preventing point and nonpoint source pollution is shifted, on a one-time basis, to STCA	173-1 State Toxics Control - State	5,000,000
2011-13 PL	CB Local Shoreline Grants Fund Shift	Base funding of $4.5 million is shifted permanently from GF-S to LTCA for grants to local governments engaged in Shoreline Master Program updates.	174-1 Local Toxics Control - State	4,500,000
			Total Ecology MTCA Fund Shifts[1]	$48,230,000
			DNR - Forest Practices 2015-17 173 Fund Shift[2]	5,438,000
			PSP - Administration 2009-11 173 Fund Shift[3]	170,000
			WDFW - Multiple 2013-15 19G Fund Shifts[4]	510,000
			Grand Total = Ecology + Other Agencies	$54,348,000

1 Expenditures from the STCA and LTCA were subsequently partially shifted to ELSA (see 2013-15 budget item S01). After realignment, net shifts from GF-S were STCA $35,044,261; ELSA $13,185,739.
2 See 2015-17 biennium budget Item A0 (Forest Practices Fund Exchange) Rec Sum - A portion of the GF-S support for the Forest Practices Program is shifted to the STCA on an ongoing basis.
3 See 2009-11 biennium operating budget Item HAD (Administration Fund Shift) Rec Sum - Administration expenses are shifted from the GF-S to the STCA.
4 See 2013-15 biennium operating budget Items 1E (Shift PS Toxic Sampling); 1H (Shift Water Quality Lab); 1I (Shift Hatchery NPDES); 1J (Shift GMA/SMA).

Appendix G: Remedial Action Grant Matching Requirements by Fiscal Year

This table summarizes the type of grant funds under the Remedial Action Grant Program. The table specifies the percent of eligible costs funded by the state and any limits on the total amount of funding.

Remedial Action Grant Type	Fiscal Years	State Share Match: Limit on Percentage of Eligible Costs*	Base Funding [% eligible costs]	Additional Funding (Up to 90% of eligible costs)			State Share Funding: Maximum Grant Amount Allowed***
				Economic Disadvantage (+25%)	Innovative Technology (+15%)	Director's Discretion (Up to 90%) **	
Current Grant Types							
Site Assessment Grants	1990-93	50-100%	100% for first $25K 50% for next $25K	--	--	--	$50,000 per biennium
	1994-2001	100%	100%	--	--	--	$200,000 per biennium
	2002-present	100%	100%	--	--	--	--
Integrated Planning Grants	2008-15	100%	100%	--	--	--	$200,000 for a single site
	2016-present	100%	100%	--	--	--	$200,000 for single site; $300,000 for multiple sites
Area-wide Groundwater Investigation Grants	2004-15	100%	100%	--	--	--	--
	2016-present	100%	100%	--	--	--	$500,000

* Ecology is not required to provide maximum funding, and may provide less.
** Allows the director under certain conditions to increase the department share of eligible costs up to 90%. For oversight remedial action costs, this option exists only if the eligible project costs are less than $5.0 million.
*** The amount of the grant is determined by multiplying the state share match amount by the maximum amount of total project costs allowed during the grant period. If the amount is blank for a grant type, there is no maximum amount limit set by rule.

Remedial Action Grant Type		Fiscal Years	State Share Match: Limit on Percentage of Eligible Costs*	Base Funding [% eligible costs]	Additional Funding (Up to 90% of eligible costs)			State Share Funding: Maximum Grant Amount Allowed***
					Economic Disadvantage (+25%)	Innovative Technology (+15%)	Director's Discretion (Up to 90%) **	
Current Grant Types								
Oversight Remedial Action Grants	Normal	1990-99	50-75%	50%	YES	--	--	--
		2000-07	50-90%	50%	YES	YES	--	--
		2008-present	50-90%	50%	YES	YES	YES	--
	Extended	2016-present	50%	50%	--	--	--	--
Independent Remedial Action Grants	After cleanup	1998-2005	50-75% of $200,000	50%	YES	--	--	$150,000
		2006-15	50-75% of $400,000	50%	YES	--	--	$350,000
		2016-present	50-90% of $600,000	50%	YES	--	YES	$450,000
	During cleanup	2016-present	50-90% of $600,000	50%	YES	--	YES	$450,000

* Ecology is not required to provide maximum funding, and may provide less.
** Allows the director under certain conditions to increase the department share of eligible costs up to 90%. For oversight remedial action costs, this option exists only if the eligible project costs are less than $5.0 million.
*** The amount of the grant is determined by multiplying the state share match amount by the maximum amount of total project costs allowed during the grant period. If the amount is blank for a grant type, there is no maximum amount limit set by rule.

Remedial Action Grant Type	Fiscal Years	State Share Match: Limit on Percentage of Eligible Costs*	Base Funding [% eligible costs]	Additional Funding (Up to 90% of eligible costs)			State Share Funding: Maximum Grant Amount Allowed***
				Economic Disadvantage (+25%)	Innovative Technology (+15%)	Director's Discretion (Up to 90%) **	
Current Grant Types							
Safe Drinking Water Action Grants	1994-2015	50-75%	50%	YES	--	--	--
	2016-present	90%	90%	--	--	--	--
Former Grant Types							
Oversight Remedial Action Grants - Routine Cleanups	1992-93	100%	100%	--	--	--	$50,000
Rehab the Lab Grants	2003	100% for assessment 75% for disposal and education	100% for assessment 75% for disposal and education	--	--	--	--
Underground Storage Tank Grants	2004-05	50-75%	50%	YES	--	--	--
Derelict Vessel Remedial Action Grants	2002-15	50-75%	50%	YES	--	--	$25,000
Meth Lab Site Assessment and Cleanup Grants	2004-15	100% for assessment 50-75% for cleanup	100% for assessment 50% for cleanup	YES (for cleanup)	--	--	--

* Ecology is not required to provide maximum funding, and may provide less.

** Allows the director under certain conditions to increase the department share of eligible costs up to 90%. For oversight remedial action costs, this option exists only if the eligible project costs are less than $5.0 million.

*** The amount of the grant is determined by multiplying the state share match amount by the maximum amount of total project costs allowed during the grant period. If the amount is blank for a grant type, there is no maximum amount limit set by rule.

Appendix H: Chronology of MTCA – Major Changes and Events

1988 – Washington voters passed Initiative 97, the Model Toxics Control Act (MTCA), which called for the creation of a state cleanup program and established a tax on hazardous substances to fund it. First operating expenditures were made from the State Toxics Control Account (STCA) and the Local Toxics Control Account (LTCA) for $2.7 million.

1992 – First capital expenditures were made from LTCA for $15.7 million.

1994 – The Legislature passed SB 6123 (relating to the Model Toxics Control Act – Chapter 254, Laws of 1994). This bill defined and implemented the agreed orders, industrial property cleanup standards and institutional controls or deed restrictions.

1995 – The Legislature passed HB 1810 (relating to the Model Toxics Control Act – Chapter 359, Laws of 1995). This bill established the MTCA Policy Advisory Committee (PAC) to study and re-evaluate how MTCA is working. Final report and recommendations were submitted to the Legislature in December 1996.

2001 – Ecology adopted a comprehensive set of amendments to the MTCA rules to implement PAC's recommendations.

2008-09 – Great Recession

2013 – The Legislature passed SB 5296 (relating to the Model Toxics Control Act – Chapter 1, Laws of 2013, 1st Special Session). This bill made several major changes to MTCA, including capping tax revenues received by the STCA and LTCA at $140.0 million for each fiscal year, creating the Environmental Legacy Stewardship Account (ELSA) for operating and capital uses, revising and adding to allowed uses of these accounts, directing Ecology to manage the MTCA accounts in the capital budget at a pace that matches the estimated MTCA cash resources and revising Ecology's reporting requirements.

– The Legislature passed HB 2079 (relating to the Environmental Legacy Stewardship Account – Chapter 28, Laws of 2013, 2nd Special Session). This bill changed the use of money in the ELSA.

2014 – Since August 2014, barrel prices of crude oil began to drop, triggering a corresponding reduction in hazardous substance tax revenues.

2016 – HB 2380 (relating to the Capital Budget – Chapter 35, Laws of 2016, 1st Special Session). Section 6020 directed the Office of Financial Management (OFM), with help from the departments of Ecology and Revenue, legislative fiscal and budget staff, and independent policy experts and practitioners, to study and recommend possible solutions to MTCA revenue problems.

Appendix I: Independent and Voluntary Cleanup

MTCA allows independent cleanups to be conducted without direct Ecology supervision. Independent cleanups represent an important way for cleaning up contaminated sites in Washington, particularly those that are smaller and less complex. They enable property owners to get sites cleaned up without waiting for Ecology. They also use substantially fewer agency resources and can take less time than Ecology-supervised cleanups.

However, unlike Ecology-supervised cleanups, independent cleanups do not provide responsible parties with assurance that the completed work is sufficient under MTCA. While such cleanups must be reported to Ecology, Ecology generally will not provide an opinion on the sufficiency of independent cleanups unless requested through the Voluntary Cleanup Program (VCP).

The VCP was instituted to provide support and more certainty to those undertaking independent cleanup activities and is a subset of independent cleanups. The main difference between an Ecology-supervised cleanup and a VCP cleanup is that the customer drives the process in the VCP. Customers often request a written opinion from Ecology either on cleanup plans or on the sufficiency of completed cleanups under MTCA. Such opinions may facilitate various property transactions. For example, the opinions may help the owner sell or redevelop the property or obtain loans where the property is used as collateral.

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