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ECOLOGY
State of Washington

Model Toxics Control Accounts

Ten-Year Financing Report 2018

Toxics Cleanup Program

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition
AFRS	Agency Financial Reporting System
AHAB	Affordable Housing Advisory Board
BRTF Account	Brownfield Redevelopment Trust Fund Account
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CAP	Cleanup Action Plan
CAP	Chemical Action Plan
CC	construction complete (part of CC/O&M/Performance Monitoring)
CDF	controlled density fill
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CLARC	Cleanup Levels and Risk Calculations spreadsheet
COC	contaminants of concern
cPAH	carcinogenic polycyclic aromatic hydrocarbon
CPG	Coordinated Prevention Grant program
CSA	Cleanup Settlement Account
CSI	Eastern Washington Clean Sites Initiative
CSCSL	Confirmed and Suspected Contamination Site List
CSID	cleanup site identification number
CWU	Central Washington University
DNR	Washington State Department of Natural Resources
DOC	Washington State Department of Corrections
DOH	Washington State Department of Health
DOR	Washington State Department of Revenue
EAP	Environmental Assessment Program
ECY or Ecology	Washington State Department of Ecology
EAGL	Ecology's Administration of Grants and Loans
EIS	Environmental Impact Statement
EJ	environmental justice
ELSA	Environmental Legacy Stewardship Account (one of the three MTCA accounts)
EPA	United States Environmental Protection Agency
FOB	Free on Board
FS	Feasibility Study

Acronym or Abbreviation	Definition
FSID	facility site identification number
FUDS	formerly used defense site
FY	fiscal year
GAAP	generally accepted accounting principles
GF	General Fund
GIS	Geographic Information Systems
GW	Groundwater
HCA	Health Care Authority
HOTAP	Heating Oil Tank Assistance Program
HSL	Hazardous Sites List
HST	Hazardous Substance Tax
HWTR	Hazardous Waste and Toxics Reduction Program
II	Initial Investigation
IPG	Integrated Planning Grant
ISIS	Integrated Site Information System database
IT	information technology
LD	Legislative District
LDW	Lower Duwamish Waterway
LLC	limited liability company
LTCA	Local Toxics Control Account (one of the three MTCA accounts)
LUST	leaking underground storage tank
MTCA	Model Toxics Control Act
MTCA accounts	Model Toxics Control Accounts (STCA, LTCA, ELSA)
MTCA Plan	Model Toxics Control Accounts Cash Management Plan
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	Formal No Further Action (when written documentation is provided)
NPL	National Priorities List (EPA – Federal Government)
NPDES	National Pollutant Discharge Elimination System
NOP	North Olympic Peninsula
NRDA	Natural Resource Damage Assessment
NWP	Nuclear Waste Program
O&M	operation and maintenance (part of CC/O&M/Performance Monitoring)
OFM	Washington State Office of Financial Management
PAHs	polycyclic aromatic hydrocarbons
PBTs	persistent, bioaccumulative, and toxic chemicals

Acronym or Abbreviation	Definition
PCBs	polychlorinated biphenyls
PCE	tetrachloroethylene
PFAS	perfluorinated compounds
PLA	Pollutant Loading Assessment
PLIA	Washington State Pollution Liability Insurance Agency
PLP	potentially liable person or party
PPG	Public Participation Grant
PSI	Puget Sound Initiative
PTAP	Petroleum Technical Assistance Program
PUD	Public Utility District
RAG	Remedial Action Grant Program
RCW	Revised Code of Washington
RI	Remedial Investigation
ROI	return on investment
SAW	Secure Access Washington
SBCA	State Building Construction Account
SCUM II	Sediment Cleanup User's Manual
SD	School District
SEA	Shorelands and Environmental Assistance Program
SEPA	State Environmental Policy Act
SHA	Site Hazard Assessment
SMS	Sediment Management Standards (rule)
SP	Strategic Plan 2015–2020 for the Toxics Cleanup Program
SPPR	Spill Prevention, Preparedness, & Response Program
STCA	State Toxics Control Account (one of three MTCA accounts)
STRP	State and Tribal Response Program
TBT	Tributyltin
TCP	Toxics Cleanup Program
TOD	total oxygen demand
TPH	total petroleum hydrocarbons
USGS	United States Geological Survey
UST	underground storage tank
VCP	Voluntary Cleanup Program
VI	vapor intrusion
VOC	volatile organic compound

Acronym or Abbreviation	Definition
W2R	Waste 2 Resources Program (now called the Solid Waste Management Program effective Spring 2018)
WAC	Washington Administrative Code
WARM	Washington Ranking Method
WCC	Washington Conservation Corps
WQ	Water Quality Program

Glossary

Term	Definition
affordable housing	Residential housing that is rented by an individual or household where monthly housing costs (including utilities but not phone) do not exceed thirty percent of the household's monthly income, relative to that community's median income. (RCW 84.14.010).
biennium	A period of two years. The State of Washington operates on a two year (biennial) budget cycle that starts July 1st of each odd-numbered year, and ends June 30th of the next odd-numbered year. The 2019–21 Biennium starts July 1, 2019, and ends June 30, 2021.
brownfields	Previously developed properties that are currently abandoned or underused. Real or perceived environmental contamination can hinder a community's reuse objectives for the site. Examples of brownfields undergoing transformations include Seattle's Mount Baker Housing Project (CSID 13054) Wenatchee's Worthen Street Landfill (CSID 4085), and Aberdeen's Seaport Landing (CSID 4987).
Brownfield Redevelopment Trust Fund (BRTF) Account	An account that allows public moneys (state and local), as well as private and/or non-profit moneys, to be combined and set aside for cleaning up brownfields located within a redevelopment opportunity zone. The local governments designating the zone are the beneficiaries of the moneys. Moneys may be spent only after appropriation by the Legislature and approval by Ecology. Local governments must meet the eligibility and other requirements for remedial actions grants codified in Chapter 173-322A WAC. The account retains interest (RCW 70.105D.140).
cleanup actions	Also known as cleanups or remedial actions. The collective planning, investigative, and technical work needed to clean up contaminated sites.
Cleanup Settlement Account	An account that holds funds from legal settlements or court orders that resolved liability for cleanup or natural resource damages, and links those funds to specific site or restoration efforts.
cleanup site	Also known as a contaminated site or hazardous waste site. A site or property where Ecology has confirmed one or more releases (or threatened release) of a hazardous substance. Ecology has identified 12,900-plus cleanup sites in Washington state. Cleanups are often considered construction projects that remove or immobilize harmful contamination from our environment and put properties back into use. Cleanup sites can be as small as a gas station spill, or as large and complex as the Tacoma Smelter Plume (CSID 3657) that impacts thousands of acres.
Cleanup Site ID (CSID)	An identifying number assigned to a cleanup site by the Toxics Cleanup Program for the Integrated Site Information System (ISIS).

Term	Definition
Cleanup Site Search	Toxics Cleanup Program's searchable database containing the 12,900-plus confirmed or suspected contaminated sites in Washington: https://fortress.wa.gov/ecy/gsp/SiteSearchPage.aspx
Confirmed and Suspected Contaminated Sites List (CSCSL)	A subset of the 12,900-plus confirmed or suspected contaminated sites in Washington: those sites that have yet to be cleaned up and receive a "no further action" determination from us. Sites may be ranked or unranked (through the Washington Ranking Method). As of June 30, 2018, there were 5,904 sites on this list.
contaminated site	Also known as a cleanup site or hazardous waste site.
EAGL	Ecology's Grants and Loans online application system.
EJScreen	An environmental justice screening and mapping tool that provides the U.S. Environmental Protection Agency with a nationally consistent dataset and approach for combining environmental and demographic indicators.
Environmental Covenant	A legal document that puts institutional controls into place, and is often used when contamination remains on a site. It outlines restraints on how a property can be used or developed to ensure human health is protected at the site.
environmental justice	The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. (https://www.epa.gov/environmentaljustice)
Environmental Legacy Stewardship Account (ELSA)	An account that provides funds to Ecology and other state agencies having responsibility for cleaning up contaminated sites, improving hazardous waste management, and preventing future contamination. After revenue in the amount of $140 million is placed in the STCA and LTCA accounts each fiscal year, the remaining funds are deposited in the ELSA account.
Facility Site ID (FSID)	An identifying number assigned to a cleanup site or facility for Ecology's Facility Site database.
fiscal year	A period of one year named for the year it ends. Fiscal Year 2019 starts July 1, 2018, and ends June 30, 2019.
hazardous waste site	Also known a cleanup site or contaminated site. Defined in MTCA as any site that Ecology has confirmed a release or a threatened release of a hazardous substance requiring remedial action (WAC 173-340-200).
Hazardous Sites List (HSL)	A subset of Ecology's and Suspected Contaminated Sites List (CSCSL) that contains ranked sites whose cleanup actions have yet to be completed. As of August 22, 2018, there were 1,988 ranked sites on this list.

Term	Definition
Hazardous Substance Tax (HST)	The source of revenue for State Toxics Control (STCA), Local Toxics Control (LTCA), and the Environmental Legacy Stewardship (ELSA) Accounts. This is a tax on hazardous substances at their first possession in the state of Washington. Currently, the majority of the revenue is generated from petroleum products and the remaining from pesticides, industrial chemicals, acids, and other hazardous substances. By statute, 56% of the Hazardous Substance Tax is deposited in the STCA. The other 44% is deposited in the LTCA. After deposits to both accounts equal in total $140 million each fiscal year, those additional revenues are placed in ELSA.
institutional control	A prohibition of certain activities that could expose people to hazardous substance remaining at a site, or impact a cleanup's integrity over time. For example, an institutional control might restrict digging at the site, or require that an impermeable membrane "cap" remain in place to prevent contamination from migrating to groundwater.
Integrated Site Information System (ISIS)	Toxics Cleanup Program's internal database that tracks Washington's 12,900-plus contaminated sites.
Local Toxics Control Account (LTCA)	An account to provide grants or loans to local governments. Grant programs historically funded from this account include Remedial Action, Coordinated Prevention, Public Participation, Centennial Clean Water, and Stormwater grants.
model remedies	Standardized cleanup methods that can be used for some types of cleanups.
Model Toxics Control Act (MTCA statute)	Washington's environmental cleanup law, Chapter 170.105D RCW
Model Toxics Control Act Regulations (Cleanup Rule)	Washington's regulations for cleaning up upland and sediment sites under the Model Toxics Control Act (Chapter 173-340 WAC)
Model Toxics Control Accounts	Three accounts used for cleanup activities and programs, comprised of the State Toxics Control Account (STCA), Local Toxics Control Account (LTCA), and Environmental Legacy Stewardship Account (ELSA).
MTCA Biennial Report of Expenditures	Ecology's financial report produced every odd-numbered year that describes how funds from the MTCA Accounts were spent over the previous two fiscal years.
MTCA Ten-Year Financing Report	Ecology's financial report produced every even-numbered year that describes cleanup financing needs over the next ten fiscal years.

Term	Definition
No Further Action (NFA) List	A list of sites that have been determined to require no further cleanup action. They include sites that have received a formal determination from and NFA letter from Ecology. As of June 30, 2018, there were 6,995 sites on this list.
RAG Program	Ecology's Remedial Action Grant program that provides grants and loans to local governments for site investigation and cleanup.
RAG Rule	Washington's regulations that govern the issuance of remedial action grants and loans to local governments (Chapter 173-322A WAC).
Redevelopment Opportunity Zone (ROZ)	A geographic area designated by a city, county, or port district that meets criteria outlined in RCW 70.105D.150. The city, county, or port district must also adopt a resolution that includes the determinations and commitments outlined in the RCW.
remedial actions	Also known as cleanups or cleanup actions. The collective planning, investigative, and technical work needed to clean up contaminated sites.
Remedial Action Grants (RAG)	Grants for cleaning up hazardous sites throughout Washington. In 2017–19, Ecology offered five types of remedial action grants through the RAG Program: Oversight, Independent, Integrated Planning, Area-wide Groundwater, and Safe Drinking Water.
Sediment Management Standards (SMS Rule)	Washington's regulations for cleaning up contaminated sediment (Chapter 173-204 WAC).
sediment site	A contaminated site in riverbeds and seabeds where aquatic animals such as crabs and clams live. Sediment can include silt, sand, cobble, and beaches.
State Building Construction Account (SBCA)	An account used to carry out the provisions of the capital appropriations act with general obligation bond proceeds.
State Toxics Control Account (STCA)	An account used to carry out state agency efforts to implement the Model Toxics Control Act including support for toxic cleanup; toxic pollution prevention; hazardous and solid waste management; and other water and environmental health monitoring programs. The STCA also earns revenue through Cost Recovery and the Voluntary Cleanup Program (VCP). Other revenues include fines and penalties issued against persons or businesses that have not complied with environmental contamination and cleanup laws.

Term	Definition
UST Rule	Washington's regulations for installing, managing, and monitoring underground storage tanks. Ecology repealed the UST rule on July 18, 2018 (Chapter 173-360 WAC) and adopted new Chapter 173-360A WAC. It becomes effective on October 1, 2018. Learn more at: https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-360-Mar16
upland site	A contaminated site on land or in groundwater.
What's in My Neighborhood	Toxics Cleanup Program's interactive map of cleanup sites in Washington state. https://fortress.wa.gov/ecy/neighborhood/

Acknowledgments

For more than 100 years, Washington's land and water resources have been heavily impacted by past industrial business practices, waste disposal methods, and accidental spills. Cleaning up that contamination remains a critical need that helps communities thrive. Cleanups protect our environment and human health, put people to work, and spur new redevelopment opportunities like affordable housing, parks, and businesses. As Program Manager of Ecology's Toxics Cleanup Program (TCP), it is my privilege to lead the team of professionals who partner with local governments and help facilitate these transformations. Together, we are making measurable progress to clean up our land and water resources so people can thrive.

The Model Toxics Control Act (MTCA) celebrates its 30-year anniversary in 2019. This powerful environmental cleanup law drives our work to clean up sites. As a result, about 7,200 cleanups have been completed, and thousands more are underway. But much work remains and the number of sites continues to grow. The *Model Toxics Control Accounts Ten-Year Financing Report 2018* helps us prioritize those efforts by updating the ten-year forecast for local government cleanup needs. It identifies funding priorities for cleanups that can reasonably be conducted over the next ten years, and spotlights the massive amount of cleanup that still needs to be done.

Every Ecology staff member who is involved in a cleanup—from cleanup project managers to supervisors, ISIS and MIC database coordinators, fiscal, policy, and administrative staff — plays a critical role in this work to protect human health and our environment. My thanks go especially to our local government partners and TCP's managers who produced the report's project lists and ten-year cost estimates, and to the dedicated staff who analyzed, reviewed, and prepared this information.

James J. Pendowski, Manager
Toxics Cleanup Program

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Executive Summary

Purpose of this report

This report outlines the estimated financing that Washington state and local governments will need to clean up contaminated sites during the 2019–21 Biennium and over the next ten years.

The Washington State Department of Ecology (Ecology) produces this report every two years in cooperation with local governments that have cleanup responsibilities. In this document, we identify projects and grant programs that were included in our budget request submitted to the Governor for the 2019–21 Biennium. We also outline the substantial public financing that Washington state and local governments will need to conduct cleanups over the next decade.

Washington's environmental cleanup law, the Model Toxics Control Act (MTCA) requires the MTCA Ten-Year Financing Report every two years, RCW 70.105D.030(3) and (5):

(5) Before September 20th of each even-numbered year, the department shall:

(a) Develop a comprehensive ten-year financing report in coordination with all local governments with clean-up responsibilities that identifies the projected biennial hazardous waste site remedial action needs that are eligible for funding from the state and local toxics control account and the environmental legacy stewardship account;

(b) Work with local governments to develop working capital reserves to be incorporated in the ten-year financing report;

(c) Identify the projected remedial action needs for orphaned, abandoned, and other clean-up sites that are eligible for funding from the state toxics control account;

(d) Project the remedial action need, cost, revenue, and any recommended working capital reserve estimate to the next biennium's long-term remedial action needs from both the local and state toxics control account and the environmental legacy stewardship account, and submit this information to the appropriate standing fiscal and environmental committees of the senate and house of representatives. This submittal must also include a ranked list of such remedial action projects for both accounts. The submittal must also identify separate budget estimates for large, multibiennia clean-up projects that exceed ten million dollars. The department shall prepare its ten-year capital budget plan that is submitted to the office of financial management to reflect the separate budget estimates for these large clean-up projects and include information on the anticipated private and public funding obligations for completion of the relevant projects.

Per the RCW requirements noted above, this report focuses on needs for cleaning up contaminated sites during the 2019–21 biennium and over the next ten years. It is important to note that MTCA funds are also used for a broad range of other core environmental and public health work (tens of millions of dollars) at Ecology and ten other agencies in Washington state, and these funding needs are not summarized here.

How this report is organized

Chapters are organized with brief descriptions and most relevant information first, followed by background information. Maps illustrating cleanup locations and funding amounts are based on data in the financial tables in Appendix B.

Chapter 1:

- Brief introductions to Ecology, the Toxics Cleanup Program, the Model Toxics Control Act (MTCA), and why they matter.
- How Ecology's reports for the Model Toxics Control accounts relate to each other.
- Background on the historical Legislative amendments that built this report.

Chapter 2:

- Where MTCA funding comes from and how it's used.
- Ecology's 2019–21 Biennium budget request for Remedial Action Grants, the Puget Sound Initiative, the Eastern Washington Clean Sites Initiative, and Protect Investments in Cleanup Remedies.

Chapter 3:

- How cleanup funding removes the threats of hazardous waste.
- Brief description of remedial actions and why they matter.
- Affordable housing now another benefit of cleanups.
- New solicitation process for 2018 Ten-Year report.
- How financial stability is related to successful cleanups.
- Other challenges that continue to impact cleanup pace, and how we're meeting those challenges.

Chapter 4:

- Estimated funding needs for local governments to clean up sites over the next ten years, prioritized in order of relative funding need priority for the 2019–21 Biennium.
- How we ranked these projects for the 2018 report.

Chapter 5:

- Estimated funding needs for Washington state to direct and oversee cleanups over the next ten years, prioritized in order of relative funding need for the 2019–21 Biennium.
- Discussion of sites included in Ecology's 2019-21 Biennium budget request, which are categorized by *Eastern Washington Clean Sites Initiative* (EW CSI), *Clean Up Toxic Sites—Puget Sound Initiative* (PSI), and *Protect Investments in Cleanup Remedies* (PICR).
- How we ranked these projects for the 2018 report.

Chapter 6:

- Estimated funding needs for large, multi-biennia cleanups over the next ten years, organized by county.

Conclusion

References and Resources:

- Links to resources, references, and House and Senate bills mentioned in this report.

Appendices:

- Legislative directive for this report, RCW 70.105D.030(5).
- Financing tables for Ecology's 2019–21 Biennium budget request to the Governor.
- Financing tables for Remedial Action Grant (RAG) financing needs, state-directed work, and $10M projects.
- Criteria used to prioritize RAG projects for this report.
- Example: 2018 Ten-Year solicitation letter to local governments and Site Regiter.
- Screenshots: The Oversight Grant application in Ecology's Administration of Grants and Loans system (EAGL) used for 2018 Ten-Year solicitation to local governments.

Framework for reading this report

1. The individual "cleanup sites" referenced in this report may also be called "cleanup projects." When we reference a "project" or "program" statewide activity, we've made an effort to describe it as "statewide."

2. This report provides the foundation for Ecology's biennial budget for cleanups and remedial action grants.

3. The report identifies the projected costs of remedial actions on Washington's hazardous waste sites, for work expected over the next ten years. The Legislature decides how to fund those remedial actions each biennium. Projects may be funded by the three MTCA accounts into which the Hazardous Substance Tax (HST) is deposited—State Toxics Control Account (STCA), Local Toxics Control Account (LTCA) and Environmental Legacy Stewardship Account (ELSA). Projects may also be funded from the State Building Construction Account (SBCA) appropriations.

4. We used Washington State Department of Revenue's latest HST forecast (June 2018) for the MTCA projected revenues.

5. Cost estimates for the local government financing needs were solicited from local governments, and state-directed cleanup needs from Ecology staff. The estimates are for planning purposes and were based upon the best available, self-reported information at the time of this report. Ecology expects these estimates will change as site information is updated in the ten-year period between 2019 and 2029.

Summary of Chapter 1: Why Ecology, TCP, and MTCA matter

Every person is entitled to clean water, clean soil, and air. Ecology's staff and programs are dedicated to protecting and conserving these resources in Washington. As of June 30, 2018, there are 12,900-plus contaminated sites in Washington state that can pose threats to human health and the environment. We use the formal cleanup process outlined in the Model Toxics Control Act to protect people and our environment from these threats.

Summary of Chapter 2: Hazardous Substance Tax forecast

The Model Toxics Control Act (MTCA) accounts[1] are primarily funded by revenue from the Hazardous Substance Tax (HST) that is collected by the Department of Revenue (DOR). The tax is imposed on the first possession in the state of petroleum products, pesticides, and certain chemicals. Petroleum makes up about 90 percent of the revenue collected with the HST.

Since the summer of 2014, crude oil prices dropped from a high of $104 per barrel to below $30 in January 2016, resulting in a correlated and significant decrease in HST revenue. While oil prices have recovered in 2018 to an average of approximately $70 per barrel (through May 2018[2]), MTCA fund balances have not been able to support demand for toxics management, prevention, and cleanup over the last two biennia. Even with $60 million in bond backfill provided in the 2017–19 Biennium, we will still have a funding gap in the 2019–21 Biennium. DOR projects HST collections will total $159 million per year in 2019–21 (June 2018 forecast). With operating carryforward and capital reappropriation demands, Ecology projects MTCA capacity for new work in the 2019–21 Biennium is about $85 million, far short of the more than $211 million in new cleanup demand estimates for the next biennium.[3]

Because the MTCA fund balance cannot support all existing or new appropriation requests for cleanup projects in the 2019–21 Biennium, Ecology will make the budget requests detailed in this report from a mix of MTCA and State Building Construction Account appropriations, similar to the 2017–19 Biennium. This does not alter the substance or utility of the information provided in this report.

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[1] State Toxics Control Account (STCA), Local Toxics Control Account (LTCA), and Environmental Legacy Stewardship Account (ELSA).

[2] Source: Europe Brent Spot Price FOB (dollars per barrel), U.S. Energy Information Administration (www.eia.gov)

[3] Ecology estimates the state share of total cleanup need for 2019–21 Biennium will be $211 million =

$167 million (state share at 50% of total Oversight and Independent Grant need during biennium—see pp.87–88 in Appendix B)
+
$7 million (state share at 100% of total financial management, Integrated Planning, and Safe Drinking Water grant need during biennium—see p.88 in Appendix B)
+
$37 million (state share at 100% of total state-directed need for biennium—see p.92 in Appendix B)

Summary of Chapter 3: Washington's still dealing with 100-year old legacy of contamination

Ecology and Ecology's Toxics Cleanup Program (TCP) work to prevent, clean up contaminated sites across our state. Many of these contaminated sites—numbering 12,953 as of June 30, 2018—resulted from more than 100 years of past business practices and accidental spills of dangerous materials.

We work closely with local governments, contractors, potentially liable persons, and thousands of others across our state to clean up and remove this legacy of contamination. We still have much work to do, but our efforts make a difference. About 7,200 of the 12,900-plus sites are already cleaned up and help protect the health of Washington's seven million residents and environment.

Cleanups create redevelopment opportunities, such as affordable housing, new businesses, or community assets like parks. When a cleanup removes the threat (or perceived threat) of contamination, it opens the door for a community to explore development options so they can put that property back into use.

Summary of Chapters 4, 5, and 6: Snapshot of financial tables

Beginning on next page.

Table 1: Summary of estimated local governments' financing needs for cleanup efforts between 2019 and 2029.
For details, see Financing Tables 9A and 9B in Appendix B.

SNAPSHOT OF LOCAL GOVERNMENTS' RAG FINANCING TABLES						
Table No.	**Table Title**	**Description**	**No. of projects**	**How were projects ranked or sorted?**	**In Ecology's 2019–21 Biennium budget request?**	**State share of total project costs over ten years (estimated)**
9A	**Remedial action grants (RAG) in Ecology's 2019–21 budget request**	Local governments' projects and statewide grant programs included in Ecology's budget request for the 2019-21 Biennium.	30 projects + 2 statewide grant programs & associated grant management	Ranked by criteria in 2EHB 1115 Section 7038 and Appendix C	Yes = $85 million	See Table 9B
9B	**Local governments' projects & cleanup financing needs for the next ten years (2019–2029)**	All projects and estimated costs identified by local governments during the 2018 Ten-Year solicitation. Includes projects for which Ecology requested funding in our 2019–21 Biennial budget request (Table 9A). The list underscores local government's significant cleanup financing needed over the next ten years.	85 projects from 41 local governments = 59 requests for Oversight grants + 26 requests for other types of RAG grants	Not ranked. Sorted by county then region.	Some = $85 million	**$492 million** = $460 million for Oversight grants + $32 million for other RAG grants & grant management activities
Total RAG Ten-Year Financing Needs	**Local government projects & cost estimates** **+** **Estimated future RAG needs**	Combined total to conduct and support local government cleanups over the next ten years (2019-2029).	85 local government projects + 4 grant programs & associated grant management + future RAG needs	Not applicable.	See Table 9A.	**$781 million** = $492 million to meet local government needs + $289 million to meet future RAG needs

Table 2: Summary of estimated financing needs to conduct state-directed cleanup efforts between 2019 and 2029.
For details, see Financing Tables 10A & 10B in Appendix B.

SNAPSHOT OF STATE-DIRECTED WORK FINANCING TABLES						
Table No.	**Table Title**	**Description**	**No. of projects**	**How were projects ranked or sorted?**	**In Ecology's 2019–21 Biennium budget request?**	**State costs over ten years (estimated)**
10A–EW CSI Eastern WA Clean Sites Initiative (EW CSI)	**Eastern Washington (EW) projects included in Ecology's 2019–21 Biennium budget request**	State-directed cleanup work or projects focusing on Eastern Washington through the *Eastern Washington Clean Sites Initiative (EW CSI).*	7 projects	Ranked by criteria in 2EHB 1115 Section 7038.	Yes = $12 million	$15 million
10A–PSI Puget Sound Initiative (PSI)	**Clean Up Toxic Sites—Puget Sound Initiative (PSI) projects in Ecology's 2019–21 Biennium budget request**	State-directed cleanup work or projects focusing on the Puget Sound region through the *Puget Sound Initiative (PSI).*	13 projects	Ranked by criteria in 2EHB 1115 Section 7038.	Yes = $10 million	$37 million
10A–PICR Protect Investments in Cleanup Remedies	**Protect Investments in Cleanup Remedies (PICR) projects included in Ecology's 2019–21 Biennium budget request**	1) Ecology's 10% cost-share of EPA's required cleanup construction costs, and 2) long-term operation, maintenance, and investments to protect cleanup remedies (like installing *in situ* treatment systems to capture residual soil contamination).	11 projects	Ranked by criteria in 2EHB 1115 Section 7038.	Yes = $10 million	$16 million
10B–Remaining state-directed projects	**Remaining state-directed projects needing financing over the next ten years**	Remaining state-directed projects not included in Ecology's 2019–21 Biennium budget request, but needing funding over the next ten years (2019-2029). Include remaining PSI and PICR projects.	17 projects	Not ranked. Sorted by county.	No	$21 million
Summary of state-directed ten-year financing needs	**All state-directed projects & cost estimates** **+** **Future state- directed needs**	Combined total to conduct all state-directed cleanups over next ten years (2019–2029).	48 projects + future needs	Not applicable.	See Table 10B.	**$237 million** = $68 million for EW/PSI/PICR projects + $21 million for remaining projects + $148 million for future needs

Table 3: Summary of estimated financing needs for large, multi-biennia cleanup projects expected to exceed $10M between 2019 and 2029. For details, see Financing Table 11 in Appendix B.

SNAPSHOT OF $10M PROJECT FINANCING TABLE						
Table No.	**Table Title**	**Description**	**No. of projects**	**How were projects ranked or sorted?**	**In Ecology's 2019–21 Biennium budget request?**	**State share of total project costs over ten years (estimated)**
11	**Cleanup projects exceeding $10 million in total costs over ten years (2019–2029)**	Projects from local governments and state-directed work (pulled from Tables 9A&B and 10A&B) that are expected to exceed $10 million dollars in total project costs over the next ten years (2019–2029).	17 projects / 22 recipients	Not ranked in this table. Sorted by city.	Projects in the budget request are found in Table 9A and Table 10A	$430 million

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Chapter 1: Introduction

Ecology and the Toxics Cleanup Program: Why they matter

Established more than 50 years ago and pre-dating the U.S. Environmental Protection Agency, Washington's Department of Ecology (Ecology) works to protect, preserve, and enhance Washington's land, air, and water for current and future generations.

Ecology's Toxics Cleanup Program's (TCP) advances that mission further: to protect human health and the environment by preventing and cleaning up pollution and supporting sustainable communities and natural resources for the benefit of current and future generations.

Every human is entitled to clean water, clean soil, and air. Ecology's staff and programs are dedicated to protecting and conserving these resources in Washington. We work to protect humans and the environment from the threats of hazardous waste. We strive to restore and preserve ecosystems that sustain life, and meet human needs without destroying environmental resources and functions.

The Model Toxics Control Act (MTCA) helps us fulfill those obligations.

Washington's Model Toxics Control Act: Why it matters

Thirty years ago, Washington's citizens foresaw the need to protect their environment, their health, and the health of generations to follow. That landmark decision powers our cleanup work today.

In 1988, Washington citizens passed Initiative 97. On March 1, 1989, the Legislature adopted it as our state's environmental cleanup law, the Model Toxics Control Act (MTCA). The law helps protect our health and environment from hazardous substances in our state's land and waters. Funds to clean up this contamination come from a voter-authorized tax on hazardous substances such as petroleum products, certain chemicals, and pesticides.

MTCA funds a broad range of environmental cleanup work that includes water and environmental health protection and monitoring; toxic pollution prevention projects; hazardous and solid waste management activities; and toxic cleanup.

Key principles that contributed to MTCA's effectiveness remain in place today:
a) the polluter pays; b) cleanups should be as permanent as possible; c) public participation is crucial; and d) cleanup processes demonstrate a bias toward action, permanence, and innovation (RCW 70.105D.030(1)(b); RCW 70.105D.030(2)(a); RCW 70.105D.040; RCW 70.105D.060).

Ecology is one of several state agencies that receive MTCA funds. Ecology's Toxics Cleanup Program's primary responsibility includes implementing and enforcing MTCA. TCP provides cleanup oversight, manages hazardous waste site cleanups in the state, and develops the rules and guidance that govern cleanup. We also administer grants to local governments to assist with assessment and cleanup.

The citizens' led Initiative 97 that shaped our environmental cleanup law celebrates its 30th anniversary in 2018. That landmark referendum to protect our environment—and the ensuing 30 years of community involvement, legislative support, wealth of scientific data, and collective efforts of thousands of cleanup partners—affirm that healthy people and a clean environment remain essential priorities in Washington. As a result, nearly 7,200 completed cleanups are protecting human health and our environment today, and that number will continue to grow.

Purpose of this report

The report outlines the estimated financing that Washington state and local governments will need to clean up contaminated sites over the next ten years.

We produce this report every two years in cooperation with local governments that have cleanup responsibilities, as required by Washington's environmental cleanup law, the Model Toxics Control Act (MTCA) in RCW 70.105D.030(3) and (5). The requirements obligate us to:

1. Provide, in coordination with all local governments that have cleanup responsibilities, a comprehensive report of the projected biennial hazardous waste site remedial action needs that are eligible for funding from the three MTCA accounts: the State Local Toxics Control Account (STCA), Local Toxics Control Account (LTCA), and Environmental Legacy Stewardship Account (ELSA).

2. Work with local governments to develop working capital reserves that we incorporate in the Ten-Year Financing Report.

3. Identify the projected remedial action needs for orphaned, abandoned, and other clean-up sites that are eligible for funding from the State Toxics Control Account.

4. Project the remedial action need, cost, revenue, and any recommended working capital reserve estimate to the next biennium's long-term remedial action needs from LTCA, STCA, and ELSA and submit it to the appropriate standing fiscal and environmental committees of the senate and house of representatives.

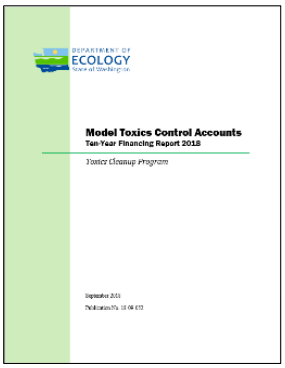
5. Include a ranked list of such remedial action projects for [the] accounts.

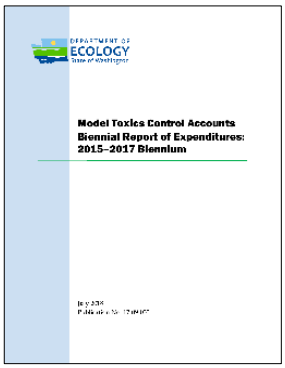
6. Identify separate budget estimates for large, multi-biennia clean-up projects that exceed ten million dollars.

7. Prepare a ten-year capital budget plan and submit it to the Governor's Office of Financial Management, that reflects the separate budget estimates for these large clean-up projects and includes information on the anticipated private and public funding obligations to complete the relevant projects.

How the MTCA Legislative reports relate to each other

The Legislature and MTCA require Ecology to produce five reports per RCW 70.105D.030(1), RCW 70.105D.130(7), and RCW 70.105D.140(6) and (9).

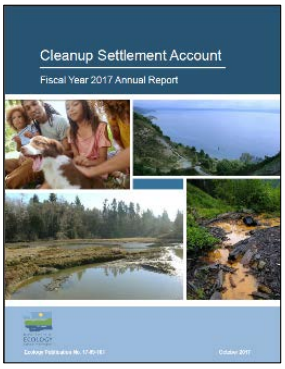




We produce the **MTCA Ten-Year Financing Report** in even-numbered years. In odd-numbered years, we produce the **MTCA Biennial Report of Expenditures**. Together, they provide a comprehensive description of how we plan to spend dollars from the MTCA accounts over the next decade, and how we spent dollars from the MTCA accounts over the past biennium. Table 4 on the next page compares content found in these reports.

Table 4: Comparison of content found in Ecology's two major MTCA financial reports: Ten-Year Financing Report and Biennial Report of Expenditures.

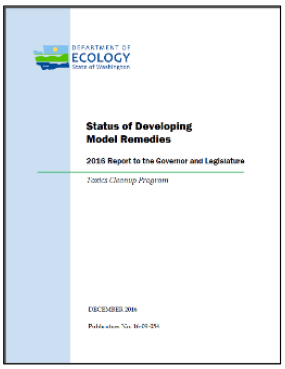
MTCA Ten-Year Financing Report	MTCA Biennial Report of Expenditures
Looks to the future with estimated costs from the MTCA accounts over the next ten years.	Looks to the past with expenditures from the MTCA accounts over the last biennium.
Lists cleanup sites and estimated funding needs self-reported by local governments, and provides separate budget estimates for large, multi-biennia cleanups that exceed $10 million.	Documents the 1,900-plus ranked sites on Ecology's Hazardous Sites List.
Lists cleanup grant programs and projects included in Ecology's biennial budget request.	Highlights Ecology's results, outcomes, and success stories.
Identifies working capital reserves for LTCA, STCA, and ELSA for Ecology and local governments.	Identifies operating and capital budget expenditures from LTCA, STCA, and ELSA by Ecology and other state agencies.
Identifies projected revenue for the three MTCA accounts based on June forecast from Department of Revenue.	Identifies all sources of revenues (Hazardous Substance Tax and Ecology-generated revenues from cost recovery, fines, and other miscellaneous sources) deposited into the three MTCA accounts.
Discusses only publicly funded cleanups.	Discusses publicly funded cleanups, and privately funded cleanups at a high level.
Contains more detail about the types of remedial action grants available to local governments.	Contains more detail about the Model Toxics Control Act, the MTCA accounts, and steps in the MTCA cleanup process; administrative options for cleanups; laws and liability; and public involvement opportunities.
Produced by Ecology's Toxics Cleanup Program in cooperation with local governments that have cleanup responsibilities.	Produced by Ecology's Toxics Cleanup Program in cooperation with other Ecology programs.
Due to the Legislature by September 20 in even-numbered years. RCW 70.105D.030(3) and (5)	Due to the Legislature by December 1 in odd-numbered years. RCW 70.105D.030(6)
2016 MTCA Ten-Year Financing Report: https://fortress.wa.gov/ecy/publications/SummaryPages/1609060.html	**2017 MTCA Biennial Report of Expenditures:** https://fortress.wa.gov/ecy/publications/SummaryPages/1709055.html
Find past reports on our website: https://ecology.wa.gov/About-us/Get-to-know-us/Our-Programs/Toxics-Cleanup/TCP-Legislative-reports	



The **Cleanup Settlement Account (CSA) Annual Report** describes work accomplished during the previous fiscal year (July 1 through June 30). It includes Asarco bankruptcy settlement projects such as mine cleanups, the Everett Smelter, and the Tacoma Smelter Plume. The CSA holds funds from legal settlements or court orders that resolved liability for cleanup or natural resource damages, and links those funds to specific site or restoration efforts. TCP produces this report in October each year. (RCW 70.105D.130(7)). Find the 2017 CSA report online at https://fortress.wa.gov/ecy/publications/SummaryPages/1709181.html Find previous CSA reports on our website: https://ecology.wa.gov/About-us/Get-to-know-us/Our-Programs/Toxics-Cleanup/TCP-Legislative-reports

Brownfields Redevelopment Trust Fund (BRTF) Account Report describes activity for each specific redevelopment opportunity zone or specific brownfield renewal authority for which the Legislature provided specific appropriation in the previous two fiscal years. Effective 2015, MTCA requires Ecology to produce this report every other October in odd-numbered years. (RCW 70.105D.140(6) and (9))

To date, these reports have consisted of brief communications to the Legislature stating the account had no activity to report since it held no funds. In 2017, the Toxics Cleanup Program examined how local governments created three Redevelopment Opportunity Zones (ROZs) in Spokane, Bellingham, and Seattle between 2013 and 2017, and possible reasons why no Brownfield Redevelopment Trust Fund Accounts have yet been established to support those activities. The report, *Redevelopment Opportunity Zones & Brownfield Redevelopment Trust Fund Accounts in Washington State: 2013–2017*, is available at https://fortress.wa.gov/ecy/publications/SummaryPages/1809048.html



Status of Developing Model Remedies: 2016 Report to the Governor and Legislature was a one-time report produced in December 2016. It summarizes the progress we made to establish model remedies under MTCA and describes how both MTCA and model remedies facilitate contamination cleanups in Washington. It also identifies which model remedies were used before 2013 and new ones we developed since then; how we engaged the public in the development process; opportunities for using model remedies in the future; and next steps. (RCW 70.105D.030(4)). Find it online at https://fortress.wa.gov/ecy/publications/summarypages/1609054.html

Background: How Legislative amendments and a new solicitation process affected the way prioritize projects

MTCA amendments in 2007 and 2013

The Legislature amended MTCA in 2007 through Substitute House Bill 1761 (Chapter 446, Laws of 2007). One of the changes required Ecology to prepare comprehensive biennial reports projecting cleanup expenditures over the subsequent ten years. (RCW 70.105D.030(3) and (5)).

In 2013, the Legislature further amended MTCA in Second Engrossed Second Substitute Senate Bill 5296 (Chapter 1, Laws of 2013 2nd Special Session) and House Bill 2079 (Chapter 28, Laws of 2013 2nd Special Session). Among other changes to RCW 70.105D, the legislation:

- Introduced the concept of "brownfields" into MTCA, which are previously developed properties that are currently abandoned or underused because of historic or suspected contamination.
- Allowed for extended grant agreements with local governments for long-term remediation projects that exceed $20 million.
- Altered how HST revenues are distributed.
- Created the Environmental Legacy Stewardship Account—a [then] new account to which HST revenues can be directed—and specified the account's uses.
- Expanded Ecology's reporting requirements, and
- Directed Ecology to:
    - Develop new tools to speed cleanups (such as model remedies) for lower risk sites;
    - Focus state and local resources (such as brownfields renewal authorities and redevelopment opportunity zones, or ROZ); and
    - Adopt a cash management approach to managing the MTCA accounts, allowing for short-term accelerated use of MTCA funds.

Legislature establishes criteria for prioritizing funding during 2015–17 Biennium

In June 2015, the Legislature passed its 2015–17 Biennium Capital Budget (2EHB 1115 (Chapter 3, Laws of 2015 3rd Special Session).

In Section 7038 of this bill, which helped address the MTCA accounts' shortfall discussed in Chapter 2 of this report, the Legislature authorized Ecology to "delay the start of clean-up projects based on acuity of need, readiness to proceed, cost-efficiency, or need to ensure geographic distribution." These criteria gave Ecology direction about how to prioritize which cleanup projects would proceed, and which ones would need to be delayed.

Ecology integrates additional criteria into the 2018 solicitation process

In the spring of 2017, we began working to improve the way we solicited local governments' cleanup projects and estimated ten-year financing needs.

One of those improvements augmented the criteria established by the 2015–17 Biennium Capital Budget by incorporating additional criteria from five other sources (Table 5 below and Table 12 in Appendix C).

As the demand for cleanup funding escalates amid diminished revenues and strained resources, there are several advantages to citing multiple criteria to prioritize RAG funding. It helps local governments confidently propose or apply for only those projects best suited for RAG funding, which allows them to explore alternative funding for other sites under their purview. It allows us to formally incorporate environmental justice concerns into our evaluations. It increases transparency about the prioritization process, while helping our staff make funding decisions.

Chapter 3 provides details about the 2018 solicitation process. It explains how we incorporated environmental justice considerations and how we prioritized RAG projects for this report. Table 5 on the next page identifies the sources of criteria used for the 2018 solicitation process. Table 12 in Appendix C lists the criteria and WAC citations.

Table 5: Sources of criteria Ecology used to prioritize RAG funding needs during the 2018 Ten-Year solicitation.

Source	Link
2015–17 Biennium Capital Budget (2EHB 1115), Chapter 3, Laws of 2015 3rd Special Session, Section 7038 *From which Ecology developed an internal document:* MTCA cash management plan (Section 7038 of 2015–17 Biennium Capital Budget)	http://leap.leg.wa.gov/leap/budget/lbns/1517Cap1115-PL.pdf
Remedial Action Grant rule (WAC 173-322A-210)	http://apps.leg.wa.gov/WAC/default.aspx?cite=173-322A-210
Remedial Action Grants for Local Governments: 2018–2021 Guidance	https://fortress.wa.gov/ecy/publications/SummaryPages/1809049.html
TCP's Integrated Planning Grant evaluation form	Internal document
Recommendations from Front and Centered's report, *Equity Analysis of Washington State Toxics Sites & the Model Toxic Control Act* (January 26, 2017)	http://frontandcentered.org/wp-content/uploads/2017/01/MTCA-Report_1-25-17.pdf

Chapter 2:
Model Toxics Control Act Funding:
Where It Comes from and How It's Used

Hazardous Substance Tax funds the Model Toxics Control accounts

The Model Toxics Control Act (MTCA) accounts[4] are primarily funded by revenue from the Hazardous Substance Tax (HST) that is collected by the Department of Revenue (DOR). The HST is imposed on the first possession in the state of petroleum products, pesticides, and certain chemicals. These hazardous substances are taxed at the rate of 0.70 percent of the wholesale value ($7 tax per $1,000 product value). More than 95 percent of the revenue deposited into the MTCA accounts comes from the HST payments. The remainder comprises fees, revenues from cost recovery efforts, fines, and other miscellaneous revenues.

Figure 1 on the next page displays HST revenue from inception of the tax. It also includes DOR's latest (June 2018) revenue forecast for the tax.[5]

Using DOR's June 2018 forecast, Table 6 identifies the estimated revenue for the three MTCA accounts and working capital reserves for the 2019–21 Biennium.

[4] State Toxics Control Account (173-STCA); Local Toxics Control Account (LTCA-174); and Environmental Stewardship Legacy Account (ELSA-19G).

[5] The June 2018 forecast includes actual receipts through May 2018 and forecast for the remainder of the fiscal year.

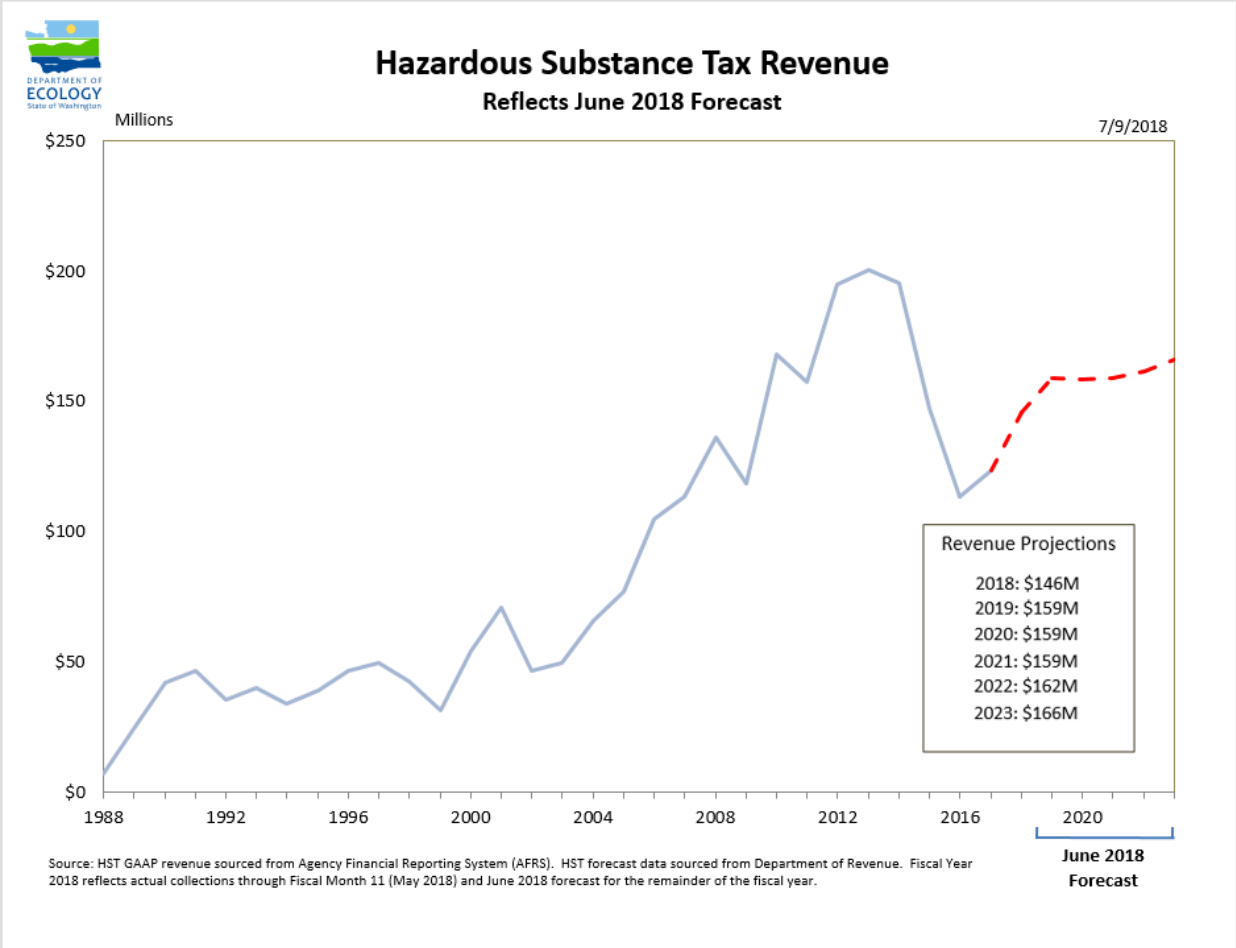


Figure 1: Hazardous Substance Tax revenue (reflects June 2018 forecast). Source: Washington State Department of Ecology & Department of Revenue (June 2018)[6]

Table 6: Estimated revenue in MTCA accounts based on June 2018 forecast

MTCA Account	Estimated Revenue 2019–21 Biennium	Working Capital Reserves 2019–21 Biennium
State Toxics Control Account	$157 million from HST $10 million from cost recovery efforts & penalties	$3.0 million
Local Toxics Control Account	$123 million from HST	$1.0 million
Environmental Legacy Stewardship Account	$37 million from HST	$2.9 million

[6] Department of Revenue Non-General Fund Tax Sources – Environmental/Habitat Taxes, June 2018 Revenue Forecast

2017–19 Biennium Capital Budget and MTCA revenue

Since the summer of 2014, crude oil prices have dropped from a high of $104 per barrel to below $30 in January 2016, resulting in a correlated and significant decrease in HST revenue. While oil prices have recovered in 2018 to an average of approximately $70 per barrel (through May 2018), MTCA fund balances have not supported the demand for toxics management, prevention, and cleanup over the last two biennia.

To balance the accounts and fund delayed capital projects in the 2017–19 Biennium, the enacted Capital Budget provided $60 million in bond backfill. Even with the accounts currently balanced, we will still have a funding gap in the 2019–21 Biennium. DOR projects HST collections will total $159 million per year in 2019–21 (June 2018 forecast). With operating carryforward and capital reappropriation demands, Ecology projects MTCA capacity for new work in the 2019–21 Biennium is about $85 million, far short of the more than $211 million in all new cleanup demand estimates in the next biennium.[7]

In addition to the reduced value of crude oil, other drivers causing the reduced MTCA capacity include:

- MTCA appropriations have been expanded in recent biennia to several agencies. Thirteen years ago, only five agencies received MTCA appropriations during the 2003–05 Biennium. Today, ten agencies, in addition to Ecology, receive appropriations totaling $27.2 million (approximately 11% of the total MTCA appropriation).

- Other dedicated accounts provided up to $26 million in loans to MTCA accounts in the enacted budgets, and the balance of these repayments will come due in the 2021–23 Biennium.

- Since the 2007–09 Biennium, the Legislature has shifted $75.3 million of work previously funded by General Fund-State (GF-S) to MTCA (approximately $64.2 million to Ecology, and $11.1 million to other agencies). Although fund shifts preserved core environmental work during the Great Recession, they also further eroded MTCA capital funding capacity.

[7] Ecology estimates the state share of total cleanup need for 2019–21 Biennium will be $211 million =

$167 million (state share at 50% of total Oversight and Independent Grant need during biennium—see pp.87–88 in Appendix B)
+
$7 million (state share at 100% of total financial management, Integrated Planning, and Safe Drinking Water Grant need during biennium—see p.88 in Appendix B)
+
$37 million (state share at 100% of total state-directed need for biennium—see p.92 in Appendix B)

Ecology actively managing MTCA

TCP guides cleanup projects through MTCA's regulatory process and requirements, including those projects seeking state capital budget funding. The regulation requires that all cleanup projects proceed through various cleanup phases, from an assessment of human health and environmental risks to the final cleanup remedy (Chapter 173-340 WAC). Chapter 3 of this report explains these phases in more detail. Depending on the phase, they demonstrate a project's progress and inform readiness to proceed, providing important information as Ecology ranks projects for funding.

Ecology is actively managing MTCA through a cash management plan, consistent with legislative and the Office Financial Management (OFM) direction.

The Legislature authorized Ecology in the enacted 2015–17 Capital Budget (2EHB 1115) and the 2016 Supplemental Budget Engrossed Substitute House Bill 2380 (ESHB 2380) to take several steps to respond to projected MTCA revenue shortfalls during the 2015–17 Biennium.

One of these steps was authorization to delay cleanup projects (2EHB 1115, Section 7038). After that budget became law, Ecology and OFM used this direction as the foundation for its MTCA Cash Management Plan. The plan describes Ecology's use of the authorized options from the Legislature to maintain positive cash balances in the accounts, including delaying several high-priority cleanup projects.

2EHB 1115, Section 7038(3) authorized Ecology to delay the start of cleanup projects based on the following criteria:

- Acuity of need,
- Readiness to proceed,
- Cost efficiency, and
- Need for geographic distribution.

Ecology initially prioritized projects following MTCA's requirement to address the urgency and effectiveness of cleanup projects. The agency then used Section 7038's authority to determine the list of delayed projects using the following approach outlined below:

1. Applying Section 7038 criteria as detailed in the MTCA Cash Management Plan. Ecology used this authority in the 2017–19 Biennium to guide project prioritization and followed the same criteria for prioritizing the 2019–21 biennial budget request.

2. Where groups of projects have met all of the same Section 7038 criteria, ranking projects based on Ecology's regional and program priorities and staff capacity to oversee the cleanup. The recovered economy is delivering a record number of cleanup sites to Ecology to review and act on—from 200–300 per year on average, to 400 in 2015. Economic conditions require Ecology to maintain the current work force and find ways to manage work load while continuing existing cleanup priorities.

3. Reviewing current information from grant recipients and Ecology's regional cleanup project managers on the status of projects to further refine prioritization. This includes the construction stage of projects, schedule changes, whether permits are in hand, if projects are ready to bid, if projects leverage partnerships, and if projects have already incurred eligible costs.

Additional actions authorized by the Legislature include:

- Fund transfers between the three MTCA accounts to maintain positive cash balances. Transfers are coordinated between OFM, Ecology, and the State Treasurer.

- Taking loans of up to $23 million total from the Cleanup Settlement Account (CSA). In the 2015–17 Biennium, CSA loaned $23 million to LTCA, and payback with interest is scheduled from Fiscal Year 2020 to Fiscal Year 2022. The 2018 Supplemental Capital Budget provided an initial loan payback of $8.15 million in Fiscal Year 2019.

- If needed, the Legislature also authorized Ecology to take additional actions to manage available funds, including delaying non-cleanup projects and contracts.

Due to the volatility in HST revenue and the $140 million a year revenue cap in STCA and LTCA, the MTCA accounts are perpetually out of balance. Ecology requires ongoing transfer provisions in the enacted budgets to maintain positive cash balances in the three MTCA accounts. Managing MTCA fund and cash balances requires active monitoring of spending and allotments, and transfers between the accounts. In the 2017–19 Biennium, transfers between MTCA accounts to maintain positive balances are provided for under the 2017–19 Operating Budget Section 980 and Capital Budget Section 7022. Ecology will continue to need transfer authority between the accounts in future biennia because the $140 million revenue cap (RCW 70.105d.070 (2)) does not leave enough revenue to cover current base operating appropriations in STCA and ELSA.

2019–21 Biennium budget requests

With 2019–21 Biennium HST revenue projected to total $159 million per year, and with operating carryforward and capital reappropriation demands, projected MTCA capacity is only about $85 million based on the June 2018 forecast, far short of new cleanup demands of an estimated $211 million next biennium.

Since there is not sufficient capacity to meet cleanup demands, Ecology is requesting a mix of MTCA and SBCA appropriations to support cleanup projects in its 2019–21 Biennium budget requests. Additionally, Ecology is requesting to restore the $64.2 million GF-State shifted to MTCA funding in Ecology's operating budget to create more MTCA capacity for additional capital investments.

Chapter 3: Funding Remedial Actions Removes Hazardous Threats

Ecology and its Toxics Cleanup Program (TCP) work to prevent, clean up contaminated sites across our state. Many of these contaminated sites—numbering 12,953 as of June 30, 2018—are the result of more than 100 years of past business practices and accidental spills of dangerous materials.

We partner with local governments, contractors, potentially liable persons, and thousands of others across our state to clean up this legacy of contamination. Much cleanup work remains, and while the number of sites continues to grow (200 to 300 new sites are discovered each year), the massive cleanup efforts are making a difference. Roughly 7,200 of the 12,900-plus sites are already cleaned up or undergoing monitoring, and nearly 4,000 have cleanups underway.

This work is possible thanks to cleanup experts, the cleanup process, and funding from the MTCA accounts.

What are hazardous sites and remedial actions?

A *hazardous waste site* under MTCA is any site that Ecology has confirmed a release or a threatened release of a hazardous substance requiring remedial action (WAC 173-340-200). We frequently use the phrases *hazardous waste site*, *cleanup site*, and *contaminated site* interchangeably.

Remedial actions, also known as *cleanups*, are the collective planning, investigative, and technical work needed to clean up a site contaminated by hazardous waste. Cleanups are often considered construction projects that remove or immobilize contamination and put properties back into use.

MTCA cleanup steps remove hazardous threats

The steps in the formal MTCA cleanup process[8] drive our work to clean up hazardous waste, and the process often starts with a single phone call. For example, a cleanup might begin with an alert construction worker who discovers a leaking underground storage tank and reports it to Ecology.[9] We'll take it from there using the formal MTCA cleanup steps. We'll investigate and work with the tank owners to clean it up right away, or assess further hazards and the extent of contamination, e.g., what's the contamination comprised of? Is it impacting drinking water or nearby streams? Has it co-mingled with other contaminants?

Next steps in the process include developing feasibility studies, cleanup action plans, and engineering design plans, and working with contractors and responsible parties to put the remedy into action. One of those remedies might involve excavating the leaking tank and petroleum-soaked soil, then treating the soil offsite. We might use legal measures to restrict future uses on the site (like a parking lot is okay, but not a playground). We may conduct or require long-term monitoring—sometimes years following a cleanup—to ensure the remedy still protects human health and the environment, and that the site still complies with any legal restrictions.

Throughout the process, we'll alert the public to ways they comment and participate in public meetings via our mailing lists, event listings, and *Site Register*.

It takes dedicated funding, science-based actions, and strong partnerships to untangle the 100-year old legacy of past business practices and accidental spills. Some complex cleanups can prove expensive and take years—like the Lower Duwamish Waterway and others discussed in Chapter 6. Other cleanups can be loud, dirty, and disruptive—like the Yard Cleanup Program's work within the Tacoma Smelter Plume, where we're removing and replacing arsenic- and lead-contaminated soil. Each time we use the MTCA cleanup steps, employ the skills of cleanup

[8] Formal cleanups are those conducted or supervised by Ecology. Independent cleanups are conducted by property owners on their own or with technical assistance from Ecology or the Pollution Liability Insurance Agency (PLIA), but must still meet MTCA cleanup standards. For more information:

> "Chapter 3: The MTCA Cleanup Process," *MTCA Biennial Report of Expenditures: 2015–2017 Biennium,* pp. 37-58*:* https://fortress.wa.gov/ecy/publications/SummaryPages/1709055.html
>
> "How the cleanup process works," Ecology's website: https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-process
>
> Cleanup process of the Model Toxics Control Act (Chapter 173-340 WAC): http://app.leg.wa.gov/WAC/default.aspx?cite=173-340

[9] Report a spill by calling 1-800-OILS-911 (1-800-645-7911) or via Ecology's website: https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue/Report-a-spill

experts, and access funding from the MTCA accounts, we make measurable progress toward healthier communities and economies.

Affordable housing now another benefit of cleanups

Unless countered by remedial actions, contaminated sites can continue to pose risks to human health and the environment. When we remove those threats—whether real or perceived—communities can thrive. One recently evolving benefit of cleanups is more land for affordable housing development opportunities. Affordable housing is defined as residential housing where monthly housing costs (including utilities, but not phone) do not exceed thirty percent of the household's monthly income, relative to that community's median income.[10] The possibility of more land for affordable housing development is rapidly becoming another benefit of remediation, especially in densely populated communities like Seattle and Tacoma.

It's not just larger cities that are experiencing this demand, however—Washington has a dire need for affordable housing across the entire state. The Washington State Affordable Housing Advisory Board[11] notes that housing supply and affordability affect all Washington communities, and rents are growing faster than low and middle incomes. A key factor is land availability. When cleanups open the door for communities to explore development options, they can put formerly abandoned or underused properties back into use.

In support of this critical need, the Legislature passed Supplemental Capital Budget in January 2018 (ESSB 6095), which included direction to Ecology to collaborate with Washington's Department of Commerce and "develop a competitive process to select projects for funding…[where]…funding recipients must restrict the use of their cleaned up property to affordable housing" (Section 3009, ESSB 6095). The Legislature continued its support of linking cleanups with affordable housing in three additional ways during the 2018 Legislative Session:

1. Provided $6.2 million in funding to support Mount Baker Housing's cleanup of land for the development of *The Maddux*, a project expected to create more than 140 units of affordable housing in downtown Seattle.

[10] New and Rehabilitated Multiple-Unit Dwellings in Urban Centers, Washington State Legislature, Chapter 84.14 RCW: https://app.leg.wa.gov/rcw/default.aspx?cite=84.14.010 (RCW 84.14.010)

[11] Washington State Affordable Housing Advisory Board's *2017 Affordable Housing Update* (February 2018 report). Available at http://www.commerce.wa.gov/wp-content/uploads/2018/04/AHAB-2017-Report.pdf and via website at https://www.commerce.wa.gov/about-us/boards-and-commissions/affordable-housing-advisory-board/

2. Provided Integrated Planning Grant funds to Ecology, to distribute to local governments to investigate and plan cleanup for potential affordable housing development.

3. Instructed Ecology and Department of Commerce to develop a program to carry out more of these cleanups.

Ecology began developing the Healthy Housing Remediation Program in April 2018. In June 2018, we reached out to local government representatives and housing groups to begin building a list of possible cleanup projects. In October 2018, we published a report about this new program, the solicitation process, and its results. *Healthy Housing Remediation: 2018 Results and Recommendations*, Publication No. 18-09-205 is available online at https://fortress.wa.gov/ecy/publications/SummaryPages/1809205.html

Putting funding in context: Cleanup sites by the numbers

MTCA drives the cleanup process. Funding from the MTCA accounts drives the actual work to investigate, remove, and prevent contamination that can threaten Washington's residents and economy. Over the last 30 years, we identified more than 12,900 sites in Washington that have confirmed or suspected contamination (Figure 2). To better understand the funding need, here's how these sites break down as of June 30, 2018:

1. **12,953 sites have contamination or suspected contamination in Washington state.**

2. **7,195 of those 12,953 contaminated sites** (about 56%) are already cleaned up or require no further action. That averages 216 completed cleanups per year, or 1 completed cleanup project roughly every 1.5 days.[12] Note: Sometimes cleanups involve studies and investigations that confirm contamination on a site has naturally attenuated, i.e., diminished, over time. Even if a cleanup remedy is not active (such as an excavation), we still consider it to be a "cleanup."

3. **200 of the 7,195 cleaned-up sites** (about 2%) are being monitored to ensure the remedy is still protecting human health and the environment.

4. **3,918 sites** (about 30%) have already begun cleanup actions by site owners or Washington state, but 1,948 of these sites have not reported any activity for more than five years. Project inactivity can often be attributed to a property owner's lack of funding; a change in property ownership; or the time, scientific evidence, and

[12] Source: Ecology's ISIS database, June 30, 2018.

investigation required to meet the rigorous MTCA cleanup standards that are protective of human health and the environment.

5. **1,824 sites** (about 14%) still need to begin cleanup actions.

6. **200 to 300 new sites are discovered and reported to Ecology each year,** and about 216 sites are cleaned up each year. These new sites continue to be added to the list despite resource challenges—including staffing, workloads, and diminished funding—that impact Ecology's ability to provide the necessary oversight, technical assistance, and grant (or loan) funding to owners of contaminated sites.[13]

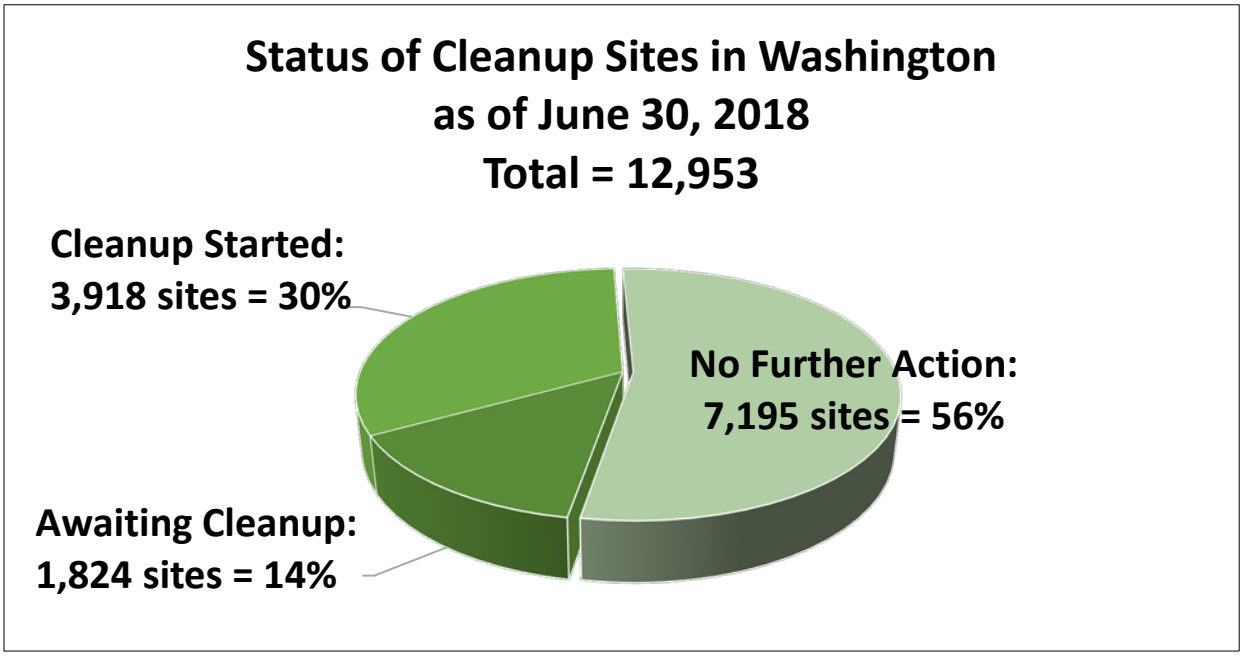


Figure 2: Number and status of contaminated sites in Washington as of June 30, 2018. Source: Ecology's Management Information System (MIC).[14]

[13] The majority of new sites that are reported contain "old" or "legacy" pollution, e.g., petroleum from leaking tanks under former gas stations. Most of these new sites are reported by the public. Ecology does not actively seek new sites unless conducting a broad geographic cleanup action such as an area-wide or bay-wide cleanup.

[14] Ecology generally classifies contaminated sites into three main cleanup categories or statuses: *No Further Action, Cleanup Started, and Awaiting Cleanup*. For purposes of this report, the status of *No Further Action* also includes sites with the statuses of 1) *Construction complete – performance*

What are the challenges of publicly funding cleanup work?

Under MTCA, polluters pay for cleanup. About 79% of contaminated sites in Washington are privately owned and cleanup costs become the owner's responsibility. But the remaining 21% are publicly owned sites that fall under the responsibility of local, state, and federal governments.[15] Several factors contribute to these public funding obligations for cleaning up sites and overseeing site cleanups:

1. **The high volume of publicly owned sites.** "Publicly owned sites" are those owned by schools, colleges, or universities; ports, cities, or counties; publicly or financially owned bankruptcies; public utility districts; or state, tribal, or federal governments. These public sites will need state funding to remove the threats of contamination. As of June 30, 2018, there were:

    a. **2,779** publicly owned contaminated sites in Washington (about 21%).
    b. **1,391** of these sites (about 50%) are already cleaned up.
    c. **102 of those 1,391 cleaned-up sites** are undergoing monitoring to ensure the remedy still protects human health and the environment.
    d. **868** publicly owned sites already have cleanup actions underway.
    e. **408** sites are waiting to begin.

2. **The number of sites that are privately owned but considered orphaned and abandoned sites**, as well as the number of sites with non-compliant owners or those with emergency cleanup needs.

3. **The number of grants provided to local governments, and cleanup oversight conducted by Ecology.** Washington state provides full or partial funding for cleanups through remedial action grants and loans to local governments. Ecology also provides cleanup oversight. See Chapters 4 and 5 for more information.

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monitoring, 2) *Cleanup complete – active O&M / monitoring,* and 3) *Reported Cleaned Up*. As of June 30, 2018, there were 200 sites in these categories (combined).

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Note: Ecology includes EPA-tracked sites when we report the total "universe" of contaminated sites in Washington (12,953 as of June 30, 2018). However, we don't include EPA-tracked sites in our pie chart totals above, which reflect the status of sites under Ecology's purview. As of June 30, 2018, 16 of the 12,953 contaminated sites in Washington were tracked by the EPA.

[15] Source: Ecology's ISIS database as of August 2018.

The *MTCA Ten-Year Financing Report 2018* provides a funding estimate for sites that may need full or partial funding over the next ten years. Ecology's 2019–21 Biennium Capital Budget request to the Governor specifically includes 61 publicly funded projects outlined in the RAG and State-Directed project lists in Appendix A. However, these projects do not encompass the full enormity of Washington's cleanup funding needs, nor of those sites yet to be discovered and reported. These new sites may also require state funding to begin cleanup actions.

What is the "Ten-Year solicitation process"?

In January, February, and March during even-numbered years, Toxics Cleanup Program staff ask local governments for their cleanup projects and estimated financing needs over the next ten years. These "remedial action grant" projects will likely require funding or partial funding from the Local Toxics Control Accounts (LTCA).

The purpose of our solicitation request to local governments is three-fold:

1. To inform jurisdictions that they may own a contaminated site, but may also be eligible to apply for funding through our Remedial Action Grant (RAG) program to help pay for the cleanup costs.

2. To ask for their help building a comprehensive estimate of Washington's cleanup funding needs that we will publish in the MTCA Ten-Year Financing Report to the Legislature and public.

3. To ask them to provide enough project information that helps us select which sites to fund, and helps us create Ecology's budget for the next biennium.

For Ecology to consider a project for inclusion in our biennial budget request to the Governor, the project must be listed in the Ten-Year Report. Since our budget recommendations must fall within available resources, however, we can include only a small subset of those projects in our biennial budget request.

The Ten-Year solicitation period is typically open for three to four weeks. We announce it in the *Site Register*, on our website, and through several Listservs (i.e., email distribution lists), with periodic reminders the same way. See Appendix D for an example solicitation letter and *Site Register* announcement for the 2018 process.

After the solicitation period ends, TCP grants and loans staff, regional managers, and site managers (also called cleanup project managers) review and prioritize each project based on

multiple criteria—such as whether the contaminated site has immediate impacts to human health, whether it's ready to proceed, or whether the cleanup is already underway.

From the list of projects that meet the criteria, we can include some of them in our budget request to the Governor for the following biennium. The rest remain in the queue and will be ready should funding become available. The long list of unfunded projects underscores the critical need for cleanup dollars and the unavailability of state funds to fully meet that need: of the 85 projects reported to us by local governments, only 30 projects are included in our 2019–21 Biennium budget request to the Governor. See Financing Table 9A in Appendix B.

New solicitation process effective February 2018

The spring of 2018 marks the first time we solicited this information using an online application in Ecology's Administration of Grants and Loans (EAGL) system. Once local government staff created a Secure Access Washington (SAW) account, they could create an EAGL account and enter their project's information online.

The goal of the application was to streamline the process for applicants and reviewers, but it has another benefit for local governments: since their online account is now pre-loaded with their project information, they can more efficiently finalize their grant with Ecology if the Legislature funds their project.

Why did we refine our solicitation process for the 2018 report?

During the 2016 Ten-Year solicitation, we received 89 responses from local governments, which means we received responses from 70 percent of the people to whom we sent an email. The 89 respondents identified 189 sites for potential funding over the next ten years. When we analyzed their responses and listened to their feedback, we realized that a) we needed to refine our solicitation questions so we could obtain more consistent information that allows us to evaluate projects on equal merit, and b) we wanted to make it easier for local governments to respond to the request.

With an escalating demand for cleanup funding and fewer resources to meet that demand, there are several benefits to using multiple criteria for evaluating cleanup projects. Clear criteria help local governments quickly determine if their projects qualify for funding in the first place, so they can pursue other funding options if needed. Multiple criteria allow us to formally incorporate environmental justice concerns into our evaluations. They help build transparency about how and why we prioritize projects, and help our managers make difficult funding decisions when balancing limited resources.

Our goals of this project were primarily transparency and ease-of-use. We worked to:

- Create an efficient tool for local governments to transmit their complex information to us, and an efficient process so our staff could review it.

- Develop clear questions that focused applicants' responses in ways we could compare answers on equal merit.

- Cite the criteria and their authoritative sources to justify why we were asking certain questions.

- Incorporate environmental justice considerations in both the solicitation questions and our evaluation.

- Eliminate the need for local governments to re-enter data when finalizing their grant agreement, should the Legislature fund their projects.

- Create fields for Ecology staff to document and justify their review of the "self-reported" data submitted by local governments. This documentation included updating the solicited responses with additional or more current information we knew about the site. Our staff also added Ecology-specific information; for example, one component of a project's readiness to proceed is whether Ecology has assigned a cleanup project manager to oversee the cleanup.

2018 solicitation methodology

In 2017 and 2018, we worked to improve the solicitation process in several stages.

1. Beginning in spring 2017, we collaborated with Ecology's EAGL team to develop a tailored online application that was based on an existing generic application. In-house user testing began in summer 2017.

2. We assembled criteria from four sources—the RAG Rule, the RAG Guidance, Ecology's MTCA Cash Management Plan, and TCP's Integrated Planning Grant criteria. See Table 12 in Appendix C for the full list of criteria.

3. We discussed and compiled environmental justice considerations with Ecology's Environmental Justice Coordinator. We used EPA's EJScreen, an environmental justice mapping and screening tool, and considered suggestions found in Front and Centered's 2017 report, *Equity Analysis of Washington State Toxics Sites & the Model Toxic Control Act.* Front and Centered is a statewide coalition of 60-plus organizations and groups rooted in communities of color and people with lower incomes.

4. For each remedial action grant type available—Oversight, Independent, Integrated Planning Grant, Area-wide Groundwater, and Safe Drinking Water—we developed specific questions where response options were limited to radio buttons, checkboxes, and short comment fields. The short-response fields allowed us to gather and evaluate information consistently. Longer comment boxes, and the ability to upload required or supplemental documents without size limit, allowed respondents to provide qualitative data, e.g., photographs, their ten-year forecast (which estimates the project's funding needs per biennium) and their spending plan (which outlines how and when their staff would spend awarded funds each quarter in the coming biennium). Information like this allowed our staff to determine a project's readiness to proceed. For each question we asked applicants, we also cited the above-mentioned criteria and sources. See Appendix D for sample screenshots of the Oversight Grant application—the grant type for which we receive the most applications and award the most money.

5. Our outreach, in which we also recommended applicants create their required SAW account before the solicitation period began, included:

    a. Four announcements in Ecology's *Site Register* on January 18, February 2, February 15, and March 1, 2018.
    b. Email notices to stakeholder groups, including Association of Cities, Association of Counties, and Public Ports Association.
    c. Email notices to local governments that may be responsible for cleanup sites, including former RAG applicants and former Ten-Year Report respondents.
    d. RAG Listserv and email distribution lists for TCP's Brownfields program and Washington State Department of Commerce.
    e. Ecology's Remedial Action Grants webpage.

    See Appendix D for an example solicitation letter used during the 2018 process.

The new EAGL application launched Monday, February 5, 2018, and ran through Friday, March 2, 2018. TCP grants and loans staff were available by phone and email to answer questions. They were also the first people to review each submittal, and contacted applicants if required information was missing.

How did we incorporate environmental justice (EJ) considerations into the 2018 solicitation and evaluation?

Consideration of "highly impacted communities" is crucial when prioritizing grant applications.

The RAG rule defines a highly impacted community as one that Ecology has determined "…is likely to bear a disproportionate burden of public health risks from environmental pollution." (WAC 173-322A-100(24)). Ecology interprets this to encompass communities with disproportionate public health challenges, and those with a) low income populations; b) communities with large populations of children; c) communities composed largely of senior citizens; d) linguistically isolated residents; and e) residents with less than a high school education.

Guided by our 2018–21 RAG Guidance for local governments,[16] we developed the following process to analyze these environmental justice factors:

1. For each applicant's site, we pulled demographic information at the census tract level from the EJScreen database (https://www.epa.gov/ejscreen).

2. We compiled percentiles for each of the highly-impacted groups (percentile of low-income residents; of children under the age of 5; of seniors over the age of 64; of linguistically isolated residents; and of residents with less than a high-school education) into one number between 0 and 500 (i.e., 100 possible points for each percentile group).

3. We scaled those numbers to make them comparable with our other evaluation criteria and factored them into our decisions on which projects to fund.

We also asked local governments to help us compile EJ information for their sites. In the narrative section of each grant application, they could provide relevant EJ information about their site and its surrounding area, such as existing demographic and health data:

- Per capita and median household income
- Unemployment rate.
- English language proficiency.
- Planned affordable housing use of remediated site.
- Cancer rates or other disproportionate health impacts.

The data in applicants' narratives were incorporated into reviewers' evaluations, with a potential to shift the "highly impacted communities" category evaluation by up to 10% in either direction.

[16] *Remedial Action Grants for Local Governments: 2018–2021 Guidance*, pp. 10-11, Ecology Publication No. 18-09-049, https://fortress.wa.gov/ecy/publications/SummaryPages/1809049.html

Results of the 2018 solicitation process

During the 2018 Ten-Year solicitation, we sent emails to 125 email addresses and received 41 responses from local governments, in which they identified 85 sites for potential funding over the next ten years. We will continue refining our solicitation process for the 2020 Ten-Year Financing Report and streamlining the experience for both users and reviewers. One enhancement, for example, is an interactive mapping feature expected to go live in Fall 2018. When applicants apply for a grant or loan, they will now define their project's location using the map feature. Visitors to the public-facing map can search for projects and see all Ecology grants and loans for the projects, including open and closed agreements. They'll be able to review grant types, recipients, and which Ecology program oversees the agreement; dollar amounts; project summaries; and project themes, such as water quality or cleanup construction.

Identifying and ranking cleanup work

For this report, Ecology also developed a project list and cost estimates for state-directed projects that focus on the Puget Sound Basin, Eastern Washington, and investments to protect cleanup remedies.

Ranking state-directed cleanup projects

To guide prioritization of all projects included in the 2019–21 Capital Budget request to the Governor, Ecology reviewed each project's phase of cleanup and applied direction found in the enacted 2015–17 Capital Budget (2EHB 1115, Section 7038). To determine the priority for RAG funding, we also used additional criteria discussed earlier in this chapter. These approaches responded to the most recent direction of the Legislature: to focus limited state resources on projects that are acutely needed, ready to proceed, cost efficient, and geographically distributed.

MTCA's cleanup process informs how we prioritized projects

As mentioned in Chapter 2, Toxics Cleanup Program staff guide cleanup projects through MTCA's regulatory process and requirements, including those seeking state capital budget funding. The regulation requires that all cleanup projects proceed through various cleanup phases, from an assessment of human health and environmental risks to the final cleanup remedy (Chapter 173-340 WAC). These phases include:

- Assessment: Projects are prioritized based on human health and environmental risks. Cleanup projects address risks from contaminated soil, groundwater, drinking water, marine water and sediment, toxic vapors, or a combination of the above.

- Remedial Investigation: Remedial investigations define the nature, extent, and magnitude of contamination on all projects.

- Feasibility Study: Feasibility studies are conducted on projects and include alternative analysis; cost-benefit analysis; long-term or life-cycle cost analysis; and cleanup technology preferences.

- Cleanup Action Plan: Information from the remedial investigation and feasibility study are included in a cleanup action plan that describes cleanup standards, methods, monitoring requirements, and schedule—including any time-critical elements.

- Comment: The public is encouraged to review and comment on the projects' investigations, feasibility studies, and cleanup plans during public comment periods.

- Cleanup: Design, construction, operations, and monitoring of the cleanup. A cleanup is complete when Ecology determines cleanup standards have been met. At this cleanup phase, projects are ready to proceed: either the projects are in construction; they have permits or are in the permitting process; their design is complete or underway; or they are under contract.

These phases provide a framework to the cleanup process that state budget writers can translate and compare to more typical "brick and mortar" capital construction projects. OFM and legislative staff use construction benchmarks such as *predesign*, *design*, and *construction* to understand the status of a capital project and to make funding decisions. The phases that cleanup projects proceed through under MTCA demonstrate a cleanup project's progress and inform rankings such as *readiness to proceed*. An example similar to this would be a building on a university campus that is in the design phase or ready for construction.

In addition to projects being evaluated according to the MTCA regulatory process, the projects were reviewed based on the following four elements:

1. **Continuing investments at sites with ongoing cleanup projects.**

   In 2013, the Legislature made significant changes to MTCA. Among them was direction for Ecology to plan hazardous site cleanup at a pace that matches the estimated cash resources in the MTCA accounts (RCW 70.105D.170). Cleanups can take many years once a site has been contaminated with toxic chemicals. Three major factors determine the length of time for cleanup; the regulatory process used (formal versus independent cleanup); the nature of contaminants (how difficult they are to remediate); and the type of contaminated media (soil,

groundwater, sediments, etc.). Ecology has been working to develop model remedies, tools, and policies to help achieve cleanup faster.

Financial certainty for cleanup project development is critical to ensure existing projects are completed as envisioned, and new projects can be planned and designed to maximize environmental and public health improvements and economic development opportunities.

2. Applying the 2015–17 and 2017–19 Biennium budget prioritization criteria.

As in the 2015–17 budget, the 2017–19 budget continued to authorize Ecology to delay the start of cleanup projects based on acuity of need, readiness to proceed, cost-efficiency, or need to ensure geographic distribution. In 2017–19, the Legislature added criteria to evaluate projects for the purposes of increasing affordable housing. Ecology used this authority to guide prioritization of projects.

3. Consideration of Ecology's regional and program priorities.

Where groups of projects met all of the same budget prioritization criteria, projects were further ranked considering Ecology's regional and program priorities.

4. Reviewing current information from our partners and Ecology's regional cleanup managers on the status of projects to further refine the prioritization.

Considering, for instance, the construction stage of projects; schedule changes; whether permits are in hand; if projects are ready to bid; and if projects leverage other funds.

Financial stability the key for successful cleanups

Local government cleanup projects require financial certainty to ensure successful and timely project completion.

Local governments rely on public funding (i.e., Remedial Action Grants and their grant-match) to complete cleanups. When public funding is unpredictable, it can cause cleanups to be delayed or not considered at all. It also affects local governments' ability to leverage cleanup funding from other sources, including insurance claims and other potentially liable parties. When state financial contributions are certain and stable, they ensure that projects are completed as envisioned and that new projects can be designed.

Since funding is dependent on our state's year-to-year or biennium-to-biennium budget decisions, it can generate concern that phased cleanup projects will be stranded or delayed. This

happened beginning February 2014 when oil prices declined, MTCA revenues were volatile, and budget decisions mandated delays to existing cleanup projects.

Two years ago in the 2016 MTCA Ten Year Financing Report, we noted that local governments are limited by the time they can give each project: they devote time to plan cleanups, knowing they may lose the opportunity to pursue other projects if they cannot secure funds or if planned funds do not materialize. We also reported some local governments were postponing new cleanup projects in the near future in favor of more certain projects. That appears to have happened and is shown in the following figures.

Figure 3 shows the expected state share for potential Remedial Action Grant funded cleanups over the next ten years. Figure 4 focuses on the expected phases of activity that potential RAG recipients have planned for their cleanup activities over the same timeframe. Taken together, Figures 3 and 4 illustrate the factors driving the critical need for stabilized cleanup funding.

Figure 3 compares the Remedial Action Grant demand, to Ecology's average Remedial Action Grant appropriations between 2009 and 2019, to the 2019–21 Biennium budget request. The top line of the chart is the estimated and ongoing demand of approximately $150 million per biennium.

As the figure illustrates, cleanups were affected by the budget decisions made when managing the MTCA revenue shortfall. Local government cleanup needs far exceed the average biennial appropriations of $63.5 million supported by the MTCA accounts since the 2007–09 Biennium, and the 2019–21 Biennium budget request of $85 million.

Figure 4 shows the expected state share of local cleanup needs (based on an assumed funding level of 50% of eligible project costs) for the next ten years grouped by cleanup phase. The lower two lines represent the preliminary phases of a cleanup, *Site/Remedial Investigation* and *Feasibility Study/Cleanup Action Plan Development*. The top line represents the need from projects that local governments have said are in the *Remedial Design, Cleanup Construction,* and *Post-Closure & Monitoring* phases. The lines have changed (as compared to the 2016 MTCA Ten Year Financing Report) and are telling us there is a consequence to funding uncertainty.

Instead of showing the progress of projects into construction phases of cleanup over the ten-year plan, projects ready for cleanup construction seems to have stalled. Cleanups that were planned, studied, and engineered are working toward completion. More projects are now just getting off the ground and will be in the early planning or feasibility study stages over the next ten years.

Capital projects require stability. Without it, the progress slows. This report demonstrates the importance of sustaining Remedial Action Grants each biennium that provides funding certainty

and meaningful project investment. When budget and policy decision makers can see how unstable financing negatively impacts local governments' ability to time or complete their cleanups, it can help them determine the best level of stable funding for cleanups happening our state.

Figure 3: Remedial Action Grant estimated state share ten-year need 2019–29

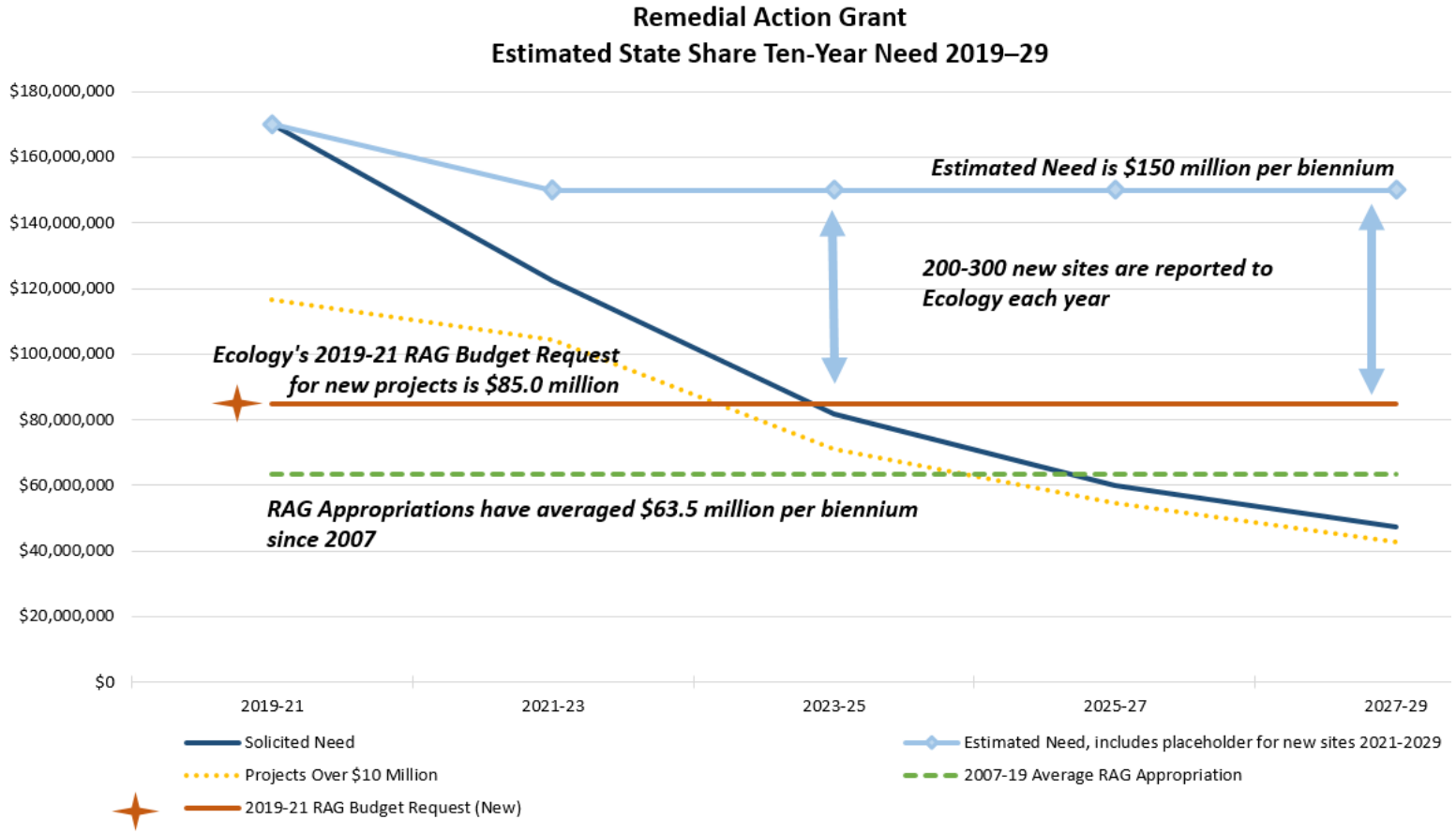

Figure 3 illustrates the solicited/estimated Remedial Action Grant (RAG) financing needs for the next ten years (2019–2029). Projects expecting to exceed $10 million in costs over the next ten years comprise a substantial proportion of the total need. A few major cleanups (i.e., more than $45 million in projected cost) encompass nearly 70% of that demand: Whatcom Waterway in Bellingham, Weyerhaeuser Mill A in Everett, Harbor Island East Waterway in Seattle, and the Lower Duwamish Waterway in Seattle.

Figure 4: Remedial Action Grant estimated state share ten-year need by cleanup phase

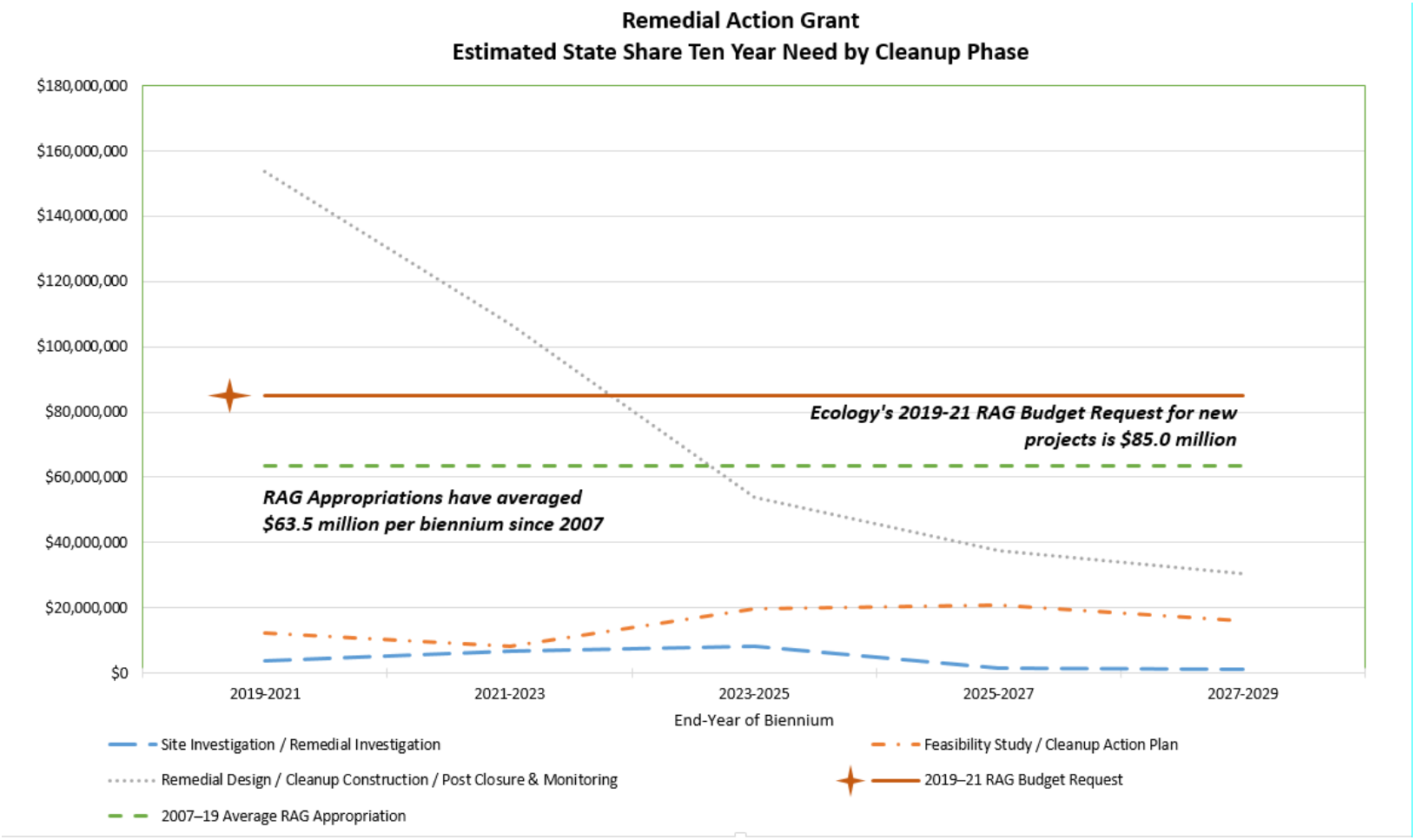

Figure 4 reorganizes the total Remedial Action Grant need (Figure 3's "Solicited Need" line) by expected project phase. Local governments were asked to identify each project's expected phase and estimated cost per biennium. The majority of local governments' needs are for projects that are either entering active construction, or have cleanup construction already taking place.

Additional Challenges Impact Rate of Cleanups

Financial stability, an increasing workload, and a continually expanding universe of sites are only some of the factors impacting the rate of cleanups. As we've reported in past reports, other challenges include:

1) The need for long-term financing to pay for large, complex cleanup projects such as Seattle's Lower Duwamish Waterway;

2) Providing brownfields funding for local governments that coincides with construction and rapidly changing real estate development cycles; and

3) "Area-wide" contamination that may create new sites or threaten to re-contaminate sites already cleaned up, especially for complex sites with sediment contamination. Bellingham Bay is an example of such complexity.

Financing large cleanups

Figure 5 and Table 11 (found in Chapter 6 and Appendix B, respectively) identify large projects for MTCA funding that are expected to exceed $10 million in total estimated project costs. Many of these complex cleanups line our shores and major waterways: the Georgia Pacific and Whatcom Waterway sites along Bellingham Bay and Harbor Island's East Waterway in Seattle, among others. Huge cleanup sites are also found across the state: landfills in Yakima, Skagit, and King counties; former lumber mills in Seattle and Everett; and the former Everett Smelter in Snohomish County.

Marine ports with sediment contamination are especially expensive to clean up and can take years to complete. The current model for financing these longer-term cleanup projects is tied to the state's biennial funding and expenditure plan. Although this model depends on biennial budget decisions by the Legislature, Ecology will continue to collaborate with local governments to request funding for the highest priority projects from the Legislature each biennium.

Extended Grant Agreements

Following the 2013 MTCA amendments, Ecology was authorized to enter into "extended grant agreements" with local governments for multi-biennial projects that cost more than $20 million. Ecology does not have the projected revenue to enter into extended agreements at this time. When we do, projects with such agreements will receive the highest funding priority each biennium during the state's budget process. This priority would provide local governments the highest level of assurance that funds would be available in future biennia as work continues at a site. The assurance would enable local governments to commit to long-term cleanups without the state needing to set aside large amounts of grant funds upfront. Funds granted under

extended grant agreements must be substantially expended or contracts for future work awarded each biennium to maintain this priority (RCW 70.105D.070(4)(a)(i) and (e)(i)).

Brownfields cleanup and redevelopment

A "brownfields property" is a previously developed and currently abandoned or underutilized real property, where environmental, economic, or community reuse objectives are hindered by the release (or threatened release) of hazardous substances. Either Ecology has determined the need for remedial action under MTCA, or the Environmental Protection Agency (EPA) has determined action is needed under federal cleanup law.

Although it is a stated goal in the MTCA statute, it can be difficult to coordinate brownfields cleanup and redevelopment decisions with a real estate developer's rapidly evolving timelines and economic priorities. One way to address this has been Ecology's Integrated Planning Grants (IPGs): no-match grants awarded through the RAG program that help local governments plan brownfields cleanups and redevelopment before they invest large amounts of money. IPGs help remove a site's uncertainties by funding groundwork such as environmental site assessments, land use analyses, and market studies.

Ecology's IPGs help local governments make cleanup decisions with greater confidence and propel brownfields sites towards redevelopment. In its 2018 Supplemental Budget ESSB 6095, the Legislature provided Ecology $2.7 million to award these flexible grants.

We identified two qualified applicants for the affordable housing IPGs from our 2018 Ten-Year solicitation and immediately put $400,000 of these funds to use. We awarded the remaining funds following a separate solicitation for affordable housing projects conducted in June 2018.[17]

Seattle Chinatown International District's affordable housing IPG 2018

In 2018, Ecology awarded a $200,000 Integrated Planning Grant to the Seattle Chinatown International District Preservation and Development Authority. The IPG will allow them to examine the cleanup needs and development potential for two contaminated sites in the Seattle Chinatown International District.

The **Seattle Goodwill Industries parcel** is approximately 8 acres with a history of various contaminating uses. The **7th Ave Auto Site** is a 0.31 acre site at the edge of the historic part of Chinatown. The IPG will fund remedial investigations and feasibility studies for both sites,

[17] For more information, see Ecology's *Healthy Housing Remediation Program: 2018 Results and Recommendations*, publication no. 18-09-205: https://fortress.wa.gov/ecy/publications/SummaryPages/1809205.html

which will help the communitiy explore its redevelopment goals to: 1) provide affordable housing and commercial spaces, and 2) increase residential density and find new uses for underused properties in the neighborhood.

Wenatchee's affordable housing IPG 2018

In May 2018, Ecology awarded $200,000 to the City of Wenatchee to evaluate a former tree fruit research facility for possible acquisition and redevelopment into an asset that would support affordable housing.

A portion of the site, called the Test Plot Area, was used for pesticide disposal testing for nearly 20 years. Although one percent of the area received an assessment and cleanup, resulting in a No Further Action opinion letter from Ecology in 2007, much of the rest of the property had remained uncharacterized (that is, the type and extent of contamination is still unknown). Redevelopment, however, will support City of Wenatchee's goals for infill development (for example, building smaller homes on higher density land, or developing vacant parcels within previously built areas). Redevelopment will also support Washington's broader goals under the Growth Management Act.

The IPG will pay to analyze existing environmental assessment documents, conduct Phase I and Phase II Environmental Site Assessments, and identify data gaps that might exist. In collaboration with Ecology staff, the community's housing authority will also use the grant to develop and implement an environmental investigation approach that will characterize the nature and extent of contamination, and allow them to project initial estimates about the size of the cleanup.

Area-wide contamination

Ecology is gaining an increased understanding of widespread contamination and how to manage it. TCP works with local governments and other constituents to address this type of contamination. Ecology offers area-wide groundwater grants as one tool to investigate area-wide contamination without requiring local governments to be a potentially liable party (PLP) or seek reimbursement of grant funds from such persons.

While no local government has applied for an area-wide groundwater contamination grant, Seattle's Lower Duwamish Waterway is an example of both area-wide contamination and potential recontamination. Nonpoint source pollution, such as stormwater that moves over ground and picks up pollutants, causes contamination and re-contamination of sites already cleaned up. Controlling the source of pollution is becoming a major focal point in using funds to prevent site contamination, and Ecology continues working to address stormwater pollution.

Site complexity affects speed of cleanup

A complex site such as the Lower Duwamish Waterway can take several years to clean up after it has been contaminated with toxic chemicals. The more complex the site, the longer cleanup can take. Three major factors determine the length of time for cleanup:

1) The regulatory process that is used (e.g., "formal cleanups" where Ecology provides oversight, versus "voluntary cleanups," which are conducted by private parties with limited or no Ecology oversight).
2) The nature of contaminants, and
3) The type of media (such as air, soil or groundwater).

Typically, sites with contaminated surface water, groundwater, or contaminated marine sediments are forecasted to take longer to clean up.

Ecology makes every attempt to locate PLPs so that remedial actions can begin. Our staff then work closely with the PLPs to investigate the extent of contamination, develop feasible approaches for cleanup, develop plans, and conduct the cleanup.

As we discussed in more detail in previous Ten-Year Financing Reports, we continue to develop and refine tools to make this process more efficient. **Pragmatic tools** like standardized cleanup methods (called model remedies), tighter document review times, and checklists are helping cleanups and reviews go faster. **Updated guidance documents** with how-to's for people conducting cleanups provide guidance for interpreting our cleanup rules—*Sediment User's Manual II (SCUM II)*, *Model Remedies for Sites with Petroleum Impacts to Groundwater*, and *Vapor Intrusion FAQs* are such examples. **Internal training tools for staff**—like our annual two-day Site Manager's University, the Cleanup Manager's Toolkit, MTCA 101 webinar series, and TCP Resource Library—are helping standardize our processes and broaden our knowledge through hands-on training and case studies.

The goals of these intensive efforts remain the same:

1. Decrease the time it takes to remediate a contaminated site.
2. Decrease the time it takes to spend RAG Program funds.
3. Provide greater predictability by developing project schedules for studies and cleanup actions that implement MTCA at formal sites (i.e., sites under Ecology oversight).

Table 7 provides more examples of ways our staff and partners are working to speed the pace of cleanups.

Table 7: Examples of resources to speed up cleanups.

Resource	Link
TCP policies and guidance	www.ecy.wa.gov/programs/tcp/policies/pol_main.html
TCP publications	www.fortress.wa.gov/ecy/publications/
Voluntary Cleanup Program	www.ecy.wa.gov/programs/tcp/vcp/Vcpmain.htm
Cleanup Levels and Risk Calculation (CLARC) website	https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx
Environmental Monitoring Data (EIM and MyEIM) application updates	https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database/Using-MyEIM
Model Remedies	https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/MTCA-model-remedies
Vapor Intrusion	https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Vapor-intrusion-overview
Underground Storage Tank (UST) Rule 2018 update	https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-360-Mar16

Learn more about cleanups happening in your neighborhood

Every day, hundreds of sites are being cleaned up across our state and some of them might be in your own neighborhood. Learn more about this critical work and how to get involved by accessing the resources in Table 8 at end of this report, including Ecology's public events listing and interactive What's in My Neighborhood map. For a more detailed discussion on public involvement opportunities, including Public Participation Grants and when to provide comments during cleanups, see Chapter 3 in the 2017 Biennial Report of Expenditures: https://fortress.wa.gov/ecy/publications/SummaryPages/1709055.html

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Chapter 4: Estimated RAG Funding Needed for Local Governments over the Next Ten Years

The MTCA accounts fund Ecology's Remedial Action Grant (RAG) program, which provide grants and loans to local governments to investigate and clean up contaminated sites in their communities. The Legislature has also used state bonds to fund this work.

This chapter discusses how much RAG funding we estimate local governments will need over the next ten years. It also provides background about the RAG program; laws and rules that direct it; and the types of grants and loans available to local governments. Tables 9A and 9B in Appendix B display these funding needs in a table format.

How much RAG funding do we estimate local governments will need?

Ecology has identified 85 cleanup projects owned by local governments, 4 statewide grant programs, associated grant management, and future-need demands for RAG funding through the MTCA accounts or other fund sources over the next ten years. These cleanup projects represent only a fraction of contaminated sites in Washington that are expected to need MTCA funding in the future. See Table 9A & 9B (Appendix B).

Ten-Year RAG funding estimates for MTCA Account funding

Ecology estimates that more than $1.5 billion will be required to support work at locally owned cleanup sites over the next ten years. Breaking down that number:

- **Shared responsibility ($1.5 billion).** Ecology and local governments identified 85 locally owned, cleanup projects for the ten-year period (59 applications for Oversight Grants; 26 for other grant types). We estimate that approximately $963 million will be required to complete this work and conduct associated grant management activities over the next decade. Ecology also anticipates an additional $578 million (estimated) will be needed to address future needs of locally owned cleanups over the next decade.

- **State's share of locally owned cleanups and four grant programs ($781 million)**. For planning purposes, Ecology estimates that we will need at least $781 million will be needed to cover the state's share of the aforementioned cleanup costs:

    - **State's share of locally owned cleanups ($460 million)**. The state will need approximately $460 million for Oversight Grants for 59 of the 85 locally owned

projects. Local agencies will be responsible for the remaining amount of these cleanup costs.

- **State's share of four statewide grant programs and grant management ($32 million).** Ecology estimates that the state will required $32 million to fund additional statewide grant programs and associated grant management over the next ten years:

  - *State's share of four statewide grant programs ($27 million)* for 26 of the 85 RAG applications: integrated planning grants (6 projects); safe drinking water grants (1 project); and reimbursement of independent remedial actions conducted at publicly owned sites (i.e., 19 voluntary cleanup projects through our Voluntary Cleanup Program).

  - *State's share of Remedial Action Grant program administration ($5 million).* Ecology estimates that we will need $5 million to administer the Remedial Action Grant program over the next ten years. At approximately $1,011,000 per biennium, this represents about 2% of the historical funding level of the RAG Program, which has averaged approximately $63.5 million per biennium since 2007.

- **State's share of placeholders for anticipated cleanup needs ($289 million).** For planning purposes, Ecology estimates we will need about $289 million to meet emerging needs over the next ten years for the 200 to 300 newly reported cleanup sites each year.

- **Range of project costs.** Estimated project costs over the next ten years range from $160,000 for Port of Anacortes' Shell Oil Tank Farm cleanup, to more than $130 million for 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 that are being conducted by local governments and TCP. However, this range does not encompass the entire cost estimate of large cleanups such as the Lower Duwamish Waterway, which will include multiple components and a combination of MTCA, federal, and other funds to complete.

The sites and projects identified in this report represent only a fraction of local government-owned, contaminated sites in Washington that are expected to need public funding in the future. Funding needs will also continue to expand as new sites are discovered.

2019–21 Biennium budget request for local government RAG funding

Ecology's budget request for the 2019–21 Biennium includes approximately $85 million to cover the state share of cleanup costs for 33 projects: 30 cleanup projects at locally owned sites, 2 additional statewide grant programs, and 1 broad project for associated grant management. See Tables 9A, 9B, and 9C and the Summary in Appendix B.

The RAG budget request is comprised of:

- Approximately $81 million for work at 30 of the 85 locally owned sites identified in this plan.
- $3 million for 2 statewide grant programs (independent remedial action grants and integrated planning grants).
- Approximately $1 million for associated grant management.

The RAG financing tables in Appendix B help put this budget request into context. See Tables 9A, 9B, 9C, and summary tables beginning on page 82 of this report:

- Washington state and local governments have a combined estimated need of $1.5 billion to conduct cleanups over the next ten years.
- State share of RAG projects is an estimated $781 million over that period.
- State share of RAG during the 2019–21 Biennium is an estimated $174 million.
- Ecology's RAG budget request of $85 million falls $89 million short of helping local governments address all of their estimated cleanup needs over the next two years.

Background: Working with local governments to identify the need

This section of the report was prepared by working in partnership with local governments that receive MTCA funds. For purposes of this report, "local government" means any political subdivision, regional government unit, district, or municipal or public corporation. This includes cities, towns, counties, ports, and brownfield development authorities

Local governments have a clear perspective of cleanup activities that directly affect their communities. By working with these stakeholders, we learn more about each community's needs and build stronger relationships with the invested parties that help conduct cleanups. When we coordinate with local governments on the RAG Program, we gain critical insight into their timelines, cleanup priorities, cost estimates, and technical issues.

Background: How the Remedial Action Grant Program works and what types of grants are available to local governments

Through Ecology, Washington state offers grants and loans to local governments to encourage and expedite cleanup activity. Grant dollars facilitate the cleanup and reuse of contaminated publicly owned lands, and lessen the cost impact to local taxpayers. Ecology generally requires local governments to match a portion of the grant funding.

In response to requests by local governments as well as by legislative mandate, we continue to take steps to make the existing grant process more transparent. As a result, we've expanded public involvement opportunities in the grant process by:

1. Soliciting project cleanup information from local governments for inclusion in the ten-year financing report;
2. Working closely with local governments to refine their needs as projects change;
3. Making updates to the project list; and
4. Publishing the project lists in the MTCA Ten-Year Financing Report.

Rules governing cleanup under MTCA

Ecology adopted three rules that guide TCP's investigation and cleanup of hazardous waste sites under MTCA:

1. Chapter 173-340 WAC, Model Toxics Control Act Cleanup Regulation (MTCA rule)
2. Chapter 173-204 WAC, Sediment Management Standards (SMS rule)
3. Chapter 173-322A WAC, Remedial Action Grants and Loans (RAG rule)[18]

As a result of the 2013 legislative directives in MTCA, Ecology established new funding priorities, made several adjustments to the RAG Program, and repealed/replaced the previous RAG rule with Chapter 173-322A WAC. The RAG rule does the following:

- Allows Ecology to enter into extended grant agreements with local governments for projects that exceed $20 million and occur over multiple budget cycles. Such projects would receive priority for funds.

- Provides integrated planning grants to local governments for studies that facilitate the cleanup and reuse of contaminated sites.

[18] Ecology repealed Chapter 173-322 WAC on August 29, 2014, and adopted Chapter 173-322A WAC, Remedial Action Grants and Loans. The modified rule became effective on September 29, 2014.

- Eliminates methamphetamine lab site assessment and cleanup grants and derelict vessel remedial action grants as separate types of grants.

- Provides area-wide groundwater remedial action grants without requiring local governments to be a potentially liable person or seek reimbursement of grant funds from such persons.

- Allows Ecology to enter into grant agreements with local governments before they acquire or secure access to a property, provided they include a schedule for obtaining access.

- Provides periodic reimbursement of the costs of independent remedial actions.

- Implements cash management principles such as allocating funds for a two-year scope of work and requiring that local governments substantially spend funds before receiving a new grant.

- Makes other appropriate changes to the application information requirements governing remedial action grants and loans (such as grant match requirements).

- Streamlines existing requirements, improves rule clarity, and improves consistency with other requirements in the chapter or with other state and federal laws and rules (such as coordinating with agency-wide efforts to streamline and standardize grant processes).

Types of RAG grants

Ecology's RAG Program provides multiple funding opportunities to local governments:

1. *Extended Grant Agreements* are given to local governments for sites where the cleanup project exceeds $20 million and occurs over multiple budget cycles. These enable local governments to commit to long-term cleanups without tying up large amounts of grant funds. As of September 2018, Ecology does not have the projected revenue to enter into extended agreements. When we do, these projects will receive the highest funding priority each biennium during the state's budget process.

2. *Oversight Remedial Action Grants* provide funding to local governments that investigate and clean up hazardous waste sites under the supervision of Ecology or the U.S. Environmental Protection Agency under an order or decree.

3. *Independent Remedial Action Grants* (Voluntary Cleanup Program) are provided to local governments that voluntarily take on cleanup actions without Ecology's oversight or approval.

4. *Area-wide Groundwater Remedial Action Grants* are given to local governments conducting an environmental investigation in an area that may have multiple areas of contamination in a neighborhood. We provide these grants without requiring the local government to be a potentially liable party or seek reimbursement of grant funds from such persons. As of September 2018, Ecology has not awarded any area-wide grants.

5. *Safe Drinking Water Action Grants* help local governments, or local governments applying on behalf of a purveyor, provide safe drinking water to areas contaminated by, or threatened by contamination from, hazardous waste sites.

6. *Integrated Planning Grants* encourage and expedite the cleanup of brownfields properties. They provide funding to local governments to conduct assessments of brownfields sites, and develop integrated project plans for their cleanup and adaptive reuse.

7. *Site Assessment Grants* (commonly referred to as *Site Hazard Assessment Grants or SHAs*) were formally given to local health departments and districts to conduct initial investigations and hazard assessments on behalf of Ecology. The assessments would confirm the presence, then type and level of contamination at a site, which would then be listed on Ecology's Hazardous Sites List. When the 2017–19 Biennium capital budget was delayed until ultimately enacted in January 2018, we permanently and fully transitioned the Site Assessment program from the local health districts back to Ecology. The funding variability and uncertainty of the Site Assessment grants during the 2015–17 and 2017–19 biennia had left many local health districts with smaller budgets than planned. As a result, they had cut or reassigned staff previously funded by these grants. Today, all initial investigations are conducted by Ecology or the Pollution Liability Insurance Agency (PLIA). PLIA only conducts initial investigations of suspected heating oil sites. All site hazard assessments are conducted by Ecology.

Ranking projects for RAG Program funding

Eligible projects included in the 2019–21 budget submittal were ranked depending on their phase of cleanup under the MTCA regulatory process (an indication of a project's readiness to proceed) and direction in the enacted 2015–17 Capital Budget (2EHB 1115, Section 7038), as well as the additional criteria outlined in Chapter 3 of this report. This approach directly responds to legislative direction focusing limited resources on projects that are acutely needed, ready to proceed, cost efficient, and geographically distributed. The Section 7038 criteria mirror some, but not all, priority criteria described in WAC 173-322A-210. See Appendix C for the complete list of criteria used to prioritize projects for the 2018 Ten-Year Financing Plan.

Newer projects may take priority over others depending on a project's risk, land re-use potential, or ability to proceed with cleanup.

For Oversight Remedial Action Grants, Ecology further prioritizes based on the factors specified in WAC 173-322A-320(3):

(a) The threat posed by the hazardous waste site to human health and the environment;
(b) Whether the applicant is a prospective purchaser of a brownfield property within a redevelopment opportunity zone;
(c) The land reuse potential of the hazardous waste site;
(d) Whether the hazardous waste site is located within a highly impacted community;
(e) The readiness of the applicant to start and complete the work to be funded by the grant and the performance of the applicant under prior grant agreements;
(f) The ability of the grant to expedite the cleanup of the hazardous waste site;
(g) The ability of the grant to leverage other public or private funding for the cleanup and reuse of the hazardous waste site;
(h) The distribution of grants throughout the state and to various types and sizes of local governments; and
(i) Other factors as determined and published by the department.

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Chapter 5: Estimated Funding Needs for State-Directed Work over the Next Ten Years

In addition to supporting sites under the purview of local governments, the MTCA accounts fund remedial actions for:

1) State-directed investigations and cleanup at orphaned or abandoned properties, or those that have non-compliant owners;
2) State cost-share at federal Superfund sites where EPA is performing the cleanup action (e.g., Ecology's 10 percent cost-share of EPA's required cleanup costs);
3) Emergency removals and cleanup actions; and
4) Actions to support investigations and cleanup of multiple sites across the state, such as long-term operation, maintenance and investments to protect cleanup remedies.

Tables 10A and 10B in Appendix B identify projects that need state-directed remedial action activities and their estimated costs over the next ten years.

Orphaned & abandoned sites / Sites with non-compliant owners / Emergency needs

Orphaned and abandoned sites are contaminated properties that have been abandoned, have no identifiable responsible party, or are beyond the technical or financial scope of local governments. Other state-directed sites funded by MTCA accounts include those with non-compliant owners, or sites with emergency needs. Unless these sites are cleaned up, they will continue to pose threats to public health, the environment, groundwater, and fish and wildlife resources.

Developing the state-directed list

Using best available information, Ecology developed a project list and cost estimates for state-directed cleanup investments that could reasonably undergo remedial actions over the next ten years. This list also includes projects that protect investments in cleanup remedies, such as installing an *in situ* treatment system to capture residual soil contamination. Another example is at an EPA Superfund site, where the state pays 10 percent of construction costs and 100 percent of long-term operation and maintenance.

Ranking state-directed projects for MTCA funding

The 31 projects included in Ecology's 2019–21 Biennium Budget submittal were ranked depending on their phase of cleanup under the MTCA regulatory process (an indication of a project's readiness to proceed), direction in the enacted 2015–17 Capital Budget (2EHB 1115, Section 7038). This approach directly responds to legislative direction to focus limited resources on projects that are acutely needed, ready to proceed, cost efficient, and geographically distributed. TCP incorporates risk to human health and the environment, land re-use potential, as well as other factors, including:

- Information learned about the site during discussions with local governments;
- Hazard ranking of contaminated sites;
- Length of time the site has been waiting to be cleaned up;
- Contaminated site priority of local governments;
- Readiness of local government or private owner to proceed with a cleanup;
- Availability of leveraged funds, such as insurance policies, other grants, and other funding sources;
- Economic factors such as potential for redevelopment, job creation, or public benefit; and
- Whether or not the project affects a highly impacted community.

New sites will require MTCA funding in the future

Ecology expects that new hazardous sites will be reported. Since 2000, between 200 and 300 new contaminated sites have been discovered and reported to Ecology. Many of these sites are historical contamination that are discovered beginning as a voluntarily cleanup. Some of the sites will require state resources through the MTCA accounts to complete their cleanup. As more information about these sites becomes known, they may need to move up in priority for cleanup actions, funding, and staff resources.

How much funding do we estimate will be needed for state-directed cleanups?

Ecology conducts state-directed cleanups using MTCA accounts for those sites that urgently need action to protect the environment and public. The state-directed tables in Appendix B (Tables 10A-EW, 10A-PSI, and 10A-PICR, and 10B – Remaining Need) identify 48 state-directed projects where the state is leading the projects. Information was developed based on a reasonable expectation of the work Ecology could do in ten years with projected funding and staffing resources. Remediation often takes several years, which means Ecology will not be able to complete every site's cleanup actions within a biennium.

Ten-Year funding estimates for state-directed work

- **State-directed work ($237 million).** Ecology estimates we will require a total of $237 million for 48 state-directed projects over the next ten years. We based cleanup costs estimates on input from Ecology cleanup project managers. Total project costs over the next ten years include approximately:

    - $37 million for 13 sites in the Puget Sound Initiative (identified in Ecology's 2019–21 budget request);
    - $15 million for 7 sites in the Eastern Washington Initiative (identified in Ecology's 2019–21 budget request);
    - $16 million to support 11 sites through Protect Investments in Cleanup Remedies (identified in Ecology's 2019–21 budget request);
    - $21 million for 17 sites not included in the 2019–21 budget request; and
    - An estimated $148 million in placeholders for assumed future need.

- **Placeholders for anticipated cleanup needs ($148 million).** The state-directed project lists include funding placeholders of approximately $148 million over the next ten years. New cleanup sites are reported to Ecology every year and some will require state-directed cleanup investments.

- **Range of project costs**. Estimated cleanup costs for state-directed cleanups range from $30,000 for the Aladdin Plating work in Tacoma, to $17 million for Port of Everett's lowland areas and upland cleanups. The range illustrates the diversity of size and complexity for cleanups being conducted by the Toxics Cleanup Program, but does not

encompass the entire cost estimate of large cleanups (such as the Lower Duwamish Waterway) that will include multiple components and a combination of MTCA, federal, and other funds to complete.

The state-directed cleanup work identified in this report represents only a fraction of the contaminated sites in Washington expected to need state funding in the future. Funding needs will also continue to expand as new contamination is discovered or reported.

2019–21 Biennium budget request

Ecology's budget request for the 2019–21 Biennium includes $32 million to conduct state-directed work for 31 activities categorized by three components:

- Approximately $12 million for 7 orphaned and abandoned sites in Eastern Washington through the *Eastern Washington Clean Sites Initiative*.

- Approximately $10 million for 13 orphaned and abandoned sites in the Puget Sound region through the *Clean Up Toxics Sites-Puget Sound Initiative*.

- Approximately $10 million for 11 statewide projects designed to support long-term operation, maintenance, and investments through *Protect Investments in Cleanup Remedies*.

The state-directed financing tables in Appendix B help put this budget request into context. See Tables 10A and 10B and summary tables beginning on page 89 of this report:

- Estimated cost for Washington to conduct state-directed cleanup work is $237 million over the next ten years.
- Estimated need to conduct this work during the 2019–21 Biennium is $37 million.
- Ecology's budget request for state-directed work during the 2019–21 Biennium is $32 million, which is $5 million short of actual need over the next two years.

Chapter 6:
Estimated Funding Needed for Large Multi-Biennia Cleanup Project over the Next Ten Years

RCW 70.105D.030 (5)(d) requires Ecology to provide separate budget estimates for large, multi-biennia cleanup projects that exceed $10 million. This distinction is important because these cleanups create a huge demand on agency resources, and impact Washington's ability to address other cleanup projects.

Ecology has identified 133 projects that could reasonably undergo remedial actions over the next ten years (Tables 9 and 10 in Appendix B). Included in these lists are 17 large projects (shared by 22 recipients) that are expected to exceed $10 million in total estimated project costs (Figure 5 below, Table 11 in Appendix B).

As the map and table indicate, two of these complex projects have more than one cleanup happening at the same location (Lower Duwamish Waterway and Harbor Island East Waterway in Seattle). Other major cleanups line our waterways from Port Angeles to the ports of Bellingham, Everett, Seattle, Tacoma, Olympia, and Longview. Large cleanup sites can also be found at landfills, transfer stations, and former lumber mills in Anacortes, Yakima, Bellingham, and Seattle.

- **Shared responsibility for large projects ($819 million).** Ecology and local governments identified 17 cleanup sites with estimated costs greater than $10 million. We estimate that approximately $819 million will be needed for these projects over the next ten years.

- **State's share of large project costs ($430 million).** Ecology estimates that we will need at least $430 million to cover the state share of these cleanup costs. Local agencies will be responsible for the remaining amount.

- **Range of large project costs.** Estimated project costs range from $10 million for the Ephrata Landfill in Grant County, to more than $191 million for multiple projects related to the Lower Duwamish Waterway Superfund site (LDW) in Seattle. The $191 million figure includes LDW projects identified by King County, City of Seattle, Seattle City Light, Port of Seattle, and Ecology.

The majority of the estimated costs summarized in Table 11 are eligible for Remedial Action Grants. However, they also create a significant impact on state-directed dollars. To break down these numbers:

- The $10 million project list is comprised of 22 recipients sharing 17 projects.

- 19 of the 22 recipients have RAG projects; the other 3 have state-directed projects.

- 16 recipients have projects that appear on Ecology's 2019–21 Biennium budget request (under the RAG, Eastern Washington, and PSI budget requests). (Table 9A)

- In terms of estimated total cleanup costs, the forecasted needs for the 19 recipients' projects represent more than 51% of the RAG needs identified in Table 9B.

- When we look at Ecology's 2019—21 Biennium budget requests for Remedial Action Grants, Puget Sound Initiative, Eastern Washington, and Protect Investments in Cleanup Remedies projects, these $10 million projects make up 63% of our cleanup budget request:

    - $74 million requested for these large projects in Ecology's 2019–21 Biennium budget request to the Governor.
    - $117 million comprises Ecology's total budget request for RAG, PSI, EW, and PICR projects.
    - As a result, large $10M projects comprise 63% of Ecology's total cleanup budget request for the 2019–21 Biennium.

It's also important to note that the 17 projects on this list include many, but not all, of the large multi-biennia cleanup projects in Washington. Not reflected in Figure 5 or Table 11 are many more large cleanups that private parties or the federal government conduct, and that do not require significant state or local funding. Such sites include the Asarco cleanup actions in Tacoma, cleanup of the upper Columbia River sediments, Hanford Nuclear Reservation, and Holden Mine in Eastern Washington.

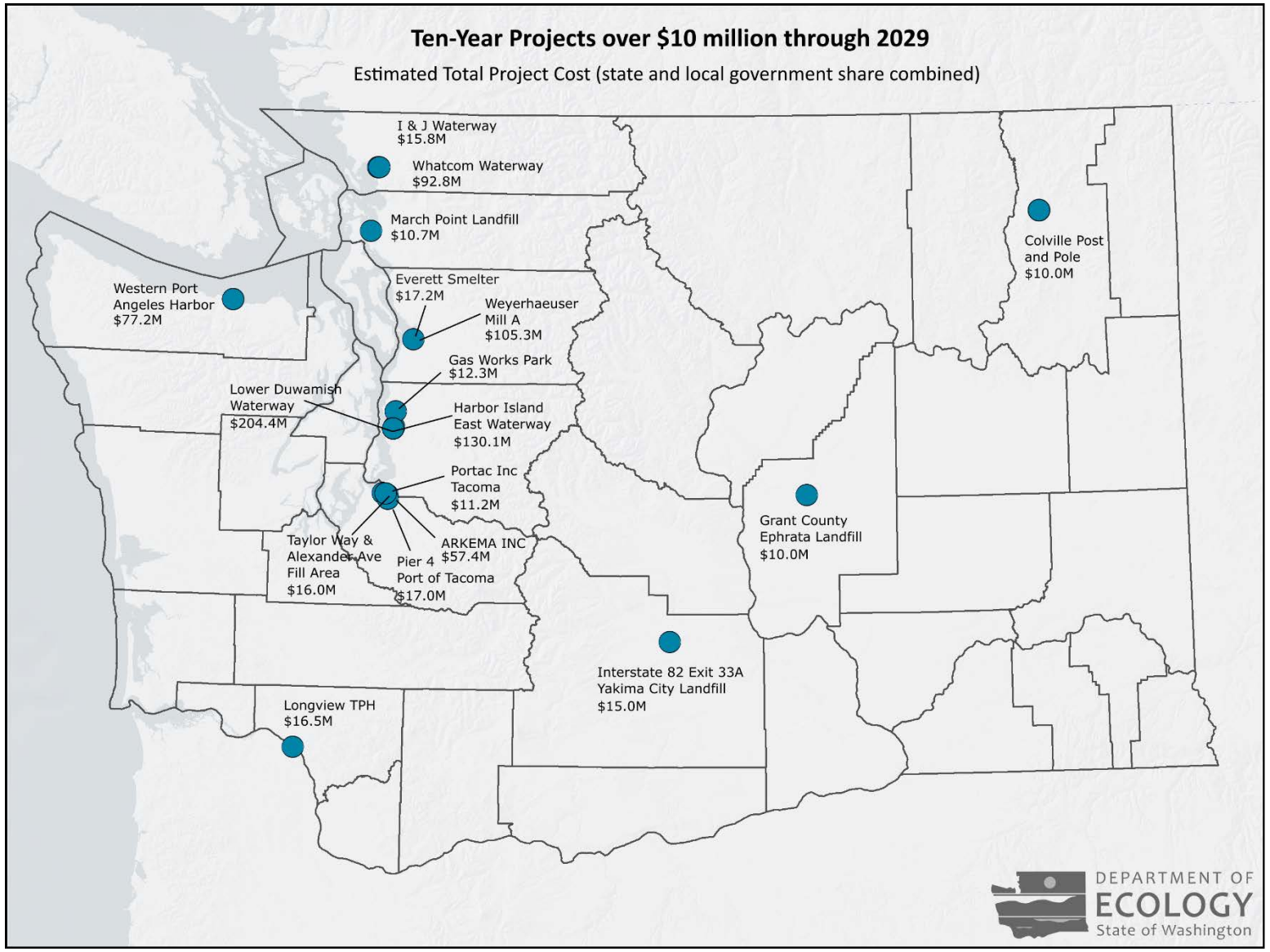

Figure 5: Ten-year projects over $10 million through 2027-29 Biennium (state and local government share combined)

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Conclusion

Since MTCA was adopted into law 30 years ago, the Department of Ecology has identified 12,900-plus hazardous sites in Washington that have confirmed or suspected contamination. Together with our cleanup partners, we are making substantial progress to clean up and remove the threats posed by these sites. As of June 30, 2018, about 7,000 sites have been cleaned up or determined to require no further action, and cleanup actions are completed at roughly 200 other sites, which are being monitored to ensure their remedies are working.

But more work remains and the number of sites continues to grow. More than 5,700 sites still need further investigation and cleanup; roughly 1,800 of these sites have not yet begun preliminary work. Washington's "universe" of sites continues to expand as 200 and 300 new sites are discovered and reported to Ecology each year.

The cleanup work outlined in this report requires significant public funding since more than 2,700 of the 12,900-plus sites in Washington (approximately 21%) are publicly owned. To help protect public health and the environment, privately owned orphaned and abandoned sites will also require public funding, as well as those with non-compliant owners or emergency cleanup needs.

To address the growing number of sites, we continue to find ways to accelerate the pace of cleanups, like developing model remedies, updating technical guidance, and conducting in-house training. Similarly, the MTCA Ten-Year Financing Report helps us prioritize and speed up cleanup efforts. By ranking projects based on criteria such as readiness to proceed, construction stage, and environmental justice considerations, and by identifying the full scope of financing needed to address the remaining sites, this report helps Ecology and local governments plan so cleanups can get underway faster.

Chapters 4 and 5 outline the cost estimates to conduct these cleanups over the next ten years. Ecology estimates that the state and local governments will require $1.8 billion in combined state and local funds to perform investigations and cleanup at contaminated sites in Washington over the next decade. Figures 6 through 9 summarize these funding needs by county and legislative district. It is important to note that the sites and projects identified in this report represent only a

fraction of local government-owned or orphaned and abandoned sites that are expected to need public funding in the future, with many more sites yet to be discovered and reported.[19]

For cleanup projects that fall under local governments' purview, projected state funding needs for the 2019–21 Biennium exceed the amounts likely to be available for Remedial Action Grants. For example, Ecology's 2019–21 Biennium budget request includes $85 million to start or continue the next phase of projects, and begin projects for the state share of the RAG Program. Local governments identified more than $211 million in state share that they would need during this two year period. We based this estimate on information local governments reported to Ecology at the time of this report. Ecology does not have the resources to review each cost estimate and project schedule submitted by local governments. However, the disparity between the local government self-reported need and state funding resources indicates there will be project delays as Ecology works with local governments to adjust project schedules that align with funding availability.

Washington's projected state and local funding needs (across all Ecology cleanup programs) have increased since Ecology prepared the first ten-year financing report was prepared in 2008. In the 2008 report, for instance, Ecology identified $1.2 billion in cleanup needs, which is approximately $600 million less than the 2018 cost projections. Figure 6 illustrates this trend by comparing the projected ten-year total cleanup costs from Ecology's MTCA Ten-Year Financing Reports for 2010, 2012, 2014, 2016, and 2018.

History and experience show that cleanup needs constantly evolve as investigations are completed and new sites are identified. Ecology will continue to refine these cost estimates (for both public and state-directed projects) for the MTCA Ten-Year Financing Reports that are produced every two years, which are companion pieces to Ecology's MTCA Biennial Reports that evaluate STCA, LTCA, and ELSA expenditures during the previous biennium. Ecology will continue to use expenditure information to help update subsequent ten-year forecasts.

It remains critical that stable financing be available for local governments that rely on public funding to complete their cleanups. Capital projects require stability. Unpredictable public funding can cause projects to be delayed or removed from consideration entirely, or negatively impact local government's ability to leverage cleanup funding from other sources. Stable public funding from the state, however, helps ensure that projects are completed as envisioned and that

[19] Funding estimates in this report do not include Washington's entire statewide cleanup costs, most of which are funded by private parties and the federal government. Privately and federally funded cleanup actions include a wide range of projects that reflect various levels of Ecology involvement and oversight. For example, most privately funded cleanups are performed with review under the Voluntary Cleanup Program, with fees and Ecology's services paid for by private parties. Other large, privately funded projects are being conducted pursuant to orders or consent decrees, which do not require public funding and are therefore not identified in this report.

new projects can begin. Stable funding not only keeps cleanups moving, it provides the necessary progress that keeps investors interested in redeveloping these sites.

As long as MTCA is a principal source of capital cleanup funding, the state must establish a plan to sustain Remedial Action Grants and state-directed cleanup investments each biennium to provide funding certainty and meaningful project investment. Ecology will continue working with the Governor, the Legislature, local governments, and stakeholders to determine what level of funding is needed to provide stability over the long-term.

Remedial actions yield exceptional benefits for Washington's seven million residents. They help protect our communities' health, restore damaged shorelines, create new recreational opportunities, and spur economic development. Continued public funding will prove essential as state, local, and federal agencies, private organizations, and individuals work together to achieve these benefits. Cleanup needs will likely always exceed available public funding, but an understanding of the scope of those cleanups—and their beneficial impacts on Washington State—will help ensure we use public funds as effectively as possible.

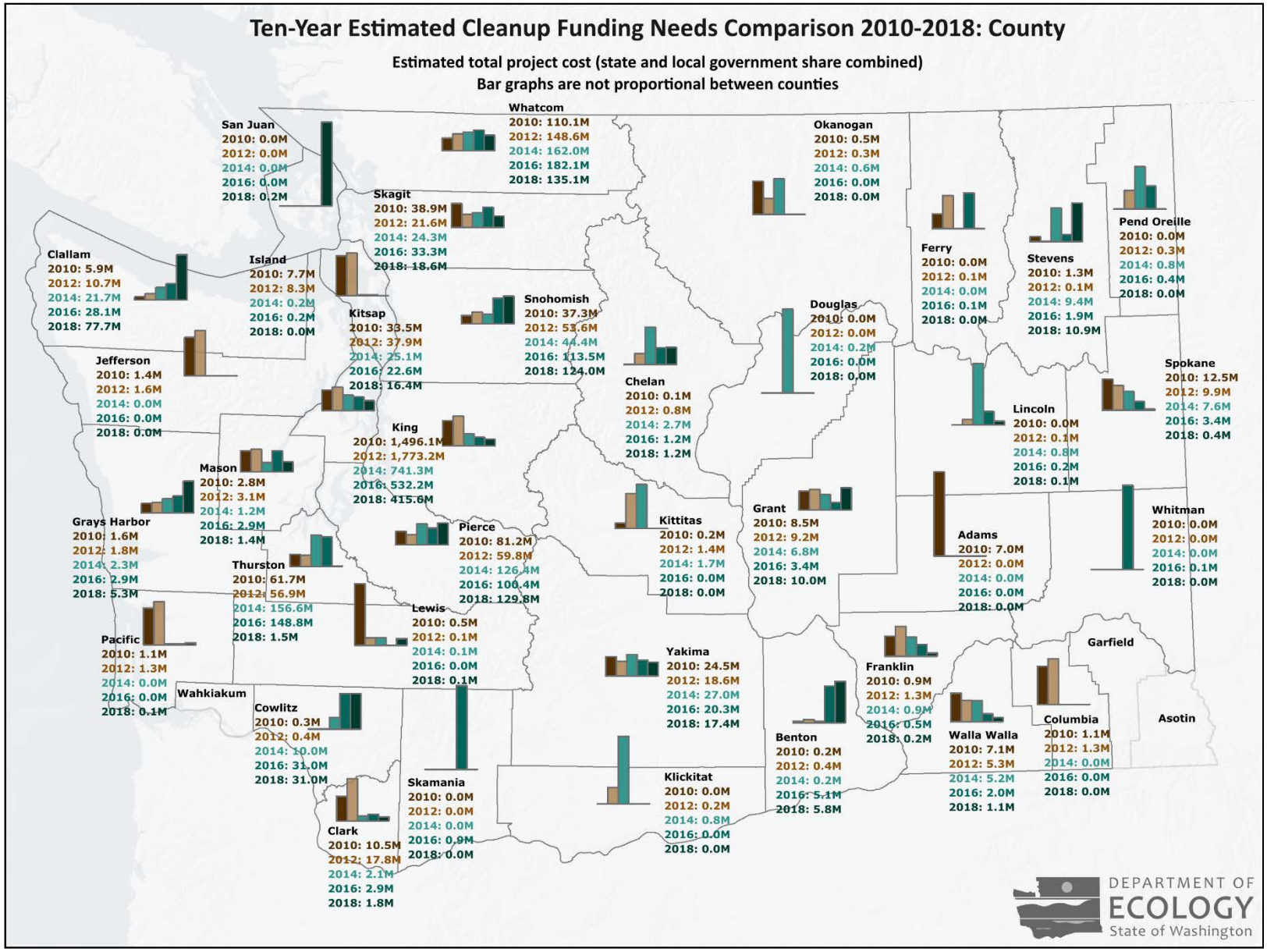

Figure 6: Ten-year estimated cleanup funding needs comparison 2010, 2012, 2014, 2016, and 2018: County. Map represents the earliest collection of raw data for this report and may yield discrepancies when compared to the Financing Tables. Refer to Tables 9A and 9B for the most refined site-specific data.

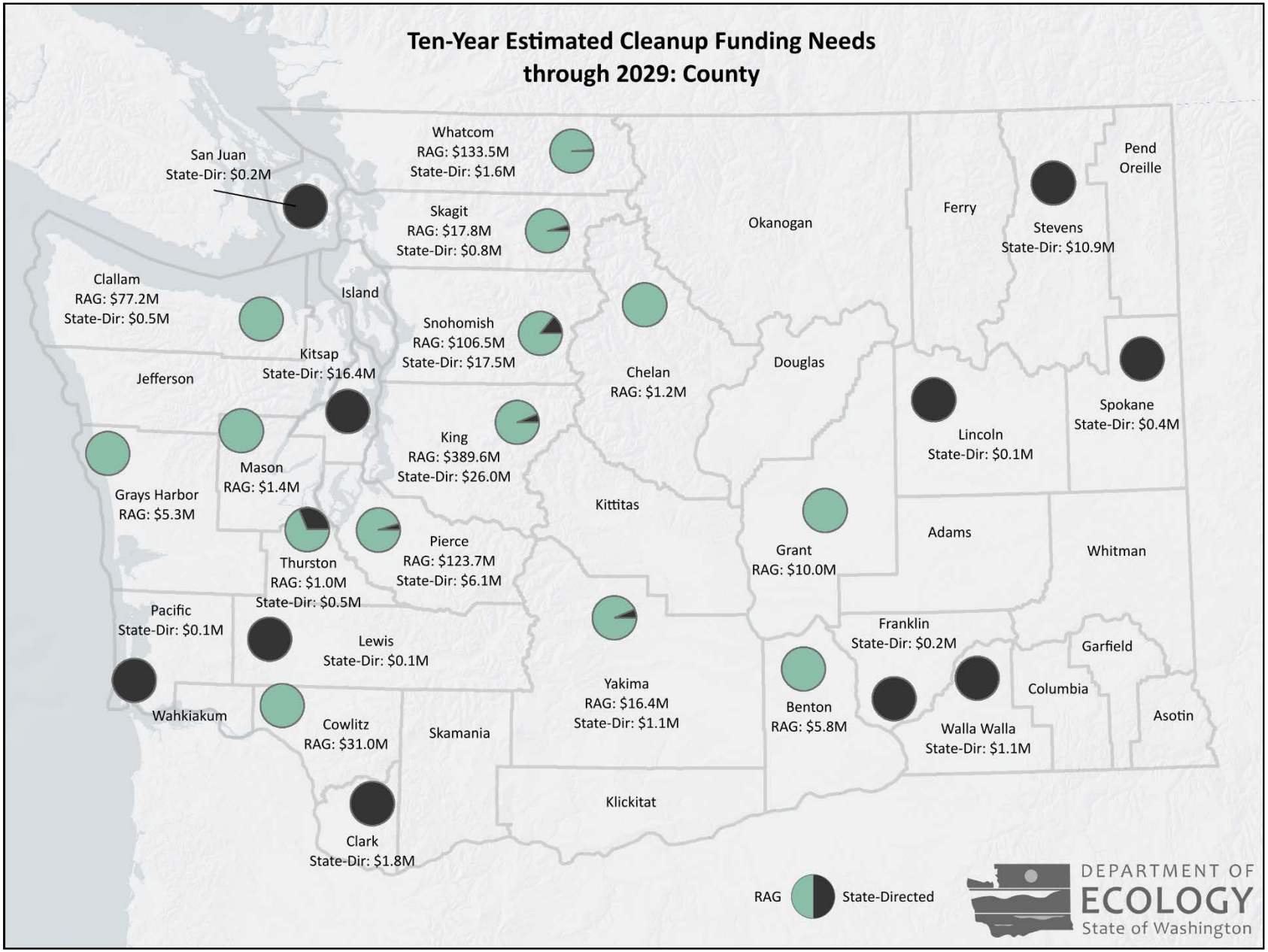

Figure 7: Ten-year estimated cleanup funding needs through 2027-29 Biennium: County

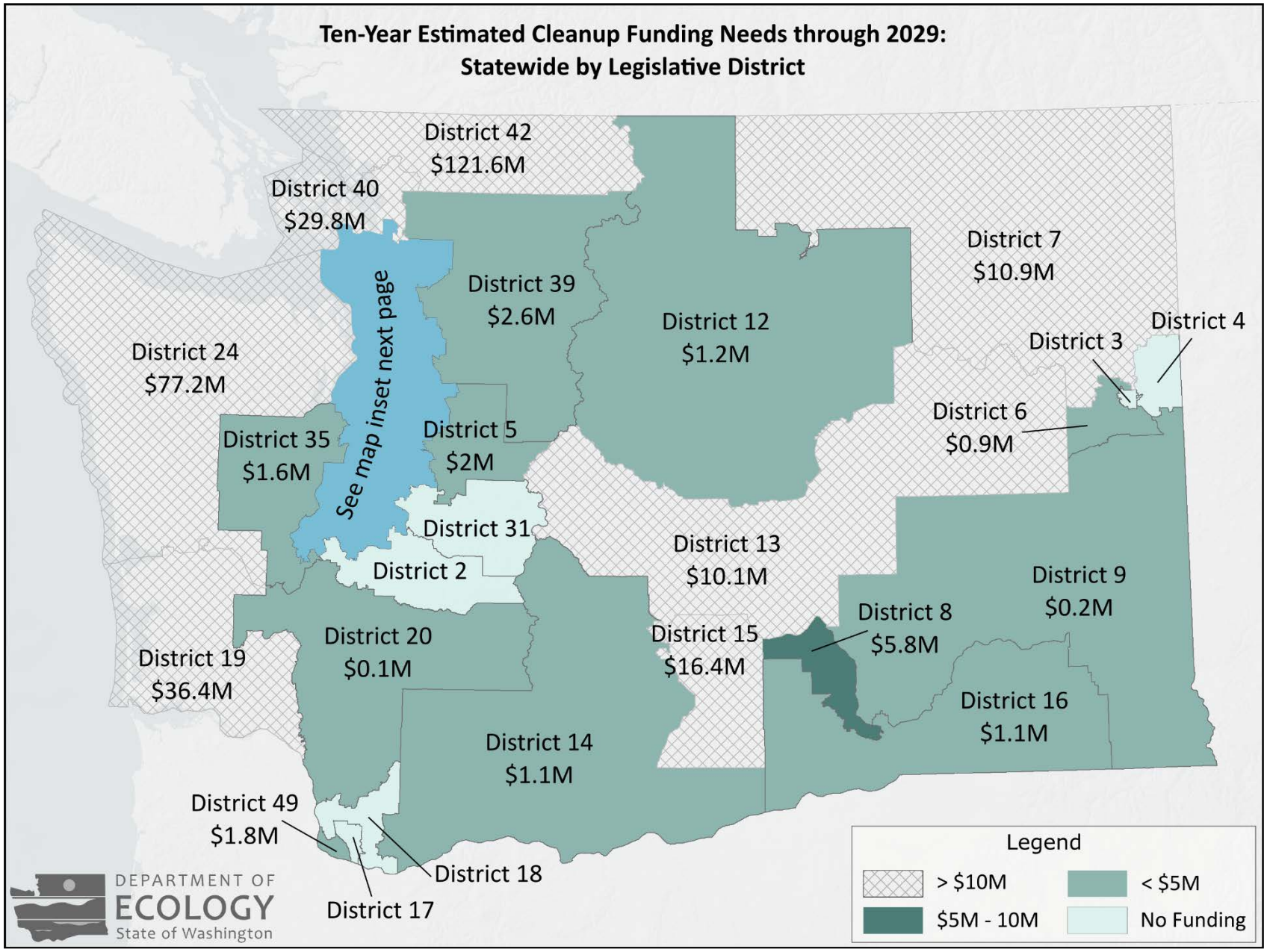

Figure 8: Ten-year estimated cleanup funding needs through 2027-29 Biennium: Legislative District.
Note: Map does not depict project funding on statewide or regional projects.

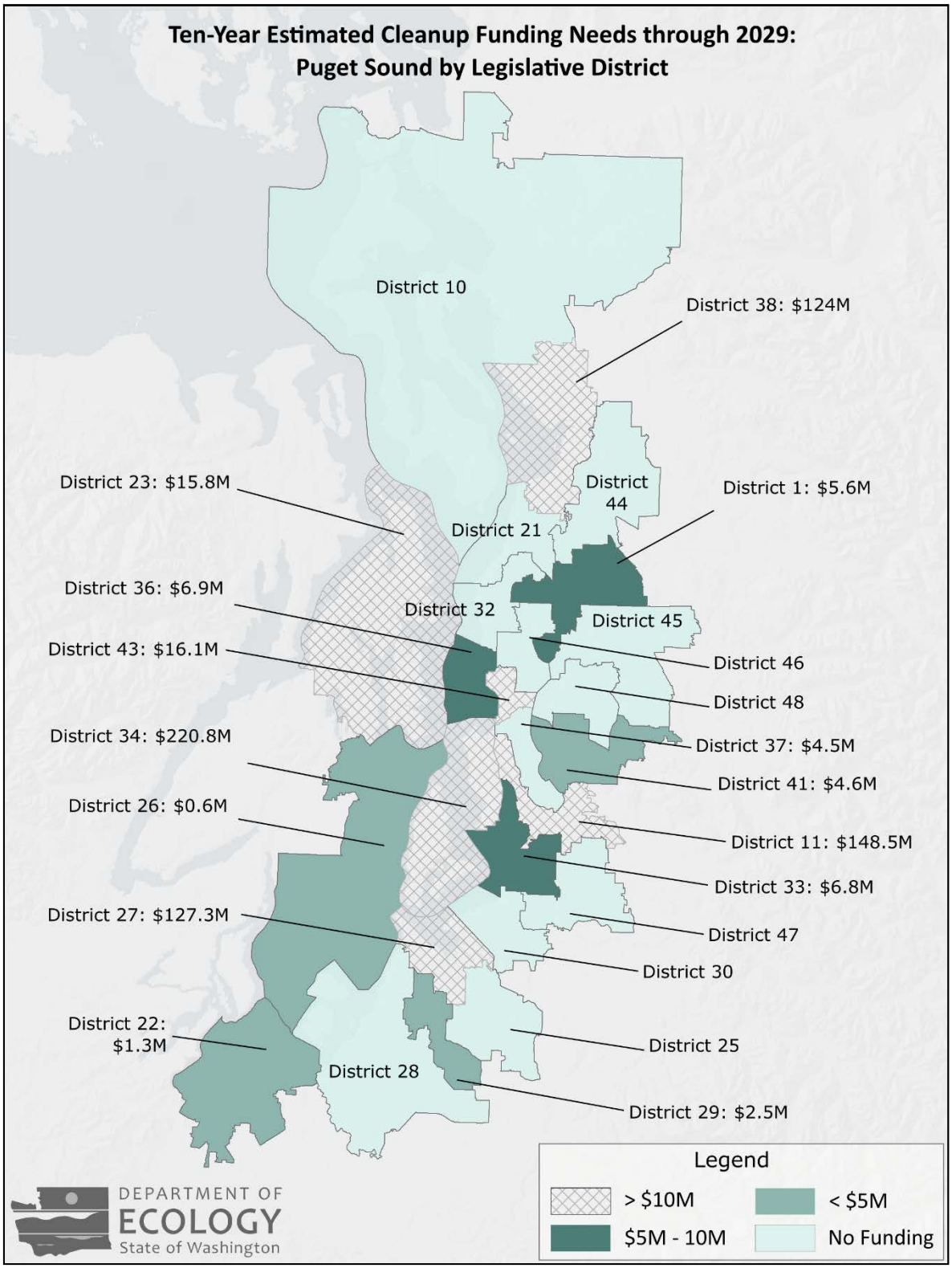

Figure 9: Ten-year estimated cleanup funding needs through 2027-29 Biennium: Puget Sound Legislative Districts (inset map). Note: Map does not depict project funding on statewide or regional projects.

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References & Resources

Table 8: Ecology references and resources relevant to this report.

Resource	Description	Link
ACCOUNTING AND BUDGET RESOURCES		
AFRS	Ecology's internal Agency Financial Reporting System (AFRS)	internal
Ecology's Budget & Strategic Plan	Ecology's webpage that explains how our budget works.	http://www.ecology.wa.gov/About-us/How-we-operate/Budget-strategic-planning
Ecology's Budget & Program Overview	Published every two years. Provides an overview of Ecology's budget and agency priorities. Gives a sense of perspective about our activities and a summary of the budget that supports them. Biennium 2017–19 published May 2018 (Publication No. 18-01-004).	https://fortress.wa.gov/ecy/publications/SummaryPages/1801004.html
Ecology's MTCA Cash Management Plan	Ecology's plan that was developed in response to requests in Section 7038 of 2015–17 Biennium Capital Budget.	Internal document
Ecology's MTCA Biennial Report of Expenditures 2017	Published every two years. Provides an overview of expenditures, successes, and results of work funded by the three MTCA accounts: STCA, LTCA, and ELSA. Biennium 2015–17 published July 2018 (Publication No. 17-09-055.	https://fortress.wa.gov/ecy/publications/SummaryPages/1709055.html
Washington State Fiscal Information	Interactive fiscal reports, project maps, budget bills, and documents.	www.fiscal.wa.gov
EAGL	Ecology's Administration of Grants and Loans system, where local governments and community groups can apply for funding opportunities, including grants for cleanup and safe drinking water.	**Overview:** https://ecology.wa.gov/About-us/How-we-operate/Grants-loans **SAW log-in:** https://secureaccess.wa.gov/ecy/eagl/
Washington State Department of Revenue (DOR)	Department of Revenue Non-General Fund Tax Sources – Environmental/Habitat Taxes, June 2018 Revenue Forecast	internal link

Resource	Description	Link
ACCOUNTING AND BUDGET RESOURCES (CONTINUED)		
Report to the Legislature: Washington State Model Toxics Control Accounts, as required by Chapter 35, Laws of 2015, 1st Special Session	Produced by the Office of Financial Management (OFM), Budget Division. Explains the method and outcome of OFM's analysis and explores options to stabilize the use and sources of the MTCA accounts (November 2016).	https://www.ofm.wa.gov/sites/default/files/public/legacy/reports/MTCA_ReportNov2016.pdf
ENVIRONMENTAL DATA		
EIM and MyEIM	Environmental Information Management System (EIM) and MyEIM are tools that contain environmental data for air, water, soil, sediment, aquatic animals, and plants used for cleaning up sites. Data are collected by Ecology and our partners such as local governments.	**EIM:** https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database **MyEIM:** https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database/Using-MyEIM
CLARC	Cleanup Levels and Risk Calculation spreadsheet containing information about many chemicals for establishing cleanup levels that comply with MTCA regulations.	https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx
PUBLIC INVOLVEMENT		
Ecology's website	Learn how Ecology's ten programs are working to clean up hazardous waste in your neighborhood, treat stormwater, recycle electronic equipment, protect your air and shorelines, and more.	www.ecology.wa.gov
Public Involvement Listing	An electronic listing of upcoming public meetings for all Ecology activities.	https://ecology.wa.gov/Events/Search/Listing
Grants and loans	List of Ecology's grants and loans, including details about the application process, eligibility, types of projects, timelines, and requirements.	https://ecology.wa.gov/About-us/How-we-operate/Grants-loans/Find-a-grant-or-loan/

Resource	Description	Link
PUBLIC INVOLVEMENT (CONTINUED)		
Site Register	An electronic newsletter issued by Ecology that provides information on cleanups and announces public comment opportunities.	https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Site-Register-lists-and-data **Subscribe:** http://listserv.ecology.wa.gov/scripts/wa-ECOLOGY.exe?SUBED1=SITEREGISTER&A=1
eComments	A tool for submitting your comments online. Watch for opportunities to comment in the *Site Register* and Public Involvement Listing.	https://ecology.wa.gov/Events/Search/Listing
Mailing lists (electronic and hardcopy)	Ecology's mailing lists of interested parties, organizations, and residents living near a cleanup site. We use these lists to distribute information and notify about public meetings and opportunities to comment. Contact your regional office to get on the lists.	https://ecology.wa.gov/About-us/Get-to-know-us/Contact-us
What's in My Neighborhood	An interactive map of Ecology's 12,900-plus contaminated sites in our ISIS database.	https://fortress.wa.gov/ecy/neighborhood/
TECHNICAL RESOURCES AND GUIDANCE		
Cleanup Site Search (website)	Database of 12,900-plus contaminated sites known to Ecology that draws from the Integrated Site Information System (ISIS) database.	https://fortress.wa.gov/ecy/gsp/SiteSearchPage.aspx
TCP Web Reporting portal	Selection of reports and datasets you can tailor for quick data retrieval. Draws from two of Ecology's internal environmental databases: Integrated Site Information System (ISIS) and Underground Storage Tank (UST) System.	https://fortress.wa.gov/ecy/tcpwebreporting/
Washington State Open Data Initiative	The State of Washington maintains an open data portal (https://data.wa.gov/) to which Ecology has published cleanup data sets in map, table, and graph visualizations.	https://data.wa.gov/Natural-Resources-Environment/Cleanup-Site-Map/e239-pe5z

Resource	Description	Link
TECHNICAL RESOURCES AND GUIDANCE (CONTINUED)		
Toxics Cleanup Program's (TCP's) policies and guidance	A consolidated (but not exhaustive) list of TCP's policies, procedures, implementation memos, and major guidance documents for cleaning up hazardous sites and meeting the requirements of MTCA.	https://ecology.wa.gov/Regulations-Permits/Plans-policies/Toxics-cleanup-policies
TCP's Legislative reports	Find past reports of the: • MTCA Ten-Year Financing Report • MTCA Biennial Reports of Expenditures • Cleanup Settlement Account (CSA) • 2016 Model Remedies Report.	https://ecology.wa.gov/About-us/Get-to-know-us/Our-Programs/Toxics-Cleanup/TCP-Legislative-reports
TCP publications	Focus sheets, frequently asked questions, guidance documents, and technical reports that describe cleanup sites across the state.	https://fortress.wa.gov/ecy/publications/UIPages/PublicationList.aspx?IndexTypeName=Program&NameValue=Toxics+Cleanup&DocumentTypeName=Publication
EJScreen	EPA's environmental justice mapping and screening tool. It's based on nationally consistent data and an approach that combines environmental and demographic indicators in maps and reports.	https://www.epa.gov/ejscreen
Economic Vitality and Environmental Cleanup in Washington State: Qualitative and Quantitative Case Study Ecology Publication No. 10-09-046	Case studies from 2010 that examine the broader benefits of cleanup and redevelopment of four environmentally impaired properties: 1) Pacific Wood Treating (PWT) site in Ridgefield, 2) Thea Foss Waterway in Tacoma, 3) Waterfront District in Bellingham, and 4) Palouse Producers property in Palouse.	https://fortress.wa.gov/ecy/publications/SummaryPages/1009046.html
Yard Cleanup Program	Ecology's program that uses a large part of the Asarco settlement to sample and replace soil in residential yards that lie within the Tacoma Smelter Plume.	https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-sites/Toxic-cleanup-sites/Tacoma-smelter/Yard-cleanup-program
Pollution Liability Insurance Program (PLIA)	A Washington state agency that helps owners and operators meet financial responsibility and environmental cleanup requirements for underground storage tanks.	www.plia.wa.gov

Resource	Description	Link
TECHNICAL RESOURCES AND GUIDANCE (CONTINUED)		
Spills Program	An Ecology program that focuses on preventing oil spills to water and land, and planning for and delivering a rapid, aggressive, and well-coordinated response.	https://ecology.wa.gov/Spills-Cleanup/Spills **Report a spill:** https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue/Report-a-spill
Affordable Housing Advisory Board (AHAB)	The principal advisory group to the Washington State Department of Commerce on housing, housing-related issues, and the five-year housing advisory plan. AHAB has 22 members representing a variety of housing interests around the state.	https://www.commerce.wa.gov/about-us/boards-and-commissions/affordable-housing-advisory-board/
Healthy Housing Remediation: 2018 Results and Recommendations	A report to the Legislature. Provides initial results from Ecology and Commerce on developing a program to assist with investigation and cleanup of contamination for affordable housing development. Publication No. 18-09-205 (October 2018).	https://fortress.wa.gov/ecy/publications/SummaryPages/1809205.html
SOURCES FOR CRITERIA USED TO PRIORITIZE PROJECTS IN THIS REPORT		
2015–17 Biennium Capital Budget (2EHB 1115), Chapter 3, Laws of 2015 3rd Special Session, Section 7038	From which Ecology developed an internal document: MTCA cash management plan (Section 7038 of 2015–17 Biennium Capital Budget)	Internal document
Remedial Action Grant rule	Known as the RAG Rule, WAC 173-322A-210.	http://apps.leg.wa.gov/WAC/default.aspx?cite=173-322A-210
Remedial Action Grants for Local Governments: 2018–2021 Guidance	Known as the RAG Guidance, Ecology publication no. 18-09-049	https://fortress.wa.gov/ecy/publications/SummaryPages/1809049.html
TCP's Integrated Planning Grant evaluation form		Internal document
Recommendations from Front and Centered's report, *Equity Analysis of Washington State Toxics Sites & the Model Toxic Control Act* (January 26, 2017)	Front and Centered is a statewide coalition of 60-plus organizations and groups rooted in communities of color and people with lower incomes.	http://frontandcentered.org/wp-content/uploads/2017/01/MTCA-Report_1-25-17.pdf

Resource	Description	Link
CLEANUP LAWS AND REGULATIONS MENTIONED IN THIS REPORT		
MTCA (statute)	Hazardous Waste Cleanup—Model Toxics Control Act, Chapter 70.105D RCW	http://app.leg.wa.gov/rcw/default.aspx?cite=70.105D
Cleanup Rule	Model Toxics Control Act—Cleanup Regulations, Chapter 173-340 WAC	http://apps.leg.wa.gov/WAC/default.aspx?cite=173-340
RAG Rule	Remedial Action Grants and Loans Regulations, Chapter 173-322A WAC	http://apps.leg.wa.gov/WAC/default.aspx?cite=173-322A
SMS Rule	Sediment Management Standards, Chapter 173-204 WAC	http://apps.leg.wa.gov/WAC/default.aspx?cite=173-204
UST Rule	Underground Storage Tank Regulations, Chapter 173-360 WAC	http://apps.leg.wa.gov/WAC/default.aspx?cite=173-360
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C Sec. 9601 et seq. (commonly known as Superfund)	https://www.epa.gov/laws-regulations/summary-comprehensive-environmental-response-compensation-and-liability-act
NCP	National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300	https://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol28/pdf/CFR-2011-title40-vol28-part300.pdf
WASHINGTON STATE LEGISLATURE HOUSE & SENATE BILLS REFERENCED IN THIS REPORT		
SB 5296 (2013–2014)	Second Engrossed Second Substitute Senate Bill 5296 (2E2SSB 5296) Concerning the model toxics control act.	http://app.leg.wa.gov/billsummary?BillNumber=5296&Year=2013
2EHB 1115 (2015–2017)	Enacted Capital Budget Bill 2EHB 1115 (2015–17 Biennium & 2015 Supplemental) Concerning the capital budget.	http://leap.leg.wa.gov/leap/budget/lbns/1517Cap1115-SL.pdf
HB 1266 (2017–2018)	1st Substitute House Bill 1266 Concerning petroleum storage tank systems.	https://app.leg.wa.gov/billsummary?BillNumber=1266&Year=2017
SB 5965 (2017–2018)	1st Substitute Engrossed Substitute Senate Bill 5965 (ESSB 5965) Relating to the capital budget.	http://app.leg.wa.gov/billsummary?BillNumber=5965&Year=2017
ESSB 6095 (2017–2018)	Supplemental Capital Budget, Engrossed Substitute Senate Bill 6095 (ESSB 6095) Concerning the capital budget	http://apps2.leg.wa.gov/billsummary?Year=2017&BillNumber=6095&Year=2017&BillNumber=6095

Appendix A:
Reporting Requirements for MTCA Ten-Year Financing Report (RCW 70.105D.030(5))

(5) Before September 20th of each even-numbered year, the department shall:

(a) Develop a comprehensive ten-year financing report in coordination with all local governments with clean-up responsibilities that identifies the projected biennial hazardous waste site remedial action needs that are eligible for funding from the state and local toxics control account and the environmental legacy stewardship account;

(b) Work with local governments to develop working capital reserves to be incorporated in the ten-year financing report;

(c) Identify the projected remedial action needs for orphaned, abandoned, and other clean-up sites that are eligible for funding from the state toxics control account;

(d) Project the remedial action need, cost, revenue, and any recommended working capital reserve estimate to the next biennium's long-term remedial action needs from both the local and state toxics control account and the environmental legacy stewardship account, and submit this information to the appropriate standing fiscal and environmental committees of the senate and house of representatives. This submittal must also include a ranked list of such remedial action projects for both accounts. The submittal must also identify separate budget estimates for large, multibiennia clean-up projects that exceed ten million dollars. The department shall prepare its ten-year capital budget plan that is submitted to the office of financial management to reflect the separate budget estimates for these large clean-up projects and include information on the anticipated private and public funding obligations for completion of the relevant projects.

Full text available at: http://app.leg.wa.gov/rcw/default.aspx?cite=70.105D.030

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Appendix B:
Ten-Year 2018 Financing Tables

1. Remedial Action Grant (RAG) projects
   (Tables 9A, 9B, 9C, and summary)

2. State-directed projects
   (Tables 10A, 10B, and summary)

3. Projects exceeding $10 million over ten years
   (Table 11)

Table 9A: 2019-21 Remedial Action Grant (RAG) budget request

Local government financing needs that were included in Ecology's 2019–21 Biennium budget request to the Governor. See Table 9B for the full list of projects identified by local governments.

Rank	Recipient	Site Name	Csid	Region	County	City	Leg. District	WRIA	Ecology's 2019-21 Request
1	Wenatchee - City	Gold Knob Prospects (Saddle Rock)	11610	CRO	Chelan	Wenatchee	12	45 - Wenatchee	1,120,000
2	Yakima - City	Tiger Oil - North 1st	4922	CRO	Yakima	Yakima	15	38 - Naches	1,215,000
3	Everett - Port	Weyerhaeuser Mill A (Former)	2146	HQCU	Snohomish	Everett	38	07 - Snohomish	16,250,000
4	Grays Harbor - Historical Seaport Authority	Seaport Landing - Former Weyerhaeuser Aberdeen Sawmill	4987	SWRO	Grays Harbor	Aberdeen	19	22 - Lower Chehalis	1,800,000
5	Bellingham - Port	Westman Marine	2205	NWRO	Whatcom	Blaine	42	01 - Nooksack	2,963,000
6	Everett - City - Public Works Department	Everett Landfill Tire Fire	3862	NWRO	Snohomish	Everett	38	07 - Snohomish	290,000
7	Bothell - City - Public Works	Bothell Simon & Son Fine Dry-cleaning/ Service Center	427	NWRO	King	Bothell	1	08 - Cedar - Sammamish	2,350,000
8	Skagit County - Port	Northern State Hospital	10048	NWRO	Skagit	Sedro-Woolley	39	03 - Lower Skagit - Samish	367,500
9	Bellingham - Port	Cornwall Avenue Landfill	220	NWRO	Whatcom	Bellingham	40	01 - Nooksack	2,421,500
10	Seattle - City - Public Utilities Department (SPU)	Gas Works Park Sediment Cleanup	2876	NWRO	King	Seattle	43	08 - Cedar - Sammamish	809,000
11	Bellingham - Port	I & J Waterway	2012	NWRO	Whatcom	Bellingham	42	01 - Nooksack	6,980,000
12	Bellingham - Port	Central Waterfront	3418	NWRO	Whatcom	Bellingham	42	01 - Nooksack	1,895,000

Table 9A: 2019-21 Remedial Action Grant (RAG) budget request (continued)

Rank	Recipient	Site Name	Csid	Region	County	City	Leg. District	WRIA	Ecology's 2019-21 Request
13	Bellingham - Port	Whatcom Waterway	219	NWRO	Whatcom	Bellingham	42	01 - Nooksack	2,255,000
14	Seattle city of - Public Utilities Department	Lower Duwamish Waterway Sediment Remediation Source Control	1643	NWRO	King	Seattle	34	09 - Duwamish - Green	462,000
15	Seattle - City - Public Utilities Department (SPU)	Lower Duwamish Waterway Sediment Remediation	1643	NWRO	King	Seattle	35	09 - Duwamish - Green	1,249,000
16	Grant County - Public Works	Ephrata Landfill Remediation	1692	ERO	Grant	Ephrata	13	41 - Lower Crab	3,525,000
17	Skagit County - Public Works Department	Whitmarsh (March Point) Landfill	304	HQCU	Skagit	Anacortes	40	03 - Lower Skagit - Samish	2,500,000
18	Bellingham - Port	Harris Avenue Shipyard	193	NWRO	Whatcom	Bellingham	40	01 - Nooksack	1,248,000
19	Seattle - City - Public Utilities Department (SPU)	South Park Landfill	1324	NWRO	King	Seattle	11	09 - Duwamish - Green	50,000
20	Tacoma - Port	Parcel 15 Remediation (Portac Inc)	3642	SWRO	Pierce	Tacoma	27	10 - Puyallup - White	1,000,000
21	Port Angeles - Port and City	Western Port Angeles Harbor & MTCA Design & Cleanup Construction	11907	SWRO	Clallam	Port Angeles	24	18 - Elwah - Dungeness	2,250,000
22	Seattle - Port - Seattle-Tacoma International Airport	Lora Lake Apartments	2008	NWRO	King	Burien	33	09 - Duwamish - Green	3,340,000

Table 9A: 2019-21 Remedial Action Grant (RAG) budget request (continued)

Rank	Recipient	Site Name	Csid	Region	County	City	Leg. District	WRIA	Ecology's 2019-21 Request
23	Tacoma - Port	Alexander Avenue Petroleum Tank Facilities	743	SWRO	Pierce	Tacoma	27	10 - Puyallup - White	1,294,000
24	Anacortes - Port	Dakota Creek Industries Shipyard	5174	HQCU	Skagit	Anacortes	40	03 - Lower Skagit - Samish	810,000
25	Seattle City Light (SCL)	Lower Duwamish Waterway	1643	NWRO	King	Seattle	35	09 - Duwamish - Green	720,000
26	Tacoma - Port	Arkema Manufacturing	3405	SWRO	Pierce	Tacoma	27	10 - Puyallup - White	7,500,000
27	Seattle - Port - Seaport Environmental Program	Lower Duwamish Superfund	1643	NWRO	King	Seattle	35	09 - Duwamish - Green	3,991,000
28	Seattle City Light (SCL)	North Boeing Field/Georgetown Steam Plant RI/FS	4765	NWRO	King	Seattle	11	09 - Duwamish - Green	175,000
29	Tacoma - Port	Earley Business Center	2395	SWRO	Pierce	Tacoma	27	10 - Puyallup - White	1,548,000
30	Yakima - City	Interstate 82 Exit 33A Yakima City Landfill	3853	CRO	Yakima	Yakima	15	37 - Lower Yakima	8,700,000
31	Statewide	Grant Management	N/A		Statewide	Statewide	Statewide	Statewide	1,011,000
32	Statewide	Integrated Planning Grants	N/A		Statewide	Statewide	Statewide	Statewide	1,000,000
33	Statewide	Independent Remedial Action Grants	N/A		Statewide	Statewide	Statewide	Statewide	2,000,000
								Remedial Action Grants Subtotal	**85,089,000**

Table 9B: Local government projects and cleanup financing needs for the next ten years (2019–2029)

List of all cleanup projects received from local governments during the 2018 Ten-Year Solicitation, with estimated state and local financing needs over the next ten years (2019–2029). The self-reported financing needs for the 2019–21 biennium were $340.1 million; estimated state share is $174.0 million; and Ecology's 2019–21 Biennium budget request to the Governor equals $85.1 million. See Table 9A for the 33 projects from this list included in the budget request.

Recipient	Site Name	CSID	Region	County	Leg. District	Solicited Local Government Ten-Year Need					Total Local Government Ten-Year Need	State Share	Local Government Share
						2019-21	2021-23	2023-25	2025-27	2027-29			
Richland city of	Richland Horn Rapids Landfill	4891	Central	Benton	8	$4,950,000	$200,000	$200,000	$200,000	$200,000	$5,750,000	$2,875,000	$2,875,000
Wenatchee city of	Gold Knob Prospects	11610	Central	Chelan	12	$1,244,170	$0	$0	$0	$0	$1,244,170	$622,085	$622,085
Port Angeles port of	WESTERN PORT ANGELES HARBOR	11907	Southwest	Clallam	24	$1,500,000	$12,150,000	$17,050,000	$7,900,000	$0	$38,600,000	$19,300,000	$19,300,000
Port Angeles city of - Community and Economic Development	WESTERN PORT ANGELES HARBOR	11907	Southwest	Clallam	24	$1,500,000	$12,150,000	$17,050,000	$7,900,000	$0	$38,600,000	$19,300,000	$19,300,000
Longview port of	Berth 4 Upland Area	99907	Southwest	Cowlitz	19	$500,000	$5,800,000	$3,200,000	$0	$0	$9,500,000	$4,750,000	$4,750,000
Longview port of	INTERNATIONAL PAPER LONGVIEW	3685	Southwest	Cowlitz	19	$5,000,000	$0	$0	$0	$0	$5,000,000	$2,500,000	$2,500,000
Longview port of	TPH (Total Petroleum Hydrocarbon)	99908	Southwest	Cowlitz	19	$1,130,000	$5,200,000	$10,000,000	$200,000	$0	$16,530,000	$8,265,000	$8,265,000
Grant County - Public Works	GRANT COUNTY EPHRATA LANDFILL 1	1692	Eastern	Grant	13	$4,700,000	$2,200,000	$1,700,000	$1,000,000	$400,000	$10,000,000	$5,000,000	$5,000,000
Grays Harbor port of	Hungry Whale Grocery	4988	Southwest	Grays Harbor	19	$660,000	$25,000	$25,000	$25,000	$25,000	$760,000	$380,000	$380,000
Grays Harbor - Historical Seaport Authority	Weyerhaeuser Sawmill Aberdeen/Seaport Landing	4987	Southwest	Grays Harbor	19	$2,000,000	$2,500,000	$0	$0	$0	$4,500,000	$2,250,000	$2,250,000
Bothell city of - Public Works	Bothell Service Center Simon & Son	427	Northwest	King	1	$4,700,000	$60,000	$60,000	$60,000	$60,000	$4,940,000	$2,470,000	$2,470,000
Seattle port of - Seaport Environmental Program	Chevron Seattle Terminal 4097	2132	Northwest	King	11	$1,401,187	$0	$0	$0	$0	$1,401,187	$700,594	$700,594
Seattle city of - Public Utilities Department	Gas Works Park WA Natural Gas	2876	Northwest	King	43	$1,618,000	$1,978,000	$7,608,000	$1,074,000	$0	$12,278,000	$6,139,000	$6,139,000
Seattle port of - Seaport Environmental Program	Harbor Island East Waterway	1372	Northwest	King	11	$13,929,104	$12,325,000	$33,225,000	$40,225,000	$30,400,000	$130,104,104	$65,052,052	$65,052,052
King County - Natural Resources and Parks Department	Harbor Island East Waterway	1372	Northwest	King	11	$1,180,000	$1,900,000	$1,000,000	$0	$0	$4,080,000	$2,040,000	$2,040,000
King County - Natural Resources and Parks Department	King County Denny Way CSO	2582	Northwest	King	36	$2,077,000	$173,000	$0	$0	$0	$2,250,000	$1,125,000	$1,125,000
King County - Natural Resources and Parks Department	King St CSO Sediment Remediation	99906	Northwest	King	37	$4,183,000	$283,000	$0	$0	$0	$4,466,000	$2,233,000	$2,233,000
Seattle port of - Seattle-Tacoma International Airport	Lora Lake Apartments	2008	Northwest	King	33	$6,680,000	$40,000	$40,000	$40,000	$0	$6,800,000	$3,400,000	$3,400,000
Seattle port of - Seaport Environmental Program	Lower Duwamish Waterway	1643	Northwest	King	34	$7,981,000	$11,406,000	$22,280,000	$23,080,000	$18,095,000	$82,842,000	$41,421,000	$41,421,000
King County - Natural Resources and Parks Department	Lower Duwamish Waterway	1643	Northwest	King	34	$3,112,000	$2,333,000	$2,333,000	$2,333,000	$2,333,000	$12,444,000	$6,222,000	$6,222,000

Table 9B: Local government projects and cleanup financing needs for the next ten years (2019–2029) (continued from previous page)

						Solicited Local Government Ten-Year Need							
Recipient	**Site Name**	**CSID**	**Region**	**County**	**Leg. District**	**2019-21**	**2021-23**	**2023-25**	**2025-27**	**2027-29**	**Total Local Government Ten-Year Need**	**State Share**	**Local Government Share**
King County - Natural Resources and Parks Department	Lower Duwamish Waterway	1643	Northwest	King	34	$1,618,000	$0	$0	$0	$0	$1,618,000	$809,000	$809,000
Seattle city of - Public Utilities Department	Lower Duwamish Waterway	1643	Northwest	King	34	$2,497,000	$10,752,000	$20,552,000	$20,552,000	$20,552,000	$74,905,000	$37,452,500	$37,452,500
Seattle city of - Public Utilities Department	Lower Duwamish Waterway	1643	Northwest	King	34	$923,000	$1,589,000	$1,783,000	$1,948,000	$1,988,000	$8,231,000	$4,115,500	$4,115,500
Seattle City Light	Lower Duwamish Waterway	1643	Northwest	King	34	$1,439,878	$5,142,992	$5,210,750	$4,823,250	$4,648,875	$21,265,745	$10,632,873	$10,632,873
King County - Natural Resources and Parks Department	Maury Island Open Space	1532	Northwest	King	34	$1,468,000	$60,000	$905,000	$835,000	$70,000	$3,338,000	$1,669,000	$1,669,000
Seattle City Light	North Boeing Field Georgetown Steam Plant	4765	Northwest	King	11	$350,739	$0	$225,000	$0	$0	$575,739	$287,870	$287,870
Seattle port of - Seaport Environmental Program	Port of Seattle Terminal 115	11307	Northwest	King	34	$1,064,000	$76,875	$0	$0	$0	$1,140,875	$570,438	$570,438
Seattle port of - Seaport Environmental Program	Port of Seattle Terminal 30	4394	Northwest	King	11	$3,255,755	$406,188	$441,000	$208,500	$131,000	$4,442,443	$2,221,222	$2,221,222
Seattle port of - Seaport Environmental Program	Port of Seattle Terminal 30	4394	Northwest	King	11	$692,500	$0	$0	$0	$0	$692,500	$346,250	$346,250
Seattle port of - Seaport Environmental Program	PORT OF SEATTLE TERMINAL 91	2674	Central	King	36	$3,938,127	$532,500	$132,500	$0	$0	$4,603,127	$2,301,564	$2,301,564
Seattle city of - Public Utilities Department	SOUTH PARK LANDFILL	1324	Northwest	King	11	$100,000	$6,645,000	$410,000	$0	$0	$7,155,000	$3,577,500	$3,577,500
Shelton city of - Public Works Department	SHELTON C STREET LANDFILL	2295	Southwest	Mason	35	$600,000	$600,000	$150,000	$0	$0	$1,350,000	$675,000	$675,000
Tacoma port of	Alexander Avenue Petroleum Tank Facilities	743	Southwest	Pierce	27	$2,588,000	$797,000	$1,154,000	$891,000	$890,000	$6,320,000	$3,160,000	$3,160,000
Tacoma port of	ARKEMA INC	3405	Southwest	Pierce	27	$15,000,000	$42,400,000	$0	$0	$0	$57,400,000	$28,700,000	$28,700,000
Tacoma port of	Pier 4 Port of Tacoma	12597	Southwest	Pierce	27	$17,000,000	$0	$0	$0	$0	$17,000,000	$8,500,000	$8,500,000
Tacoma port of	Portac Inc Tacoma	3642	Southwest	Pierce	27	$2,000,000	$100,000		$100,000	$9,000,000	$11,200,000	$5,600,000	$5,600,000
Tacoma port of	PQ Corporation	11532	Southwest	Pierce	27	$3,970,000	$0	$0	$0	$0	$3,970,000	$1,985,000	$1,985,000
Tacoma port of	SOUND MATTRESS & FELT CO	1615	Southwest	Pierce	27	$600,000	$200,000	$4,000,000	$400,000	$250,000	$5,450,000	$2,725,000	$2,725,000
Tacoma port of	Tacoma DPU Steam Plant 2	12439	Southwest	Pierce	27	$613,000	$186,000	$425,000	$104,000	$50,000	$1,378,000	$689,000	$689,000
Tacoma port of	Tacoma Port Earley Business Center	2395	Southwest	Pierce	27	$3,095,000	$1,486,000	$120,000	$120,000	$120,000	$4,941,000	$2,470,500	$2,470,500
Tacoma port of	TAYLOR WAY & ALEXANDER AVE FILL AREA	4692	Southwest	Pierce	27	$6,000,000	$10,000,000	$0	$0	$0	$16,000,000	$8,000,000	$8,000,000
Anacortes city of	Anacortes Former Water Treatment Plant	13264	Northwest	Skagit	40	$2,500,000	$0	$0	$0	$0	$2,500,000	$1,250,000	$1,250,000

Table 9B: Local government projects and cleanup financing needs for the next ten years (2019–2029) (continued from previous page)

						Solicited Local Government Ten-Year Need							
Recipient	**Site Name**	**CSID**	**Region**	**County**	**Leg. District**	**2019-21**	**2021-23**	**2023-25**	**2025-27**	**2027-29**	**Total Local Government Ten-Year Need**	**State Share**	**Local Government Share**
Anacortes port of	Anacortes Port	1678	Headquarters Cleanup	Skagit	40	$236,000	$0	$0	$0	$0	$236,000	$118,000	$118,000
Anacortes port of	ANACORTES PORT OF DAKOTA CREEK	5174	Headquarters Cleanup	Skagit	40	$1,620,000	$0	$0	$0	$0	$1,620,000	$810,000	$810,000
Skagit County - Public Works Department	MARCH POINT LANDFILL	304	Headquarters Cleanup	Skagit	40	$10,104,000	$190,000	$190,000	$134,000	$78,000	$10,696,000	$5,348,000	$5,348,000
Skagit County port of	Northern State Multi Service Center	10048	Northwest	Skagit	39	$735,000	$218,000	$1,202,000	$202,000	$202,000	$2,559,000	$1,279,500	$1,279,500
Anacortes port of	Shell Oil Tank Farm	4846	Headquarters Cleanup	Skagit	40	$160,000	$0	$0	$0	$0	$160,000	$80,000	$80,000
Everett city of - Public Works Department	Everett Landfill Tire Fire	3862	Northwest	Snohomish	38	$580,000	$520,000	$110,000	$0	$0	$1,210,000	$605,000	$605,000
Everett port of	WEYERHAEUSER MILL A	2146	Headquarters Cleanup	Snohomish	38	$65,000,000	$40,000,000	$300,000	$0	$0	$105,300,000	$52,650,000	$52,650,000
Olympia city of	WEST OLYMPIA LANDFILL	4807	Southwest	Thurston	22	$1,000,000	$0	$0	$0	$0	$1,000,000	$500,000	$500,000
Bellingham port of	Blaine Marina Inc	63	Northwest	Whatcom	42	$106,000	$0	$0	$0	$0	$106,000	$53,000	$53,000
Bellingham port of	CENTRAL WATERFRONT	3418	Northwest	Whatcom	42	$4,304,000	$337,000	$0	$0	$0	$4,641,000	$2,320,500	$2,320,500
Bellingham port of	Cornwall Avenue Landfill	220	Northwest	Whatcom	40	$4,843,000	$150,000	$0	$0	$0	$4,993,000	$2,496,500	$2,496,500
Bellingham port of	Harris Avenue Shipyard	193	Northwest	Whatcom	40	$3,096,000	$5,348,000	$0	$0	$0	$8,444,000	$4,222,000	$4,222,000
Bellingham port of	I & J Waterway	2012	Northwest	Whatcom	42	$14,379,000	$1,419,000	$0	$0	$0	$15,798,000	$7,899,000	$7,899,000
Bellingham port of	Westman Marine Inc	2205	Northwest	Whatcom	42	$6,626,000	$83,000	$0	$0	$0	$6,709,000	$3,354,500	$3,354,500
Bellingham port of	WHATCOM WATERWAY	219	Northwest	Whatcom	42	$54,600,000	$33,443,000	$4,780,000	$0	$0	$92,823,000	$46,411,500	$46,411,500
Yakima city of -City Manager office of	Interstate 82 Exit 33A Yakima City Landfill	3853	Central	Yakima	15	$9,666,667	$5,333,333	$0	$0	$0	$15,000,000	$7,500,000	$7,500,000
Yakima city of -City Manager office of	Tiger Oil N 1st St Fmr 6013	4922	Central	Yakima	15	$1,350,000	$0	$0	$0	$0	$1,350,000	$675,000	$675,000
					Remedial Action Oversight Grant Subtotals	**$319,764,127**	**$238,737,888**	**$157,861,250**	**$114,354,750**	**$89,492,875**	**$920,210,890**	**$460,105,445**	**$460,105,445**

NOTE: Table 9B identifies all local governments' projects received during the 2018 Ten-Year Solicitation, and outlines their estimated financing needs between 2019 and 2029. Projects on this list that were also included in Ecology's 2019–21 Biennium budget request to the Governor are identified in Table 9A. Totals may not add due to rounding.

Table 9C: Other Remedial Action Grant types (2019–2029)

Financing needs of other Remedial Action Grants over the next ten years based on local government responses during the 2018 Ten-Year Solicitation.

Grant Type	Region	County	Estimated Local Government Ten-Year Need					Total Local Government Ten-Year Need	State Share	Local Government Share
			2019-21	2021-23	2023-25	2025-27	2027-29			
Grant Management	Statewide	Statewide	$1,011,000	$1,011,000	$1,011,000	$1,011,000	$1,011,000	$5,055,000	$5,055,000	$0
Independent Remedial Action Grants	Statewide	Statewide	$12,848,629	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$20,848,629	$10,424,315	$10,424,315
Integrated Planning Grants	Statewide	Statewide	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$5,000,000	$5,000,000	$0
Safe Drinking Water Action Grants	Statewide	Statewide	$5,500,000	$0	$0	$0	$0	$5,500,000	$5,500,000	$0
Area-wide Groundwater Grants	Statewide	Statewide	$0	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$6,000,000	$6,000,000	$0
Other Remedial Action and Grant Management Activities Subtotals			**$20,359,629**	**$5,511,000**	**$5,511,000**	**$5,511,000**	**$5,511,000**	**$42,403,629**	**$31,979,315**	**$10,424,315**

SUMMARY: Grand totals of Tables 9B + 9C = Remedial action & grant management activities (2019–2029)

	Estimated Local Government Ten-Year Need					Total Local Government Ten-Year Need	State Share	Local Government Share
	2019-21	2021-23	2023-25	2025-27	2027-29			
Remedial Action and Grant Management Activities Grand Totals	**$340,123,756**	**$244,248,888**	**$163,372,250**	**$119,865,750**	**$95,003,875**	**$962,614,519**	**$492,084,760**	**$470,529,760**

FUTURE: Subtotals of estimated future RAG funding needs (2019–2029)

	Estimated Local Government Ten-Year Need					Total Local Government Ten-Year Need	State Share	Local Government Share
	2019-21	2021-23	2023-25	2025-27	2027-29			
Placeholder for Future RAG Subtotal	**$0**	**$55,751,112**	**$136,627,750**	**$180,134,250**	**$204,996,125**	**$577,509,237**	**$288,754,619**	**$288,754,619**

TOTAL: Remedial Action Grant estimated ten-year financing need (2019–2029)

As outlined in Tables 9A, 9B, 9C and summarized below, Washington state and local governments have a combined estimated need of $1.5 billion to conduct cleanups over the next ten years. State's share of RAG projects is an estimated $781 million over that period. State's share of RAG during the 2019–21 Biennium is an estimated $174 million. Ecology's RAG budget request for that biennium is $85 million, which falls $89 million short of helping local governments address all of their estimated cleanup needs over the next two years. See Table 9A, which identifies RAG projects included in Ecology's budget request.

	Estimated Local Government Ten-Year Need					Total Local Government Ten-Year Need	State Share	Local Government Share
	2019-21	2021-23	2023-25	2025-27	2027-29			
Total Remedial Action Grant Ten-Year Financing Need	**$340,123,756**	**$300,000,000**	**$300,000,000**	**$300,000,000**	**$300,000,000**	**$1,540,123,756**	**$780,839,378**	**$759,284,378**

Table 10A-PSI (Clean Up Toxics Sites–Puget Sound Initiative)

Puget Sound Initiative (PSI) projects that are included in Ecology's 2019–21 Biennium budget request to the Governor.

Rank	Recipient	Project	CSID	Region	County	Leg. District	Ecology's 2019-21 Request	Estimated Future Cleanup Needs by Biennium					Total Project Costs
								2019-21	2021-23	2023-25	2025-27	2027-29	
1	Seattle	Lower Duwamish Waterway Source Control and Cleanup	1643	Northwest	King	34	$3,000,000	$3,000,000	$2,000,000	$2,000,000	$4,000,000	$2,000,000	$13,000,000
2	Seattle	Circle K Station 1462	5089	Northwest	King	43	$2,500,000	$2,500,000	$700,000	$0	$0	$0	$3,200,000
3	Everett	Everett Lowland Areas and Upland Port of Everett Remediation	4298	Northwest	Snohomish	38	$3,200,000	$3,200,000	$4,000,000	$4,000,000	$4,000,000	$2,000,000	$17,200,000
4	Tacoma	Aladdin Plating	3257	Southwest	Pierce	27	$10,000	$10,000	$10,000	$10,000	$0	$0	$30,000
5	Port Angeles	Port Angeles Harbor (Rayonier Mill & Western Post Angeles Harbor)	N/A	Southwest	Clallam	6	$250,000	$250,000	$250,000	$0	$0	$0	$500,000
6	Puget Sound Wide	Required Public Involvement/Tribal Engagement for Headquarters	N/A	Headquarters Cleanup	Puget Sound Wide	Puget Sound Wide	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$1,000,000
7	Statewide	Cleanup Rule Decision Support Services	N/A	Statewide	Statewide	Statewide	$250,000	$250,000	$0	$0	$0	$0	$250,000
8	Everett	JELD-WEN	4402	Headquarters Cleanup	Snohomish	38	$100,000	$100,000	$0	$0	$0	$0	$100,000
9	Statewide	Freshwater Natural Background	N/A	Statewide	Statewide	Statewide	$240,000	$240,000	$0	$0	$0	$0	$240,000
10	Bremerton	Bremerton Naval Complex Natural Resource Damage Assessment (NRDA)	N/A	Headquarters Cleanup	Kitsap	26	$200,000	$200,000	$200,000	$200,000	$0	$0	$600,000
11	Olympia	Budd Inlet Source Control & Cleanup	2245	Southwest	Thurston	22	$125,000	$125,000	$125,000	$0	$0	$0	$250,000
12	Seattle	Gas Works Parks	2876	Northwest	King	43	$300,000	$300,000	$200,000	$100,000	$0	$0	$600,000
13	Bainbridge Island	Port Blakely - Baywide sampling	N/A	Headquarters Cleanup	Kitsap	23	$100,000	$100,000	$100,000	$0	$0	$0	$200,000
		Clean Up Toxics Sites - Puget Sound Subtotals					**$10,475,000**	**$10,475,000**	**$7,785,000**	**$6,510,000**	**$8,200,000**	**$4,200,000**	**$37,170,000**

Table 10A-EW CSI (Eastern Washington Clean Sites Initiative)

Eastern Washington Clean Sites Initiative (EW-CSI) projects that are included in Ecology's 2019–21 Biennium budget request to the Governor.

Rank	Recipient	Project	CSID	Region	County	Leg. District	Ecology's 2019-21 Request	Estimated Future Cleanup Needs by Biennium					Total Project Costs
								2019-21	2021-23	2023-25	2025-27	2027-29	
1	Colville	Colville Post and Pole	46	Eastern	Stevens	7	$10,000,000	$10,000,000	$0	$0	$0	$0	$10,000,000
2	Yakima	Frank Wear	4194	Central	Yakima	14	$250,000	$250,000	$200,000	$200,000	$200,000	$200,000	$1,050,000
3	Pasco	Pasco Landfill	1910	Eastern	Franklin	9	$150,000	$150,000	$0	$0	$0	$0	$150,000
4	Region wide	Central Assessment Sites	N/A	Central	Region wide	Region wide	$560,000	$560,000	$250,000	$250,000	$250,000	$250,000	$1,560,000
5	Northport	Northport Remedial Investigation/LeRoi	47	Eastern	Stevens	7	$400,000	$400,000	$200,000	$100,000	$100,000	$100,000	$900,000
6	Walla Walla	Stubblefield Salvage Yard	4121	Eastern	Walla Walla	16	$500,000	$500,000	$350,000	$100,000	$75,000	$50,000	$1,075,000
7	Marshall	Marshall Landfill	1022	Eastern	Spokane	6	$250,000	$250,000	$40,000	$40,000	$40,000	$40,000	$410,000
		Eastern Washington Clean Sites Initiative Subtotals					**$12,110,000**	**$12,110,000**	**$1,040,000**	**$690,000**	**$665,000**	**$640,000**	**$15,145,000**

Table 10A-PICR (Protect Investments in Cleanup Remedies)
PICR projects that are included in Ecology's 2019–21 Biennium budget request to the Governor. These comprise Ecology's 10 percent cost-share of EPA's required cleanup construction costs, and long-term operation, maintenance, and investments to protect cleanup remedies.

Rank	Recipient	Project	CSID	Region	County	Leg. District	Ecology's 2019-21 Request	Estimated Future Cleanup Needs by Biennium					Total Project Costs
								2019-21	2021-23	2023-25	2025-27	2027-29	
1	Bainbridge Island	Wyckoff Treatment Plant	2683	Headquarters Cleanup	Kitsap	23	$1,305,000	$1,305,000	$690,000	$330,000	$303,000	$195,000	$2,823,000
2	Tacoma	Lilyblad	4329	Solid Waste Management	Pierce	27	$1,785,000	$1,785,000	$195,000	$132,000	$70,000	$0	$2,182,000
3	Lakewood	Lakewood Ponders	735	Southwest	Pierce	29	$2,260,000	$2,260,000	$60,000	$60,000	$60,000	$60,000	$2,500,000
4	Tacoma	Well 12A	135	Headquarters Cleanup	Pierce	27	$300,000	$300,000	$300,000	$60,000	$700,000	$70,000	$1,430,000
5	Bothell	Bothell BP 11353	5084	Northwest	King	1	$550,000	$550,000	$100,000	$0	$0	$0	$650,000
6	Vancouver	Handy Andy Time Oil	4981	Southwest	Clark	49	$265,000	$265,000	$240,000	$240,000	$240,000	$240,000	$1,225,000
7	Olympia	Black Lake Grocery	N/A	Southwest	Thurston	35	$150,000	$150,000	$13,000	$13,000	$13,000	$13,000	$202,000
8	Lincoln	Priceless Gas	5945	Eastern	Lincoln	13	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$50,000
9	Chehalis	American Crossarm	134	Southwest	Lewis	20	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$50,000
10	Bainbridge Island	Wyckoff: Operable Unit (OU) 1 - Subtidal Sediments/Buoy, Long Term O&M	2683	Headquarters Cleanup	Kitsap	23	$292,000	$292,000	$0	$292,000	$0	$0	$584,000
11	Bainbridge Island	Wyckoff: Record of Decision/Agreement I (RODA) - 10% match	2683	Headquarters Cleanup	Kitsap	23	$2,710,000	$2,710,000	$962,000	$70,000	$90,000	$50,000	$3,882,000
		Protect Investments in Cleanup Remedies Subtotals					**$9,637,000**	**$9,637,000**	**$2,580,000**	**$1,217,000**	**$1,496,000**	**$648,000**	**$15,578,000**

Table 10B - Remaining ten-year financing needs for state-directed activities

Projects that are **not** included in Ecology's 2019–21 Biennium budget request to the Governor, but needing funding over the next ten years (2019–2029). Includes remaining PSI and PICR projects.

Recipient	Project	CSID	Region	County	Leg. District	Estimated Future Cleanup Needs by Biennium					Total Project Costs
						2019-21	2021-23	2023-25	2025-27	2027-29	
Vancouver	Malcolm Montague	3601	Southwest	Clark	49	$620,000	$0	$0	$0	$0	$620,000
Bellevue	Tiki Carwash	5096	Northwest	King	41	$750,000	$3,500,000	$300,000	$0	$0	$4,550,000
Issaquah	Issaquah Perfluorooctane Acid (PFOA)	N/A	Northwest	King	5		$2,000,000	$0	$0	$0	$2,000,000
Seattle	Lower Duwamish Waterway Slivers	1643	Northwest	King	34	$1,000,000	$1,000,000	$0	$0	$0	$2,000,000
Bainbridge Island	Wyckoff: Record of Decision/Agreement I (RODA) - Long Term O&M	2683	Headquarters Cleanup	Kitsap	23	$0	$150,000	$0	$175,000	$250,000	$575,000
Bainbridge Island	Wyckoff: Record of Decision/Agreement II (RODA) - Long Term O&M	2683	Headquarters Cleanup	Kitsap	23	$0	$0	$0	$188,000	$100,000	$288,000
Bainbridge Island	Wyckoff: Record of Decision/Agreement II (RODA) - 10% match	2683	Headquarters Cleanup	Kitsap	23	$0	$1,240,000	$4,670,000	$430,000	$920,000	$7,260,000
Port Gamble	Port Gamble Natural Resource Damage Assessment (NRDA) Contingency	3444	Headquarters Cleanup	Kitsap	23	$200,000	$0	$0	$0	$0	$200,000
Willapa Bay	Willapa Bay - Statistical Support	N/A	Headquarters Cleanup	Pacific	19	$60,000	$0	$0	$0	$0	$60,000
Puget Sound Wide	Western Washington University - Sediment Management	N/A	Headquarters Cleanup	Puget Sound Wide	Puget Sound Wide	$0	$100,000	$100,000	$100,000	$100,000	$400,000
Friday Harbor	Friday Harbor Baywide Sampling	N/A	Headquarters Cleanup	San Juan	40	$0	$150,000	$50,000	$0	$0	$200,000
Anacortes	Guemes Channel Sediment Sampling	N/A	Headquarters Cleanup	Skagit	40	$50,000	$0	$0	$0	$0	$50,000
Anacortes	Scott Paper Mill - Fish Mix - beach nourishment	2573	Headquarters Cleanup	Skagit	40	$250,000	$0	$0	$0	$0	$250,000
Anacortes	Custom Plywood Dioxin Removal Interim Action - Final Phase/5-Year Review	4533	Headquarters Cleanup	Skagit	40	$0	$125,000	$125,000	$193,000	$80,000	$523,000
Everett	C-B Shingle	N/A	Headquarters Cleanup	Snohomish	38	$0	$150,000	$0	$0	$0	$150,000
Bellingham	Bellingham Bay Polychlorinated Biphenyls (PCB)/Carcinogenicpolycyclic Aromatic Hydrocarbons (CPAH) Contamination Nearshore Area	N/A	Northwest	Whatcom	40	$100,000	$0	$0	$0	$0	$100,000
Bellingham	Bellingham Bay Site - Habitat Restoration	N/A	Northwest	Whatcom	42	$1,500,000	$0	$0	$0	$0	$1,500,000
						$4,530,000	**$8,415,000**	**$5,245,000**	**$1,086,000**	**$1,450,000**	**$20,726,000**

FUTURE: Subtotals of estimated future state-directed cleanup financing needs (2019–2029).

	Estimated Future Cleanup Needs by Biennium					
	2019-21	2021-23	2023-25	2025-27	2027-29	Total Ten-Year Need
Placeholder - Future State-Directed Subtotal	$0	$30,180,000	$36,338,000	$38,553,000	$43,062,000	$148,133,000

TOTAL: State-directed estimated ten-year financing need (2019–2029)

As outlined in Tables 10A and 10B and summarized in the table below, the estimated cost for Washington to conduct state-directed cleanup work is $237 million over the next ten years. Estimated need to conduct this work during the 2019–21 Biennium is $37 million. Ecology's budget request for state-directed work during the 2019–21 Biennium is $32 million, which is $5 million short of actual need (See Table 10A-PSI, Table 10A-EW, and Table 10A-PICR identifying state-directed projects included in Ecology's budget request.)

	Estimated Future Cleanup Needs by Biennium					
	2019-21	2021-23	2023-25	2025-27	2027-29	Total Ten-Year Need
Estimated Total State-Directed Ten-Year Financing Need	$36,752,000	$50,000,000	$50,000,000	$50,000,000	$50,000,000	$236,752,000

Table 11: Cleanup projects exceeding $10 million in total costs over the next ten years (2019–2029)

Projects from local governments and state-directed work that are expected to exceed $10 million in total costs over ten years (2019–2029). Source: Tables 9B, 10A-EW, 10A-PSI, 10A-PICR, and 10B.
Sixteen of the twenty-two recipients have projects that are included in Ecology's 2019–21 Biennium budget request to the Governor. These projects comprise 63% of the total cleanup budget requested for the next biennium (that is, they comprise $73 million of the total $117 million budget requested for RAG, EW, PSI, and PICR projects).

Recipient	Site Name	Region	County	Leg. District	Estimated Ten-Year Need 2019-21	2021-23	2023-25	2025-27	2027-29	Total Ten-Year Need	State Share	Local Government Share
Cleanup Site ID 304	**MARCH POINT LANDFILL**	**Located in ANACORTES**										
Skagit County - Public Works Department	March Point Landfill	Headquarters Cleanup	Skagit	40	$10,104,000	$190,000	$190,000	$134,000	$78,000	$10,696,000	$5,348,000	$5,348,000
Subtotals for Cleanup Site ID # 304					**$10,104,000**	**$190,000**	**$190,000**	**$134,000**	**$78,000**	**$10,696,000**	**$5,348,000**	**$5,348,000**
Cleanup Site ID 2012	**I & J WATERWAY**	**Located in BELLINGHAM**										
Bellingham Port of	I & J Waterway	Northwest	Whatcom	42	$14,379,000	$1,419,000	$0	$0	$0	$15,798,000	$7,899,000	$7,899,000
Subtotals for Cleanup Site ID # 2012					**$14,379,000**	**$1,419,000**	**$0**	**$0**	**$0**	**$15,798,000**	**$7,899,000**	**$7,899,000**
Cleanup Site ID 219	**WHATCOM WATERWAY**	**Located in BELLINGHAM**										
Bellingham Port of	Whatcom Waterway	Northwest	Whatcom	42	$54,600,000	$33,443,000	$4,780,000	$0	$0	$92,823,000	$46,411,500	$46,411,500
Subtotals for Cleanup Site ID # 219					**$54,600,000**	**$33,443,000**	**$4,780,000**	**$0**	**$0**	**$92,823,000**	**$46,411,500**	**$46,411,500**
Cleanup Site ID 46	**COLVILLE POST AND POLE**	**Located in COLVILLE**										
Colville	Colville Post and Pole	Eastern	Stevens	7	$10,000,000	$0	$0	$0	$0	$10,000,000	$10,000,000	$0
Subtotals for Cleanup Site ID # 46					**$10,000,000**	**$0**	**$0**	**$0**	**$0**	**$10,000,000**	**$10,000,000**	**$0**
Cleanup Site ID 1692	**GRANT COUNTY - PUBLIC WORKS**	**Located in EPHRATA**										
Grant County - Public Works	Grant County - Public Works	Eastern	Grant	13	$4,700,000	$2,200,000	$1,700,000	$1,000,000	$400,000	$10,000,000	$5,000,000	$5,000,000
Subtotals for Cleanup Site ID # 1692					**$4,700,000**	**$2,200,000**	**$1,700,000**	**$1,000,000**	**$400,000**	**$10,000,000**	**$5,000,000**	**$5,000,000**
Cleanup Site ID 4298	**EVERETT SMELTER**	**Located in EVERETT**										
Everett	Everett Smelter	Northwest	Snohomish	38	$3,200,000	$4,000,000	$4,000,000	$4,000,000	$2,000,000	$17,200,000	$17,200,000	$0
Subtotals for Cleanup Site ID # 4298					**$3,200,000**	**$4,000,000**	**$4,000,000**	**$4,000,000**	**$2,000,000**	**$17,200,000**	**$17,200,000**	**$0**
Cleanup Site ID 2146	**WEYERHAEUSER MILL A**	**Located in EVERETT**										
Everett Port of	Weyerhaeuser Mill A	Headquarters Cleanup	Snohomish	38	$65,000,000	$40,000,000	$300,000	$0	$0	$105,300,000	$52,650,000	$52,650,000
Subtotals for Cleanup Site ID # 2146					**$65,000,000**	**$40,000,000**	**$300,000**	**$0**	**$0**	**$105,300,000**	**$52,650,000**	**$52,650,000**
Cleanup Site ID 99908	**TPH (TOTAL PETROLEUM HYDROCARBON)**	**Located in LONGVIEW**										
Longview Port of	TPH (Total Petroleum Hydrocarbon)	Southwest	Cowlitz		$1,130,000	$5,200,000	$10,000,000	$200,000	$0	$16,530,000	$8,265,000	$8,265,000
Subtotals for Cleanup Site ID # 99908					**$1,130,000**	**$5,200,000**	**$10,000,000**	**$200,000**	**$0**	**$16,530,000**	**$8,265,000**	**$8,265,000**

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Table 11: Cleanup projects exceeding $10 million in total costs over the next ten years (2019–2029) (continued from previous page)

						Estimated Ten-Year Need							
	Recipient	Site Name	Region	County	Leg. District	2019-21	2021-23	2023-25	2025-27	2027-29	Total Ten-Year Need	State Share	Local Government Share
Cleanup Site ID 11907		**WESTERN PORT ANGELES HARBOR**	**Located in PORT ANGELES**										
	Port Angeles City of - Community and Economic Development	Western Port Angeles Harbor	Southwest	Clallam	24	$1,500,000	$12,150,000	$17,050,000	$7,900,000	$0	$38,600,000	$19,300,000	$19,300,000
			Located in PORT ANGELES										
	Port Angeles Port of	Western Port Angeles Harbor	Southwest	Clallam	24	$1,500,000	$12,150,000	$17,050,000	$7,900,000	$0	$38,600,000	$19,300,000	$19,300,000
					Subtotals for Cleanup Site ID # 11907	**$3,000,000**	**$24,300,000**	**$34,100,000**	**$15,800,000**	**$0**	**$77,200,000**	**$38,600,000**	**$38,600,000**
Cleanup Site ID 2876		**GAS WORKS PARK WA NATURAL GAS**	**Located in SEATTLE**										
	Seattle City of - Public Utilities Department	Gas Works Park WA Natural Gas	Northwest	King	43	$1,618,000	$1,978,000	$7,608,000	$1,074,000	$0	$12,278,000	$6,139,000	$6,139,000
					Subtotals for Cleanup Site ID # 2876	**$1,618,000**	**$1,978,000**	**$7,608,000**	**$1,074,000**	**$0**	**$12,278,000**	**$6,139,000**	**$6,139,000**
Cleanup Site ID 1372		**HARBOR ISLAND EAST WATERWAY**	**Located in SEATTLE**										
	Seattle Port of - Seaport Environmental Program	Harbor Island East Waterway	Northwest	King	11	$13,929,104	$12,325,000	$33,225,000	$40,225,000	$30,400,000	$130,104,104	$65,052,052	$65,052,052
					Subtotals for Cleanup Site ID # 1372	**$13,929,104**	**$12,325,000**	**$33,225,000**	**$40,225,000**	**$30,400,000**	**$130,104,104**	**$65,052,052**	**$65,052,052**
Cleanup Site ID 1643		**LOWER DUWAMISH WATERWAY**	**Located in SEATTLE**										
	King County - Natural Resources and Parks Department	Lower Duwamish Waterway	Northwest	King	34	$3,112,000	$2,333,000	$2,333,000	$2,333,000	$2,333,000	$12,444,000	$6,222,000	$6,222,000
			Located in SEATTLE										
	Seattle	Lower Duwamish Waterway	Northwest	King	34	$3,000,000	$2,000,000	$2,000,000	$4,000,000	$2,000,000	$13,000,000	$13,000,000	$0
			Located in SEATTLE										
	Seattle City of - Public Utilities Department	Lower Duwamish Waterway	Northwest	King	34	$2,497,000	$10,752,000	$20,552,000	$20,552,000	$20,552,000	$74,905,000	$37,452,500	$37,452,500
			Located in SEATTLE										
	Seattle City Light	Lower Duwamish Waterway	Northwest	King	34	$1,439,878	$5,142,992	$5,210,750	$4,823,250	$4,648,875	$21,265,745	$10,632,873	$10,632,873
			Located in SEATTLE										
	Seattle Port of - Seaport Environmental Program	Lower Duwamish Waterway	Northwest	King	34	$7,981,000	$11,406,000	$22,280,000	$23,080,000	$18,095,000	$82,842,000	$41,421,000	$41,421,000
					Subtotals for Cleanup Site ID # 1643	**$18,029,878**	**$31,633,992**	**$52,375,750**	**$54,788,250**	**$47,628,875**	**$204,456,745**	**$108,728,373**	**$95,728,373**
Cleanup Site ID 12597		**PIER 4 PORT FF TACOMA**	**Located in TACOMA**										
	Tacoma Port of	Pier 4 Port ff Tacoma	Southwest	Pierce	27	$17,000,000	$0	$0	$0	$0	$17,000,000	$8,500,000	$8,500,000
					Subtotals for Cleanup Site ID # 12597	**$17,000,000**	**$0**	**$0**	**$0**	**$0**	**$17,000,000**	**$8,500,000**	**$8,500,000**

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Table 11: Cleanup projects exceeding $10 million in total costs over the next ten years (2019–2029) (continued from previous page)

						Estimated Ten-Year Need							
	Recipient	Site Name	Region	County	Leg. District	2019-21	2021-23	2023-25	2025-27	2027-29	Total Ten-Year Need	State Share	Local Government Share
Cleanup Site ID 3405		**ARKEMA INC**	**Located in TACOMA**										
	Tacoma Port of	Arkema Inc	Southwest	Pierce	27	$15,000,000	$42,400,000	$0	$0	$0	$57,400,000	$28,700,000	$28,700,000
					Subtotals for Cleanup Site ID # 3405	**$15,000,000**	**$42,400,000**	**$0**	**$0**	**$0**	**$57,400,000**	**$28,700,000**	**$28,700,000**
Cleanup Site ID 3642		**PORTAC INC TACOMA**	**Located in TACOMA**										
	Tacoma Port of	Portac Inc Tacoma	Southwest	Pierce	27	$2,000,000	$100,000	$0	$100,000	$9,000,000	$11,200,000	$5,600,000	$5,600,000
					Subtotals for Cleanup Site ID # 3642	**$2,000,000**	**$100,000**	**$0**	**$100,000**	**$9,000,000**	**$11,200,000**	**$5,600,000**	**$5,600,000**
Cleanup Site ID 4692		**TAYLOR WAY & ALEXANDER AVE FILL AREA**	**Located in TACOMA**										
	Tacoma Port of	Taylor Way & Alexander Ave Fill Area	Southwest	Pierce	27	$6,000,000	$10,000,000	$0	$0	$0	$16,000,000	$8,000,000	$8,000,000
					Subtotals for Cleanup Site ID # 4692	**$6,000,000**	**$10,000,000**	**$0**	**$0**	**$0**	**$16,000,000**	**$8,000,000**	**$8,000,000**
Cleanup Site ID 3853		**INTERSTATE 82 EXIT 33A YAKIMA CITY LANDFILL**	**Located in YAKIMA**										
	Yakima City of -City Manager Office of	Interstate 82 Exit 33A Yakima City Landfill	Central	Yakima	15	$9,666,667	$5,333,333	$0	$0	$0	$15,000,000	$7,500,000	$7,500,000
					Subtotals for Cleanup Site ID # 3853	**$9,666,667**	**$5,333,333**	**$0**	**$0**	**$0**	**$15,000,000**	**$7,500,000**	**$7,500,000**
					Cleanup Projects Exceeding $10 Million in Total Costs Over Ten Years (2019-2029)	**$249,356,649**	**$214,522,325**	**$148,278,750**	**$117,321,250**	**$89,506,875**	**$818,985,849**	**$429,592,925**	**$389,392,925**

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Appendix C:
2018 Ten-Year Solicitation Criteria by Remedial Action Grant Type

See also discussion in Chapter 3 for environmental justice considerations that were incorporated into RAG project evaluations.

Table 12: 2018 Ten-Year Solicitation criteria by remedial action grant type.

FUNDING PRIORITIES	CRITERIA
Overall Funding Priorities	
WAC 173-322A-210(a)	Oversight remedial action grants and loans under an existing extended grant agreement
WAC 173-322A-210(b)	Other remedial action grants and loans for previously funded projects, provided that substantial progress has been made
WAC 173-322A-210(c)	Remedial action grants and loans for new projects
Project Eligibility - Integrated Planning Grants	
WAC 173-322A-310(2)(a)	The applicant must be a local government
WAC 173-322A-310(2)(b)	The applicant must have an ownership interest in property or have a demonstrated interest in purchasing property affected by the hazardous waste site.
WAC 173-322A-310(2)(c)	The applicant must have the necessary access to complete the project or obtain such access in accordance with the schedule in the grant agreement.
WAC 173-322A-310(2)(d)	The applicant must not be required to conduct the actions under an order or decree.
Funding Priority - Integrated Planning Grants	
WAC 173-322A-310(3)(a)	Threat posed by the site to human health and the environment
WAC 173-322A-310(3)(b)	Whether the hazardous waste site is within a redevelopment opportunity zone
WAC 173-322A-310(3)(c)	The land reuse potential of the hazardous waste site
WAC 173-322A-310(3)(d)	Whether the hazardous waste site is located within a highly impacted community
WAC 173-322A-310(3)(e)	The readiness of the applicant to start and complete the work to be funded by the grant and the performance of the applicant under prior grant agreements
WAC 173-322A-310(3)(f)	The ability of the grant to expedite the cleanup of the hazardous waste site
WAC 173-322A-310(3)(g)	The ability of the grant to leverage other public or private funding for the cleanup and reuse of the hazardous waste site
WAC 173-322A-310(3)(h)	The distribution of grants throughout the state and to various types and sizes of local governments
WAC 173-322A-310(3)(i)	Other factors as determined and published by the department

FUNDING PRIORITIES	CRITERIA
Project Eligibility - Oversight Grants	
WAC 173-322A-320(2)(a)	The applicant must be a local government
WAC 173-322A-320(2)(b)	The applicant must be a potentially liable person, potentially responsible party, or prospective purchaser at the hazardous waste site.
WAC 173-322A-320(2)(c)	The project must meet one of the following criteria: (i) The applicant is required to conduct remedial actions at the hazardous waste site under an order or decree; or (ii) A person other than the applicant is required to conduct remedial actions at the hazardous waste site under an order or decree and the applicant has: (A) Signed the order or decree; and (B) Entered into a written agreement with the other person to reimburse the person for a portion of the remedial action costs incurred under the order or decree
WAC 173-322A-320(2)(d)	If the order or decree is issued under the federal cleanup law, it must be signed or acknowledged in writing by the department as a sufficient basis for funding under this chapter.
WAC 173-322A-320(2)(e)	The project must be included in the department's ten-year financing plan required under RCW 70.105D.030(5)
Funding Priority - Oversight Grants	
WAC 173-322A-320(3)(a)	Threat posed by the site to human health and the environment
WAC 173-322A-320(3)(b)	Whether the applicant is a prospective purchaser of a brownfield property within a redevelopment opportunity zone
WAC 173-322A-320(3)(c)	The land reuse potential of the hazardous waste site
WAC 173-322A-320(3)(d)	Whether the hazardous waste site is located within a highly impacted community
WAC 173-322A-320(3)(e)	The readiness of the applicant to start and complete the work to be funded by the grant and the performance of the applicant under prior grant agreements
WAC 173-322A-320(3)(f)	The ability of the grant to expedite the cleanup of the hazardous waste site
WAC 173-322A-320(3)(g)	The ability of the grant to leverage other public or private funding for the cleanup and reuse of the hazardous waste site
WAC 173-322A-320(3)(h)	The distribution of grants throughout the state and to various types and sizes of local governments
WAC 173-322A-320(3)(i)	Other factors as determined and published by the department

FUNDING PRIORITIES	CRITERIA
Independent Remedial Action Grants- Post-cleanup reimbursement	
WAC 173-322A-330(2)(a)	Under this grant, the department may reimburse the recipient after the department has issued a no further action determination for the hazardous waste site or property under the voluntary cleanup program
Independent Remedial Action Grants - Periodic Reimbursement	
WAC 173-322A-330(2)(b)	Under this grant, the department may reimburse the recipient periodically during the investigation and the cleanup of a hazardous waste site or property under the voluntary cleanup program
Project Eligibility - Independent Remedial Action Grants	
WAC 173-322A-330(3)(a)	The applicant must be a local government
WAC 173-322A-330(3)(b)	The applicant must be a potentially liable person, potentially responsible party, or prospective purchaser at the hazardous waste site or have an ownership interest in the hazardous waste site
WAC 173-322A-330(3)(c)	For post-cleanup reimbursement grants, the applicant must have completed independent remedial actions at the hazardous waste site or property and received a no further action determination for the site or property under the voluntary cleanup program
WAC 173-322A-330(3)(d)	For periodic reimbursement grants, the applicant must: (i) Enroll the hazardous waste site in the voluntary cleanup program before entering into a grant agreement for the site; (ii) Conduct independent remedial actions at the hazardous waste site or property in accordance with work plans authorized by the department under the voluntary cleanup program; and (iii) Have necessary access to conduct independent remedial actions at the hazardous waste site or obtain such access in accordance with a schedule in the grant agreement.
Funding Priority - Independent Remedial Action Grants	
WAC 173-322A-330(4)(a)	The threat posed by the hazardous waste site to human health and the environment
WAC 173-322A-330(4)(b)	Whether the applicant is a prospective purchaser of a brownfield property within a redevelopment opportunity redevelopment zone
WAC 173-322A-330(4)(c)	The land reuse potential of the hazardous waste site
WAC 173-322A-330(4)(d)	Whether the hazardous waste site is located within a highly impacted community
WAC 173-322A-330(4)(e)	The readiness of the applicant to start and complete the work to be funded by the grant and the performance of the applicant under prior grant agreements
WAC 173-322A-330(4)(f)	The ability of the grant to expedite the cleanup of the hazardous waste site

FUNDING PRIORITIES	CRITERIA
Funding Priority - Independent Remedial Action Grants (continued from previous page)	
WAC 173-322A-330(4)(g)	The ability of the grant to leverage other public or private funding for the cleanup and reuse of the hazardous waste site
WAC 173-322A-330(4)(h)	The distribution of grants throughout the state and to various types and sizes of local governments
WAC 173-322A-330(4)(i)	Other factors as determined and published by the department
Project Eligibility – Area-wide Groundwater Investigation Grants	
WAC 173-322A-340(2)(a)	The applicant must be a local government
WAC 173-322A-340(2)(b)	The project must involve the investigation of known or suspected area-wide groundwater contamination.
WAC 173-322A-340(2)(c)	The applicant must not be required to conduct the investigation under an order or decree
WAC 173-322A-340(2)(d)	The applicant must have the necessary access to conduct the investigation or obtain such access in accordance with a schedule in the grant agreement.
WAC 173-322A-340(2)(e)	The project must be included in the ten-year financing plan required under RCW 70.105D.030(5)
Funding Priority - Area-wide Groundwater Investigation Grants	
WAC 173-322A-340(3)(a)	The threat posed by the hazardous waste sites to human health and the environment
WAC 173-322A-340(3)(b)	Whether the hazardous waste site is within a redevelopment opportunity zone
WAC 173-322A-340(3)(c)	The land reuse potential of the hazardous waste sites
WAC 173-322A-340(3)(d)	Whether the hazardous waste sites are located within a highly impacted community
WAC 173-322A-340(3)(e)	The readiness of the applicant to start and complete the work to be funded by the grant and the performance of the applicant under prior grant agreements
WAC 173-322A-340(3)(f)	The ability of the grant to expedite the cleanup of the hazardous waste sites
WAC 173-322A-340(3)(g)	The ability of the grant to leverage other public or private funding for the cleanup and reuse of the hazardous waste sites
WAC 173-322A-340(3)(h)	The distribution of grants throughout the state and to various types and sizes of local governments
WAC 173-322A-340(3)(i)	Other factors as determined and published by the department

FUNDING PRIORITIES	CRITERIA
Project Eligibility - Safe Drinking Water Grants	
WAC 173-322A-350(2)(a)	The applicant must be a local government
WAC 173-322A-350(2)(b)	The applicant must be a purveyor or the applicant must be applying on behalf of a purveyor.
WAC 173-322A-350(2)(c)	The applicant or purveyor must be in substantial compliance, as determined by the department of health, with applicable rules of the state board of health or the department of health, including chapter 246-290 WAC (Group A public water supplies), chapter 246-292 WAC (Waterworks operator certification), chapter 246-293 WAC (Water System Coordination Act), and chapter 246-294 WAC (Drinking water operating permits)
WAC 173-322A-350(2)(d)	The drinking water source must be affected or threatened by one or more hazardous substances originating from a hazardous waste site.
WAC 173-322A-350(2)(e)	(e) The department of ecology has determined that the drinking water source: (i) Exhibits levels of hazardous substances that exceed the maximum contaminant levels (MCLs) established by the state board of health and set forth in WAC 246-290-310; (ii) Exhibits levels of hazardous substances that exceed the cleanup levels established by the department of ecology under Part VII of chapter 173-340 WAC; or (iii) Is threatened to exceed the levels of hazardous substances identified in (e)(i) or (ii) of this subsection.
WAC 173-322A-350(2)(f)	If the safe drinking water action includes water line extensions, the extensions must be consistent with the coordinated water system plan prepared under chapter 70.116 RCW and any plans for new development prepared under chapter 36.70 or 36.70A RCW for the geographic area containing the affected water supplies.
WAC 173-322A-350(2)(g)	The applicant must not be required to conduct the safe drinking water action under an order or decree.
Funding Priority - Safe Drinking Water Grants	
WAC 173-322A-350(3)(a)	The threat posed by the hazardous waste site to drinking water
WAC 173-322A-350(3)(b)	Whether the drinking water serves a highly impacted community
WAC 173-322A-350(3)(c)	The per capita cost of providing safe drinking water
WAC 173-322A-350(3)(d)	The ability of the grant to expedite the provision of safe drinking water
WAC 173-322A-350(3)(e)	The ability of the grant to leverage other public or private funding for the provision of safe drinking water
WAC 173-322A-350(3)(f)	The readiness of the applicant to start and complete the work to be funded by the grant and the performance of the applicant under prior grant agreements
WAC 173-322A-350(3)(g)	Other factors as determined and published by the department

Appendix D:
Ten-Year Solicitation 2018
Outreach and Application

1. Sample correspondence to local governments (January 17, 2018)

2. Sample announcement in *Site Register* (February 15, 2018)

3. Screenshots of EAGL application for Oversight Grants (as of August 2018)

Sample correspondence to local governments (January 17, 2018)

From: WA Dept of Ecology Remedial Action Grants on behalf of Matt Alexander
To: ECY-REMEDIAL-ACTION-GRANTS@LISTSERV.ECOLOGY.WA.GOV
Subject: Need funding for your cleanup project? Get SAW & EAGL accounts by 2/5/2018
Date: Wednesday, January 17, 2018 4:09:59 PM

Please see the message below from Jim Pendowski, Program Manager of the Toxics Cleanup Program:

Dear Ladies and Gentlemen:

The Department of Ecology's Toxics Cleanup Program oversees the cleanup of hazardous waste sites that pose risks to human health and the environment. **Our records indicate that your jurisdiction may own contaminated sites.** This makes your jurisdiction potentially responsible for investigating and cleaning them up. However, you may be eligible for funding through our Remedial Action Grant (RAG) Program to help pay for these cleanup costs. You can let us know about your funding needs through Ecology's Grants and Loans system (EAGL).

Why am I being contacted?

Ecology has begun planning its 2019-21 cleanup budget. As part of the process, we need to understand your funding needs for cleaning up your contaminated site(s). If you don't already have Secure Access Washington (SAW) and EAGL accounts, you'll need to create them before you can report your funding needs or before we'll include your site(s) in our **2018 Model Toxics Control Accounts (MTCA) Ten-Year Financing Report** to the Legislature. This report underlines the critical need for cleanups in Washington. For the first time, we're soliciting this information through EAGL.

Once your SAW and EAGL accounts are ready and you've entered your site information, you can apply for site funding now (or in the future), and your sites will be included in our 2018 report to the Legislature. See the 2016 list in Appendix A of our 2016 MTCA Ten-Year Financing Report: https://fortress.wa.gov/ecy/publications/SummaryPages/1609060.html

Why do you request our cleanup financing needs every two years?

The Model Toxics Control Act (MTCA) requires us to develop this comprehensive Ten-Year Financing Report to the Legislature. It identifies Washington's projected, contaminated site investigation and cleanup financing needs over the next ten years. We're required to deliver this report, in coordination with local governments that have cleanup responsibilities, **by September 20, 2018.**

When will I receive details about this solicitation?

Local governments that were included in the 2016 MTCA Accounts Ten-Year Financing Report will be contacted by email with details for completing this biennial solicitation. We expect to send the email by **Monday, February 5, 2018**

When is the solicitation period?

We expect the response period to begin **Monday, February 5, 2018**. We'll need to receive your responses by **close of business Friday, March 2, 2018**. This will let us provide the Legislature a comprehensive estimate of local government cleanup needs, and inform our budgeting and site selection process. To avoid possible delays, we strongly recommend setting up your SAW and EAGL accounts before Monday, February 5.

Does my jurisdiction have to respond to this solicitation request?

Yes, if you anticipate needing state funding to clean up contaminated sites in the 2019–21 biennium. For the first time, the solicitation will be conducted through EAGL. **This will also serve as your grant application should the Legislature fund your remedial action project.** All jurisdictions must submit grant applications through EAGL, a streamlined process that provides transparency for both recipients and Ecology staff.

Why should I set up my SAW and EAGL access now?

If your jurisdiction does not already have access to SAW and EAGL, we strongly encourage you to set them up now so you're ready for the submission process.

I'm brand-new to EAGL—what do I do first?

Set up a SAW account at https://secureaccess.wa.gov/ecy/eagl. If you already have a SAW account for other government services, don't create a new account to access EAGL. Simply log into your existing SAW account and add EAGL as an Ecology service.

How do I set up a SAW account?

Visit Secure Access Washington at https://secureaccess.wa.gov/ecy/eaglto create the account, then follow the instructions below to access EAGL. Please note: You may not "share" a SAW account with another person or organization.

1. Create your SAW account and wait for a confirmation email.

2. Click the confirmation link in the email and log back into SAW. You will automatically be directed to the EAGL system.

3. If you're registering your organization in EAGL for the first time, you'll need this information:

    a. Statewide Vendor Number available at https://des.wa.gov/services/contracting-purchasing/doing-business-state/receiving-payment-state
    b. DUNS (Dun & Bradstreet) Number
    c. Federal tax ID

4. Complete **EAGL's registration page** in the system.

5. You'll know you completed the process when you receive a system-generated email, letting you know that Ecology will activate your EAGL registration within three business days.

Where can I find more help?

Videos demonstrating how to setup your SAW and EAGL access are online at https://youtu.be/XFizCBKZpK8 and https://youtu.be/XXJh9arfasQ. Further direction and guidance regarding this improved submission process will be included in the email correspondence by February 5, 2018. For SAW or EAGL questions, please contact:

Matt Alexander, Ecology
(360) 407-7606
Matthew.Alexander@ecy.wa.gov

Lydia Lindwall, Ecology
(360) 407-6210
Lydia.Lindwall@ecy.wa.gov

We look forward to working with you and showcasing Washington's critical cleanup financing needs.

Regards,

Jim Pendowski Program Manager
Toxics Cleanup Program

Visit us on the web or social media.

Subscribe or Unsubscribe

Sample Site Register announcement (February 15, 2018)

Local Governments May Be Eligible for Grant Assistance

Your local government may own contaminated sites.
Ecology's Toxics Cleanup Program oversees the cleanup of hazardous waste sites that pose risks to human health and the environment. If you're a local government, you may be eligible for grant assistance from Ecology to clean up contaminated sites in your community.

Tell the Legislature your cleanup funding needs.
As part of Ecology's budget process, every two years we solicit local governments' financing needs to clean up their contaminated sites. We'll use this information to prepare the 2018 Model Toxics Control Act (MTCA) Accounts Ten-Year Financing Report and Ecology's 2019–21 capital budget request.

Please respond by March 2, 2018, to be included in the MTCA Ten-Year Financing Report.
You can let us know about your funding needs through Ecology's Grants and Loans system (EAGL). EAGL provides a streamlined process and transparency for both recipients and Ecology staff. To use EAGL, you need to setup a **Secure Access Washington (SAW) account**. The response period began, Monday, February 5, 2018. We'll need to receive your responses by close of business Friday, March 2, 2018. This will let us provide the Legislature a comprehensive estimate of local government cleanup needs, and inform our budgeting and site selection process.

Use EAGL to apply for funding now or later.
You can apply for site funding now or in the future through EAGL. If you apply by March 2, 2018, your site(s) will be included in our 2018 report to the Legislature.

Need help to determine your funding needs?
If you have questions about site(s) in your jurisdiction, please contact your Regional Section Manager with the Toxics Cleanup Program below:

Central Regional Office
Valerie Bound
509-454-7886
Valerie.Bound@ecy.wa.gov

Eastern Regional Office
Kathy Falconer
509-329-3568
Kathy.Falconer@ecy.wa.gov

Headquarters Cleanup
Barry Rogowski
360-407-7226
Barry.Rogowski@ecy.wa.gov

Northwest Regional Office
Bob Warren
425-649-7054
Bob.Warren@ecy.wa.gov

Southwest Regional Office
Rebecca Lawson
360-407-6241
Rebecca.Lawson@ecy.wa.gov

Begin the application process at:
https://ecology.wa.gov/About-us/How-we-operate/Grants-loans

Find more information:

- The 2016 list of contaminated sites (Appendix A of the 2016 MTCA Ten-Year Financing Report): **https://fortress.wa.gov/ecy/publications/SummaryPages/1609060.html**
- Remedial Action Grants for Local Governments 2018-2021 Guidance: **https://fortress.wa.gov/ecy/publications/SummaryPages/1809049.html**

If you have SAW & EAGL system questions, please contact:

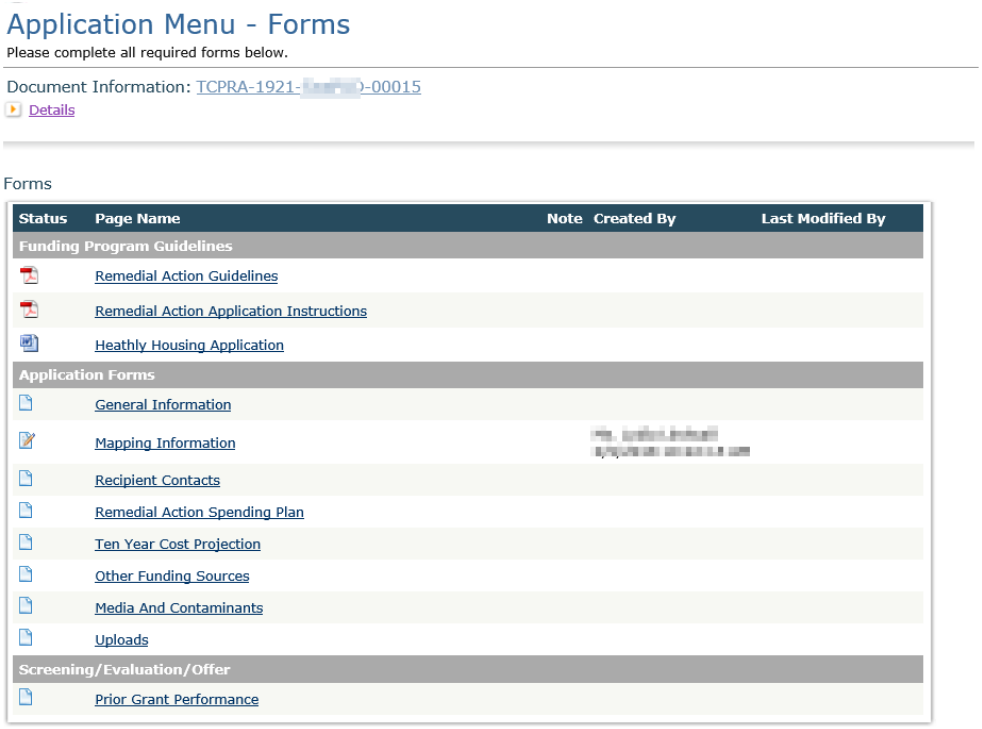
Matt Alexander, Ecology
360-407-7606
Matthew.Alexander@ecy.wa.gov

Lydia Lindwall, Ecology
360-407-6210
Lydia.Lindwall@ecy.wa.gov

Applying for an Oversight Grant: Screenshots from EAGL application

1. Initiating the application. When applicants begin the application process in EAGL, they'll see these screens containing links to guidance and instructions. After selecting "General Information," they can apply for their specific Remedial Action Grant: **Oversight**, **Extended Grant Agreement**, **Independent** (for post-cleanup or periodic reimbursements), **Integrated Planning**, **Area-wide Groundwater Investigations**, or **Safe Drinking Water Action** grant. Note that "Healthy Housing Application" was added to EAGL in Summer 2018 and was not yet an option during the Ten-Year Solicitation period February to March 2018.

2. Drop-down options are specific to the grant type. After selecting the grant type under "General Information," the drop-down menu that is specific to that grant will display. A form containing the priority funding and evaluation criteria unique to that grant type becomes available in their application.



GENERAL INFORMATION

Instructions:

Please fill in the appropriate fields.
Required fields are marked with an *
When done, click the **SAVE** button.

Project Title *

Project Short Description *
0 of 500

Project Long Description *
0 of 15000

Total Cost *

Total Eligible Cost *

Effective Date *

Expiration Date *

Ecology Program: Toxics Cleanup

Project Category *

- ○ Oversight Remedial Action Grant (Not an extended grant agreement)
- ○ Oversight Extended Grant Agreement (Extends over multiple biennia and total eligible costs of remedial actions exceed $20 million)
- ○ Independent Remedial Action - Post Cleanup (Project must have a no further action determination before receiving funding)
- ○ Independent Remedial Action - Periodic Reimbursement (Applicant must be in the VCP and have an approved workplan)
- ○ Integrated Planning Grant
- ○ Area-Wide Groundwater Investigations Grant
- ○ Safe Drinking Water Action Grant
- ○ Standard or Extraordinary Financial Hardship Loan

Will Environmental Monitoring Data be collected?:

Overall Goal *
0 of 1000

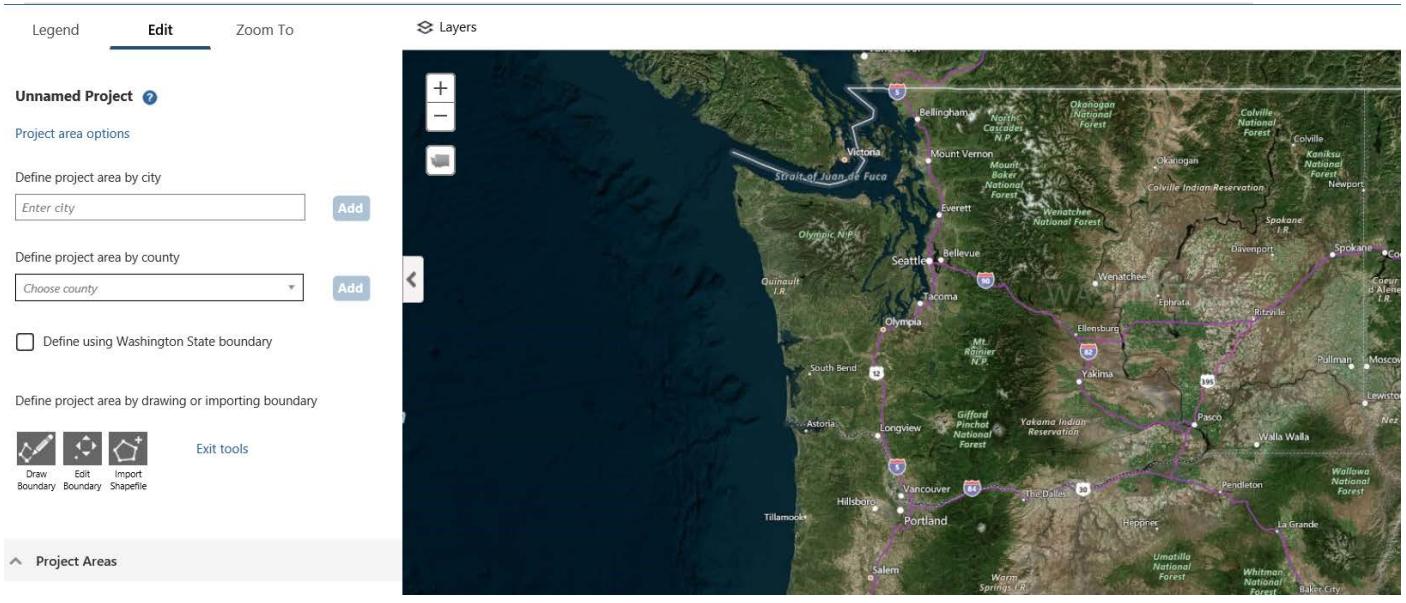
3. New mapping feature helps to document a project's location. When applicants click **Add/Modify Location(s),** they'll see a recent enhancement in EAGL that's expected to go live in Fall 2018. Applicants for any Ecology grant or loan will use this interactive mapping feature to define their project's location. Visitors accessing the public-facing map will be able to search all Ecology grants and loans—including open and closed agreements—and find project information such as grant types, recipient, the Ecology program overseeing the agreement, dollar amounts, project summaries, and project themes, such as water quality or cleanup construction.

MAPPING INFORMATION

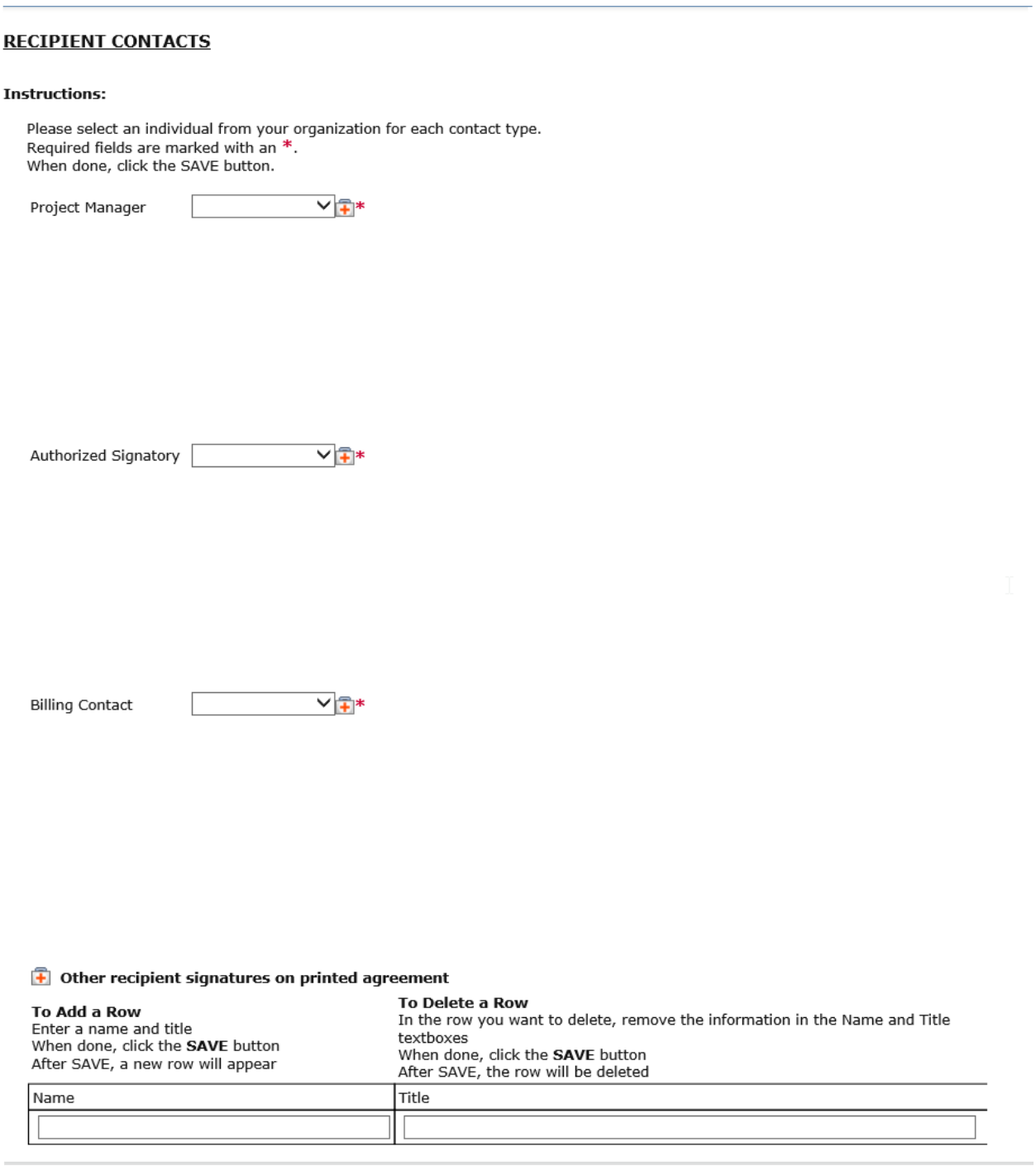
1. Click "Add/Modify Location(s)"
2. You will be directed to the Map
   For more detailed instructions click "My Training Materials" in the top navigation
3. When you return from the Map, save this form to check it back in (allow others to modify the Map)

No location data currently exists for this project. To add location data, please click the map button below.

Add/Modify Location(s)



4. Identifying contacts. Applicants can add their registered users through this screen, and identify those who fulfill specific roles for the grant or loan agreement. They can also add other staff to be included in the signature block of the printed agreement.



RECIPIENT CONTACTS

Instructions:

Please select an individual from your organization for each contact type.
Required fields are marked with an *.
When done, click the SAVE button.

Project Manager *

Authorized Signatory *

Billing Contact *

Other recipient signatures on printed agreement

To Add a Row
Enter a name and title
When done, click the **SAVE** button
After SAVE, a new row will appear

To Delete a Row
In the row you want to delete, remove the information in the Name and Title textboxes
When done, click the **SAVE** button
After SAVE, the row will be deleted

Name	Title

5. Identifying a spending plan. Applicants use this part of the application to tell us when they expect to bill Ecology during the next two-year budget period, should their request be funded for the upcoming biennium. These payment requests would be less than, or equal to, their share of the grant amount. Such information helps us with cash management. If they're awarded funding, recipients would update these estimated expenditures with actuals when they submit their payment requests.

REMEDIAL ACTION SPENDING PLAN

The purpose of the Spending Plan is to inform Ecology about when you plan to bill for project costs throughout the grant period.

Instructions:

Please fill out all fields.
Payment request number is not required until you submit your first payment request.
When done, click the **SAVE** button.
To clear the entire form, click the **DELETE** button.

Payment Request Number: Not required until first payment *

Date Submitted: * Submitted By: *

Note: Please enter amounts for state share only. Costs go in the quarter they are being billed to Ecology, not when the costs were incurred.

Start Year *	Jul-Sept	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar	Apr-Jun	
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 5	Qtr 6	Qtr 7	Qtr 8	Biennial Total
Site/Task Name									
*									
Total									Grand Total

6. Identifying their ten-year plan by phase of work. Applicants use this screen to tell us their funding needs by phase of work for the next ten years. This helps us: a) plan for the upcoming budget cycle, b) prepare our budget request, and c) report to the Legislature on upcoming funding needs over the next decade. Note that this self-reported ten-year plan is provided by local governments and is distinct from Ecology's Ten-Year Financing Plan outlined in this report.

TEN YEAR COST PROJECTION

Enter total project costs needed through project completion divided up by the biennium when expenditures are planned.

Round all values to the nearest thousand (1,000).

The Total column and Total row values are automatically calculated. Do not enter any total values. Click "Save" to run the calculations.

Click **SAVE** button when done.

	2019-2021 7/1/19 - 6/30/21	2021-2023 7/1/21 - 6/30/23	2023 - 2025 7/1/23 - 6/30/25	2025 - 2027 7/1/25 - 6/30/27	2027 - 2029 7/1/27 - 6/30/29	Total
PHASE OF CLEANUP - (identify funding being requested by biennium and phase of cleanup)						
Interim & Emergency Actions (J002) Costs for performing cleanup actions under J003-J007 and J013 as an interim or emergency action.						
Assessments & Remedial Investigations (J003) Costs incurred planning and implementing site investigations, phase 1 and 2 environmental site assessments for integrated planning grants, and Remedial Investigations (RI). This includes site characterization studies, cultural resource studies, source control, investigations, sampling and analysis, surveying, mapping, data management, EIM data entry, public involvement, and project management costs necessary to conduct the investigations.						
Feasibility Study (J004) Costs incurred planning and implementing the FS and selection of remedy. This includes MTCA or sediment feasibility studies, pilot tests and treatability studies, supplemental testing, source control engineering studies to develop solutions, green remediation alternatives analysis, development of the cleanup action plan, EIS, data management, public involvement, and project management costs necessary to complete the FS.						
Engineering Design (J005) Costs to prepare the engineering design report, construction plans and specifications, and any other needed plans or reports necessary to complete the Engineering Design phase. This includes mapping, surveying, design of source control systems, or stormwater reduction/treatment facilities, permit applications, and project management costs.						

Cleanup Construction (J006) Costs to conduct cleanup actions at the site. This includes construction work and oversight, health and safety monitoring, quality control/assurance, environmental monitoring/testing and EIM data entry, operations and maintenance costs during active construction, and project management costs.						
Post Construction Operation and Maintenance & Monitoring (J007) Costs of operations and maintenance of the remedy and/or monitoring for one year after completion of cleanup construction. This includes project management costs for this activity.						
Integrated Planning Grant Activities (J011) Costs to perform planning and public outreach activities in coordination with any of the above phases of the cleanup process to develop a property redevelopment plan in conjunction with cleanup. This includes costs such as: public outreach, economic studies, financing options, market assessments, redevelopment strategies, and transportation studies.						
Independent Remedial Actions (J012) Costs performing independent remedial actions. These costs are not tracked under specific phases of cleanup. They could include activities from any of the above phases of cleanup.						
Grant & Project Administration (J008) Recipient staff costs required to manage the grant and project. This includes grant billing and reporting, data management, contracting costs, and reports or studies related to multiple tasks or sites.						
Safe Drinking Water Actions (J013) Costs necessary to provide safe drinking water to residents impacted by contaminated drinking water sources from a contaminated site.						
Area-wide Groundwater Investigations (J003) Costs to investigate area-wide groundwater issues within an area of known or suspected area-wide groundwater contamination.						
TOTAL ELIGIBLE PROJECT COSTS						

7. Identifying funding sources, media, contaminants, and risks to human health. Applicants use the following screens to identify existing funding for their cleanup, and describe the contaminated site to the best of their knowledge. The screens also identify Ecology's funding priorities and criteria that are applicable to that specific grant type.

This information not only helps applicants determine their project's eligibility for funding, it identifies the criteria Ecology managers will use when evaluating their project, such as readiness to proceed, land re-use potential, and the site's proximity to a drinking water well.

OTHER FUNDING SOURCES

Instructions:

Please fill in the appropriate fields.
Required fields are marked with an *
When done, click the **SAVE** button.

***Do you have any contribution/settlement funds to commit to the grant funded activities?** ○ **Yes** ○ **No**

Other Funding Sources

Funding Organization Type *	Organization Name *	Type of Funding *	Funding/Agreement #	Amount Committed *

Local Government
State Agency
Federal Agency
PLP
Insurance
Other

loan
grant
bond
cash
interagency agreement
other

If Funding Organization type "Other" was selected above, describe.

Upload Settlement Document
(PLP or Insurance)

Enter a description for your file
Click the Browse button and select your file
Click Save, your file will appear in the list of uploaded documents
Repeat for each file
To Delete a file, remove a file's description and select the Delete checkbox next to the file
then click SAVE.

Attachment Description | Attachment | Browse...

MEDIA AND CONTAMINANTS

Please check the relevant media field(s) for all known or suspected contaminants at the site.
Click the **SAVE** button.

CONTAMINANT GROUP	CONTAMINANT	MEDIA					DESCRIPTION
		SOIL	GROUND WATER	SURFACE WATER	AIR	SEDIMENT	
Non-Halogenated Organics	Phenolic Compounds	☐	☐	☐	☐	☐	Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)
	Non-Halogenated Solvents	☐	☐	☐	☐	☐	Organic solvents, typically volatile or semi-volatile, not containing any halogens. To determine if a product has halogens, search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is not a Cl, I, Br, F in the formula, it's not halogenated. (Examples: acetone, benzene, toluene, xylenes, methyl ethyl ketone, ethyl acetate, methanol, ethanol, isopropranol, formic acid, acetic acid, stoddard solvent, Naptha). Use this when TEX contaminants are present independently of gasoline.
	Polynuclear Aromatic Hydrocarbons (PAH)	☐	☐	☐	☐	☐	Hydrocarbons composed of two or more benzene rings.
	Tributyltin	☐	☐	☐	☐	☐	The main active ingredients in biocides used to control a broad spectrum of organisms. Found in antifouling marine paint, antifungal action in textiles and industrial water systems. (Examples: Tributyltin; monobutyltin; dibutyltin)
	Methyl tertiary-butyl ether	☐	☐	☐	☐	☐	MTBE is a volatile oxygen-containing organic compound that was formerly used as a gasoline additive to promote complete combustion and help reduce air pollution.
	Benzene	☐	☐	☐	☐	☐	Benzene
	Other Non-Halogenated Organics	☐	☐	☐	☐	☐	TEX
	Petroleum Diesel	☐	☐	☐	☐	☐	Petroleum Diesel
	Petroleum Gasoline	☐	☐	☐	☐	☐	Petroleum Gasoline
	Petroleum Other	☐	☐	☐	☐	☐	Oil-range organics
Halogenated Organics	PBDE	☐	☐	☐	☐	☐	Polybrominated di-phenyl ether
	Other Halogenated Organics	☐	☐	☐	☐	☐	Other organic compounds with halogens (chlorine, fluorine, bromine, iodine). search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is a Cl, I, Br, F in the formula, it is halogenated. (Examples: Hexachlorobutadiene; hexachlorobenzene; pentachlorophenol)
	Halogenated solvents	☐	☐	☐	☐	☐	PCE, chloroform, EDB, EDC, MTBE
	Polychlorinated Biphenyls (PCB)	☐	☐	☐	☐	☐	Any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects
	Dioxin/dibenzofuran compounds	☐	☐	☐	☐	☐	A family of more than 70 compounds of chlorinated dioxins or furans. (Examples: Dioxin; Furan; Dioxin TEQ; PCDD; PCDF; TCDD; TCDF; OCDD; OCDF). Do not use for 'dibenzofuran', which is a non- chlorinated compound that is detected using the semivolatile organics analysis 8270
Metals	Metals - Other	☐	☐	☐	☐	☐	Cr, Se, Ag, Ba, Cd
	Lead	☐	☐	☐	☐	☐	Lead
	Mercury	☐	☐	☐	☐	☐	Mercury
	Arsenic	☐	☐	☐	☐	☐	Arsenic
Pesticides	Non-halogenated pesticides	☐	☐	☐	☐	☐	Pesticides without halogens (Examples: parathion, malathion, diazinon, phosmet, carbaryl (sevin), fenoxycarb, aldicarb)
	Halogenated pesticides	☐	☐	☐	☐	☐	Pesticides with halogens (Examples: DDT; DDE; Chlordane; Heptachlor; alpha-beta and delta BHC; Aldrin; Endosulfan, dieldrin, endrin)
Other Contaminants	Radioactive Wastes	☐	☐	☐	☐	☐	Wastes that emit more than background levels of radiation.
	Conventional Contaminants, Organic	☐	☐	☐	☐	☐	Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)
	Conventional Contaminants, Inorganic	☐	☐	☐	☐	☐	Non-metallic inorganic substances or indicator parameters that may indicate the existence of contamination if present at unusual levels (Examples: Sulfides, ammonia)
	Asbestos	☐	☐	☐	☐	☐	All forms of Asbestos. Asbestos fibers have been used in products such as building materials, friction products and heat-resistant materials.
	Other Deleterious Substances	☐	☐	☐	☐	☐	Other contaminants or substances that cause subtle or unexpected harm to sediments (Examples: Wood debris; garbage (e.g., dumped in sediments))
	Benthic Failures	☐	☐	☐	☐	☐	Failures of the benthic analysis standards from the Sediment Management Standards.
	Bioassay Failures	☐	☐	☐	☐	☐	For sediments, a failure to meet bioassay criteria from the Sediment Management Standards. For soils, a failure to meet TEE bioassay criteria for plant, animal or soil biota toxicity.
Reactive Wastes	Unexploded Ordinance	☐	☐	☐	☐	☐	Weapons that failed to detonate or discarded shells containing volatile material.
	Other Reactive Wastes	☐	☐	☐	☐	☐	Other Reactive Wastes (Examples: phosphorous, lithium metal, sodium metal)
	Corrosive Wastes	☐	☐	☐	☐	☐	Corrosive wastes are acidic or alkaline (basic) wastes that can readily corrode or dissolve materials they come into contact with. Wastes that are highly corrosive as defined by the Dangerous Waste Regulation (WAC 173-303-090(6)). (Examples: Hydrochloric acid; sulfuric acid; caustic soda)

OVERSIGHT REMEDIAL ACTION GRANTS

Your responses to questions on this form will help us evaluate your application.
Please select all criteria applicable to your project.
Click **SAVE** button when done.

Cleanup Site ID (CSID) (if applicable)

Enter your CSID, click save, and verify the correct site page is shown

* Are you requesting funding for the 2019-2021 Biennium? ○ Yes ○ No

If Yes, please make sure the amount you entered for Total Eligible Cost on the General Information Form matches the amounts you enter on the Ten Year Cost Projection Form for the 2019-2021 biennium.

Remedial Action Grant and Loan Priority

1. Grants and loans under an existing Extended Grant Agreement (Not applicable for the 2018 Ten Year Solicitation) - WAC 173-322A-210(1)(a)
2. Oversight Grants and loans for previously funded projects - WAC 173-322A-210(1)(b)
3. Grants for new projects - WAC 173-322A-210(1)(c)

WAC 173-322A-210(1)(a)-(c)

* Our site/cleanup project has:

- ○ has an existing extended grant agreement
- ○ previously received remedial action grant/loan funding and made substantial progress
- ○ never received a remedial action grant or loan.

Project Eligibility

For oversight grants, a project consists of remedial actions conducted under one or more orders or decrees at a single hazardous waste site.
WAC 173-322A-320(2)(a)-(d)

Our jurisdiction is: (Select local government type from dropdown) — WAC 173-322A-320 (2)(a)

*

If other, please identify the type of local government your jurisdiction is.

For this project, we are: (Select response from dropdown) — WAC 173-322A-320 (2)(b)

*

* Our jurisdiction is (or anticipates being) required to conduct remedial actions under an order or decree. — WAC 173-322A-320 (2)(c) & (d)

- ○ Yes
- ○ No
- ○ Unknown

Funding Priority Factors

Threat posed by the hazardous waste site to human health and the environment
WAC 173-322A-320(3)(a)

Our site/cleanup project has the following environmental problems: (Select response from the drop down)

- uncontained contaminants*
- contaminants that exhibit high mobility*
- highly permeable soil or is within a floodplain*
- acutely toxic contaminants*
- impact to water resources used for crop irrigation*
- a drinking water well or sole-source aquifer within one mile of its boundaries*
- a designated sensitive environment or fishery resource within one mile of its boundaries*
- a well head protection zone within one mile of its boundaries*

Our site cleanup project has: (Select One)*

- ○ surface and groundwater impacts and serves 4,999 people or fewer.
- ○ surface and groundwater impacts and serves more than 5,000 people.
- ○ surface and groundwater impacts and serves more than 10,000 people.
- ○ unknown.
- ○ none apply.

Ecology Only
Performance of the applicant under prior grant agreements (not a scored criteria until the 2020 Ten-Year Solicitation) - WAC 173-322A-320(3)(e)

Land reuse potential of the hazardous waste site
WAC 173-322A-320(3)(c)

Our site/cleanup project has strong reuse potential because it: (Select all that apply)

- ☐ is located within an incorporated city, town or urban growth area designated under RCW 36.70A.110
- ☐ is a vacant, abandoned or underutilized former industrial or commercial facility.
- ☐ has availability of urban infractructure (i.e. water, sewer, other utilities, public transit).
- ☐ meets the goals of local government planning documents at the time of redevelopment. (upload planning documents below)
- ☐ presents opportunity for significant fish/wildlife habitat restoration and/or other conservation benefits.
- ☐ considers climate change projections (i.e., sea-level rise, extreme weather events, wildfires, etc.).
- ☐ has an identified purchaser, developer, operator, or lessee when redeveloped.
- ☐ incorporates other sustainability measures (i.e., LEED certification, stormwater/flood management, low-water landscaping, etc.).

*Our site/cleanup project: (Select One)

- ○ solely provides a public access/public benefit (i.e., park, museum, library).
- ○ provides mixed use (i.e., both public access/public benefit and private).
- ○ does not provide public access/public benefit

*Our site/cleanup project: (Select One)

- ○ preserves affordable housing stock when redeveloped.
- ○ provides some additional affordable housing stock when redeveloped.
- ○ solely provides affordable housing stock when redeveloped.
- ○ does not preserve or provide affordable housing

Ecology Only

Land use Potential
WAC 173-322A-320(3)(c)

Does this project demonstrate a clear vision for future use of the property?

- ○ Yes
- ○ No

Will this project achieve:

- ○ a MTCA Method A cleanup
- ○ a MTCA Method B cleanup without using institutional controls
- ○ Uncertain

Readiness to proceed
WAC 173-322A-320 (2)(c)&(d) and WAC 173-322A-320 (3)(c)through(e)

Our site/cleanup project demonstrates readiness to proceed because: (Select all that apply)

☐ we have legal access to the site.	WAC 173-322A-320(3)(e)
☐ we have contracts in place. (such as public works)	WAC 173-322A-320(3)(e)
☐ we've hired an environmental consultant.	WAC 173-322A-320(3)(e)
☐ the required state, local, or federal permits are in hand.	WAC 173-322A-320(3)(e)
☐ an order or decree has been signed.	WAC 173-322A-320(2)(c) & (d)
☐ an order or decree is in process.	WAC 173-322A-320(2)(c) & (d)
☐ a local executive or legislative body has acted (such as approvals from city council or port commission, etc.).	WAC 173-322A-320(3)(e)
☐ matching funds are secured and ready to be spent, if local match or non-state funding is being used.	WAC 173-322A-320(3)(e)
☐ we've completed draft workplans.	WAC 173-322A-320(3)(e)
☐ we've identified our local government / staff project manager.	WAC 173-322A-320(3)(e)
☐ all PLPs have been identifed.	WAC 173-322A-320(3)(e)
☐ all PLPs have been notified.	

If needed, please provide clarifying details about your responses above.

Ecology Only
Ecology's evaluation of readiness to proceed: (Select all that apply)
WAC 173-322A-320(3)(i)

- ☐ Ecology cleanup project manager (a.k.a. site manager) has been assigned.
- ☐ Public comment period has been scheduled.
- ☐ Public comment period has been completed.
- ☐ Remedial Investigation / Feasibility Study (RI/FS) has been completed.

Ability of grant to leverage other funds WAC 173-322A-320(3)(g)	This grant would give us the ability to leverage other funds because (select all that apply): ☐ a public/private partnership is in place. ☐ local infrastructure project(s) are planned to serve the redeveloped area (e.g., public transit, roads, etc.) ☐ we have a large local investment that reduces match or expands the scope of work beyond that funded by the grant. ☐ we've submitted grant applications for other funding. ☐ other grants we would receive are contingent upon this funding. (Upload supporting documentation)
Ecology Only **Geographic distribution:** WAC 173-322A-320(3)(h)	Ecology will prioritize eligible projects for funding or limit funding for eligible projects based on factors that include the distribution of grants throughout the state and to various types and sizes of local governments.
Ecology Only **Highly Impacted Community** WAC-173-322A-320(3)(d)	Ecology will evaluate which communities are a highly impacted community by comparing applicants' census tract data from EPA's 2017 EJScreen tool. The factors that will be compared are: 1) percent of population who have low income (less than 2 times the poverty level); 2) percent linguistically isolated; 3) percent under the age of 5; 4) percent over the age of 64; and 5) percent with less than a high school education.

Please upload a copy of your order or decree and other project- and budget-related documents to support your responses above. Your project's evaluation will be affected by these supporting documents.
Click the BROWSE button
Select your file
Click SAVE, your file will appear in the list of uploaded documents
Repeat for each file
To delete a file, select the Delete checkbox next to the file and click SAVE

Document description

	Browse...
	Browse...

CATEGORY OF CLEANUP SITE

Instructions:

Please fill in the appropriate fields.
Required fields are marked with an *
When done, click the **SAVE** button.

* **Description/Categories of Cleanup Sites**

Selected	ID	General Category	Detailed Description
☐	3122	Agricultural & Forestry Operations	Farming operations; Orchards; Nurseries; Include pesticide mixing areas and field application of pesticides at these facilities
☐	3123	Pesticide Handling	Pesticide & fertilizer formulation and handling at other than farms, orchards or nurseries – Pesticide formulators; Distributors, Aerial applicators
☐	3124	Bulk Fuel Storage and Handling	Petroleum and biofuels refining; Bulk fuel storage & handling; Pipeline operations; Railyards
☐	3125	Chemical & Paint manf & Distribution	Chemical and Paint manufacturing, storage and handling (do not include petroleum refining and pesticide handling, which are listed separately)
☐	3126	Dry Cleaning	Dry cleaners
☐	3127	Discharges & Outfalls	Marine and freshwater discharges and outfalls - Combined sewer/stormwater overflows; Treatment facility outfalls; Stormwater runoff & discharges
☐	3128	Marine Services	Includes both marine and freshwater facilities - Shipyards; Boatyards; Marinas; Dock & Pier operations; Ship terminals; Sediment sites not otherwise specified
☐	3129	Landfills and Hazardous Waste Facilities	Municipal & Industrial solid waste landfills; Drum dump sites; Illegal dumps; RCRA/State Hazardous Waste Treatment, Storage & Disposal Facilities (TSDs); Tire fires; Drug Labs
☐	3130	Leaking Underground Storage tanks	UST/LUST tanks and pipe systems leaks and spills; Gas stations; Service Stations; Heating oil tank leaks;
☐	3131	Vehicle & Equipment Maintenance	Truck and auto repair & servicing - Equipment repair and leasing; Brake shops; Muffler replacement; Battery replacement; Engine repair; Transmission shops; Hydraulic lift leaks
☐	3132	Manufactured Gas; Power Generation	Manufactured gas plants (MGPs); Electric power generation facilities; Substations; Transformers; MGP residuals/ash disposal sites; Associated equipment maintenance facilities (do not include vehicle repair which is listed separately)
☐	3133	Metal Works	Metal plating; Metal machining & fabrication; Airplane manufacturing & assembly
☐	3134	Military Facilities; Munitions Related	Military bases – Army, Navy; Marine; Air Force; Coast Guard; Missile silos; Artillery ranges; Munitions & explosives manufacturing & disposal; Shooting Ranges & Clubs
☐	3135	Mining & Drilling	Mining related – Mines; Tailings and waste rock disposal; Ore processing facilities; Oil and Gas exploration and extraction
☐	3136	Misc Industrial & Commercial Activities	Miscellaneous industrial & commercial activities - not otherwise specified; Miscellaneous manufacturing facilities - not otherwise specified
☐	3137	Salvage Yards	Junk yards; Scrap metal yards; Salvage yards; Auto shredding/wrecking yards; Battery recyclers; Transformer recycling; Scrap metal recycler
☐	3138	Smelters & Foundries	Smelters; Foundries; Die Casting; Steel Mills – General operations; Disposal sites & stockpiles; Smelter air deposition areas (smelter plumes); Log sort yards and other areas where wastes have been used as aggregate or fill
☐	3139	Spills	Spills - Vehicle Crashes; Shipwrecks; Train derailments (do not include LUST sites and Bulk Fuel Handling Facilities which are listed separately)
☐	3140	Wood Products Manufacturing	Wood Products Manufacturing; Lumbermills; Sawmills; Papermills; Pulpmills; Plywood manufacturing; Log sort yards not mixed with smelter waste; Include both general operations and associated wood waste & treatment residuals disposal sites
☐	3141	Wood Treatment	Wood treatment – pole treatment; lumber treatment
☐	3142	Other	Unidentified sources; Clean operations impacted by off-property sources (other than smelter plumes)

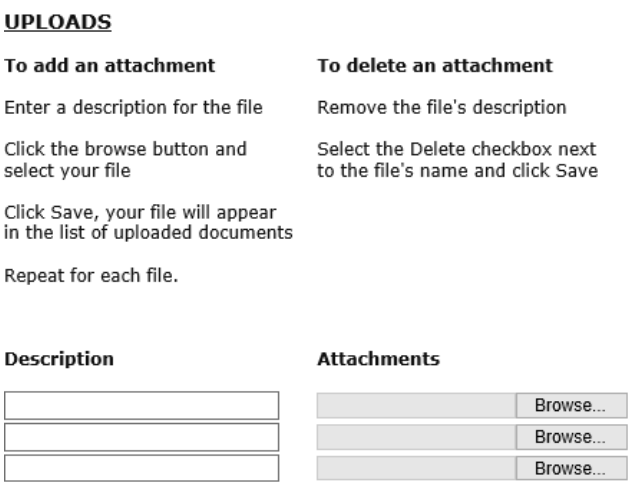
NOTES:

If the application contains multiple sites, include the CSID associated with each general category of contaminant.

Use as many categories as appropriate for the site. For Example, a LUST site on a military base should be classified as both military and LUST; a waste dump site affiliated with a smelter should be classified as a smelter and a landfill.

Avoid using the "Misc Industrial & Commercial Activities" and "Other" categories where possible.

8. Uploading supplemental information. Before completing their application, applicants have the option of uploading additional documents that support their request. Examples might include scopes of work, budgets, and letters of support from other parties. Most document types are accepted, including Word, Excel, PowerPoint, PDF, and .jpg, .png, and .gif images. TCP's Grants and Loans staff are available to help applicants during any stage of the application process, including uploading documents.



UPLOADS

To add an attachment	**To delete an attachment**
Enter a description for the file	Remove the file's description
Click the browse button and select your file	Select the Delete checkbox next to the file's name and click Save
Click Save, your file will appear in the list of uploaded documents	
Repeat for each file.	

Description	**Attachments**
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