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ECOLOGY
State of Washington

Model Toxics Control Act Capital Account

Ten-Year Financing Report 2020

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
CAP	Cleanup Action Plan
CAP	Chemical Action Plan
CC	construction complete (part of CC/O&M/Performance Monitoring)
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CLARC	Cleanup Levels and Risk Calculations spreadsheet
COVID-19	2019 coronavirus disease; also known as 2019 novel coronavirus
cPAH	carcinogenic polycyclic aromatic hydrocarbon
CRO	Ecology's Central Regional Office
CSA	Cleanup Settlement Account
CSCSL	Confirmed and Suspected Contamination Site List
CSI	Eastern Washington Clean Sites Initiative
CSID	cleanup site identification number
CWU	Central Washington University
DNR	Washington State Department of Natural Resources
DOR	Washington State Department of Revenue
EAGL	Ecology's Administration of Grants and Loans
EAP	Environmental Assessment Program
ECY or Ecology	Washington State Department of Ecology
EJ	environmental justice
EPA	United States Environmental Protection Agency
ERO	Ecology's Eastern Region Office
ESSB	Engrossed Substitute Senate Bill
ESP	Everett Smelter Plume
FS	Feasibility Study
FSID	facility site identification number
FY	fiscal year
HB	House Bill
HSL	Hazardous Sites List
HST	Hazardous Substance Tax
HVOC	highly volatile organic compound

Acronym or Abbreviation	Definition
II	Initial Investigation
IPD	Implicit Price Deflator
IPG	Integrated Planning Grant
ISIS	Integrated Site Information System database
IT	information technology
LD	Legislative District
LDW	Lower Duwamish Waterway
MTCA	Model Toxics Control Act
MTCA accounts	Model Toxics Control Act accounts. **Effective July 1, 2019:** MTCA Operating Account, MTCA Capital Account, and MTCA Stormwater Account **Previous to July 1, 2019:** State Toxics Control Account (STCA), Local Toxics Control Account (LTCA), Environmental Legacy Stewardship Account (ELSA)
MTCA Plan	Model Toxics Control Accounts Cash Management Plan
MVF	Motor Vehicle Fund
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	Formal No Further Action (when written documentation is provided)
O&M	operation and maintenance (part of CC/O&M/Performance Monitoring)
OFM	Washington State Office of Financial Management
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PCE	tetrachloroethylene
PFAS / PFOAS	Per-fluorinated and poly-fluorinated alkyl substances
PLIA	Washington State Pollution Liability Insurance Agency
PLP	potentially liable person or party
PSI	Puget Sound Initiative
RAG	Remedial Action Grant Program
RCW	Revised Code of Washington
RI	Remedial Investigation
SAW	Secure Access Washington
SBCA	State Building Construction Account
SCUM	Sediment Cleanup User's Manual
SEA	Shorelands and Environmental Assistance Program
SHA	Site Hazard Assessment

Acronym or Abbreviation	Definition
SMS	Sediment Management Standards (rule)
SSB	Substitute Senate Bill
TCP	Ecology's Toxics Cleanup Program
UST	underground storage tank
VCP	Voluntary Cleanup Program
WAC	Washington Administrative Code

Acknowledgments

Washington state is a natural treasure that defies description—it's simply our home. It's where wheat fields on the Palouse wave hello in the summer and orchards in the Cascade foothills ripen in the fall. It's where salmon swim and eagles soar in an environment that beckons us to explore, be uplifted, and become renewed.

Over the last century, however, our environment has been scarred by a legacy of contamination. Past industrial business practices, waste disposal methods, and accidental spills have impacted our sediment, air, groundwater, and soil. It's a toxic legacy that threatens our well-being and economy. Fortunately, Washington is also home to extraordinary people—including residents, scientists, legislators, and local government representatives—who are fighting to reverse the effects of that contamination every day.

Ecology's Toxics Cleanup Program is dedicated to that work. We use Washington's environmental cleanup law, the Model Toxics Control Act, to direct and facilitate the cleanup of more than 13,400 contaminated sites. We offer grants and loans to local governments to clean up sites in their jurisdictions, and partner with them to educate and monitor cleanups so we can prevent more hazards. Together, we've cleaned up more than 7,300 sites and thousands more are underway.

MTCA funding to do that work is limited, and this report describes how we prioritize which projects receive it. It is one of the primary ways we inform the Legislature and public about cleanup financing needs: we identify funding priorities for cleanups that can be reasonably conducted over the next ten years, and draw attention to the amount of funding still needed.

The projects described herein are testament to the local government representatives who are also balancing limited resources to protect their communities. My thanks for their work and grant applications that informed this report, and to Ecology's staff who help make cleanups happen—including our cleanup project managers, database coordinators, and grant, fiscal, policy, and administrative staff. My thanks especially to the dedicated team on the following page who analyzed, reviewed, and prepared this information for you.

Washington is our home and its resources are irreplaceable. It is a privilege working alongside you to protect them.

Rebecca Lawson, Interim Manager
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Executive Summary

Purpose of this report

The Washington State Department of Ecology (Ecology) produces the MTCA Capital Account Ten-Year Financing Report every two years in cooperation with local governments that have cleanup responsibilities. This report outlines the estimated financing that Washington state and local governments will need to clean up contaminated sites during the 2021–23 biennium and over the next ten years. It also identifies the projects and grant programs that were included in Ecology's budget request to the Governor for the 2021–23 biennium.

Washington's environmental cleanup law, the Model Toxics Control Act (MTCA), requires this report (RCW 70A.305.030(4)).[1]

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

(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 model toxics control capital 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 model toxics control capital 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 model toxics control capital 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 the model toxics control capital account. The submittal must also identify separate budget estimates for large, multibiennia clean-up projects that exceed ten million dollars. The department must 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.

[1] Hazardous Waste Cleanup—Model Toxics Control Act, RCW 70A.305.030, Department's powers and duties, as amended by 2019 c 422: https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305.030

Per these requirements, the Ten-Year Financing Report focuses on funding needed to clean up contaminated sites during the 2021–23 biennium and over the next ten years. However, MTCA is also used to fund a broad range of other critical public health and environmental work at Ecology and eleven other state agencies in Washington, totaling tens of millions of dollars. The funding needs of those activities are not summarized here. To learn more about those activities, download our companion report, MTCA Biennial Report of Expenditures: 2017–19 Biennium,[2] published in November 2019.

Summary of Chapter 1: Background on MTCA and cleanup numbers

Every person is entitled to clean water, soil, and air. As of June 2020, there are more than 13,400 contaminated sites in Washington state that can pose threats to human health, environment, and economy. Roughly 21% of those sites are "public" and therefore the responsibility of local, state, and federal governments to clean up. Ecology uses steps in the Model Toxics Control Act to conduct or oversee cleanups and so far, we've cleaned up more than 7,300 of them. Since there are about 200 to 300 new sites discovered and reported to Ecology each year, staying on top of this work is challenging. We identify some of the factors that affect cleanup speed and what we're doing to help them go faster. We also provide links to resources such as this report that show we're using public funds to protect human health and the environment.

Summary of Chapter 2: Hazardous Substance Tax forecast

The MTCA accounts provide us more than $100 million in capital dollars each biennium to pass through to local governments and others. Those funds are used to conduct contaminated site cleanups and carry out projects for toxics prevention, air toxics mitigation, and stormwater pollution control. The MTCA accounts also provide about 40% of Ecology's operating budget.

The MTCA accounts are primarily funded by revenue from the Hazardous Substance Tax (HST) collected by the Department of Revenue. Petroleum makes up about 90% of revenue collected with the HST.

In 2019, the Legislature made significant changes to the MTCA accounts and the revenue that funds them. The first $50 million per biennium of liquid petroleum tax revenue is deposited into Washington's Motor Vehicle Fund, and it must be used

[2] https://fortress.wa.gov/ecy/publications/SummaryPages/1909045.html

exclusively for transportation stormwater purposes. The remaining revenue is deposited into the three new MTCA accounts: 60% into the MTCA Operating Account, 25% into the MTCA Capital Account, and 15% into the MTCA Stormwater Account.

DOR's June 2020 revenue forecast for the HST is projected to total $527 million in the 2021–23 biennium. Ecology is submitting a mix of operating and capital budget requests designed to support additional toxics prevention, management, and cleanup work. We are also submitting a request for State Building Construction Account bonds to help local governments manage emerging concerns of affordable housing and PFAS contamination in drinking water.

Summary of Chapter 3: How we estimate RAG financing needs for the next ten years

In a month-long process that begins in February every other year, we ask local governments for information about contaminated sites under their jurisdiction. We also ask for their cost estimates to clean them up over the next ten years. Through this "ten-year solicitation process," local governments can apply for remedial action grants and loans to clean up sites or provide safe drinking water to their communities. They can also simply provide us information to share with the Legislature. We prioritize the projects, submit a budget request to the Governor that funds as many as we can, then publish all of them in this report.

To prioritize which projects receive funding, we use criteria from many sources including the Remedial Action Grant (RAG) Rule, Chapter 173-322A WAC.[3] Find the criteria in Appendices D–F at the end of this report and in the 2021–23 RAG Guidance.[4] During a given biennium, local governments may be able to apply for six different types of RAG grants and loans.
For the 2021–23 biennium, we offered five of the six types.

Summary of Chapters 4, 5, 6, and 7: Snapshot of estimated cleanup financing needs for local governments and the state

See Tables 1 through 4 on the following pages.

[3] https://app.leg.wa.gov/WAC/default.aspx?cite=173-322A
[4] https://fortress.wa.gov/ecy/publications/summarypages/2009055.html

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Table 1: Snapshot of local governments' remedial action grant (RAG) financing tables found in Appendix B. It summarizes estimated local governments' financing needs from the Model Toxics Control Capital Account for cleanup efforts 2021 and 2023.

Financing Table No. in Appendix B	Financing Table Title	Description	No. of projects	How were projects ranked or sorted?	In Ecology's 2021–23 Biennium Capital Budget request?	State share of total project costs over ten years (estimated)
1A	**Remedial action grants (RAG) in Ecology's 2021–23 budget request**	Local governments' projects and statewide grant programs included in Ecology's budget request for the 2021–23 biennium.	27 projects + 2 statewide grant programs & associated grant management	Ranked by criteria in SSB 6090 Section 7022[5] and Appendices D, E, F	Yes = $62 million	See Table 1B
1B	**Local governments' projects & cleanup financing needs for the next ten years (2021–2031)**	All projects and estimated costs identified by local governments during the 2020 ten-year solicitation. Includes projects for which Ecology requested funding in our 2021–23 Biennium Capital Budget request (Table 1A). The list underscores local government's significant cleanup financing needed over the next ten years.	57 projects from 24 local governments = 54 Oversight grant submissions + 3 Area-wide Groundwater investigation grant submissions	Not ranked Sorted by county then Recipient	See Table 1A	**$384 million** = $361 million for Oversight grants and Area-wide groundwater investigation grants (Table 1B) + $23 million for other RAG grants & grant management activities (Table 1C)
1F–TOTAL **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 (2021–2031).	57 local government projects + 4 grant programs & associated grant management + future RAG needs	Not applicable	See Table 1A	**$697 million** = $384 million to meet local government needs + $313 million to meet future RAG needs

[5] http://lawfilesext.leg.wa.gov/biennium/2017-18/Pdf/Bills/Senate%20Passed%20Legislature/6090-S.PL.pdf?q=20200709153127

Table 2: Snapshot of state-directed work financing tables found in Appendix B. The table summarizes estimated financing needs from the Model Toxics Control Act Capital Account to conduct state-directed cleanup efforts between 2021 and 2031.

Financing Table No. in Appendix B	Financing Table Title	Description	No. of projects	How were projects ranked or sorted?	In Ecology's 2021–23 Biennium Capital Budget request?	State costs over ten years (estimated)
2A–PSI Puget Sound Initiative (PSI)	**Clean Up Toxic Sites—Puget Sound Initiative (PSI) projects in Ecology's 2021–23 Biennium Capital Budget request**	State-directed cleanup work or projects focusing on the Puget Sound region through the **Puget Sound Initiative.**	11 projects	Ranked by criteria in SSB 6090 Section 7022	Yes = $6 million	$14 million
2A–ESP Everett Smelter Plume (ESP)	**Everett Smelter Plume**	State-directed work to continue cleanup of the **Everett Smelter Plume Site**, and associated staff.	1	N/A	Yes = $11 million	$28 million
2A–EW CSI Eastern WA Clean Sites Initiative (EW CSI)	**Eastern Washington (EW) projects included in Ecology's 2021–23 Biennium Capital Budget request**	State-directed cleanup work or projects focusing on Eastern Washington through the **Eastern Washington Clean Sites Initiative**.	5 projects	Ranked by criteria in SSB 6090 Section 7022	Yes = $20 million	$30 million
2A–PICR Protect Investments in Cleanup Remedies	**Protect Investments in Cleanup Remedies (PICR) projects included in Ecology's 2021–23 Biennium Capital 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).	10 projects	Ranked by criteria in SSB 6090 Section 7022	Yes = $11 million	$32 million
2B–Remaining state-directed projects	**Remaining state-directed projects needing financing over the next ten years**	Remaining state-directed projects not included in Ecology's 2021–31 Biennium Capital Budget request, but needing funding over the next ten years (2021–31). Includes remaining PSI and PICR projects.	5 projects	Not ranked Sorted by county	No	$20 million

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Financing Table No. in Appendix B	Financing Table Title	Description	No. of projects	How were projects ranked or sorted?	In Ecology's 2021–23 Biennium Capital Budget request?	State costs over ten years (estimated)
2D–TOTAL **Summary of state-directed ten-year financing needs**	**All state-directed projects and cost estimates** **+** **Future state-directed needs**	Combined total to conduct all state-directed cleanups over next ten years (2021-31).	32 projects + future needs	Not applicable	See Table 2B	**$248 million** = $104 million for PSI/ESP/EW/PICR projects + $20 million for remaining projects + $124 million for future needs (Totals do not add due to rounding)

Table 3: Snapshot of SBCA-funded state directed work financing tables found in Appendix B. The table summarizes estimated financing needs from the State Building Construction Account (SBCA) to conduct state-directed emergent issue efforts between 2021 and 2031.

Financing Table No. in Appendix B	Financing Table Title	Description	No. of projects	How were projects ranked or sorted?	In Ecology's 2021–23 Biennium Capital Budget request?	State costs over ten years (estimated)
3	**PFAS Contaminated Drinking Water included in Ecology's 2021–23 Biennium Capital Budget request**	Local governments are addressing emerging contaminants (per- and poly-fluorinated alkyl substances group, or PFAS) found in local drinking water.	3 projects	Ranked by criteria in SSB 6090 Section 7022	Yes = $15 million	$15 million
4	**Healthy Housing Remediation Program projects included in Ecology's 2021–23 Biennium Capital Budget request**	Remediation projects offered to public, nonprofit, and private entities intending to remediate contaminated property to develop affordable housing.	4 projects	Ranked by criteria in SSB 6090 Section 7022	Yes = $10 million	$50 million = $13 million for identified projects + 37 million in estimated future need

Table 4: Snapshot of $10 million project financing table found in Appendix B. The table summarizes estimated financing needs for large, multi-biennia cleanup projects expected to exceed $10M between 2021 and 2031.

Financing Table No. in Appendix B	Financing Table Title	Description	No. of projects	How were projects ranked or sorted?	In Ecology's 2021–23 Biennium Capital Budget request?	State share of total project costs over ten years (estimated)
5	**Cleanup projects exceeding $10 million in total costs over ten years (2021–2031)**	Projects from local governments and state-directed work (summarized from Tables 1A&B and 2A&B) that are expected to exceed $10 million dollars in total project costs over the next ten years (2021–2031).	12 RAG + 5 state-directed = 17 projects	Not ranked in this table Sorted by city	Some Projects in the budget request are found in Financing Tables 1A and 2A	$368 million

Framework and assumptions when reading this report

1. Chapters are organized with brief descriptions and most relevant information first, followed by background information. Maps illustrate cleanup locations and funding amounts by county and Legislative districts; unless otherwise indicated, they are based on data in financial tables found in Appendix B.

2. 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."

3. This report provides the foundation for Ecology's biennial budget for cleanups and remedial action grants. Discussions are specific to Ecology's cleanup activities that are funded by the MTCA Capital Account. This report does not address Ecology's work that may be funded by the MTCA Operating or MTCA Stormwater accounts, nor discusses the needs of the eleven other state agencies that receive MTCA appropriations.

4. 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 MTCA Capital Account and from State Building Construction Account (SBCA) appropriations.

5. We used Washington State Department of Revenue's latest HST forecast (June 2020) for the MTCA projected revenues.

6. We solicited cost estimates for the local government financing needs from local governments, and state-directed cleanup needs from Ecology staff. The estimates are for planning purposes and based on 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 2021 and 2031.

Chapter 1: Purpose and Background

This chapter explains the purpose of the report and defines the scope of the problem: with more than 13,400 contaminated sites in Washington threatening human health and the environment, cleanup funding remains an essential benefit that helps our economy, wildlife, and seven million residents thrive.

In this chapter, we:

- Describe how the Washington State Department of Ecology (Ecology), Toxics Cleanup Program (TCP), and Model Toxics Control Act (MTCA) work to protect Washington's health and environment.
- Explain how we use MTCA to remove more than a century's worth of contamination.
- Outline the breadth of the problem so funding needs are in context (e.g., how many sites are cleaned up, how many remain, and how many more are discovered each year).
- Provide resources that describe how we're using public funding to conduct cleanups that may be happening in your own neighborhood right now.

Purpose of this report

Ecology produces this report every two years in cooperation with local governments that have cleanup responsibilities, in accordance with Washington's environmental cleanup law, MTCA (RCW 70A.305.030).[6]

This report outlines the estimated financing that Washington state and local governments will need to clean up contaminated sites over the next ten years. It also identifies projects and grant programs that are included in Ecology's budget request to the Governor for the 2021–23 biennium.

[6] https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305.030
RCW 70.105D.030 was amended in 2019 and recodified to RCW 70A.305.030 in 2020, but Ecology's reporting obligations did not change.

The reporting requirements outlined in RCW 70A.305.030(4) obligate Ecology 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 Model Toxics Control Capital Account.

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 Model Toxics Control Capital Account.

4. Project the remedial action need, cost, revenue, and any recommended working capital reserve estimate of the next biennium's long-term remedial action needs from the Model Toxics Control Capital Account, and submit them 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 Account.

6. Identify separate budget estimates for large, multi-biennia cleanup 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 cleanup projects and includes information on the anticipated private and public funding obligations to complete the relevant projects.

Washington's Department of Ecology & Toxics Cleanup Program: Why they matter

People and wildlife must have clean water, soil, and air to thrive. In February 1970, that fundamental need propelled Washington's Legislature and Governor to authorize the nation's first state environmental protection agency. Our agency became effective in July 1970, shortly before the United States Environmental Protection Agency was established in December 1970. Learn more about Ecology's first 50 years[7] and watch our Earth Day 2020 video.[8]

Today, Ecology's staff and programs continue their critical mission to protect, preserve, and enhance Washington's land, air, and water for current and future generations. Ecology's Toxics Cleanup Program is specifically dedicated to protecting 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 or functions.

The Model Toxics Control Act—the law, its regulations, and the accounts that fund it—are essential to helping us fulfill those obligations.

MTCA: Protecting health and environment for 31 years

In the late 1980s when Washington residents sought ways to protect their environment for future generations, they initiated a groundbreaking change that resulted in a step-by-step process for managing contaminated sites and more than 7,300 completed cleanups today.

Washington voters passed Initiative 97 in 1988, and on March 1, 1989, the Legislature adopted it into law as our state's environmental cleanup law, the Model Toxics Control Act. MTCA 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.

[7] https://ecology.wa.gov/About-us/Our-role-in-the-community/50-years
[8] https://www.youtube.com/watch?v=YpgDyjT2eiQ.

MTCA has been amended many times over the last 31 years, but the key principles that contributed to its effectiveness remain in place today:

a. 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.

Statute language supporting these principles is found in RCW 70A.305.030(1)(b); RCW 70A.305.030(2)(a); RCW 70A.105.040; RCW 70A.305.070.

Ecology is one of several state agencies that receive MTCA funds. Ecology's Toxics Cleanup Program (TCP) is primarily responsible for implementing and enforcing MTCA's cleanup provisions. TCP uses both the MTCA law and the MTCA Cleanup Rule (Chapter 173-340 WAC)[9] to provide cleanup oversight, manage hazardous waste site cleanups in the state, and develop the rules and guidance that govern cleanup. Ecology also uses funds from the Model Toxics Control Capital Account to administer grants to local governments that help with assessment and cleanup.

MTCA celebrated its 30th anniversary in 2019. That milestone draws attention to more than three decades of community engagement, legislative support, databases of cumulative scientific data, and the efforts of thousands of cleanup partners. It also affirms that healthy people and a clean environment remain essential priorities to Washington's residents. More than 7,300 cleanups are protecting our health and environment today—thanks to MTCA and the people behind it, that number will only continue to grow.

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.

[9] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340

Cleanups are often considered construction projects that remove or immobilize contamination and put properties back into use.

Some of these 4,000 cleanups may be happening in your own backyard. Zoom in or enter an address to search What's in My Neighborhood, an interactive map that connects you to details about each site: https://apps.ecology.wa.gov/neighborhood/

Why should Washington residents care about contaminated sites?

Contaminated sites can harm human health and wildlife. Hazards such as chemicals and heavy metals can pollute drinking water and food sources, and contaminated air can affect air in buildings where people live and work.

Ecology and TCP are working to clean up Washington's 13,400-plus contaminated sites. Many of these sites are the result of more than 100 years of past business practices and accidental spills of dangerous materials. By partnering with local governments, contractors, potentially liable persons, and thousands of others across our state, we're gradually removing the threats of this legacy contamination. Although the number of newly discovered sites continues to grow at a rate of 200 to 300 new sites discovered each year, the massive cleanup efforts are making a difference: more than half of the 13,400-plus sites are already cleaned up or undergoing monitoring (7,500-plus sites combined), and more than 4,000 cleanups are underway.

MTCA's cleanup steps remove hazardous threats

MTCA's steps in the formal cleanup process[10] drive our work to clean up hazardous waste—and it often starts with a single phone call. For example, a cleanup might begin with an alert construction worker discovering that an underground storage tank leaked and reporting it to Ecology.[11] Using this scenario, here are some of the steps we would take in the formal MTCA cleanup process:

[10] Ecology conducts or supervises formal cleanups. Property owners or other persons conduct independent cleanups on their own or with technical assistance from Ecology or the Pollution Liability Insurance Agency (PLIA). Independent cleanups must still meet MTCA cleanup standards. For more information, read "Chapter 2: The MTCA Cleanup Process," in *MTCA Biennial Report of Expenditures: 2017–2019 Biennium,* https://fortress.wa.gov/ecy/publications/SummaryPages/1909045.html and "How the cleanup process works" on Ecology's website at https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-process

[11] 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

1. We'll investigate and work with the tank owner to clean it up right away, or assess further hazards and the extent of contamination by finding answers to questions such as, what's the contamination comprised of? Is it impacting drinking water or nearby streams? Has it co-mingled with other contaminants?

2. We'll develop feasibility studies, cleanup action plans, and engineering design plans, and work with contractors and responsible parties to put the cleanup remedy into action. One remedy, for example, might be to excavate the tank and petroleum-soaked soil, then treat the soil offsite.

3. We might use legal measures to restrict incompatible future uses on the site: for example, after some cleanups a parking lot could be okay, but not a playground.

4. 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.

5. Throughout the process of cleaning up the leaking tank and surrounding habitat, we'll let the public know about ways they can comment or participate in public meetings through mailing lists, Ecology's public event listing,[12] and the Site Register.[13]

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 those with comingled plumes of contamination or that involve sediment. One example is our ongoing efforts with the EPA at the Eagle Harbor Wyckoff site in Kitsap County, where a former creosote wood-treating facility contaminated the soil and groundwater during its 85 years of operation (CSID 2683).[14] Other cleanups can be loud, dirty, and disruptive—like the Everett Smelter Plume cleanup[15] where we're removing and replacing arsenic- and lead-contaminated soil from the yards of more than 700 homes in about a square-mile radius.

Every time we use the MTCA cleanup steps, employ the skills of cleanup experts, and access funding from the MTCA accounts, we make measurable progress toward healthier communities and economies.

[12] https://ecology.wa.gov/Events/Search/Listing
[13] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Site-Register-lists-and-data
[14] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=2683
[15] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-sites/Toxic-cleanup-sites/Everett-Smelter

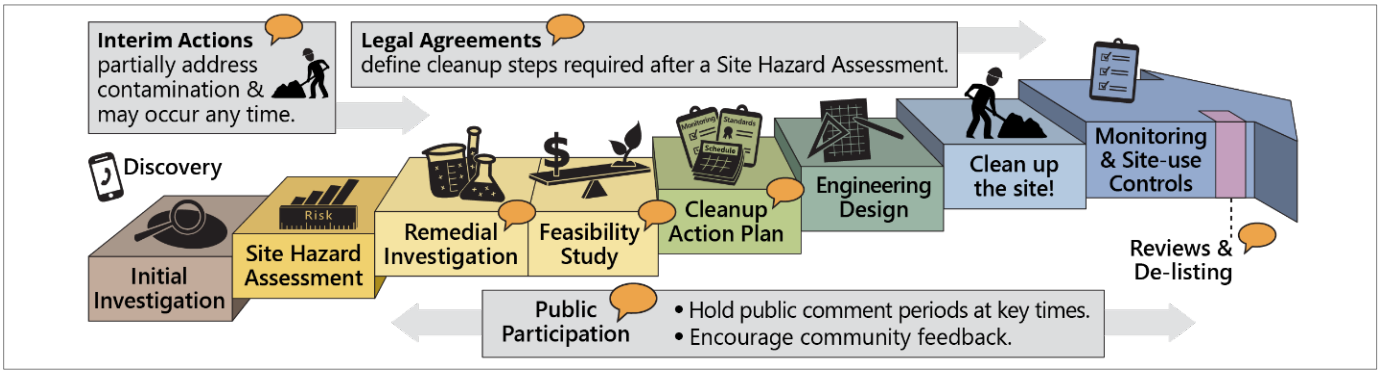


Figure 1: Steps in the formal MTCA cleanup process

Putting the funding into context: Cleanups 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 31 years, we've identified more than 13,400 sites in Washington that have confirmed or suspected contamination (Figure 2). To better understand the funding need, here's how those sites break down as of June 30, 2020:

1. **13,499 sites have contamination or suspected contamination in Washington state.**

2. **7,312 of those 13,499 contaminated sites** (54% – more than half of all contaminated sites) are already cleaned up or require no further action. 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. **198 of the 7,312 cleaned-up sites** (about 2% of all contaminated sites) are being monitored to ensure their remedies are still protecting human health and the environment.

4. **4,056 sites** (about 30% of all contaminated sites) have already begun cleanup actions by site owners or Washington state, but 2,361 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 investigation required to meet the rigorous MTCA cleanup standards that are protective of human health and the environment.

5. **1,913** (about 14% of all contaminated sites) still need to begin cleanup actions.

6. **200 to 300 new sites are discovered and reported to Ecology each year,** and about 236 sites are cleaned up per year since MTCA became law 31 years ago. 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.[16]

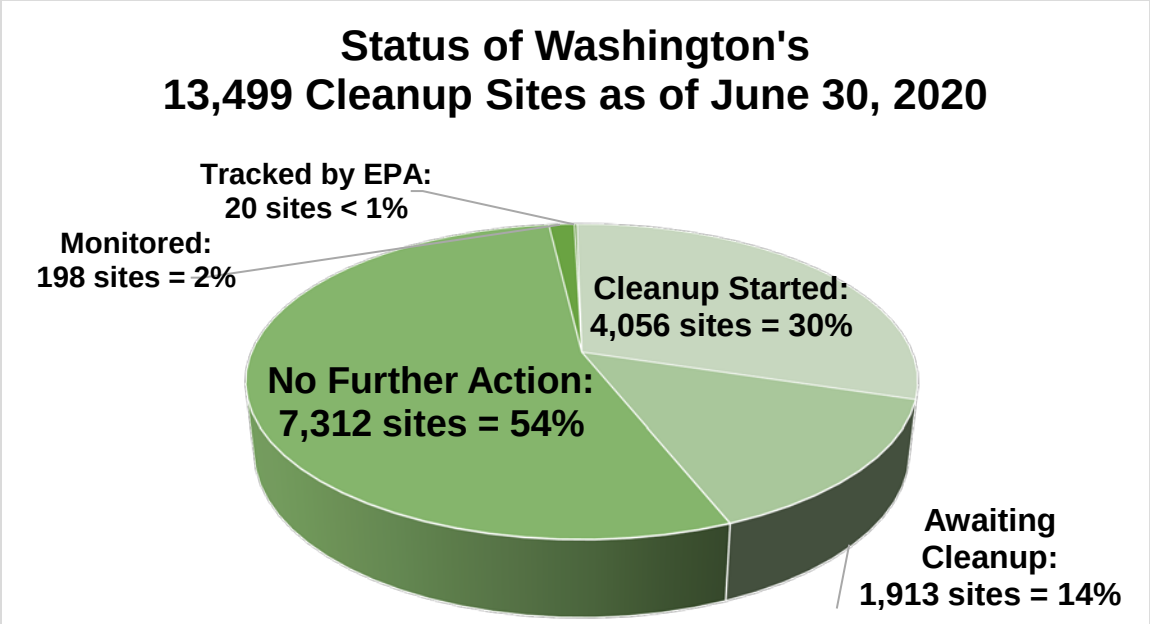


Figure 2: Number and status of contaminated sites in Washington as of June 30, 2020. Source: Ecology's Management Information System (MIC).

[16] The majority of new sites that are reported contain "old" or "legacy" pollution, e.g., a former dry cleaners site where chemicals have seeped into a nearby stream, or petroleum from leaking tanks under former gas stations. Many of these new sites are reported by the public through due diligence requirements before a property transaction occurs. Ecology does not actively seek new sites unless conducting a broad geographic cleanup action such as an area-wide or bay-wide cleanup.

Three factors obligate using public dollars to clean up sites

Under MTCA, polluters pay for cleanup. About 79% of Washington's contaminated sites are privately owned, so cleanup costs become the owner's responsibility. But the remaining 21% sites are publicly owned and become local, state, and federal governments' responsibility.[17]

Three factors contribute to Washington state's obligation to use public funds contract or oversee cleanups:

1. **High volume of publicly owned sites.** "Publicly owned sites" are those owned by schools, colleges, or universities; ports, cities, or counties; 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, 2020, there were:

    a. **Roughly 2,900** contaminated sites in Washington that are publicly owned—which is about 21% of the entire "universe" of 13,499 contaminated sites.
    b. **About 1,500** (roughly half of all public cleanup sites) have already been cleaned up.
    c. **About 100 of those 1,500 cleaned-up sites** are undergoing monitoring to ensure the remedy still protects human health and the environment.
    d. **About 880** publicly owned sites already have cleanup actions underway.
    e. **About 450** sites are waiting to begin cleanups.

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.

This report provides a funding estimate for sites that may need full or partial state funding over the next ten years. Ecology's 2021–23 Biennium Capital Budget request to the Governor specifically includes publicly funded projects outlined in the RAG and

[17] Source: Ecology's ISIS database as of June 2020.

State-Directed project lists in Appendix B. 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.

Why can it be difficult to clean up sites fast?

Financial stability, an increasing workload, and a continually expanding universe of sites are just some of the factors that impact the rate of cleanups. As we've reported in previous Ten-Year Financing 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 will coincide with construction and rapidly changing real estate development cycles.

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. One example is Bellingham Bay's collection of twelve cleanup sites on or near the waterfront.[18]

Financing large cleanups like landfills and waterways

Map 1 in Chapter 7 and Financing Table 5 in Appendix B identify large projects for MTCA funding that are expected to exceed $10 million in total estimated project costs. Many of these large, complex cleanups line our shores and major waterways: the Georgia Pacific and Whatcom Waterway sites along Bellingham Bay, Harbor Island's East Waterway in Seattle, and others. Huge cleanup sites are also found across the state in places like Kitsap, Pierce, San Juan, Skagit, Snohomish, and Stevens counties.

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.

[18] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-sites/Toxic-cleanup-sites/Puget-Sound/Bellingham-Bay (video and webpage)

Aligning brownfields cleanup & redevelopment with developers' timelines

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.

Even though it's a stated goal in the MTCA statute, it can be difficult to coordinate decisions about brownfields cleanup and redevelopment with real estate developers' rapidly evolving timelines and economic priorities. Ecology's Integrated planning grants (IPGs)[19] are one way to help. These no-match grants are awarded through the RAG program to 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.

The grants are successfully helping local governments make confident cleanup decisions so they can move their sites toward redevelopment. Two examples are the Port of Douglas County and Port of Friday Harbor—previous IPG recipients now actively moving their cleanups forward and applying for Oversight grants to help.

- **Port of Douglas County: American Silicon Technologies site in Rock Island.** Operations at this former silicon smelter on the Columbia River contaminated the soil and groundwater with heavy metals such as chromium, mercury, and lead that present risks to local residents and the environment. Overall goals for this Columbia River waterfront property are to clean up and redevelop the site, and promote job creation and economic development that is focused on emerging technologies. Other plans include adaptive reuse of existing buildings to support a mix of office space (focused on technology and education classrooms), as well as retail amenities, hotels, and event space. (CSID 11)[20]

[19] https://ecology.wa.gov/About-us/How-we-operate/Grants-loans/Find-a-grant-or-loan/Integrated-planning-grants
[20] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=11

- **Port of Friday Harbor: Albert Jensen & Sons Inc. site in San Juan County.** Past industrial uses at this 110-year old boatyard have contributed to soil and sediment contamination along the waterfront today. The entire shoreline is heavily impacted by debris, and recent sampling identified hazardous contaminants. The overall goals for this property: clean up the historic contamination and redevelop into a revitalized community and economic hub, with environmental restoration, public access, and educational opportunities. The master plan for the site's redevelopment also includes affordable housing stock (e.g., apartments, houses, etc.). (CSID 14759)[21]

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. We offer Area-wide Groundwater investigation grants as one tool to study area-wide contamination without requiring local governments to be a potentially liable party (PLP) or seek reimbursement from such persons.

The Spokane Regional Health District is one local government that applied for such a grant. The project, which is included in Ecology's 2021–23 Remedial Action Grant budget request, would develop a model for "geochemical fingerprinting" sources of PFAS chemicals to determine the extent of contamination over a wide area and create local drinking water health advisories. PFAS is a group of per- and poly-fluorinated alkyl substances that are hazardous to human health. Learn more about this type of contamination in Chapter 6.

A site's complexity affects length of cleanup

Cleaning up contamination from our soil, groundwater, surface water, and sediment is difficult and expensive. A complex, multi-faceted site such as the Lower Duwamish Waterway will take many years to clean up after it has been contaminated with toxic chemicals. The more complex elements a site has, the longer the cleanup can take. Three major factors determine the length of time for cleanup:

[21] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=14759

1. The nature of contaminants.

2. The type of media involved, such as air, soil or groundwater. Typically, sites with contaminated surface water, groundwater, or contaminated marine sediments take longer to cleanup.

3. Availability of funding for cleanup and the willingness of the responsible party to work cooperatively with Ecology to meet MTCA requirements.

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've discussed in previous Ten-Year Financing Reports, we're continuing to develop and refine tools to make the cleanup process more efficient. Examples are **guidance documents** for people who conduct cleanups and need to interpret rules, including two living resources we update regularly: Sediment User's Manual (SCUM)[22] and Cleanup Levels and Risk Calculation (CLARC).[23] **Public tools** like standardized cleanup methods (called model remedies), tighter document review times, and checklists are helping cleanups and reviews go faster. **Internal tools for staff**—like Ecology's annual multi-day Site Management University (now held online due to COVID-19), the Cleanup Manager's Toolkit, MTCA 101 webinar series, and TCP Resource Library—are helping us standardize processes and broaden our knowledge through hands-on training and case studies. Additional tools and guidance are found in Table 5.

The goals of these intensive efforts remain the same:

- Decrease the time it takes to remediate a contaminated site.

- Decrease the time it takes to spend RAG Program funds.

- Provide greater predictability by developing project schedules for studies and cleanup actions that implement MTCA at formal sites (i.e., sites under Ecology oversight).

[22] https://fortress.wa.gov/ecy/publications/SummaryPages/1209057.html
[23] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC

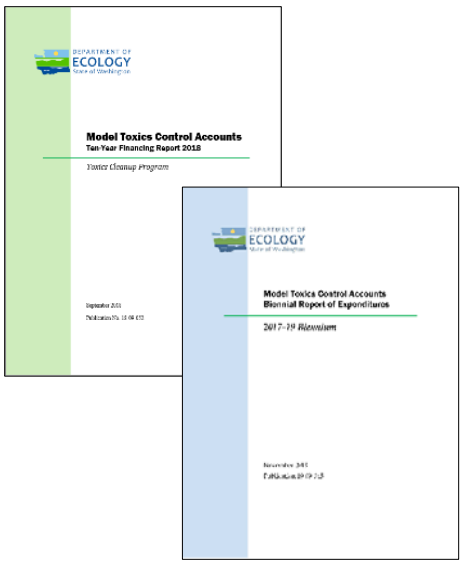
Table 5: TCP tools and guidance that help speed up cleanups

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
Voluntary Cleanup Program – Expedited Process	https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program/VCP-Expedited
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
MTCA Cleanup Rule update	https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-340

Four resources describe how we use public funds for cleanups

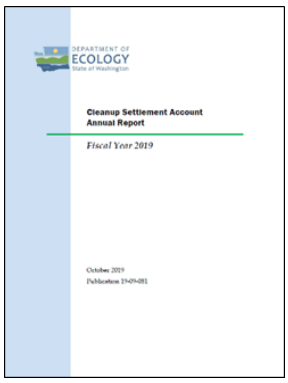
MTCA requires Ecology to produce four recurring financial reports for the Legislature and public, describing how we use funds to clean up sites and protect human health (RCW 70A.305.030). Two are companion reports that provide a comprehensive description of past and future cleanup funding; Table 6 shows how the MTCA Ten-Year Financing Report complements the MTCA Biennial Report of Expenditures.

1. **MTCA Ten-Year Financing Report** is produced by September during even-numbered years, per RCW 70A.305.030(4).[24] It describes how we plan to spend funds from the Model Toxics Control Capital Account on cleanup activities over the next ten years, and includes Ecology's biennial budget request to the Governor. Download the 2018 report.[25]



2. **MTCA Biennial Report of Expenditures** is produced by December during odd-numbered years per RCW 70A.305.030(5) and explains how we used MTCA funds over the previous biennium. Download the 2019 report.[26]

3. **Cleanup Settlement Account Annual Report** is produced by October every year, per RCW 70A.305.130(7).[27] 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. The report describes work accomplished during the previous fiscal year (July 1 through June 30). It also includes Asarco bankruptcy settlement projects such as mine cleanups, the Everett Smelter, and the Tacoma Smelter Plume. Download the 2020 report.[28]



4. **Brownfields Redevelopment Trust Fund (BRTF) Account Report** is required in October during odd-numbered years. Since the BRTF account was established in 2015, however, this report has been limited to a brief communication to the Legislature stating that the account had no activity to report since it held no funds. If the account holds funds in the future, the report would describe 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. RCW 70A.305.140(9)[29]

[24] https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305.030
[25] https://fortress.wa.gov/ecy/publications/SummaryPages/1809052.html (Ten-Year Report 2018)
[26] https://fortress.wa.gov/ecy/publications/SummaryPages/1909045.html (Biennial Report 2019)
[27] https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305.130
[28] https://fortress.wa.gov/ecy/publications/SummaryPages/2009081.html (CSA Report 2020)
[29] https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305.140

Recurring reports and one-time reports previously required by MTCA are available on Ecology's website.[30]

Find cleanups happening near you

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, our public events listing,[31] and the interactive map called What's in My Neighborhood.[32]

For detailed discussion on public involvement opportunities, including Public Participation Grants and when to provide comments during cleanups, see Chapter 2 in the 2019 Biennial Report of Expenditures.

[30] https://ecology.wa.gov/About-us/Get-to-know-us/Our-Programs/Toxics-Cleanup/TCP-Legislative-reports
[31] https://ecology.wa.gov/Events/Search/Listing
[32] https://apps.ecology.wa.gov/neighborhood/

Table 6: Comparison of content found in Ecology's two major MTCA financial reports: the MTCA Biennial Report of Expenditures and the MTCA Ten-Year Financing Report.

MTCA Ten-Year Financing Report	MTCA Biennial Report of Expenditures
Looks to the future with estimated costs from the Model Toxics Capital Account 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 the MTCA Capital Account for Ecology and local governments.	Identifies operating and capital budget expenditures from the MTCA operating, capital, and stormwater accounts 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 and other state agencies.
Due to the Legislature by September 20 in even-numbered years. RCW 70A.305.030(4)	Due to the Legislature by December 1 in odd-numbered years. RCW 70A.305.030(5)
2018 MTCA Ten-Year Financing Report: https://fortress.wa.gov/ecy/publications/SummaryPages/1809052.html	**2019 MTCA Biennial Report of Expenditures:** https://fortress.wa.gov/ecy/publications/SummaryPages/1909045.html
Find past reports on our website: https://ecology.wa.gov/About-us/Get-to-know-us/Our-Programs/Toxics-Cleanup/TCP-Legislative-reports	

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

Hazardous Substance Tax Funds Model Toxics Control Act Accounts

The Hazardous Substance Tax (HST) provides funding for accounts created under the Model Toxics Control Act (MTCA), and is a tax on the first possession of hazardous substances in Washington. The HST applies to petroleum products and certain pesticides and chemicals. It is intended to raise sufficient funds to clean up all hazardous waste sites and to prevent creation of future hazards due to improper disposal of toxic waste into the state's land, air, and water. MTCA-funded activities improve the state's environment, economy, and quality of life.

MTCA supports Ecology's work to clean up, properly manage, and prevent releases of hazardous substances. Under MTCA, more than 7,300 contaminated sites in Washington have been cleaned up. The MTCA accounts are the largest source of funding for a broad range of environmental and public health work at Ecology, and support about 40% of the agency's base operating budget. The MTCA accounts also generally provide Ecology over $100 million in capital dollars each biennium to pass through to local governments and other persons for contaminated site cleanup, toxics prevention, air toxics mitigation, and stormwater pollution control projects.

See Ecology's September 2019 publication, Focus on: MTCA Accounts and Revenue Changes,[33] for more information on MTCA and Ecology's cleanup activities.

[33] https://fortress.wa.gov/ecy/publications/SummaryPages/1901006.html

Changes to the MTCA program for the 2019–21 biennium

ESSB 5993: Reforming the financial structure of the Model Toxics Control Program

The passage of Engrossed Substitute Senate Bill (ESSB) 5993[34] (which is now codified in Chapters 70A.305 and 82.21 RCW) made significant changes to the MTCA accounts and the HST. As described in section 101 of the bill, its purpose was to update the Model Toxics Control Program and its primary funding mechanism through the following changes:

- Increase funding for programs and projects related to clean air, clean water, and toxic cleanup and prevention, with specific focus on stormwater pollution.
- Provide distinct and transparent financial separation of capital and operating budget funding.
- Improve the transparency and visibility of operating and capital project expenditures under the program.
- Eliminate the volatility of HST revenues by moving from a value-based rate to a volumetric rate for liquid petroleum products.

Account changes

ESSB 5993 eliminated the three prior MTCA accounts—the State Toxics Control Account (STCA), the Local Toxics Control Account (LTCA), and the Environmental Legacy Stewardship Account (ELSA). It replaced them with three new accounts—the Model Toxics Control (MTCA) Operating Account, the Model Toxics Control (MTCA) Capital Account, and the Model Toxics Control (MTCA) Stormwater Account.

The authorized uses of the new accounts are similar to the prior MTCA accounts and include all of Ecology's previously authorized uses.

Revenue changes

ESSB 5993 changed the HST structure for liquid petroleum products from a value-based tax to a volume-based tax.[35] Starting July 1, 2019, the HST rate on liquid petroleum products was $1.09 per barrel, and will increase annually by the Implicit Price Deflator (IPD) for non-residential structures. The Department of Revenue (DOR) will

[34] https://app.leg.wa.gov/billsummary?BillNumber=5993&Year=2019&Initiative=false
[35] https://dor.wa.gov/taxes-rates/other-taxes/hazardous-substance-tax

use the IPD for non-residential structures published each March by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), for the prior calendar year to set the new per-barrel rate for the upcoming fiscal year. Currently, the rate (as of July 1, 2020) is $1.13 per barrel.

The first $50 million per biennium of liquid petroleum tax revenue is deposited into the Motor Vehicle Fund (MVF). The revenue deposited into the MVF must be used exclusively for transportation stormwater purposes. This deposit will continue each biennium until the Legislature passes a new $2 billion "additive transportation funding act."

The remaining liquid petroleum product revenue is deposited into the three new MTCA accounts:

- 60% into the MTCA Operating Account.
- 25% into the MTCA Capital Account.
- 15% into the MTCA Stormwater Account.

Revenue from all other substances subject to the HST, including non-liquid petroleum products and certain pesticides and chemicals, is still taxed at 7/10 of one percent of the wholesale value of the substance. Those revenues are deposited into the MTCA Capital Account.

Figure 3 displays HST revenue from inception of the tax. It also includes DOR's latest (June 2020) revenue forecast for the tax.[36]

Using DOR's June 2020 forecast, Table 7 identifies the estimated revenue for the three MTCA accounts and working capital reserves for the 2021–23 biennium.

[36] The June 2020 forecast includes actual receipts through May 2020 and forecast for the remainder of the fiscal year.

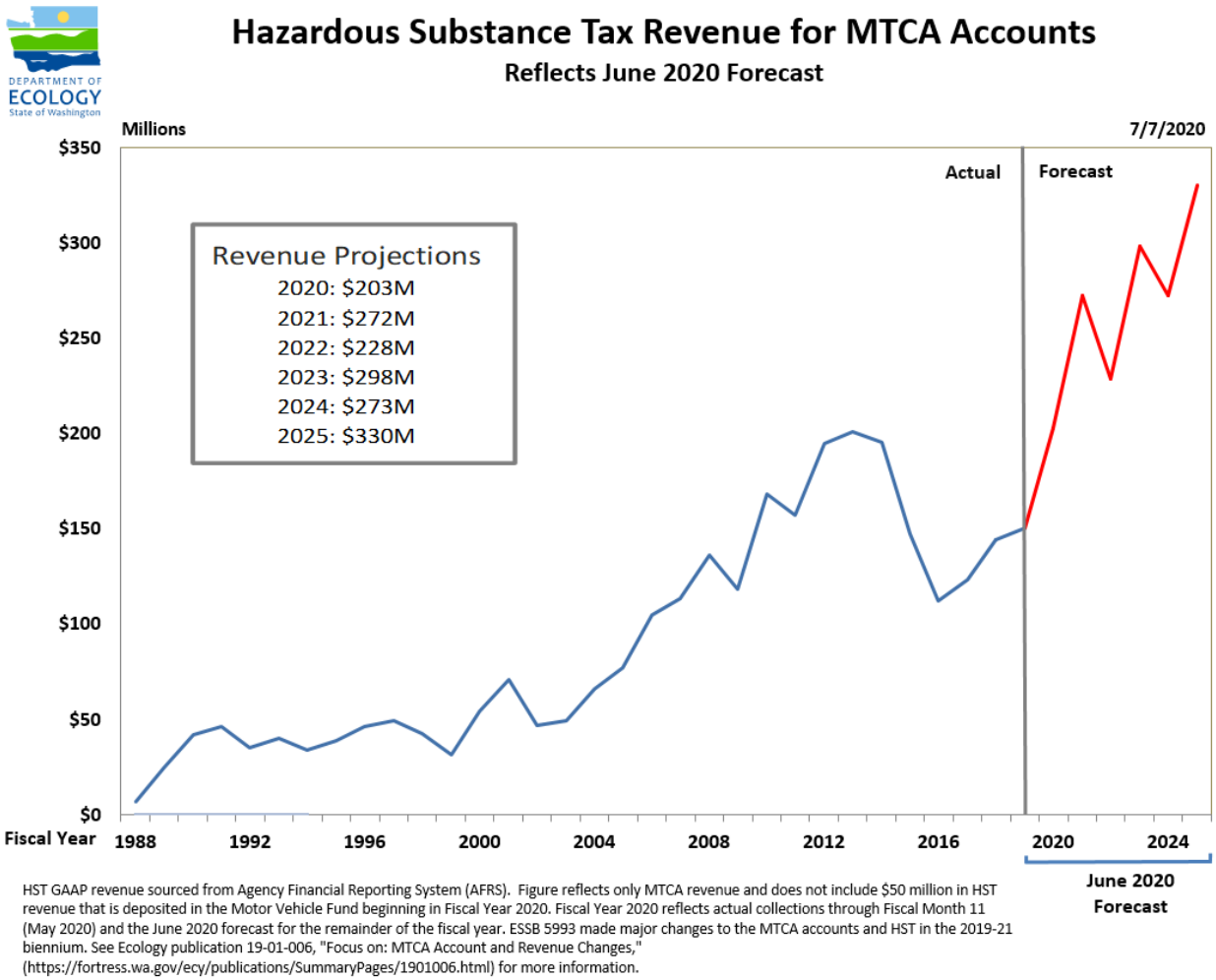

Figure 3: Hazardous Substance Tax revenue (reflects June 2020 forecast).

The figure reflects only MTCA revenue and does not include $50 million in HST revenue that is deposited in the Motor Vehicle Fund beginning in Fiscal Year 2020. Source: Washington State Department of Ecology & Department of Revenue Non-General Fund Tax Sources – Environmental/Habitat Taxes (June 2020) [37]

[37] https://dor.wa.gov/about/statistics-reports/non-general-fund-forecasts

Table 7: Estimated revenue in MTCA accounts for 2021-23 biennium based on June 2020 forecast and cost recovery

MTCA Account	Estimated Revenue 2021–23 biennium
Model Toxics Control Capital	$152 million from HST
Model Toxics Control Operating	$300 million from HST
Model Toxics Control Stormwater	$75 million from HST
HST Sub-Total	$527 million from HST
Model Toxics Control Capital	$9 million from cost recovery efforts & penalties
Total	$536 million

2019-21 Biennium Capital Budget and MTCA revenue

With the passage of ESSB 5993 in the 2019 legislative session, revenue into the MTCA accounts is projected to be higher and less volatile beginning in the 2019–21 biennium, allowing for increased funding for programs related to clean air, clean water, and toxic cleanup and prevention. In addition, the account structure provides dedicated operating, capital, and stormwater accounts to provide transparent separation of funding. Based on the Hazardous Substance Tax Forecast in June 2020 from the Department of Revenue, MTCA fund balances are projected to maintain positive balances based on 2019-21 appropriation levels after the 2020 Supplemental budget.

Ecology is 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 (Chapter 173-340 WAC). Chapters 1 and 5 of this report explains these phases in more detail. The phase of a project demonstrates a project's progress and inform readiness to proceed, providing important information as Ecology ranks projects for funding.

Ecology is actively managing the MTCA accounts through a cash management plan, consistent with legislative and the Office Financial Management (OFM) direction to maintain positive projected cash and fund balances.

2021–23 Biennium Budget requests

With 2021–23 biennium HST revenue projected to total $527 million, based on the June 2020 forecast, Ecology is submitting a mix of operating and capital budget requests designed to support additional toxics prevention, management, and cleanup work. The new funding would invest in ongoing environmental and public health work funded from the MTCA accounts, as well as respond to emerging environmental threats or changing societal needs, and scientific information. In addition, we are submitting requests for State Building Construction Account bonds to help address emerging concerns related to the availability of land for affordable housing and PFAS contamination in drinking water. See Chapter 6 for more information about this request.

Chapter 3:
How We Estimate Funding for Next Ten Years—Process, RAG Program, and Criteria

This chapter describes the ten-year solicitation process and the Remedial Action Grant (RAG) program in general. It describes the six grants that may be available to local governments in a given biennium. It also outlines how criteria evolved to help us prioritize which cleanup projects we include in Ecology's budget request to the Legislature every two years.

For details about the 2020 solicitation, see Chapter 4.

What is the "Ten-Year Solicitation" process?

In February and March during even-numbered years, Toxics Cleanup Program staff ask local governments for information about their cleanup projects and estimated financing needs over the next decade. These "remedial action grant projects" or "RAG projects" will likely require full or partial funding from the Model Toxics Control Capital Account.

We conduct this solicitation for three reasons:

1. To inform jurisdictions that they may own a contaminated site, and may be eligible to apply for funding through our 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 for 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 including a project in our biennial budget request to the Governor, the project must be included in the MTCA Ten-Year Financing Report. Since our budget recommendations must fall within available resources, however, we can include only a subset of those projects from this report in our biennial budget request.

The ten-year solicitation is open for about four weeks. We announce it through the Site Register,[38] our website, and RAG Listserv[39] (an email list) with periodic reminders the same way.

When the solicitation period ends, TCP staff (comprised of grants and loans financial managers, regional managers, and site managers/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 in our budget request to the Governor for the next biennium. The rest of the projects remain in the queue, should funding become available.

We submit our budget request to the Governor and our MTCA Ten-Year Financing Report to the Legislature in September of even-numbered years. The final budget is usually enacted on July 1 of the following odd-numbered year, as shown in Figure 4.

Chapter 4 has more information about the 2020 solicitation specifically.

Overview of the Remedial Action Grant Program

Quick glance

Ecology 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.

We work to make the grant process transparent and broadly available—not just to help local governments clean up hazardous sites, but to capture Washington's full cleanup needs so decision makers can better understand the breadth of the challenge. Throughout the year, we'll announce remedial action grant and loan opportunities through the Site Register, RAG Listserv, emails to past applicants and recipients, and

[38]https://fortress.wa.gov/ecy/publications/UIPages/PublicationList.aspx?IndexTypeName=Program&NameValue=Toxics+Cleanup&DocumentTypeName=Newsletter

[39] http://listserv.ecology.wa.gov/scripts/wa-ECOLOGY.exe?SUBED1=RAGRANT-NEWS&X=OA8748F5231673CBD0D&Y

our website. Every two years, we use those same venues to open the "ten-year solicitation" for one month.

As mentioned in the previous section and illustrated in Figure 4, applications responding to the RAG solicitation arrive during the first quarter of the year. In ensuing months, we review, verify, and prioritize each project for funding. In the fall, we publish the results in this report, and submit the project list and our proposed budget to the Governor. If projects are funded by the Legislature, those dollars become available to local governments on July 1 of the following year, about 1.5 years after they requested it during the solicitation period. Once funding has been awarded by the Legislature, Ecology works closely with the local governments to adapt to their changing project cleanup needs and help them navigate their grant or loan, so they can focus on cleaning up sites to protect their communities' health and environment.

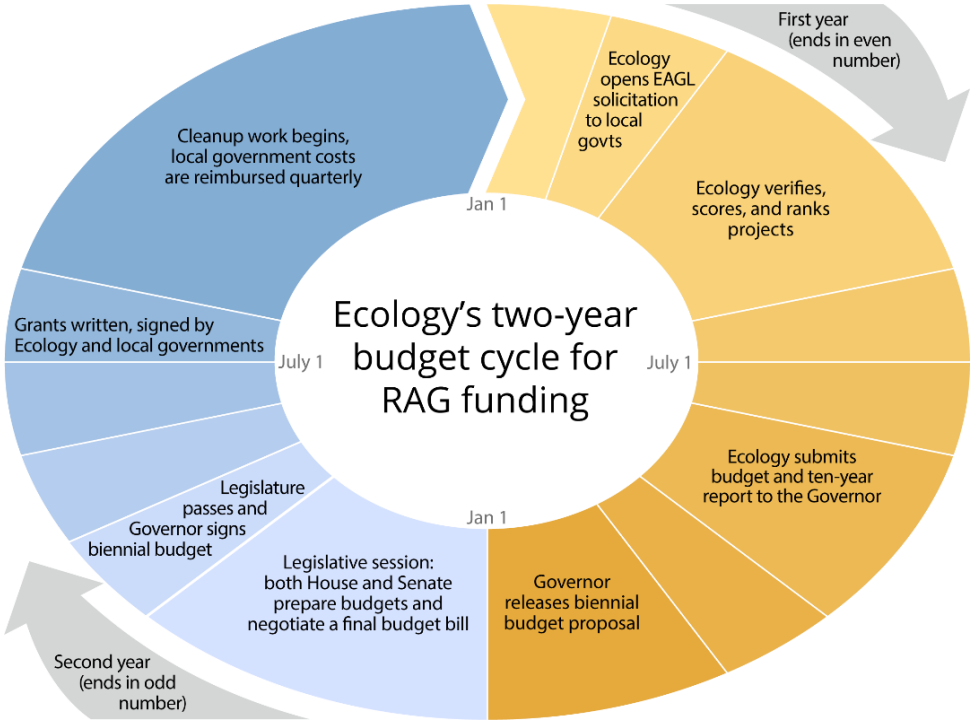

Figure 4: Ecology's two-year budget cycle for remedial action grant and loan funding is depicted by calendar year (January-December).

Remedial Action Grants and Loans regulations (RAG rule)

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

1. **MTCA Cleanup Rule:** Model Toxics Control Act—Cleanup, Chapter 173-340 WAC[40]

2. **SMS Rule:** Sediment Management Standards, Chapter 173-204 WAC[41]

We also adopted a rule that governs the funding of cleanups by local governments:

3. **RAG Rule:** Remedial Action Grants and Loans, Chapter 173-322A WAC[42]

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 changes to the RAG rule do 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. These enable local governments to commit to long-term cleanups by offering additional assurance of future state funding. (However, Ecology has neither implemented nor is planning to offer extended grant agreements in the 2021–23 biennium.)

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

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

[40] https://app.leg.wa.gov/wac/default.aspx?cite=173-340 (MTCA Cleanup Rule)

[41] https://apps.leg.wa.gov/wac/default.aspx?cite=173-204 (SMS Rule)

[42] https://app.leg.wa.gov/WAC/default.aspx?cite=173-322A&full=true (RAG Rule).

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

- Provides area-wide groundwater investigation grants without requiring local governments to be a potentially liable person or seek reimbursement from such persons.

- Provides periodic reimbursement of the costs of independent remedial actions. (However, Ecology has neither implemented nor is planning to offer periodic reimbursement for independent remedial action grants in the 2021–23 biennium.)

- 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).

Six types of RAG grants and loans may be available to local governments

The following list of remedial action grants and loans may be available to local governments in a given biennium. Chapter 4 describes the opportunities offered for the 2021–23 biennium.

1. **Oversight remedial action grants and loans** 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[43] or decree.[44]

[43] As defined in WAC 173-322A-100(33), the term “order” includes enforcement orders and agreed orders issued under MTCA, and unilateral administrative orders and administrative orders on consent issued under the federal cleanup law.

[44] As defined in WAC 173-322A-100(11), the term “decree” or “consent decree” means a consent decree issued under Chapter 70A.305 RCW or the federal cleanup law.

2. **Extended grant agreements** are a subset of Oversight remedial action grants that are intended for cleanup projects that cost more than $20 million and extend over several years. When available, these types of grants would receive priority for funds. (Ecology did not offer these for the 2021–23 biennium.)

3. **Independent remedial action grants** (for cleanups under the Voluntary Cleanup Program[45]) are provided to local governments that voluntarily take on cleanup actions without Ecology's oversight or approval.

4. **Area-wide Groundwater investigation grants** are given to local governments conducting an environmental investigation in an area that may have multiple areas of contamination. We provide these grants without requiring the local government to be a potentially liable party or seek reimbursement from such persons.

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 (IPGs)** encourage and expedite the cleanup of brownfields properties. IPGs provide funding to local governments to conduct assessments of brownfields sites, and develop integrated project plans for their cleanup and adaptive reuse.

[45] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program

Multiple criteria guide how we prioritize RAG projects for funding today: here's how they evolved

Ever since the Great Recession of 2007, the Legislature and Ecology continue to refine the criteria we use to make tough funding decisions. 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 issues like environmental justice concerns into our evaluations. They help us build transparency about how and why we prioritize projects, and provide measurable data to help managers make difficult funding decisions when faced with limited resources.

The timeline below outlines how criteria evolved over the past 13 years. For the 2020 criteria we used to prioritize funding for the 2021–23 biennium (for Oversight grants and loans, Area-wide Groundwater investigation grants, and Safe Drinking Water action grants) see:

- Appendices D, E, and F of this report
- Chapters 3, 7, 9 and Appendix A in the 2021–23 RAG Guidance.

2007: Legislature requires Ten-Year Financing Plan

The Legislature amended MTCA in 2007 through Substitute House Bill 1761[46] (Chapter 446, Laws of 2007). Among other changes, it required Ecology to prepare a comprehensive biennial report projecting cleanup expenditures over the subsequent ten years. (RCW 70A.305.030(3) and (5))[47]

[46] https://app.leg.wa.gov/billsummary?BillNumber=1761&Year=2008 (Accelerating the cleanup of Puget Sound and hazardous waste and waste sites in the state)

[47] https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305 (Hazardous Waste Cleanup-Model Toxics Control Act)

2013: Legislature allows Extended Grant Agreements, changes how tax revenue is distributed and used

In 2013, the Legislature amended RCW 70.105D (now RCW 70A.305) in Second Engrossed Second Substitute Senate Bill 5296 [48] (Chapter 1, Laws of 2013 2nd Special Session) and House Bill 2079 [49] (Chapter 28, Laws of 2013 2nd Special Session). Among other changes to MTCA, the legislation:

- Allowed for extended grant agreements with local governments for long-term remediation projects that exceed $20 million.
- Altered how HST revenues are distributed.
- Directed Ecology to adopt a cash management approach to managing the MTCA accounts, allowing for short-term accelerated use of MTCA funds. This level of increased detail had the beneficial result of greater transparency of information presented in the MTCA Ten-Year Financing Report.

2014–2020: Legislature establishes new funding criteria; Ecology refines scoring and clarifies requirements

Three events—the 2013 amendments to MTCA; the MTCA accounts shortfall between 2014 and 2018 that led to fewer resources to allocate; and the economic uncertainties presented by the COVID-19 pandemic—drive us to prioritize projects for funding and effectively evaluate a project's readiness to proceed. Criteria help us fund projects that tackle emerging threats to human health or have the best chance of succeeding.

The Legislature's 2013 changes to MTCA established criteria that led to Ecology's 2014 repeal/replacement of the Remedial Action Grant Rule (WAC 173-322A-210).[50] Successive criteria were also influenced by the 2017 report, Equity Analysis of Washington State Toxics Sites & the Model Toxic Control Act[51] from Front and Centered,[52] a statewide coalition rooted in communities of color and people with lower incomes.

[48] https://app.leg.wa.gov/billsummary?BillNumber=5296&Year=2013 (Concerning MTCA)
[49] https://apps.leg.wa.gov/billsummary?year=2013&billnumber=2079&initiative=false (Concerning the environmental legacy stewardship account)
[50] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-322A-210
[51] https://www.frontandcentered.org/wp-content/uploads/2017/01/MTCA-Report_1-25-17.pdf
[52] https://frontandcentered.org/

In June 2015, the Legislature passed its 2015–17 Biennium Capital Budget (2EHB 1115[53] (Chapter 3, Laws of 2015 3rd Special Session), which gave Ecology direction for prioritizing the delay of cleanup projects. Section 7038 of the bill helped address the MTCA accounts' shortfall. (For more on this topic, see Chapter 2 in MTCA Ten-Year Report 2018).[54] The bill 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.**" In 2018, the Legislature added "**[for] purposes of increasing affordable housing**" to the list (Substitute Senate Bill 6090,[55] Section 7022).

In 2019 and 2020, we continued refining processes and criteria in an ongoing effort to use limited funds wisely. In the year leading up to our 2020 solicitation to local governments, we updated guidance and processes, clarified requirements to incorporate emerging contaminants, and improved instructions in Ecology's Administration of Grants and Loans (EAGL) to help local governments successfully submit applications that met state requirements. Some of these 2020 refinements include:

- **Scoring.** We refined how we score applications for Oversight grants and loans, Area-wide Groundwater investigation grants, and Safe Drinking Water action grants and documented the scoring process and evaluation criteria in Remedial Action Grant and Loan Guidance for the 2021–23 Biennium[56] (found also in Appendices D–F of this report).

- **Cultural resource review requirement**. In our EAGL guidance,[57] EAGL applications, 2021–23 RAG guidance, and webpages, we affirmed that "Ecology will review all remedial action grant and loan projects for potential impacts to cultural resources and historic places."

  Cultural resources are irreplaceable sites, objects, locations, events, or pre-historic or historic activities—such as archaeological sites; boundary markers, fountains, or monuments; trails, petroglyphs, village sites, or battlefields. For a project to be eligible for grant funding, Ecology or other agencies will consult on potential impacts to cultural resources as required by Governor's

[53] https://app.leg.wa.gov/billsummary?BillNumber=1115&Year=2015 (Concerning the capital budget)
[54] https://fortress.wa.gov/ecy/publications/SummaryPages/1809052.html
[55] https://app.leg.wa.gov/billsummary?BillNumber=6090&Year=2017 (Concerning the capital budget)
[56] https://fortress.wa.gov/ecy/publications/summarypages/2009055.html (RAG guidance 2021–23)
[57] https://fortress.wa.gov/ecy/publications/SummaryPages/2009056.html (EAGL instructions)

Executive Order 05-05.[58] Visit Ecology's cultural resource review webpage[59] for details and related requirements.

- **Construction permit requirement (Oversight remedial action grants and loans and Safe Drinking Water action grants)**. As a result of 2019 legislative changes to MTCA,[60] local governments must now obtain all required permits for their cleanup project within one year of the enacted budget. We alerted local governments to this new condition in our 2020 solicitation correspondence; incorporated it into the EAGL application as well as EAGL instructions and 2021–23 RAG guidance; and considered it when we evaluated applications. Our 2020 focus sheet[61] and Section 4.3 of the 2021–23 RAG Guidance explain how we're implementing this new condition when soliciting and evaluation applications, and requesting and awarding funding.

When local government representatives know how we will evaluate their applications, they can pursue funding that best suits their project. The 2021–23 RAG Guidance[62] provides this assurance by consolidating criteria that have evolved to date, and explaining how we use them to evaluate applications for Oversight grants and loans and Safe Drinking Water and Area-wide Groundwater grants.

We published similar criteria for Integrated planning grants (IPGs) and Independent remedial action grants in the 2018–21 RAG Guidance.[63] During the first half of 2021, we will publish new IPG and Independent RAG guidance, and use them for the 2021–23 ongoing solicitations. Please visit our IPG[64] and Independent RAG[65] webpages for more information.

[58] https://www.governor.wa.gov/sites/default/files/exe_order/eo_05-05.pdf
[59] https://ecology.wa.gov/About-us/How-we-operate/Grants-loans/Find-a-grant-or-loan/Area-wide-groundwater-investigation-grants/Cultural-resources-review

[60] [Beginning with the 2021–23 Biennial Capital Budget] the department may not award a grant or loan for a remedial action unless the local government has obtained all of the required permits for the action within one year of the effective date of the enacted budget (RCW 70A.305.190(5)).

[61] https://fortress.wa.gov/ecy/publications/SummaryPages/2009054.html (Implementing new permit condition for Oversight grants and loans and Safe Drinking Water action grants)
[62] https://fortress.wa.gov/ecy/publications/summarypages/2009055.html (2021–23 RAG Guidance)
[63] https://fortress.wa.gov/ecy/publications/summarypages/1809049.html (2018–21 RAG Guidance)
[64] https://ecology.wa.gov/About-us/How-we-operate/Grants-loans/Find-a-grant-or-loan/Integrated-planning-grants
[65] https://ecology.wa.gov/About-us/How-we-operate/Grants-loans/Find-a-grant-or-loan/Independent-remedial-action-grants

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

This chapter:

- Describes how much RAG funding we estimate local governments will need over the next ten years to clean up sites.
- Describes Ecology's 2021–23 Biennium Capital Budget request for RAG projects.
- Identifies which types of grants and loans we offered during the 2020 solicitation.

The Model Toxics Control Capital Account funds 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 appropriated state bonds to fund this work.

RAG funding is only available to local governments. We prepared this chapter in partnership with local governments that are receiving or previously applied for RAG grants and loans. For purposes of this report, "local government" means any political subdivision, regional government unit, district, or municipal or public corporation—which 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.

Financing Tables 1A through 1F in Appendix B detail the funding needs discussed in this chapter.

Estimated RAG funding local governments will need

Ecology identified 57 local government cleanup projects, 4 statewide grant programs, associated grant management, and future-need demands for RAG funding through the Model Toxics Control Capital Account or other fund sources over the next ten years. These cleanup projects represent only a fraction of contaminated sites in Washington that we expect will need MTCA funding in the future. See Financing Tables 1A & 1B in Appendix B.

Ten-year RAG funding estimates from the Model Toxics Control Capital Account

Ecology estimates that more than $1.4 billion will be required to support work at locally owned cleanup sites over the next ten years.

Breaking down that estimate:

Total project cost ($1.4 billion). Ecology and local governments identified 57 local government cleanup projects for the ten-year period (54 applications for Oversight remedial action grants and 3 for Area-wide Groundwater investigation grants). We estimate that approximately $740 million will be required over the next decade to complete the cleanup work identified in the solicitation, and conduct associated grant management activities (Financing Tables 1B+1C=1D). Ecology also anticipates an additional $626 million (estimated) will be needed to address future needs of locally owned cleanups over the next decade (Financing Table 1E). This includes both the state share and the local government match, which adds up to the Total Project Cost.

State's share of locally owned cleanups + four grant programs over the next ten years ($697 million). For planning purposes, we estimate that Ecology will need at least $697 million to cover the state's share of the aforementioned cleanup costs. Breaking down that number:

- **State's share of locally owned cleanups ($361 million)**. The state will need approximately $361 million for Oversight and Area-wide Groundwater investigation grants for 57 local government projects. Local agencies will be responsible for the remaining amount of these cleanup costs, which we refer to as "Local Government Share."

- **State's share of four statewide grant programs and grant management ($23 million).** We estimate that the state will require $23 million to fund

additional statewide grant programs and associated grant management over the next ten years:

- **State's share of four statewide grant programs ($17 million):**
  $5 million for Independent remedial action grants,
  $6 million for Integrated planning grants, and
  $6 million for future Area-wide Groundwater investigation grants.

  Note: Safe Drinking Water action grants may have future needs, but due to the emergency nature of drinking water contamination, demand cannot easily be predicted.

- **State's share of grant management ($6 million).** We estimate that the state will need $6 million to administer the Remedial Action Grant program over the next ten years. At approximately $1,151,000 per biennium, this represents about 2% of the historical funding level of the RAG Program, which has averaged approximately $66.2 million per biennium since 2007.

- **State's share of placeholders for anticipated cleanup needs ($313 million).** For planning purposes, we estimate that the state will need about $313 million to meet emerging needs over the next ten years for the additional 200 to 300 new contaminated sites that are reported each year.

Range of project costs. Estimated project costs over the next ten years range from $35,000 for Spokane County's Colbert Landfill 1,4-Dioxane Risk Evaluation, 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, the range does not encompass the entire cost estimate of large cleanups such as the Lower Duwamish River cleanup, one example of many sites requiring a coordinated effort of MTCA, federal, and other funds to successfully complete the cleanup.

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

2021–23 Biennium Capital Budget request for local government RAG funding

Ecology's budget request for the 2021–23 biennium includes approximately $62 million to cover the state share of cleanup costs for 27 projects: 26 cleanup projects at locally owned sites, 1 Area-wide Groundwater investigation grant, 2 additional statewide grant programs, and associated grant management. (Financing Tables 1A–1E in Appendix B)

Breaking down those numbers, the 2021–23 RAG budget request comprises:

- Approximately $58 million for work at 26 of the 54 locally owned sites identified in this plan.
- $450,000 for 1 Area-wide Groundwater investigation grant.
- Approximately $2 million for 2 statewide grant programs (Independent remedial action grants and Integrated planning grants).
- Approximately $1 million for Ecology's grant management and administration responsibilities.

As a result:

- Washington state and local governments have a combined estimated need of $1.4 billion to conduct cleanups over the next ten years.
- State share of RAG projects is an estimated $697 million over that period.
- State share of RAG during the 2021–23 Biennium is an estimated $84 million.
- Ecology's RAG budget request of $62 million falls $22 million short of helping local governments address all of their estimated cleanup needs over the next two years.

2020 solicitation offered three RAG grants and loans

During the 2020 solicitation period February 18–March 18, Ecology encouraged local governments to apply for three types of remedial action funding for the 2021–23 biennium:

1. **Oversight remedial action grants and loans** provide funds to local governments that investigate and clean up contaminated sites under an order or decree.

2. **Area-wide Groundwater investigation grants** provide funds to local governments that investigate known or suspected areas of groundwater contamination caused by multiple releases of hazardous substances.

3. **Safe Drinking Water action grants** provide funds to local governments to ensure safe drinking water is available to communities where the source of drinking water has been polluted by the release of a hazardous substance.

Local governments applied for these grants online using Ecology's Administration of Grants and Loans (EAGL) application and referenced four new guidance documents:

- Remedial action grant and loan guidance for the 2021–23 biennium[66] for Oversight remedial action grants and loans, Area-wide Groundwater investigation grants, and Safe Drinking Water action grants. (Publication No. 20-09-055, February 2020, rev. April 2020)

- EAGL instructions for 2021–23 remedial action grants & loan applications[67] for guidance submitting online applications through Ecology's Administration of Grants & Loans called EAGL. (Publication No. 20-090-056, February 2020)

- Focus on: Oversight remedial action grants & loans and Safe Drinking Water action grants: Implementing new permit condition[68] describes what local governments need to know for a 2019 change to MTCA that requires all permits be obtained before we can award RAG funding. (Publication no. 20-09-054, January 2020)

[66] https://fortress.wa.gov/ecy/publications/SummaryPages/2009055.html
[67] https://fortress.wa.gov/ecy/publications/SummaryPages/2009056.html
[68] https://fortress.wa.gov/ecy/publications/summarypages/2009054.html

- Focus on: Area-wide Groundwater investigation grants and Safe Drinking Water action grants: Choosing the appropriate grant[69] helps local governments choose between two grant types when contamination impacts their community's groundwater or sources of drinking water. (Publication No. 20-09-057, February 2020)

Local governments' applications helped us develop Ecology's 2021–23 budget request and update our RAG financing plan for the next ten years. If their projects are awarded funding in the biennial budget, funding would become available to local governments about 1.5 years later beginning roughly July 1, 2021.

Four grant types fell outside the 2020 solicitation

We did not solicit applications for two types of remedial action grants for the 2021–23 biennium:

1. **Site Assessment Grants**, because we discontinued this grant program in the 2019–21 biennium due to funding variability and uncertainty in previous biennia. At this time, Ecology does not have plans to restart this grant program.

2. **Extended Grant Agreements** were not available for the 2021–23 biennium. These agreements are a subset of Oversight Remedial Action Grants. They could be provided for cleanups that would cost more than $20 million and extend over several years, and could provide recipients more certainty that grant funds would be available in future years. However, entering into these agreements could also result in dedicating and prioritizing limited state funding to just a few, large-value projects. Ecology has not developed a process or criteria for offering these grant agreements, partly due to budget uncertainties and previous revenue volatility experienced with the MTCA accounts.

3. In a separate solicitation process during the **2019–21 biennium**, we accepted applications for two other grant types:

4. **Independent remedial action grants** are provided to local governments that investigate and clean up contaminated sites independently under Ecology's Voluntary Cleanup Program (VCP). Currently, we only provide such grants after the local government has completed the cleanup and obtained a No Further

[69] https://fortress.wa.gov/ecy/publications/summarypages/2009057.html

Action determination. https://ecology.wa.gov/About-us/How-we-operate/Grants-loans/Find-a-grant-or-loan/Independent-remedial-action-grants

5. **Integrated planning grants** are provided to local governments to assess and develop an integrated plan for cleaning up and redeveloping a contaminated site or group of sites. https://ecology.wa.gov/About-us/How-we-operate/Grants-loans/Find-a-grant-or-loan/Integrated-planning-grants

We announced these solicitations through our Site Register[70], website, and RAG Listserv announcements. Information about meeting program requirements and managing funded projects was available in the updated 2018–21 RAG Guidance,[71] the companion and predecessor to the 2021–23 RAG guidance.

We accepted applications for the two grant types on an ongoing basis throughout the biennium with periodic reviews based on funding availability. We anticipate running a similar ongoing solicitation for these two grant types during the 2021–23 biennium.

Financial stability for local governments is key to 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, it ensures that local governments can complete projects as envisioned and design new projects.

Since funding is dependent on our state's year-to-year or biennium-to-biennium budget decisions, it can generate concern that budget shortfalls will leave phased cleanup projects stranded or delayed. This happened beginning in February 2014 when oil prices declined, MTCA revenues were volatile, and budget decisions mandated delays to existing cleanup projects. However, changes to the Hazardous Substance Tax in 2019—moving from a value-based rate to a volumetric rate for liquid petroleum

[70] An Ecology newsletter published about every two weeks that contains information about cleanup activities, public meetings, public comment periods, and policy and rule changes.

[71] https://fortress.wa.gov/ecy/publications/SummaryPages/1809049.html

products—are expected to provide more stability in the future. See Chapter 2 for more details.

In the 2016 MTCA Ten Year Financing Report, we noted that some local governments were postponing new cleanup projects due to the continued volatility in revenue and the unreliability of state funding. Based on the data provided by local governments, that is exactly what appears to have happened over the last several years.

Figure 5 shows the expected state share for potential RAG-funded cleanups over the next ten years. Figure 6 focuses on the expected phases of cleanup activity (RI, FS, Cleanup Construction, etc.) for potential RAG-funded cleanups over the same timeframe. These figures depict a lower demand for cleanup funding and a lower demand for later-stage cleanup funding (when cleanups are most expensive and nearing completion) for the 2021–23 biennium.

Together, Figures 5 and 6 demonstrate the critical need for stabilized cleanup funding. Unstable funding during the MTCA shortfall appears to have affected overall demand and new starts. The total demand in 2021–23 and the demand for projects ready to enter cleanup construction in 2021–23 is low compared to data from previous reports. See further discussion below each figure.

Funding from the 2019–21 biennium appears to have met most of the demand coming into the 2021–23 biennium. The graphs depict less need for total funding and cleanup construction funding in 2021–23. There is an uptick reported for next biennium, as local governments projects seem to move further along in the cleanup process and prepare for the more costly phases of work during cleanup construction.

With reliable funding in the 2019–21 biennium for successive phases of cleanup, projects are starting to show progressions into cleanup construction. Additionally, more projects are coming online, such as Port of Douglas County's Rock Island Redevelopment and Port of Friday Harbor's Albert Jensen & Sons Inc. Both of these projects received Integrated planning grant funding, and are now requesting funding for the successive phases of cleanup. (See Chapter 1 for more information about these two projects.)

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 throughout our state. The more funding is reliably available, the more willing local governments will be to allocate the time and resources needed to clean up contaminated sites that are protective of human health and the environment.

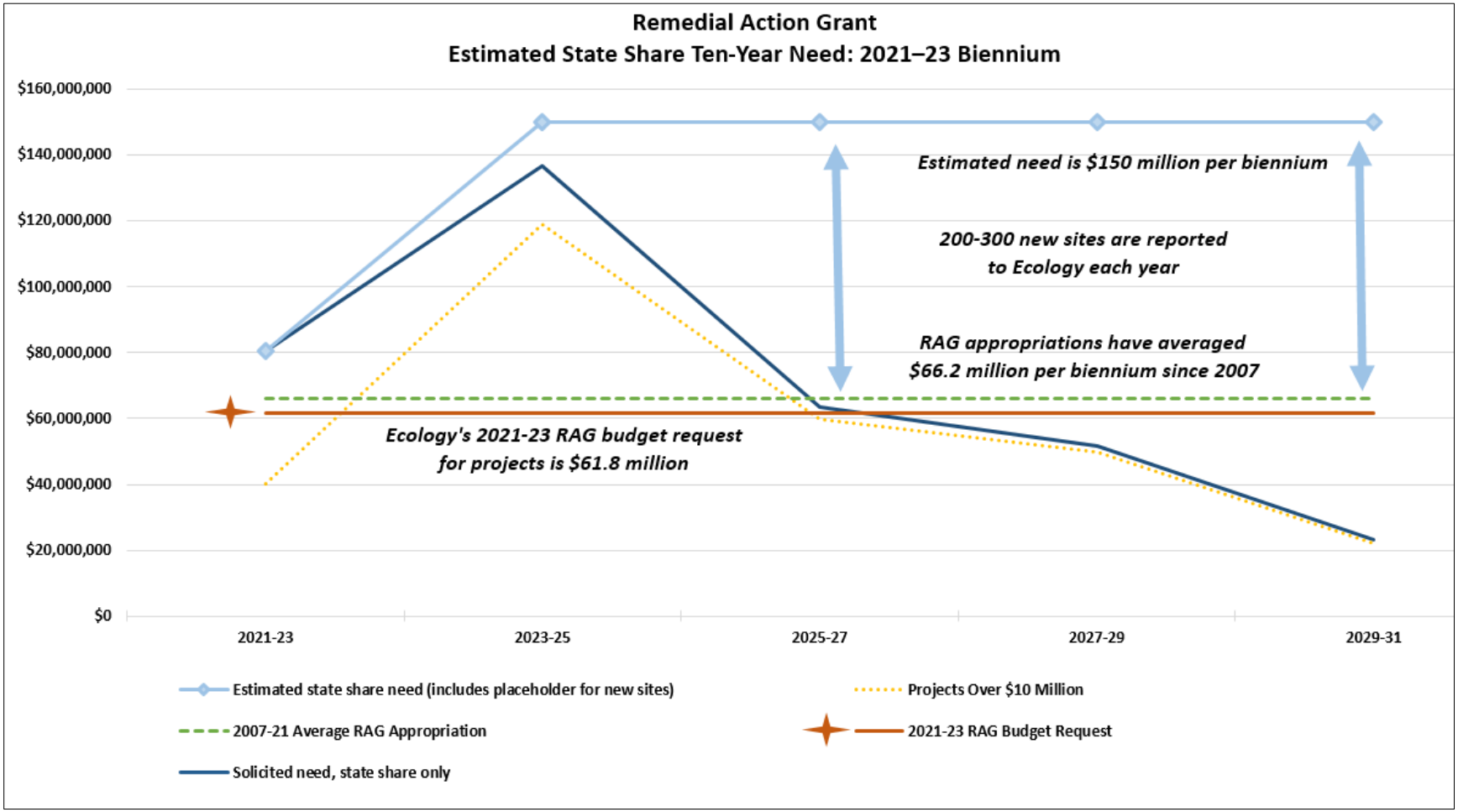

Figure 5: Local governments' solicited need in state share for Remedial Action Grant financing, and the estimated state share need for the next ten years (as of 2021–23 biennium).

Figure 5 compares a) the estimated RAG demand to b) Ecology's average RAG appropriations between 2007 and 2021 to c) the 2021–23 Biennium Capital Budget request. The top line of the chart is the estimated and ongoing demand of approximately $150 million per biennium. Cleanups were affected by the budget decisions made when managing the MTCA revenue shortfall. Local government cleanup needs exceed the average biennial appropriations of $66.2 million supported by the MTCA accounts since the 2007–09 biennium. The 2021–23 Biennium Capital Budget request of $62 million falls $22 million short of the local government need for the biennium.

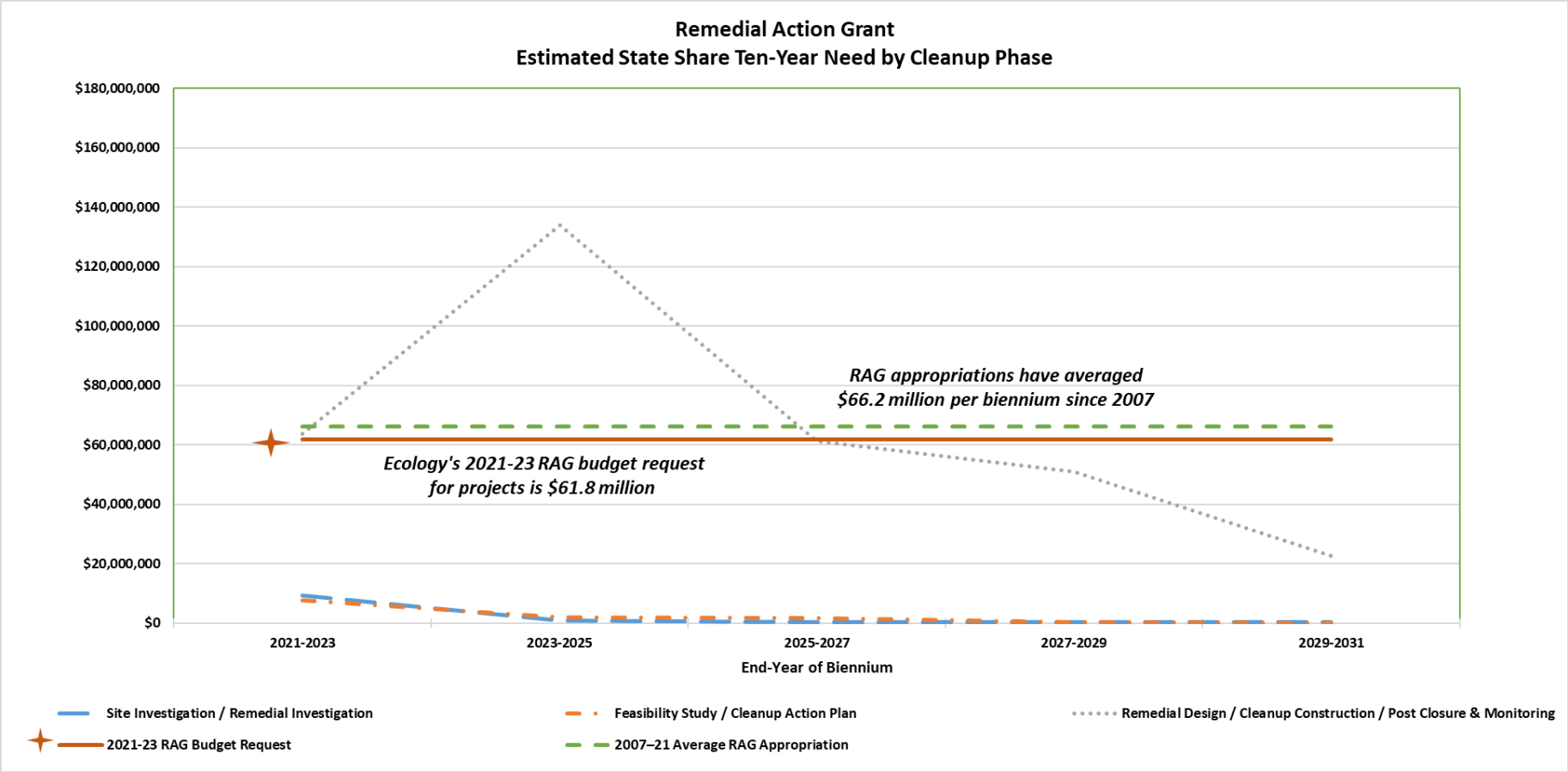

Figure 6: Remedial Action Grant estimated state share ten-year need by cleanup phase.

Figure 6 reorganizes the total Remedial Action Grant need (Figure 5's "Solicited Need" line) by expected project phase. We asked local governments 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.

The figure 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 according to phase of cleanup. 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 (compared to the MTCA Ten-Year Financing reports of 2016[72] and 2018[73]) and demonstrate both the long-term consequence of unstable funding during the MTCA shortfall and the impact of more reliable funding received in the 2019–21 biennium.

[72] https://fortress.wa.gov/ecy/publications/SummaryPages/1609060.html
[73] https://fortress.wa.gov/ecy/publications/SummaryPages/1809052.html

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

This chapter explains what Ecology means by "state-directed" cleanup projects, how we developed the list of projects, and what we considered when ranking the budget request.

At the end of this chapter is a summary of estimated costs to conduct these activities over the next ten years. Tables 2A and 2B in Appendix B list the project titles and estimated costs.

What is state-directed cleanup work?

In addition to supporting sites that are local governments' responsibility (as discussed in Chapter 4), the Model Toxics Control Act Capital Account supports remedial actions for activities for which Washington state has taken responsibility such as:

- State-conducted remedial actions at sites where there is no identifiable liable person, or the liable person is technically or financially unable to conduct remedial action (orphaned and abandoned sites), or where the liable person is non-compliant.

- State-conducted emergency remedial actions at sites where immediate action is necessary to eliminate or reduce threats to human health or the environment, such as where the source needs to be removed to prevent further harm, or where drinking water is contaminated.

- State cost-share at federal Superfund sites where EPA is performing the cleanup. The state's share includes 10% of construction costs and 100% of post-construction operation and maintenance costs.

- State funding to assist potentially liable persons or prospective purchasers pay for the costs of remedial action at a site where Ecology's director finds such funding would prevent undue economic hardship or provide a public benefit in addition to cleanup commensurate with the scope of the funding (RCW 70A.305.190(4)(a)(v) and (4)(a)(vi))

- Long-term operation and maintenance of cleanup actions, such as a groundwater treatment and hydraulic containment systems, at sites across the state to maintain the protectiveness of the remedy and protect the state's investments.

Unless sites such as these are cleaned up, they will continue to pose threats to public health, the environment, groundwater, and fish and wildlife resources.

New sites will require state-directed MTCA funding in the future

Ecology expects that we will continue to receive reports of new hazardous sites. Since we began tracking the statistic in 2000, there are between 200 and 300 new contaminated sites discovered and reported to Ecology each year. Many of these sites are historical contamination discovered during redevelopment, or when a construction project begins. Some of the sites will require state resources from the MTCA Capital Account to finish cleaning up. Any of these new sites may need to move up in priority for cleanup actions, funding, and staff resources as we gain more information about them.

Developing the state-directed list

For this report, we developed a project list and cost estimates for state-directed cleanup investments that focus on the **Puget Sound Basin, Everett Smelter Plume, Eastern Washington,** and **investments to protect cleanup remedies**.

Ecology used the best available information to develop the list and cost estimates for projects that could reasonably undergo remedial actions over the next ten years. We also included projects that protect investments in cleanup remedies. Examples of work such as this might be installing an *in situ* treatment system to capture residual soil contamination, or an EPA Superfund site where the state pays 10% of construction costs and 100% of long-term operation and maintenance.

Ranking the state-directed list for MTCA funding

We used multiple criteria to evaluate and prioritize state-directed projects. Among factors that include risk to human health and the environment, we reviewed each project's cleanup phase, and used direction from enacted 2017–19 Capital Budget (SSB 6090, Section 7022) that added consideration of affordable housing. This multi-tiered approach responds to the Legislature's direction that we focus limited state resources

on projects that are acutely needed and ready to proceed; are cost efficient and increase affordable housing; and are geographically distributed.

We considered each project's cleanup phase…

As discussed in Chapter 1, Toxics Cleanup Program staff guide projects through MTCA's regulatory process and requirements. The MTCA Cleanup Rule (Chapter 173-340 WAC)[74] requires that all cleanup projects proceed through various cleanup phases, from an assessment of human health and environmental risks to the final cleanup remedy. Phases include:

- **Assessment.** Projects are prioritized based on human health and environmental risks. Cleanup projects address risks from exposure to contaminated soil, groundwater, surface water, sediment, or air. These exposures pose human health risks from contacting contaminated soils, drinking polluted water, consuming fish and shellfish, inhaling 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 and include alternative analysis; cost-benefit analysis; long-term or life-cycle cost analysis; and cleanup technology preferences.

- **Cleanup Action Plan.** Based on the remedial investigation and feasibility study, a cleanup action plan is developed that describes the selected cleanup action, the standards it must meet, 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.** This includes design, construction, operations, and monitoring of the cleanup. A cleanup is complete when Ecology determines cleanup

[74] https://app.leg.wa.gov/wac/default.aspx?cite=173-340

standards have been met. This phase includes projects that are ready to proceed, that are in construction, that have permits or are in the permitting process, where design is complete or underway, or that are under contract.

These phases provide a framework 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 a capital project's status and to make funding decisions. The cleanup phases through which projects proceed under MTCA demonstrate a project's progress and inform rankings such as "readiness to proceed." A similar example might be a building on a university campus that is in the design phase or ready for construction.

We considered Legislative directives, budget criteria, and program priorities such as…

- **Continuing investments at sites with ongoing cleanup projects.** The 2013 changes to MTCA directed Ecology to plan hazardous site cleanup at a pace that matches the estimated cash resources in the MTCA accounts (RCW 70A.305.030). Once a site has been contaminated with toxic chemicals, a cleanup can take many years. Three major factors determine the length of cleanup time: 1) the administrative process used (e.g., a formal cleanup with Ecology oversight, or a cleanup conducted by parties independently); 2) the nature of contaminants (which indicates how difficult they are to remediate); and 3) the type of media that is contaminated, such as soil, groundwater, sediments. Ecology continues to develop model remedies, tools, and policies to make cleanups go faster. Financial certainty for cleanups is also critical and ensures that existing projects are completed as envisioned, and new projects and development opportunities can be planned.

- **2017–19 Enacted Budget criteria.** As with the previous budget for 2015–17, 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. The budget also added "[for] purposes of increasing affordable housing" to this list. Ecology is no longer delaying cleanups, but uses these same criteria to prioritize projects for budget requests.

- **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.

- **Current information from our partners and Ecology's regional cleanup managers on a project's status to help us prioritize further.** We considered, 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.

Estimated funding that state-directed cleanups will need

Ecology conducts state-directed cleanups using the Model Toxics Control Capital Account for sites that urgently need action to protect the environment and public. The state-directed tables in Appendix B (Financing Tables 2A–PSI, 2A–ESP, 2A–EW, 2A–PICR, and 2B–Remaining Need) identify 29 site-based state-directed projects where the state is leading the projects and will need funding in the next ten years. These tables also include statewide or other non-site-specific initiatives, such as updating the MTCA Cleanup Rule.[75]

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 single biennium.

Ten-year funding estimates for state-directed work

Ecology estimates we will require a total of $248 million for state-directed projects over the next ten years. We based cleanup costs estimates on input from Ecology cleanup project managers.

- **State-directed work ($248 million).** Total project costs over the next ten years comprise approximately the following, as shown in Financing Table 2D:

    - $14 million for 8 sites and three statewide (or not site-specific) programs in the **Puget Sound Initiative** (Financing Table 2A / 1 of 4)

    - $28 million for the **Everett Smelter Plume** cleanup and associated staff (Financing Table 2A / 2 of 4)

[75] https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-340

  - $30 million for 5 sites in the **Eastern Washington Initiative** (Financing Table 2A / 3 of 4)

  - $32 million to support 10 sites through **Protect Investments in Cleanup Remedies** (Financing Table 2A / 4 of 4)

  - $20 million for 5 sites not needing funding in the 2021–23 biennium (Financing Table 2B), and

  - An estimated $124 million in placeholders for assumed future need (Financing Table 2C).

- **Placeholders for anticipated cleanup needs ($124 million).** The state-directed project lists include funding placeholders of approximately $124 million over the next ten years. We receive reports of new cleanup sites every year and some will require state-directed cleanup investments.

- **Range of project costs**. Estimated cleanup costs for state-directed cleanups range from $50,000 for the Quendall Terminals work in Renton, to $20 million for the Colville Post & Poles site in Eastern Washington's Stevens County. The range illustrates the diversity of size and complexity of cleanups being conducted by the Toxics Cleanup Program, but does not encompass the entire cost estimate of large cleanups that may include multiple components and a combination of MTCA, federal, and other funds to complete.

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

2021–23 Biennium Capital Budget request

Ecology's budget request for the Model Toxic Control Capital Account during the 2021–23 biennium includes about $48 million to conduct state-directed work for 27 projects categorized by these components:

- Approximately $6 million for 8 sites in the Puget Sound region and 3 statewide (or not site-specific) projects, like updating the MTCA Cleanup Rule through the **Clean Up Toxics Sites-Puget Sound Initiative.** (Financing Table 2A / 1 of 4)

- Approximately $11 million for continuation of cleanup activities and associated staff for the **Everett Smelter Plume.** (Financing Table 2A / 2 of 4)

- Approximately $20 million for 5 sites in Eastern Washington through the **Eastern Washington Clean Sites Initiative.** (Financing Table 2A / 3 of 4)

- Approximately $11 million for 10 statewide projects designed to support long-term operation, maintenance, and investments through **Protect Investments in Cleanup Remedies.** (Financing Table 2A / 4 of 4)

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Chapter 6:
Estimated Funding Needed for Emerging Issues over the Next Ten Years: PFAS and Healthy Housing

Ecology is working with local communities and private entities to help manage two emerging issues in Washington: PFAS-contaminated drinking water and the affordable housing crisis.

For these projects during this 2021–23 round of funding, we are requesting State Building Construction Account (SBCA) funds.[76] We're including them in this report to provide a comprehensive picture of cleanup funding needs and because projects like these may require funding from the MTCA Capital Account in the future.

The SBCA is a state treasury account that Washington state agencies can use for capital projects. SBCA bonds are appropriate for the projects identified in this chapter since a) PFAS chemicals are not yet regulated under MTCA; and b) affordable housing projects provide Washington state residents an additional social benefit beyond cleanup.

We expect more demand for this type of funding assistance in the future. Additional discoveries of PFAS contamination in drinking water supplies may be found, and demands for affordable housing will likely escalate (in part) due to high development costs and people needing to live closer to where they work.

Emerging issue: PFAS chemicals are contaminating drinking water

PFAS (per-fluorinated and poly-fluorinated alkyl substances) is a group of more than 4,700 synthetic chemicals that can easily contaminate groundwater and be hard to filter out. These prevalent chemicals are found in cookware, food packaging, carpets – even certain types of firefighting foam – and remain in the environment for a long time without breaking down.

PFAS have become a serious public health concern nationwide: when released from manufacturing sites, landfills, firefighting foam, or other products, they can seep into surface soils, then leach into groundwater to contaminate drinking water supplies. PFAS can accumulate in the body when ingested, and most exposures occur when a person eats PFAS-contaminated food or drinks PFAS-contaminated water.

[76] https://apps.leg.wa.gov/RCW/default.aspx?cite=43.83.020

At the federal level, the U.S. Environmental Protection Agency (EPA) has set a lifetime health advisory level for two PFAS chemicals: Perflourooctance sulfonate (PFOS) and Perfluorooctanoic acid (PFOA). If a water supply system in Washington is contaminated with combined levels of PFOS/PFOA above 70 parts per trillion, the public must be notified, and there is an expectation that these levels will be addressed at sites that are being evaluated under federal cleanup programs (such as Superfund). Right now, however, there is no requirement for a community to provide bottled water to their customers, or for the water to be treated.

In March 2020, EPA published a preliminary determination to regulate PFOS/PFOA under the Safe Drinking Water Act. When it is finalized, EPA will begin the process of setting a maximum contaminant level – the highest level of a contaminant that is allowed in drinking water – and set as close to a level in which there is no known or expected risk to health.

At the state level, the Washington State Board of Health is currently conducting a rulemaking[77] to set standards for PFAS in drinking water. Providing bottled water or building expensive treatment systems (with costly operation and maintenance into the future) are solutions, but ones that don't address the source of the contamination. Until standards are set, individual communities must decide how to provide safe drinking water and Ecology's funding is one way local governments can combat that cost.

Ecology is requesting $15 million to help communities in Spokane, Lakewood, and Issaquah address PFAS contamination in drinking water. See Financing Table 3 in Appendix B for more information about these projects.

Emerging issue: Communities urgently need affordable housing

A new authority in ESSB 5993 of 2019 allows us to consider projects that "increase affordable housing."

Washington is in dire need of affordable housing statewide. Affordable housing is defined as residential housing that is rented by an individual or household where monthly housing costs (including utilities but not phone) do not exceed 30% of the household's monthly income, relative to that community's median income.

[77] https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/RuleMaking#:~:text=The%20State%20Board%20of%20Health%20%28board%29%20is%20revising,in%20Washington%20for%20Group%20A%20public%20water%20systems

The 2019 Affordable Housing Update[78] from the Department of Commerce's Affordable Housing Advisory Board 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: whether real or perceived contamination is found in an urban or rural setting, it drives up housing development costs. Our budget request will continue efforts that fund developers' cleanup costs for public, nonprofit, or private affordable housing. Funding this program will invest in a social good—housing—that stretches beyond the traditional "economic good" of redeveloping contaminated properties for commercial and industrial purposes.

Several cleanup projects are already underway by the Ecology's Toxics Cleanup Program:

1. Mt. Baker Housing Authority's Maddux Project in South Seattle (CSID 13054)[79]
2. Mt. Baker Housing Authority's Grand Street Commons Project in Southeast Seattle (CSID 3018)[80]
3. Seattle Chinatown International District Goodwill Affordable Housing Eight Acre Project (CSID 2997)[81]
4. Bellingham Healthy Housing Project (CSID 2279)[82]
5. Wenatchee Tree Fruit Research Center Property Redevelopment (CSID 4712)[83]
6. Kennewick Housing Authority Multi-Family Housing Complex (CSID 11314)
7. Seattle Housing Authority Yesler Family Housing (CSID 15096)[84]

Ecology is requesting $10,161,000 from the State Building Construction Account for the Healthy Housing Remediation Program, which will offer grants to public, nonprofit, and private entities that intend to remediate contaminated property to develop affordable housing. This purpose also supports the Governor's priorities on housing and homelessness.

Financing Table 4 in Appendix B identifies the four projects we included in our biennial budget request and the associated staff to move cleanups forward and help communities build a security net of affordable housing.

[78] https://www.commerce.wa.gov/wp-content/uploads/2020/03/2019-AHAB-Annual-Report.pdf
[79] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=13054
[80] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=3018
[81] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=2997
[82] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=2279
[83] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=4712
[84] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=15096

Ten-year funding estimates for emerging PFAS and healthy housing projects

PFAS: Due to the emergent nature of PFAS-contaminated drinking water, Ecology does not have estimates of future need, but we expect demand for this funding to increase in the future.

Healthy Housing: Ecology expects to need approximately $10 million each biennia to support new healthy housing projects in the future. Future requests of this nature will either need to come from the SBCA or the Model Toxics Control Capital Account.

State-directed emerging issue work ($28 million). Ecology estimates we will require a total of $28 million for these 7 emerging issue projects and associated staff over the next ten years.

- Total project costs over the next ten years include approximately:
    - $15 million for 3 PFAS projects (identified in Ecology's 2021–23 budget request);
    - $13 million for 4 Healthy Housing projects (identified in Ecology's 2021–23 budget request) and associated staff. Ecology expects to have an additional $37 million in project funding and associated staff for other healthy housing cleanup projects in future biennia.

Range of project costs. Estimated cleanup costs for emerging issue state-directed cleanups range from $750,000 in Issaquah to almost $10 million in Spokane.

2021–23 Biennium Capital Budget request for PFAS and Healthy Housing projects

Ecology's cleanup budget request for emerging issues for the 2021–23 biennium includes
$25 million in SBCA bonds to provide assistance for 7 projects.

- Approximately $15 million for 3 projects that provide safe drinking water, or studies for sites where drinking water is contaminated by PFAS chemicals.
- Approximately $10 million for 4 sites in the Healthy Housing Remediation Program[85] and associated staff.

[85] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Brownfields/Affordable-housing

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Chapter 7:
Estimated Funding Needed for Large Multi-Biennia Cleanup Project over the Next Ten Years

RCW 70A.305.030(5)(d)[86] requires Ecology to provide separate budget estimates for large, multi-biennia cleanup projects that exceed $10 million. The 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 96 projects that could reasonably undergo remedial actions over the next ten years (Financing Tables 1 through 4 in Appendix B). Included in these lists are 17 large projects (shared by 9 recipients and the state for state-directed work) that are expected to exceed $10 million in total estimated project costs; see Map 1 below and Financing Table 5 in Appendix B.

As both 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 at the ports of Bellingham, Everett, Friday Harbor, Seattle, and Tacoma. Large cleanup sites can also be found at sites in Skagit, Kitsap, and Stevens counties.

- **Total project cost for large projects ($659 million).** Ecology and local governments identified 15 cleanup sites (17 projects) with estimated costs greater than $10 million. We estimate that approximately $659 million will be needed for these projects over the next ten years.

- **State's share of large project costs ($368 million).** We estimate the state will need at least $368 million to cover the state share of these cleanup costs. Local agencies will be responsible for the remaining amount.

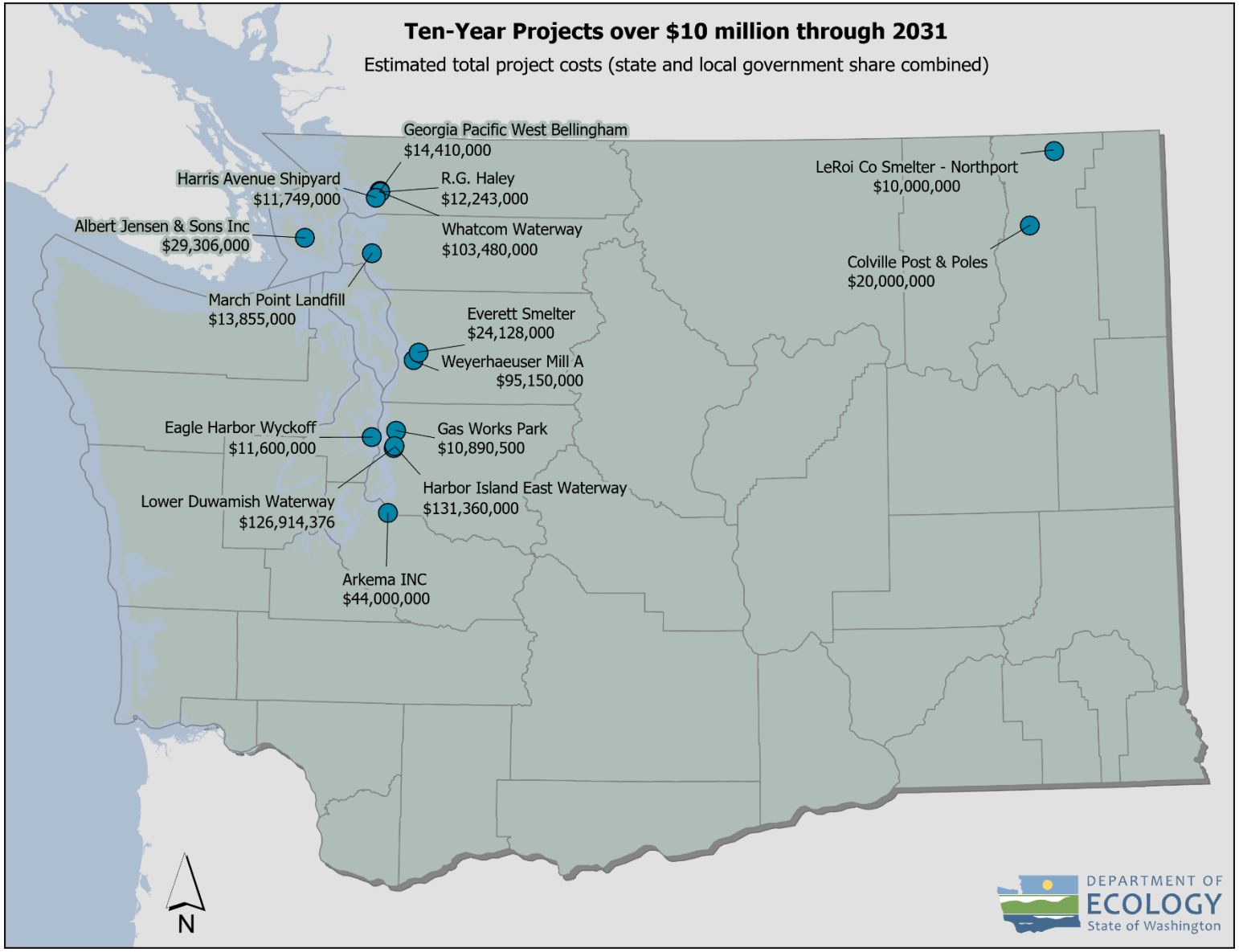
- **Range of large project costs.** Estimated project costs range from $10 million for the LeRoi Co Smelter in Northport (state-directed funding), to more than $131 million for the Port of Seattle's East Waterway Operable Unit Harbor Island Superfund Site (Remedial Action Grant funding).

[86] https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305

The majority of estimated costs summarized in Financing Table 5 are eligible for Remedial Action Grants, but there are also several large state-directed projects. Analyzing the numbers:

- 12 of the 17 projects are Remedial Action Grant submissions spread between 9 recipients. The other 5 are state-directed projects.
- In terms of estimated total ten-year cleanup costs, the forecasted needs for these 12 Remedial Action Grant projects represent more than 40% of the RAG needs identified in Financing Table 1B.
- When we look at Ecology's 2021–23 Biennium Capital Budget requests—for Remedial Action Grants, Puget Sound Initiative, Everett Smelter Plume, Eastern Washington, and Protect Investments in Cleanup Remedies projects, as well as for PFAS and Healthy Housing projects—these $10 million projects make up 51% of our cleanup budget request.
    - Of the 17 projects over $10 million, 12 need funding and are included in the 2021–23 Biennium Capital Budget request to the Governor.
    - $70 million requested for these large projects are in Ecology's 2021–23 Biennium Capital Budget request to the Governor.
    - $136 million comprises Ecology's total cleanup budget request for RAG, ESP, PSI, EW, PICR, PFAS, and Healthy Housing projects.

It's important to note that the 17 projects at the 15 sites on the list include many, but not all, the large multi-biennia cleanup projects in Washington. Not reflected in either Map 1 or Financing Table 5 are many more large cleanups that private parties or the federal government conduct, and that don't require significant MTCA Capital funding at this time. Such sites include the Asarco cleanup actions in Tacoma, cleanup of the upper Columbia River sediments, the Hanford Nuclear Reservation, and the Holden Mine in Eastern Washington.



Map 1: Ten-year projects over $10 million through 2029-31 biennium (state and local government share combined)

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Conclusion

Since Washington state adopted MTCA into law 31 years ago, the Department of Ecology has identified 13,400-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, 2020, about 7,300 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.

More work remains as the number of sites continues to grow. More than 5,900 sites still need further investigation and cleanup; roughly 1,900 of these sites have not yet begun preliminary work. Washington's "universe" of sites continues to expand as Ecology receives reports of 200 and 300 newly discovered sites each year.

The cleanup work outlined in this report requires significant public funding from the MTCA Capital Account: of the 13,400-plus contaminated sites in Washington, more than 2,900 of them are publicly owned, which is about 21% of all sites known to Ecology. In order to protect public health and the environment, privately owned orphaned and abandoned sites will also require public funding, as well as sites with non-compliant owners or emergency cleanup needs.

We're continuing to manage cleanup demands

We continue to refine best practices for managing the 200 to 300 sites discovered each year and find ways to accelerate the pace of cleanups—such as developing model remedies, updating our technical guidance and making it more user friendly, and continuing in-house training. The MTCA Ten-Year Financing Report is another way to prioritize this work and help speed up cleanup efforts: by ranking project funding 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 cleanups so they can get underway faster.

Funding public cleanups will take $1.4 billion over ten years

Chapters 4, 5, and 6 outline the cost estimates to conduct these publicly funded cleanups over the next ten years. Ecology estimates that the state and local

governments will require $1.4 billion in combined state and local funds to perform investigations and cleanup at contaminated sites in Washington over the next decade. Maps 3, 4, and 5 on the following pages summarize these funding needs by county and legislative district. It's 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 we expect to need public funding in the future, with many more sites yet to be discovered and reported.[87]

For cleanup projects that fall under local governments' purview, projected state funding needs for the 2021–23 biennium exceed the amounts likely to be available for Remedial Action Grants. For example, Ecology's 2021–23 Biennium Remedial Action Budget request includes $62 million in state share to continue projects, begin new projects, and support grant management. However, local governments identified that they would actually need more than $84 million in state share to conduct all of the projects they identified during this two year period. We based this estimate on information local governments relayed 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. The disparity between the local governments' self-reported need and state funding resources does indicate there will be project delays as Ecology works with local governments to adjust project schedules that align with funding availability.

2020 events impacted local government submittals for this report

We noted that we received fewer submissions for the 2021–23 biennium compared to the 85 submissions for the previous biennium. Several reasons may explain why local governments submitted fewer applications and smaller dollar requests in 2020:

1. COVID-19 impacts. The 2020 solicitation period closed just before the Governor's "Stay Home – Stay Healthy" Proclamation 20-05 [88] ceased non-essential business operations throughout Washington beginning March 25, 2020.

[87] Funding estimates in this report do not include Washington's entire statewide cleanup costs, most of which are funded by private parties or the federal government. Privately and federally funded cleanup projects include a wide range of projects that reflect various levels of Ecology involvement and oversight. For example, most privately funded cleanups are performed independently with informal technical assistance from Ecology's Voluntary Cleanup Program or PLIA's technical assistance programs. The private parties pay fees to cover the state's costs of providing such assistance. Other large, privately funded projects are supervised by Ecology under an order or consent decree. We did not identify privately funded projects in this report.

[88] https://www.governor.wa.gov/sites/default/files/proclamations/20-25%20Coronovirus%20Stay%20Safe-Stay%20Healthy%20%28tmp%29%20%28002%29.pdf (2020 Stay Home – Stay Healthy)

Local governments may already have been experiencing staffing and operational impacts before the official directive went into effect.

2. For the first time since we began offering RAG funding, we offered Independent remedial action and Integrated planning grants in a separate solicitation. Of the 85 projects submitted during the 2018 solicitation, 26 had been for Independent remedial action or Integrated planning grants.

3. The ten-year forecast shows that several projects were not yet ready to proceed or did not require funding in the 2021–23 biennium. As Figure 6 shows in Chapter 4, however, many local governments plan to seek funding during the next 2022 solicitation for the 2023–25 biennium.

How do estimates in the 2020 report compare to previous reports?

Washington's projected state and local funding needs (across all Ecology cleanup programs) have increased since Ecology prepared the first ten-year financing report in 2008. The $1.7 billion cost projections identified in this report, for instance, are approximately $500 million more than the $1.2 billion identified in the 2008 report. Map 2 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, 2018, and 2020.

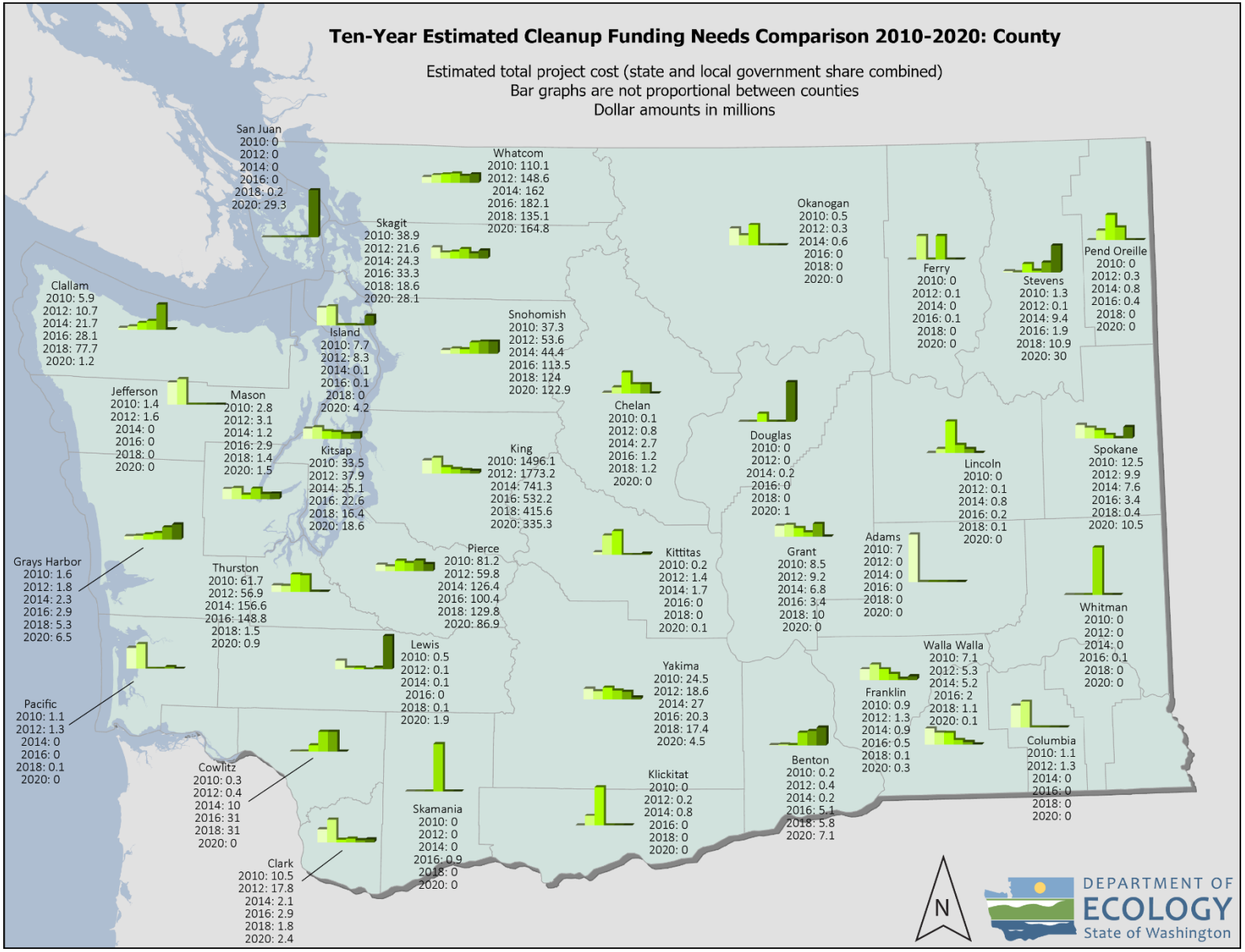
Moving forward…

History and experience show that cleanup needs constantly evolve as investigations are completed and new sites are identified. We will continue to refine cost estimates for both public and state-directed projects for these ten-year financing reports, and continue to use expenditure information to help update subsequent ten-year forecasts.

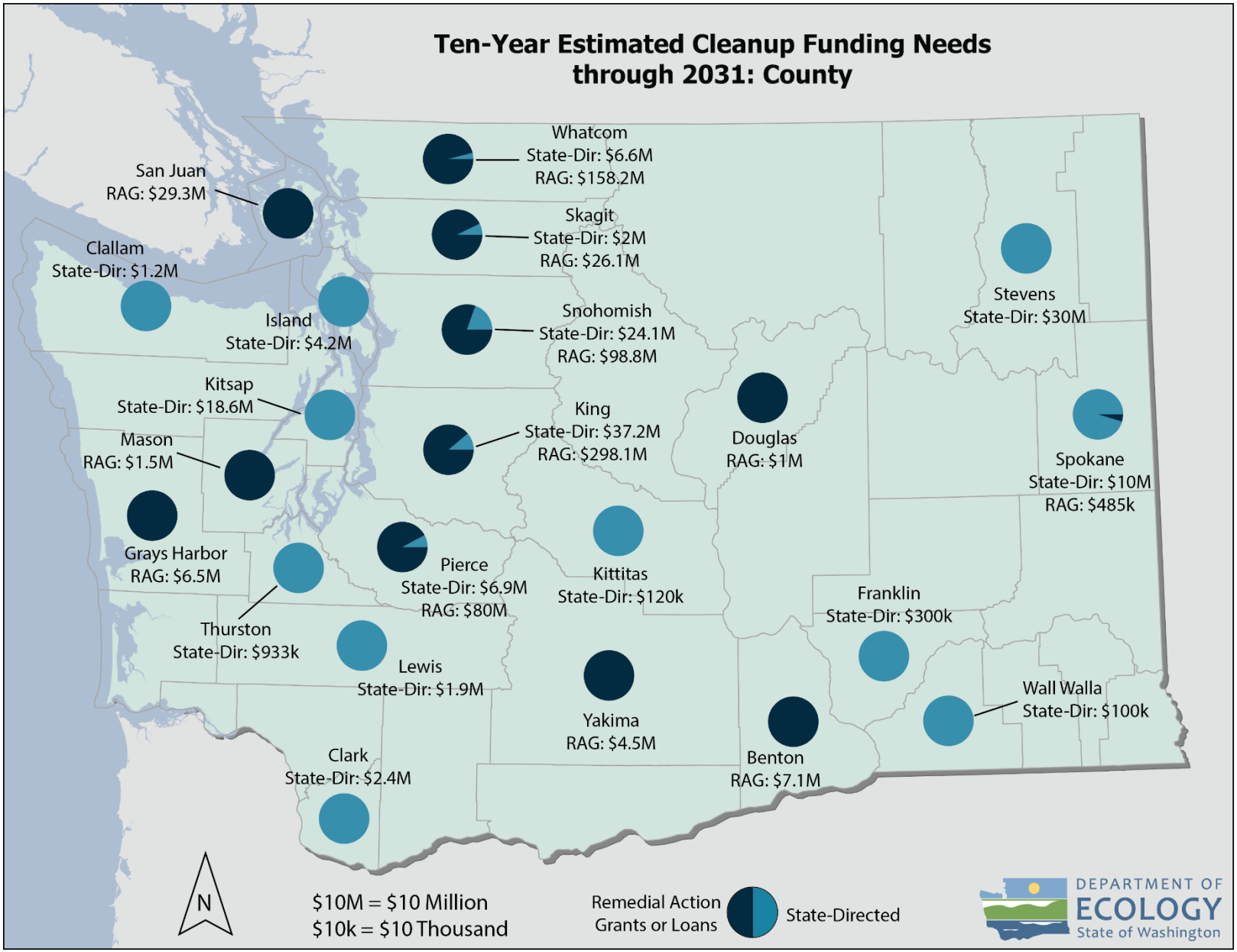
Stable and available financing remains critical for local governments that rely on public funding to complete cleanups: capital projects require stability. Unpredictable public funding can cause local governments to delay projects or remove them from consideration entirely, or negatively impact local governments' ability to leverage cleanup funding from other sources. Stable public funding from the state, however, helps ensure that local governments complete projects as envisioned and begin new projects. 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 maintain the 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 the state needs to provide stability over the long-term.

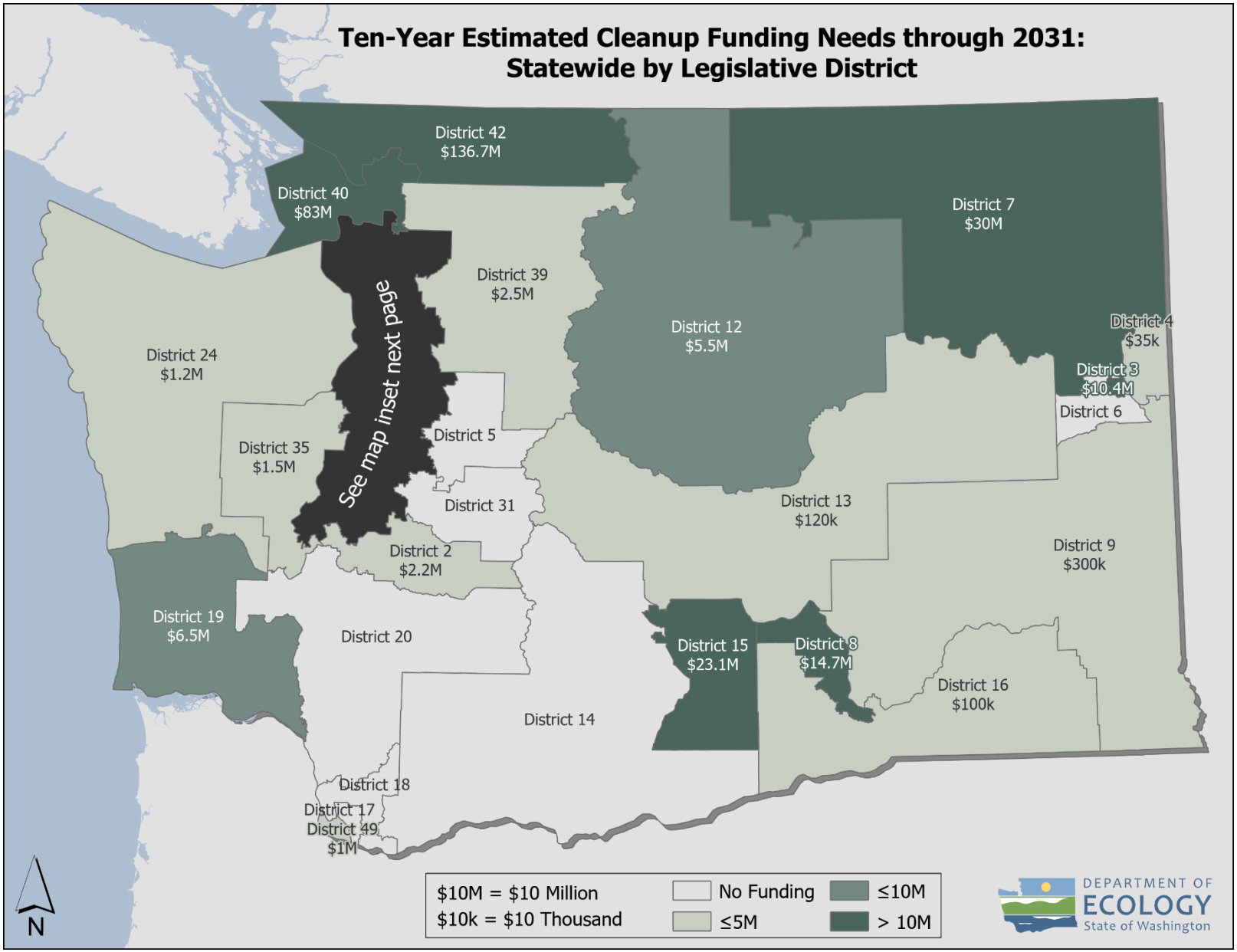
Remedial actions yield exceptional benefits for Washington's seven million residents. They help protect our communities' health, restore damaged shorelines, create new recreational opportunities, and spur economic development. Continued public funding will prove essential as state, local, and federal 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—will help ensure we use public funds as effectively as possible.



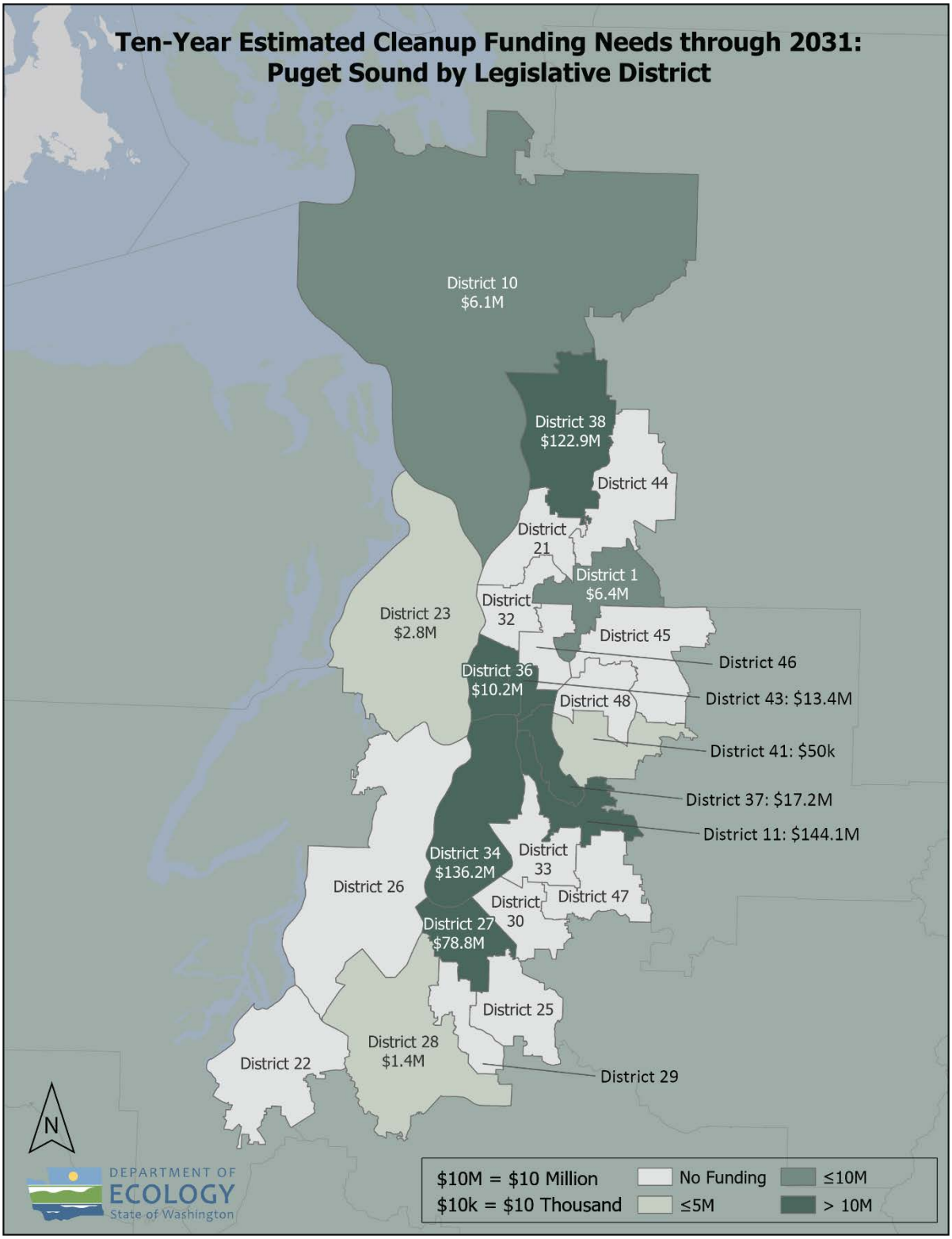
Map 2: Ten-year estimated cleanup funding needs comparison 2010, 2012, 2014, 2016, 2018, and 2020: County. Map represents the earliest collection of raw data for this report and may yield discrepancies when compared to the Financing Tables. Refer to Financing Tables 1A and 1B for the most refined site-specific data.



Map 3: Ten-year estimated cleanup funding needs through the 2029-31 biennium by County.



Map 4: Ten-year estimated cleanup funding needs through 2029-31 biennium by Legislative District. Note: Map does not depict project funding on statewide or regional projects.



Map 5: Ten-year estimated cleanup funding needs through 2029–31 biennium: Puget Sound Legislative Districts (inset map). Note: Map does not depict project funding on statewide or regional projects.

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 for the 2017–19 biennium. (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 2017–19 Biennium Capital Budget.	Ecology updates this internal document each biennium.
Ecology's MTCA Biennial Report of Expenditures 2019	Published every two years. Provides an overview of expenditures, successes, and results of work funded by the three (former) MTCA accounts: STCA, LTCA, and ELSA for the 2017–19 biennium. (Nov 2019, Publication No. 19-09-045)	https://fortress.wa.gov/ecy/publications/SummaryPages/1909045.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/

Resource	Description	Link
ACCOUNTING AND BUDGET RESOURCES (CONTINUED)		
Report to the Legislature: Washington State Model Toxics Act 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 13,400-plus contaminated sites in our ISIS database.	https://fortress.wa.gov/ecy/neighborhood/
TECHNICAL RESOURCES AND GUIDANCE		
Cleanup Site Search (website)	Database of 13,400-plus contaminated sites known to Ecology that draws from the Integrated Site Information System (ISIS) database.	https://fortress.wa.gov/ecy/gsp/SiteSearchPage.aspx
Cleanup and Tank Search (formerly Web Reporting)	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 joint 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
Affordable Housing Update	2019 affordable housing update pursuant to RCW 42.185B.040 produced by the Department of Commerce's Affordable Housing Advisory Board.	https://www.commerce.wa.gov/wp-content/uploads/2020/03/2019-AHAB-Annual-Report.pdf
SOURCES FOR CRITERIA USED TO PRIORITIZE PROJECTS IN THIS REPORT		
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: 2021–2023 Guidance	Known as 2021–23 RAG Guidance for Oversight grants and loans, Area-wide Groundwater investigation grants, and Safe Drinking Water action grants, Ecology publication no. 20-09-055	https://fortress.wa.gov/ecy/publications/SummaryPages/2009055.html
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 70A.305 RCW	https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.030
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 MENTIONED IN THIS REPORT		
ESSB 5993 (2019)	Engrossed Substitute Senate Bill 5993 (ESSB 5993) Model Toxics Control Program—Financial Structure	http://lawfilesext.leg.wa.gov/biennium/2019-20/Pdf/Bills/Session%20Laws/Senate/5993-S.SL.pdf?cite=2019%20c%20422%20§%20401
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
SSB 6090 (2017–2018)	Substitute Senate Bill 6090 Concerning the capital budget	https://app.leg.wa.gov/billsummary?BillNumber=6090&Year=2017#documentSection

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 30% 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 2021–23 biennium starts July 1, 2021, and ends June 30, 2023.
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: American Silicon Technologies' Rock Island Smelter (CSID 11), Northern State Multi Service Center (CSID 10048), and Mount Baker Housing Project (CSID 13054)
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 70A.305.140).
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. As of June 30, 2020, Ecology identified 13,499 cleanup sites in Washington state. Cleanups are often considered to be 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.

Term	Definition
Cleanup Site ID (CSID)	An identifying number assigned by Ecology's Toxics Cleanup Program to a cleanup site for the Integrated Site Information System (ISIS).
Cleanup and Tank Search **(formerly known as Web Reporting)**	Toxics Cleanup Program's online application that pulls data from the Integrated Site Information System (ISIS) and Underground Storage Tank tracking system (UST) to produce public-facing reports such as the Confirmed and Suspected Contaminated Sites List, No Further Action List, Environmental Covenants Registry, and the Voluntary Cleanup Program's Wait Lists. https://apps.ecology.wa.gov/tcpwebreporting/
Cleanup Site Search	Toxics Cleanup Program's searchable database containing the 13,400-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 13,400-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, 2020, there were 6,192 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 that combines environmental and demographic indicators. https://www.epa.gov/ejscreen
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 of all people with respect to the development, adoption, and enforcement of environmental laws, regulations, and policies. Environmental justice is the right to a safe, healthy, productive, and sustainable environment, where environment is considered in its totality to include the ecological, physical, social, political, aesthetic, and economic environment. (National Association of County and City Health Officials via https://www.doh.wa.gov/DataandStatisticalReports/WashingtonTrackingNetworkWTN/Resources/EnvironmentalJusticeIssues)
Environmental Legacy Stewardship Account (ELSA)	One of the three former MTCA accounts eliminated by the Legislature on July 1, 2019, via Engrossed Substitute Senate Bill (ESSB) 5993.

Term	Definition
Engrossed Substitute Senate Bill (ESSB) 5993	A bill passed by the Washington State Legislature in 2019 that made major changes to the MTCA accounts and its primary funding mechanism, the Hazardous Substance Tax. https://app.leg.wa.gov/billsummary?BillNumber=5993&Year=2019&Initiative=false
Facility Site ID (FSID)	An identifying number Ecology assigns to a cleanup site or facility for the Facility Site database.
fiscal year	A period of one year named for the year it ends. Fiscal Year 2021 starts July 1, 2020, and ends June 30, 2021.
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 June 30, 2020, there were 1,988 ranked sites on this list.
Hazardous Substance Tax (HST)	A volume-based tax on liquid petroleum products and one source of revenue for the MTCA accounts. The first $50 million per biennium of tax revenue is deposited into Washington's Motor Vehicle Fund, and must be used exclusively for transportation stormwater purposes. The remaining revenue is deposited into the three MTCA accounts: • 60% into the MTCA Operating Account • 25% into the MTCA Capital Account • 15% into the MTCA Stormwater Account
Healthy Housing Remediation Program	An Ecology program that makes it easier for affordable housing developers to redevelop once-contaminated properties. This program has been a line item in Ecology's last two capital budget provisos. Under the program, Ecology awards funding to assist public, nonprofit, or private affordable housing developers with their cleanup costs. https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Brownfields/Affordable-housing
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 13,400-plus contaminated sites.

Term	Definition
local government	For purposes of this report, defined as a political subdivision, regional government unit, district, or municipal or public corporation, which includes cities, towns, counties, ports, and brownfield development authorities.
Local Toxics Control Account (LTCA)	One of the three former MTCA accounts eliminated by the Legislature on July 1, 2019, via Engrossed Substitute Senate Bill (ESSB) 5993.
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 70A.305 RCW. The law was most recently changed in 2019 and recodified in 2020 from Chapter 70.105D RCW.
Model Toxics Control Act Regulations (MTCA Cleanup Rule)	Chapter 173-340 WAC, Washington's regulations for cleaning up upland and sediment sites under the Model Toxics Control Act. Ecology is currently updating this rule in three stages. Learn more at https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-340
Model Toxics Control Accounts	Three accounts used for cleanup activities and programs. On July 1, 2019, the Legislature eliminated the three previous MTCA accounts—STCA, LTCA, and ELSA—through Engrossed Substitute Senate Bill 5993, and established three new accounts: • Model Toxics Control Act Capital Account • Model Toxics Control Act Operating Account • Model Toxics Control Act Stormwater Account The authorized uses of the new accounts are similar to the previous MTCA accounts, and include all of Ecology's previously authorized uses.
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.
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, 2020, there were 7,307 sites on this list.
PFAS	A large group of manufactured chemicals that can easily contaminate groundwater and be hard to filter out. The chemicals can remain in the environment for a long time without breaking down, and some of them build up in people and the environment.

Term	Definition
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 70A.305.150. 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.
rule, also called regulations	A law adopted by an executive branch agency (such as the Department of Ecology) under the authority of a statute to carry out programs authorized or directed by the statute. Rules specify procedures and set standards and other requirements to implement a statutory program. Rules are developed and enacted through a rulemaking process specified in statute. The public process allows stakeholders to participate in the creation of rules. Agencies can't exceed their statutory authority when adopting rules, and rules can't change statutes. Rules can clarify confusing or unclear statutory directives. Washington's Legislature and voters can change rules by passing new bills or initiatives. The Washington Administrative Code (WAC) codifies rules and arranges them by subject or agency.
Sediment Management Standards (SMS Rule)	Chapter 173-204 WAC, Washington's regulations for cleaning up contaminated sediment under the Model Toxics Control Act.
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)	One of the three former MTCA accounts eliminated by the Legislature on July 1, 2019, via Engrossed Substitute Senate Bill (ESSB) 5993.

Term	Definition
statute	A law passed by the Legislature in a bill or by voters in an initiative. Statutes usually direct or authorize the establishment and implementation of government programs (such as Ecology's Remedial Action Grant Program). Agencies (such as Ecology) are part of the executive branch of state government, and are tasked with carrying out the programs directed or authorized by statute. To carry out these programs, agencies are usually authorized by statute to adopt rules. The Revised Code of Washington (RCW) codifies statutes and arranges them by subject.
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 the new Chapter 173-360A WAC that became 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.
Web Reporting	See *Cleanup and Tank Search*
What's in My Neighborhood	Toxics Cleanup Program's interactive map of cleanup sites in Washington state. https://fortress.wa.gov/ecy/neighborhood/

Appendix A:
Reporting Requirements for MTCA Ten-Year Financing Report (RCW 70A.305.030(5))

RCW 70A.305.030[89]

Department's powers and duties (as amended by 2019 c 422). Recodified from RCW 70.105D.030 pursuant to 2020 c 20 § 2030.

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

(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 model toxics control capital 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 model toxics control capital 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 the model toxics control capital 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 the model toxics control capital account. The submittal must also identify separate budget estimates for large, multibiennia clean-up projects that exceed ten million dollars. The department must 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.

[89] As amended by 2019 c 422, Model Toxics Control Program—Financial Structure.
See full text at https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305.030 and
ESSB 5993 at http://lawfilesext.leg.wa.gov/biennium/2019-20/Pdf/Bills/Session%20Laws/Senate/5993-S.SL.pdf?cite=2019 c 422 § 401 Reviser's note: RCW 70A.305.030 was amended twice during the 2019 legislative session, each without reference to the other. Both amendments are incorporated in the publication of this section under RCW 1.12.025(2).

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Appendix B:
Ten-Year 2020 Financing Tables

Remedial Action Grant (RAG) projects. Financing Table numbers:

- **1A:** RAG budget request for 2021–23
- **1B:** Local government projects & cleanup financing needs for next ten years
- **1C:** Other RAG grant types
- **1D:** Summary of 1B+1C
- **1E:** Future needs
- **1F:** Total needs (2021–2031)

State-directed projects. Financing Table numbers:

- **2A financing tables** (these are included in Ecology's 2021–23 Biennium Capital Budget request):
    - **2A-PSI** (Clean Up Toxic Sites—Puget Sound Initiative)
    - **2A-ESP** (Everett Smelter Plume)
    - **2A-EW-CSI** (Eastern Washington Clean Sites Initiative)
    - **2A-PICR** (Protect Investments in Cleanup Remedies)
- **2B:** Remaining ten-year needs (these are **not** included in the budget request)
- **2C:** Future needs
- **2D:** Total needs 2A+2B (2021–2031)

State Building Construction Account projects. Financing Table numbers:

- **3:** PFAS projects
- **4:** Healthy Housing projects

Projects exceeding $10 million over ten years. Financing Table number:

- **5**: Projects exceeding $10M in total costs over next ten years (2021–2031)

Financing Table 1A: 2021–23 Remedial Action Grant (RAG) budget request

Local government financing needs that were included in Ecology's 2021–23 Biennium Capital Budget request to the Governor. See Financial Table 1B for the full list of projects identified by local governments.

Rank	Recipient	Project Title	CSID	Region	County	City	Leg. District	WRIA	Ecology's 2021–23 Request
1	Yakima, City of - City Manager Office	Remediation and Clean-up Grant request for Yakima City Landfill IAWP	3853	Central	Yakima	Yakima	15	37 - Lower Yakima	$3,000,000
2	Grays Harbor - Historical Seaport Authority	Seaport Landing/Former Weyerhaeuser Aberdeen Sawmill	4987	Southwest	Grays Harbor	Aberdeen	19	22 - Lower Chehalis	$2,034,000
3	Douglas County, Port of	Rock Island Redevelopment	11	Central	Douglas	Rock Island	12	44 - Moses Coulee	$750,000
4	Friday Harbor, Port of	Albert Jensen & Sons Inc.	14759	Headquarters	Island	Friday Harbor	40	02 - San Juan	$1,201,000
5	Skagit County, Port of	Former Northern State Hospital	10048	Northwest	Skagit	Sedro-Woolley	39	03 - Lower Skagit - Samish	$702,000
6	Bellingham, Port of	Cornwall Avenue Landfill	220	Northwest	Whatcom	Bellingham	40	01 - Nooksack	$2,010,000
7	Bellingham, City of - City Attorney's Office	R.G. Haley International Corporation Site	3921	Northwest	Whatcom	Bellingham	40	02 - San Juan	$6,122,000
8	Everett, Port of	East Waterway - Oversight	4297	Headquarters	Snohomish	Everett	38	07 - Snohomish	$250,000
9	Bellingham, Port of	Central Waterfront	3418	Northwest	Whatcom	Bellingham	42	01 - Nooksack	$1,108,000
10	Bellingham, Port of	Harris Avenue Shipyard	193	Northwest	Whatcom	Bellingham	40	01 - Nooksack	$5,820,000
11	Tacoma, Port of	Alexander Avenue Petroleum Tank Facilities	743	Southwest	Pierce	Tacoma	27	10 - Puyallup - White	$1,150,000
12	Anacortes, Port of	Quiet Cove	12482	Headquarters	Clark	Anacortes	40	28 - Salmon - Washougal	$612,000

Financing Table 1A (continued): 2021–23 Remedial Action Grant (RAG) budget request

Rank	Recipient	Project Title	CSID	Region	County	City	Leg. District	WRIA	Ecology's 2021–23 Request
13	Spokane County - Regional Solid Waste	Colbert Landfill 1,4-Dioxane Risk Evaluation	3035	Eastern	Spokane	Colbert	4	55 - Little Spokane	$18,000
14	Tacoma, Port of	Arkema Interim Action	3405	Southwest	Pierce	Tacoma	27	10 - Puyallup - White	$2,000,000
15	Skagit County - Public Works Department	March Point / Whitmarsh Landfill Reclamation Project	304	Headquarters	Skagit	Anacortes	40	03 - Lower Skagit - Samish	$5,410,000
16	Bellingham, Port of	I & J Waterway	2012	Northwest	Whatcom	Bellingham	42	01 - Nooksack	$405,000
17	Seattle City Light	Lower Duwamish Waterway	1643	Northwest	King	Seattle	34	09 - Duwamish - Green	$574,000
18	Anacortes, Port of	Anacortes Port Log Yard	3604	Headquarters	Skagit	Anacortes	40	03 - Lower Skagit - Samish	$3,657,000
19	King County - Natural Resources and Parks Department	Lower Duwamish remedial design	1643	Northwest	King	Seattle	11	09 - Duwamish - Green	$762,000
20	Anacortes, Port of	Dakota Creek Industries Shipyard	5174	Headquarters	Skagit	Anacortes	40	03 - Lower Skagit - Samish	$45,000
21	Seattle, Port of - Seaport Environmental Program	Lower Duwamish Superfund Cleanup	1643	Northwest	King	Seattle	34	09 - Duwamish - Green	$5,630,000
22	Seattle, Port of - Seaport Environmental Program	T115N Ecology Agreed Order (RI/FS/dCAP)	1229	Northwest	King	Seattle	34	09 - Duwamish - Green	$290,000
23	Bothell, City of - Public Works	Former Riverside HVOC site	14970	Northwest	King	Bothell	1	08 - Cedar - Sammamish	$1,500,000
24	King County - Natural Resources and Parks Department	Denny Way Sediment Cleanup Unit	2582	Northwest	King	Seattle	36	08 - Cedar - Sammamish	$640,000

Financing Table 1A (continued): 2021–23 Remedial Action Grant (RAG) budget request

Rank	Recipient	Project Title	CSID	Region	County	City	Leg. District	WRIA	Ecology's 2021–23 Request
25	Shelton, City of - Public Works Department	Shelton C Street Landfill	2295	Southwest	Mason	Shelton	35	14 - Kennedy - Goldsborough	$900,000
26	Seattle, Port of - Seaport Environmental Program	East Waterway Operable Unit - Harbor Island Superfund Site	1372	Northwest	King	Seattle	11	09 - Duwamish - Green	$11,409,000
27	Spokane Regional Health District - Environmental Public Health Division	West Plains PFAS Groundwater Transport & Fate Study	N/A	Eastern	Spokane	Spokane	3	57 - Middle Spokane	$450,000
28		Integrated Planning Grants	N/A	Statewide	Statewide	Statewide	Statewide	Statewide	$1,200,000
29		Independent Remedial Action Grants	N/A	Statewide	Statewide	Statewide	Statewide	Statewide	$1,000,000
30		RAG Staff	N/A	Statewide	Statewide	Statewide	Statewide	Statewide	$1,101,000
31		EAGL	N/A	Statewide	Statewide	Statewide	Statewide	Statewide	$50,000
								Remedial Action Grants Subtotal	**$61,800,000**
	Totals may not add due to rounding.								

Financing Table 1B: Local government projects and cleanup financing needs for the next ten years (2021–2031)

List of all cleanup projects received from local governments during the 2020 solicitation with estimated state and local financing needs over the next ten years (2021–2031). The self-reported financing needs for the 20121–23 biennium were $161 million; estimated state share is $84 million; and Ecology's 2021–2031 Biennium Capital Budget request to the Governor equals $62 million. See Financing Table 1A for the 27 projects from this list included in the budget request.

Recipient	Project Title	CSID	Region	County	City	Leg. District	Solicited Local Government Ten-Year Need					Total Local Government Ten-Year Need	State Share	Local Government Share
							2021–23	2023–25	2025–27	2027–29	2029-31			
Richland, City of	Richland Horn Rapids Landfill	4891	Central	Benton	RICHLAND	8	$6,758,500	$326,000	$0	$0	$0	$7,084,500	$3,542,250	$3,542,250
Douglas County, Port of	Rock Island Redevelopment	11	Central	Douglas	ROCK ISLAND	12	$1,000,000	$0	$0	$0	$0	$1,000,000	$750,000	$250,000
Grays Harbor - Historical Seaport Authority	Seaport Landing/Former Weyerhaeuser Aberdeen Sawmill	4987	Southwest	Grays Harbor	ABERDEEN	19	$2,260,000	$4,085,000	$130,000	$0	$0	$6,475,000	$5,827,500	$647,500
Grays Harbor, Port of	The Hungry Whale Site	4988	Southwest	Grays Harbor	WESTPORT	19	$0	$8,160	$0	$0	$0	$8,160	$4,080	$4,080
Bothell city of - Public Works	Bothell Ultra Custom Care Cleaners	3172	Northwest	King	BOTHELL	1	$3,000,000	$35,000	$35,000	$35,000	$35,000	$3,140,000	$1,570,000	$1,570,000
Bothell, City of - Public Works	Former Riverside HVOC site	14970	Northwest	King	BOTHELL	1	$3,000,000	$35,000	$35,000	$35,000	$35,000	$3,140,000	$1,570,000	$1,570,000
King County - Natural Resources and Parks Department	Lower Duwamish remedial design	1643	Northwest	King	SEATTLE	34	$1,523,698	$824,000	$1,371,000	$822,000	$267,000	$4,807,698	$2,403,849	$2,403,849
King County - Natural Resources and Parks Department	East Waterway Remedial Design	1372	Northwest	King	SEATTLE	11	$549,928	$950,000	$500,000	$0	$0	$1,999,928	$999,964	$999,964
King County - Natural Resources and Parks Department	Maury Island Open Space	1532	Northwest	King	MAURY	34	$700,000	$60,000	$920,000	$850,000	$70,000	$2,600,000	$1,300,000	$1,300,000
King County - Natural Resources and Parks Department	Denny Way Sediment Cleanup Unit	2582	Northwest	King	SEATTLE	36	$1,278,070	$65,000	$0	$0	$0	$1,343,070	$671,535	$671,535
King County - Natural Resources and Parks Department	King Street Sediment Cleanup Unit	1076	Northwest	King	SEATTLE	43	$541,093	$1,840,000	$115,000	$0	$0	$2,496,093	$1,248,047	$1,248,047
Seattle City Light	University Rectifier Groundwater Investigation	N/A	Northwest	King	SEATTLE	36	$850,000	$365,000	$465,000	$365,000	$65,000	$2,110,000	$1,055,000	$1,055,000
Seattle City Light	Interbay Poleyard Groundwater Investigation	12928	Northwest	King	SEATTLE	36	$1,015,000	$315,000	$290,000	$30,000	$0	$1,650,000	$825,000	$825,000
Seattle City Light	Lower Duwamish Waterway	1643	Northwest	King	SEATTLE	34	$1,146,658	$4,919,556	$5,368,645	$6,817,534	$7,131,983	$25,384,376	$12,692,188	$12,692,188
Seattle City Light	South Park Marina RI	2858	Northwest	King	SEATTLE	11	$200,000	$0	$0	$0	$0	$200,000	$100,000	$100,000
Seattle, City of - Public Utilities Department	Gas Works Park Sediment Cleanup	2876	Northwest	King	SEATTLE	43	$0	$989,000	$4,802,000	$4,806,700	$292,800	$10,890,500	$5,445,250	$5,445,250
Seattle, Port of - Seaport Environmental Program	South Park Marina Ecology Agreed Order (RI Only)	2858	Northwest	King	SEATTLE	11	$2,697,000	$144,000	$0	$0	$0	$2,841,000	$1,420,500	$1,420,500
Seattle, Port of - Seaport Environmental Program	Terminal 108 Chiyoda EPA EE/CA	2132	Northwest	King	SEATTLE	11	$2,993,000	$3,000	$0	$0	$0	$2,996,000	$1,498,000	$1,498,000

Financing Table 1B (continued): Local government projects and cleanup financing needs for the next ten years (2021–2031)

Recipient	Project Title	CSID	Region	County	City	Leg. District	Solicited Local Government Ten-Year Need 2021–23	2023–25	2025–27	2027–29	2029-31	Total Local Government Ten-Year Need	State Share	Local Government Share
Seattle, Port of - Seaport Environmental Program	Terminal 115S-Boeing Plant 1 Ecology Agreed Order (RI/FS/dCAP)	11307	Northwest	King	SEATTLE	34	$1,184,000	$136,000	$0	$0	$0	$1,320,000	$660,000	$660,000
Seattle, Port of - Seaport Environmental Program	Terminal 91 Sediments	2674	Central	King	SEATTLE	36	$4,507,000	$304,000	$217,000	$33,000	$0	$5,061,000	$2,530,500	$2,530,500
Seattle, Port of - Seaport Environmental Program	T115N Ecology Agreed Order (RI/FS/dCAP)	1229	Northwest	King	SEATTLE	34	$579,000	$0	$0	$0	$0	$579,000	$289,500	$289,500
Seattle, Port of - Seaport Environmental Program	East Waterway Operable Unit - Harbor Island Superfund Site	1372	Northwest	King	SEATTLE	11	$26,879,000	$33,225,000	$40,225,000	$30,400,000	$631,000	$131,360,000	$65,680,000	$65,680,000
Seattle, Port of - Seaport Environmental Program	Lower Duwamish Superfund Cleanup	1643	Northwest	King	SEATTLE	34	$11,259,000	$17,283,000	$24,050,000	$21,450,000	$15,488,000	$89,530,000	$44,765,000	$44,765,000
Seattle, Port of - Seaport Environmental Program	T30 Chevron Ecology Consent Decree	4394	Northwest	King	SEATTLE	11	$4,227,000	$218,000	$91,000	$74,000	$18,000	$4,628,000	$2,314,000	$2,314,000
Shelton, City of - Public Works Department	Shelton C Street Landfill	2295	Southwest	Mason	SHELTON	35	$1,200,000	$125,000	$75,000	$75,000	$50,000	$1,525,000	$1,143,750	$381,250
Tacoma, City of - Department of Public Utilities	Tacoma Public Utilities - Kapowsin Remediation	15194	Southwest	Pierce	GRAHAM	2	$671,000	$1,522,000	$0	$0	$0	$2,193,000	$1,096,500	$1,096,500
Tacoma, Port of	Alexander Avenue Petroleum Tank Facilities	743	Southwest	Pierce	TACOMA	27	$2,300,000	$800,000	$700,000	$500,000	$400,000	$4,700,000	$2,350,000	$2,350,000
Tacoma, Port of	Arkema Interim Action	3405	Southwest	Pierce	TACOMA	27	$4,000,000	$0	$0	$20,000,000	$20,000,000	$44,000,000	$22,000,000	$22,000,000
Tacoma, Port of	Taylor Way and Alexander Avenue Fill Area	4692	Southwest	Pierce	TACOMA	27	$500,000	$2,000,000	$0	$0	$0	$2,500,000	$1,250,000	$1,250,000
Tacoma, Port of	Earley Business Center	2395	Southwest	Pierce	TACOMA	27	$0	$4,999,999	$0	$0	$0	$4,999,999	$2,500,000	$2,500,000
Tacoma, Port of	Parcel 91	1615	Southwest	Pierce	TACOMA	27	$0	$6,000,000	$0	$0	$0	$6,000,000	$3,000,000	$3,000,000
Tacoma, Port of	PORTAC	3642	Southwest	Pierce	TACOMA	27	$0	$2,000,000	$0	$0	$0	$2,000,000	$1,000,000	$1,000,000
Tacoma, Port of	PQ	11532	Southwest	Pierce	TACOMA	27	$0	$4,000,000	$0	$0	$0	$4,000,000	$2,000,000	$2,000,000
Tacoma, Port of	Tacoma TPU Steam Plant	12439	Southwest	Pierce	TACOMA	27	$0	$1,000,000	$1,600,000	$399,999	$0	$2,999,999	$1,500,000	$1,500,000
Tacoma, Port of	North Boundary Area Interim Action	5003	Southwest	Pierce	TACOMA	27	$7,000,000	$0	$0	$0	$0	$7,000,000	$3,500,000	$3,500,000
Friday Harbor, Port of	Albert Jensen & Sons Inc.	14759	Headquarters	San Juan	FRIDAY HARBOR	40	$2,402,000	$8,025,000	$4,315,000	$14,362,000	$202,000	$29,306,000	$14,653,000	$14,653,000
Anacortes, City of	Anacortes Former Water Treatment Plant Site Remediation	13264	Northwest	Skagit	MOUNT VERNON	40	$1,075,000	$0	$0	$0	$0	$1,075,000	$537,500	$537,500
Anacortes, Port of	Quiet Cove	12482	Headquarters	Skagit	ANACORTES	40	$1,224,000	$0	$0	$0	$0	$1,224,000	$612,000	$612,000
Anacortes, Port of	Dakota Creek Industries Shipyard	5174	Headquarters	Skagit	ANACORTES	40	$90,000	$0	$0	$0	$0	$90,000	$45,000	$45,000

Financing Table 1B (continued): Local government projects and cleanup financing needs for the next ten years (2021–2031)

Recipient	Project Title	CSID	Region	County	City	Leg. District	Solicited Local Government Ten-Year Need 2021–23	2023–25	2025–27	2027–29	2029-31	Total Local Government Ten-Year Need	State Share	Local Government Share
Anacortes, Port of	Anacortes Port Log Yard	3604	Headquarters	Skagit	ANACORTES	40	$7,314,000	$0	$0	$0	$0	$7,314,000	$3,657,000	$3,657,000
Skagit County - Public Works Department	March Point / Whitmarsh Landfill Reclamation Project	304	Headquarters	Skagit	ANACORTES	40	$10,820,000	$750,000	$540,000	$1,181,000	$564,000	$13,855,000	$6,927,500	$6,927,500
Skagit County, Port of	Former Northern State Hospital	10048	Northwest	Skagit	SEDRO WOOLLEY	39	$780,000	$499,000	$404,000	$404,000	$404,000	$2,491,000	$2,241,900	$249,100
Everett, Port of	Weyerhaeuser Mill A (Former)	2146	Headquarters	Snohomish	EVERETT	38	$0	$54,650,000	$40,000,000	$500,000	$0	$95,150,000	$47,575,000	$47,575,000
Everett, Port of	East Waterway - Oversight	4297	Headquarters	Snohomish	EVERETT	38	$500,000	$500,000	$500,000	$500,000	$500,000	$2,500,000	$1,250,000	$1,250,000
Everett, Port of	Kimberly-Clark Worldwide	2569	Headquarters	Snohomish	EVERETT	38	$500,000	$450,000	$200,000	$0	$0	$1,150,000	$575,000	$575,000
Spokane County - Regional Solid Waste	Colbert Landfill 1,4-Dioxane Risk Evaluation	3035	Eastern	Spokane	SPOKANE	4	$35,000	$0	$0	$0	$0	$35,000	$17,500	$17,500
Spokane Regional Health District - Environmental Public Health Division	West Plains PFAS Groundwater Transport & Fate Study	N/A	Eastern	Spokane	SPOKANE	3	$450,000	$0	$0	$0	$0	$450,000	$225,000	$225,000
Bellingham, City of - City Attorney's Office	R.G. Haley International Corporation Site	3928	Northwest	Whatcom	BELLINGHAM	40	$12,243,000	$0	$0	$0	$0	$12,243,000	$6,121,500	$6,121,500
Bellingham, Port of	Central Waterfront	3418	Northwest	Whatcom	BELLINGHAM	42	$2,215,000	$90,000	$0	$0	$0	$2,305,000	$1,152,500	$1,152,500
Bellingham, Port of	GP West (Chlor-Alkali RAU)	2279	Northwest	Whatcom	BELLINGHAM	42	$0	$14,410,000	$0	$0	$0	$14,410,000	$7,205,000	$7,205,000
Bellingham, Port of	Whatcom Waterway	219	Northwest	Whatcom	BELLINGHAM	42	$0	$103,260,000	$220,000	$0	$0	$103,480,000	$51,740,000	$51,740,000
Bellingham, Port of	Sea K Fish	10583	Northwest	Whatcom	BLAINE	42	$6,720,000	$60,000	$0	$0	$0	$6,780,000	$3,390,000	$3,390,000
Bellingham, Port of	I & J Waterway	2012	Northwest	Whatcom	BELLINGHAM	42	$810,000	$2,215,000	$105,000	$0	$0	$3,130,000	$1,565,000	$1,565,000
Bellingham, Port of	Cornwall Avenue Landfill	220	Northwest	Whatcom	BELLINGHAM	40	$4,020,000	$105,000	$0	$0	$0	$4,125,000	$2,062,500	$2,062,500
Bellingham, Port of	Harris Avenue Shipyard	193	Northwest	Whatcom	BELLINGHAM	40	$11,639,000	$110,000	$0	$0	$0	$11,749,000	$5,874,500	$5,874,500
Sunnyside, Port of	Former Planters Hotel Site Cleanup	12922	Central	Yakima	SUNNYSIDE	15	$525,000	$0	$0	$0	$0	$525,000	$393,750	$131,250
Yakima, City of - City Manager office of	Remediation and Clean-up Grant request for Yakima City Landfill IAWP	3853	Central	Yakima	YAKIMA	15	$4,000,000	$0	$0	$0	$0	$4,000,000	$3,000,000	$1,000,000
						Remedial Action Oversight Grant Subtotals	**$161,180,947**	**$273,700,715**	**$127,273,645**	**$103,640,233**	**$46,153,783**	**$711,949,323**	**$361,323,562**	**$350,625,762**

NOTE: Financing Table 1B identifies all local governments' projects received during the 2020 Ten-Year Solicitation, and outlines their estimated financing needs between 2021 and 2031. Projects on this list that were also included in Ecology's 2021–23 Biennium Capital Budget request to the Governor are identified in Financing Table 1A.
Totals may not add due to rounding.

Financing Table 1C: Other Remedial Action Grant types (2021–2031)

Financing needs of other Remedial Action Grants over the next ten years based on local government responses during the 2020 Ten-Year Solicitation.

Grant Type	Region	County	Estimated Local Government Ten-Year Need 2021–23	2023–25	2025–27	2027–29	2029-31	Total Local Government Ten-Year Need	State Share	Local Government Share
Grant Management	Statewide	Statewide	$1,151,000	$1,151,000	$1,151,000	$1,151,000	$1,151,000	$5,755,000	$5,755,000	$0
Independent Remedial Action Grants	Statewide	Statewide	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$10,000,000	$5,000,000	$5,000,000
Integrated Planning Grants	Statewide	Statewide	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$6,000,000	$6,000,000	$0
Safe Drinking Water Action Grants	Statewide	Statewide	$0	$0	$0	$0	$0	$0	$0	$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			**$4,351,000**	**$5,851,000**	**$5,851,000**	**$5,851,000**	**$5,851,000**	**$27,755,000**	**$22,755,000**	**$5,000,000**

Financing Table 1D–SUMMARY: Grand totals of Financing Tables 1B + 1C = Remedial action & grant management activities (2021–2031)

	Estimated Local Government Ten-Year Need 2021–23	2023–25	2025–27	2027–29	2029-31	Total Local Government Ten-Year Need	State Share	Local Government Share
Remedial Action and Grant Management Activities Grand Totals	**$165,531,947**	**$279,551,715**	**$133,124,645**	**$109,491,233**	**$52,004,783**	**$739,704,323**	**$384,078,562**	**$355,625,762**

Financing Table 1E–FUTURE: Subtotals of estimated future RAG funding needs (2021–2031)

	Estimated Local Government Ten-Year Need 2021–23	2023–25	2025–27	2027–29	2029-31	Total Local Government Ten-Year Need	State Share	Local Government Share
Placeholder for Future RAG Subtotal	**$0**	**$20,448,285**	**$166,875,355**	**$190,508,767**	**$247,995,217**	**$625,827,624**	**$312,913,812**	**$312,913,812**

Financing Table 1F–TOTAL: Remedial Action Grant estimated ten-year financing need (2021–2031)

As outlined in Financing Tables 1A, 1B, 1C and summarized below, Washington state and local governments have a combined estimated need of $1.4 billion to conduct cleanups over the next ten years. State's share of RAG projects is an estimated $698 million over that period. State's share of RAG during the 2021–31 biennium is an estimated $84 million. Ecology's RAG budget request for that biennium is $62 million, which falls $22 million short of helping local governments address all of their estimated cleanup needs over the next two years. See Table 1A, which identifies RAG projects included in Ecology's budget request.

	Estimated Local Government Ten-Year Need 2021–23	2023–25	2025–27	2027–29	2029-31	Total Local Government Ten-Year Need	State Share	Local Government Share
Total Remedial Action Grant Ten-Year Financing Need	**$165,531,941**	**$300,000,000**	**$300,000,000**	**$300,000,000**	**$300,000,000**	**$1,365,531,948**	**$696,992,374**	**$668,539,574**

Financing Table 2A (1 of 4) – PSI (Clean Up Toxics Sites–Puget Sound Initiative)

Puget Sound Initiative (PSI) projects that are included in Ecology's 2021–23 Biennium Capital Budget request to the Governor.

Rank	Project	CSID	Region	County	City	Leg. District	Ecology's 2021–23 Request	Estimated Future Cleanup Needs by Biennium					Total Project Costs
								2021–23	2023–25	2025–27	2027–29	2029-31	
1	Custom Plywood	4533	Headquarters Cleanup	Skagit	Anacortes	40	$350,000	$350,000	$90,000	$890,000	$108,000	$608,000	$2,046,000
2	Port Angeles Rayonier Site/ W Port Angeles Harbor	2270 & 11907	Southwest	Clallam	Port Angeles	24	$875,000	$875,000	$300,000	$0	$0	$0	$1,175,000
3	Cleanup Rule	N/A	Statewide	Statewide	Statewide	Statewide	$346,000	$346,000	$0	$0	$0	$0	$1,160,000
4	Freshwater Natural Background	N/A	Statewide	Statewide	Statewide	Statewide	$162,000	$162,000	$0	$0	$0	$0	$162,000
5	Western WA University	N/A	Headquarters Cleanup	Statewide	Statewide	Statewide	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$1,000,000
6	Whidbey Marine & Auto Supply	5610	Northwest	Island	Freeland	10	$750,000	$750,000	$3,000,000	$200,000	$200,000	$100,000	$4,250,000
7	Bellingham Bay Site - Habitat Restoration	N/A	Northwest	Whatcom	Bellingham	42	$1,500,000	$1,500,000	$0	$0	$0	$0	$1,500,000
8	Quendall Terminals	3857	Northwest	King	Renton	41	$50,000	$50,000	$0	$0	$0	$0	$50,000
9	May Creek Landfill	4119	Northwest	King	Renton	11	$75,000	$75,000	$0	$0	$0	$0	$75,000
10	Treoil Industries	950	Northwest	Whatcom	Ferndale	42	$500,000	$500,000	$1,500,000	$200,000	$200,000	$100,000	$2,500,000
11	Time Oil Handy Andy 8	4981	Southwest	Clark	Vancouver	49	$1,000,000	$1,000,000	$0	$0	$0	$0	$1,000,000
Clean Up Toxics Sites - Puget Sound Subtotals							**$5,808,000**	**$5,808,000**	**$5,090,000**	**$1,490,000**	**$708,000**	**$1,008,000**	**$14,104,000**

Financing Table 2A (2 of 4) - Everett Smelter Plume costs over the next ten years (2021–2031)

Rank	Project	CSID	Region	County	City	Leg. District	Ecology's 2021–23 Request	Estimated Future Cleanup Needs by Biennium					Total Project Costs
								2021–23	2023–25	2025–27	2027–29	2029–31	
1	Everett Smelter Plume Staff	N/A	Northwest	Snohomish	Everett	38	$1,136,000	$1,136,000	$1,136,000	$1,136,000	$0	$0	$3,408,000
2	Everett Smelter Plume Uplands	4298	Northwest	Snohomish	Everett	38	$6,628,000	$6,628,000	$6,600,000	$6,600,000	$0	$0	$19,828,000
3	Everett Smelter Plume Lowlands	4298	Eastern	Snohomish	Everett	38	$3,050,000	$3,050,000	$500,000	$250,000	$250,000	$250,000	$4,300,000
					Everett Smelter Plume Subtotals		**$10,814,000**	**$10,814,000**	**$8,236,000**	**$7,986,000**	**$250,000**	**$250,000**	**$27,536,000**

Financing Table 2A (3 of 4) - EW CSI (Eastern Washington Clean Sites Initiative)

Eastern Washington Clean Sites Initiative (EW-CSI) projects that are included in Ecology's 2021–23 Biennium Capital Budget request to the Governor.

Rank	Project	CSID	Region	County	City	Leg. District	Ecology's 2021–23 Request	Estimated Future Cleanup Needs by Biennium					Total Project Costs
								2021–23	2023–25	2025–27	2027–29	2029-31	
1	Pasco Landfill	1910	Eastern	Franklin	Pasco	9	$300,000	$300,000	$0	$0	$0	$0	$300,000
2	CWU 4 (CRO)	2609	Central	Kittitas	Ellensburg	13	$120,000	$120,000	$0	$0	$0	$0	$120,000
3	Colville Post & Pole	46	Eastern	Stevens	Colville	7	$10,000,000	$10,000,000	$10,000,000	$0	$0	$0	$20,000,000
4	LeRoi Co Smelter - Northport	47	Eastern	Stevens	Northport	7	$10,000,000	$10,000,000	$0	$0	$0	$0	$10,000,000
5	Stubblefield Salvage Yard	4121	Eastern	Walla Walla	Walla Walla	16	$100,000	$100,000	$0	$0	$0	$0	$100,000
	Eastern Washington Clean Sites Initiative Subtotals						**$20,520,000**	**$20,520,000**	**$10,000,000**	**$0**	**$0**	**$0**	**$30,520,000**

Financing Table 2A (4 of 4) - PICR (Protect Investments in Cleanup Remedies)

PICR projects that are included in Ecology's 2021–23 Biennium Capital 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	Project	CSID	Region	County	City	Leg. District	Ecology's 2021–23 Request	Estimated Future Cleanup Needs by Biennium					Total Project Costs
								2021–23	2023–25	2025–27	2027–29	2029-31	
1	Wyckoff Treatment Plant	2683	Headquarters Cleanup	Kitsap	Bainbridge Island	23	$1,800,000	$1,800,000	$1,800,000	$900,000	$900,000	$900,000	$6,300,000
2	Lilyblad [90]	4329	Solid Waste Management	Pierce	Tacoma	27	$$2,289,000	$2,289,000	$0	$0	$0	$0	$2,289,000
3	Time Oil Handy Andy 8	4981	Southwest	Clark	Vancouver	49	$360,000	$360,000	$360,000	$360,000	$360,000	$0	$1,440,000
4	Circle K Station 1461	5089	Northwest	King	Seattle	43	$500,000	$500,000	$200,000	$300,000	$200,000	$200,000	$1,400,000
5	Black Lake Grocery	5037	Southwest	Thurston	Olympia	35	$894,000	$894,000	$13,000	$13,000	$13,000	$0	$933,000
6	American Crossarm	134	Southwest	Lewis	Chehalis	20	$50,000	$50,000	$10,000	$10,000	$10,000	$0	$80,000
7	Wyckoff ROD-A1 10% Match	2683	Headquarters Cleanup	Kitsap	Bainbridge Island	23	$2,100,000	$2,100,000	$2,000,000	$2,000,000	$3,000,000	$2,500,000	$11,600,000
8	Wyckoff OU1 Subtidal Sediments	2683	Headquarters Cleanup	Kitsap	Bainbridge Island	23	$100,000	$100,000	$300,000	$10,000	$10,000	$300,000	$720,000
9	Tiki Car Wash	5096	Northwest	King	Bellevue	41	$1,500,000	$1,500,000	$3,500,000	$200,000	$200,000	$100,000	$5,500,000
10	Hamilton Labree Rd PCE	2001	Southwest	Lewis	Chehalis	20	$1,500,000	$1,500,000	$300,000	$0	$0	$0	$1,800,000
	Protect Investments in Cleanup Remedies Subtotals						**$11,093,000**	**$11,093,000**	**$8,483,000**	**$3,793,000**	**$4,693,000**	**$4,000,000**	**$32,062,000**

[90] Ecology is currently preparing a focused Feasibility Study (FS) for the site to determine if we need to revise or update the current Cleanup Action Plant (CAP). Until the FS is completed, the future activities and spending projections are unknown at this time. The FS is anticipated to be completed by the end of 2020 and will be used to inform the next steps of the cleanup.

Financing Table 2B (1 of 1): Remaining ten-year financing needs for state-directed activities

Projects that are **not** included in Ecology's 2021–23 Biennium Capital Budget request to the Governor, but needing funding over the next ten years (2021–2031). Includes remaining PSI and PICR projects

City	Project	CSID	Region	County	City	Leg. District	Estimated Future Cleanup Needs by Biennium					Total Project Costs
							2021–23	2023–25	2025–27	2027–29	2029-31	
Tacoma	Aladdin Plating	3257	Southwest	Pierce	Tacoma	27	$0	$20,000	$20,000	$20,000	$20,000	$80,000
Seattle	Lower Duwamish Waterway Source Control and Cleanup	1643	Northwest	King	Seattle	34	$0	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$12,000,000
Seattle	Gas Works Park	2876	Northwest	King	Seattle	43	$0	$40,000	$75,000	$0	$0	$115,000
Bothell	Bothell BP	5084	Northwest	King	Bothell	1	$0	$100,000	$0	$0	$0	$100,000
Seattle	Seattle Chinatown	2997	Northwest	King	Seattle	37	$0	$3,000,000	$5,000,000	$0	$0	$8,000,000
Remaining Needs State-Directed Subtotal							**$0**	**$6,160,000**	**$8,095,000**	**$3,020,000**	**$3,020,000**	**$20,295,000**

Financing Table 2C (1 of 1): FUTURE State-directed estimated ten-year financing need (2021–2031)

	Estimated Future Cleanup Needs by Biennium					Total Ten-Year Need
	2021–23	2023–25	2025–27	2027–29	2029-31	
Placeholder - Future State-Directed Subtotal	**$0**	**$12,031,000**	**$28,636,000**	**$41,329,000**	**$41,722,000**	**$123,718,000**

Financing Table 2D (1 of 1): 2A+2B+2C = TOTAL State-directed estimated ten-year financing need (2021–2031)

As outlined in Financing Tables 2A and 2B, 2C and summarized below, the estimated cost for Washington to conduct state-directed cleanup work is $249 million over the next ten years. Estimated need to conduct this work during the 2021–23 biennium is $49 million.

	Estimated Future Cleanup Needs by Biennium					
	2021–23	2023–25	2025–27	2027–29	2029-31	Total Ten-Year Need
Estimated Total State-Directed Ten-Year Financing Need	**$42,435,000**	**$50,000,000**	**$50,000,000**	**$50,000,000**	**$50,000,000**	**$248,235,000**

Financing Table 3 (1 of 1): PFAS Projects' total costs over the next ten years (2021–2031)

Rank	Project	CSID	Region	County	City	Leg. District	Ecology's 2021–23 Request	Estimated Future Cleanup Needs by Biennium					Total Project Costs
								2021–23	2023–25	2025–27	2027–29	2029-31	
1	PFAS Pilot	N/A	Northwest	King	Issaquah	5	$750,000	$750,000	$0	$0	$0	$0	$750,000
2	Scotts Wellfield PFAS Contamination	N/A	Southwest	Pierce	Lakewood	29	$4,536,000	$4,536,000	$0	$0	$0	$0	$4,536,000
3	West Plains PFAS Supply Improvements	N/A	Eastern	Spokane	Spokane	3	$9,990,000	$9,990,000	$0	$0	$0	$0	$9,990,000
	PFAS Contaminated Drinking Water Subtotals						**$15,276,000**	**$15,276,000**	**$0**	**$0**	**$0**	**$0**	**$15,276,000**

Financing Table 4 (1 of 1): Healthy Housing Projects' total costs over the next ten years (2021–2031). Ecology expects to have demand for $10 million in project funding and associated staff per biennium for other affordable housing cleanup projects in future biennia.

Rank	Project	CSID	Region	County	City	Leg. District	Ecology's 2021–23 Request	Estimated Future Cleanup Needs by Biennium					Total Project Costs
								2021–23	2023–25	2025–27	2027–29	2029-31	
1	Capital Housing Staff	N/A	Northwest	Statewide	Statewide	Statewide	$361,000	$361,000	$361,000	$0	$0	$0	$722,000
2	Mt. Baker Grand Street Commons	3018	Northwest	King	Seattle	37	$2,200,000	$2,200,000	$0	$0	$0	$0	$2,200,000
3	Bellingham Healthy Housing	2279	Northwest	Whatcom	Bellingham	42	$2,600,000	$2,600,000	$0	$0	$0	$0	$2,600,000
4	Mt. Baker Rainier and Genesee	4187	Northwest	King	Seattle	37	$4,000,000	$4,000,000	$2,000,000	$0	$0	$0	$6,000,000
5	Skyway Housing	567	Northwest	King	Seattle	37	$1,000,000	$1,000,000	$0	$0	$0	$0	$1,000,000
	Healthy Housing Remediation Program Subtotals						**$10,161,000**	**$10,161,000**	**$2,361,000**	**$0**	**$0**	**$0**	**$12,522,000**

Financing Table 5 (1 of 1): Cleanup projects exceeding $10 million in total costs over the next ten years (2021–2031)

Projects from local governments and state-directed work that are expected to exceed $10 million in total costs over ten years (2021–2031). Source: Financing Tables 1B (RAG), 2A (ESP, EW, PICR, and Remaining Needs) and 2B. Twelve of the seventeen projects over $10 million are included in Ecology's 2021–23 Biennium Capital Budget request to the Governor. These projects comprise 51% of the total cleanup budget requested for the next biennium (that is, they comprise $70 million of the total $136 million budget requested for RAG, PSI, ESP, EW, PICR, PFAS, and Healthy Housing projects).

Recipient	Project Title	Region	County	Leg. District	Estimated Local Government Ten-Year Need 2021–23	2023–25	2025–27	2027–29	2029-31	Total Local Government 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 / Whitmarsh Landfill Reclamation Project	Headquarters Cleanup	Skagit	40	$10,820,000	$750,000	$540,000	$1,181,000	$564,000	$13,855,000	$6,927,500	$6,927,500
			Subtotals for Cleanup Site ID # 304		**$10,820,000**	**$750,000**	**$540,000**	**$1,181,000**	**$564,000**	**$13,855,000**	**$6,927,500**	**$6,927,500**
Cleanup Site ID 2683	**EAGLE HARBOR WYCKOFF**	**Located in BAINBRIDGE ISLAND**										
State-Directed	Wyckoff ROD-A1 10% Match	Northwest	Kitsap	23	$2,100,000	$2,000,000	$2,000,000	$3,000,000	$2,500,000	$11,600,000	$11,600,000	$0
			Subtotals for Cleanup Site ID # 2683		**$2,100,000**	**$2,000,000**	**$2,000,000**	**$3,000,000**	**$2,500,000**	**$11,600,000**	**$11,600,000**	**$0**
Cleanup Site ID 2279	**GEORGIA PACIFIC WEST BELLINGHAM**	**Located in BELLINGHAM**										
Bellingham, Port of	GP West (Chlor-Alkali RAU)	Northwest	Whatcom	42	$0	$14,410,000	$0	$0	$0	$14,410,000	$7,205,000	$7,205,000
			Subtotals for Cleanup Site ID # 2279		**$0**	**$14,410,000**	**$0**	**$0**	**$0**	**$14,410,000**	**$7,205,000**	**$7,205,000**
Cleanup Site ID 3928	**RG HALEY INTL CORP**	**Located in BELLINGHAM**										
Bellingham, City of - City Attorney's Office	R.G. Haley International Corporation Site	Northwest	Whatcom	40	$12,243,000	$0	$0	$0	$0	$12,243,000	$6,121,500	$6,121,500
			Subtotals for Cleanup Site ID # 3928		**$12,243,000**	**$0**	**$0**	**$0**	**$0**	**$12,243,000**	**$6,121,500**	**$6,121,500**
Cleanup Site ID 219	**WHATCOM WATERWAY**	**Located in BELLINGHAM**										
Bellingham, Port of	Whatcom Waterway	Northwest	Whatcom	42	$0	$103,260,000	$220,000	$0	$0	$103,480,000	$51,740,000	$51,740,000
			Subtotals for Cleanup Site ID # 219		**$0**	**$103,260,000**	**$220,000**	**$0**	**$0**	**$103,480,000**	**$51,740,000**	**$51,740,000**
Cleanup Site ID 193	**HARRIS AVENUE SHIPYARD**	**Located in BELLINGHAM**										
Bellingham, Port of	Harris Avenue Shipyard	Northwest	Whatcom	40	$11,639,000	$110,000	$0	$0	$0	$11,749,000	$5,874,500	$5,874,500
			Subtotals for Cleanup Site ID # 193		**$11,639,000**	**$110,000**	**$0**	**$0**	**$0**	**$11,749,000**	**$5,874,500**	**$5,874,500**
Cleanup Site ID 46	**COLVILLE POST & POLES**	**Located in COLVILLE**										
State-Directed	Colville Post & Poles	Eastern	Stevens	7	$10,000,000	$10,000,000	$0	$0	$0	$20,000,000	$20,000,000	$0
			Subtotals for Cleanup Site ID # 46		**$10,000,000**	**$10,000,000**	**$0**	**$0**	**$0**	**$20,000,000**	**$20,000,000**	**$0**
Cleanup Site ID 4298	**EVERETT SMELTER**	**Located in EVERETT**										
State-Directed	Everett Smelter Plume	Northwest	Snohomish	38	$9,678,000	$7,100,000	$6,850,000	$250,000	$250,000	$24,128,000	$24,128,000	$0
			Subtotals for Cleanup Site ID # 4298		**$9,678,000**	**$7,100,000**	**$6,850,000**	**$250,000**	**$250,000**	**$24,128,000**	**$24,128,000**	**$0**
Cleanup Site ID 2146	**WEYERHAEUSER MILL A**	**Located in EVERETT**										
Everett, Port of	Weyerhaeuser Mill A (Former)	Headquarters Cleanup	Snohomish	38	$0	$54,650,000	$40,000,000	$500,000	$0	$95,150,000	$47,575,000	$47,575,000

Financing Table 5 (continued): Cleanup projects exceeding $10 million in total costs over the next ten years (2021–2031)

Recipient	Project Title	Region	County	Leg. District	Estimated Local Government Ten-Year Need 2021–23	2023–25	2025–27	2027–29	2029-31	Total Local Government Ten-Year Need	State Share	Local Government Share
			Subtotals for Cleanup Site ID # 2146		**$0**	**$54,650,000**	**$40,000,000**	**$500,000**	**$0**	**$95,150,000**	**$47,575,000**	**$47,575,000**
Cleanup Site ID 14759	**ALBERT JENSEN & SONS INC**	**Located in FRIDAY HARBOR**										
Friday Harbor, Port of	Albert Jensen & Sons Inc.	Northwest	San Juan	40	$2,402,000	$8,025,000	$4,315,000	$14,362,000	$202,000	$29,306,000	$14,653,000	$14,653,000
			Subtotals for Cleanup Site ID # 14759		**$2,402,000**	**$8,025,000**	**$4,315,000**	**$14,362,000**	**$202,000**	**$29,306,000**	**$14,653,000**	**$14,653,000**
Cleanup Site ID 47	**LEROI CO SMELTER**	**Located in NORTHPORT**										
State-Directed	LeRoi Co Smelter - Northport	Eastern	Stevens	7	$10,000,000	$0	$0	$0	$0	$10,000,000	$10,000,000	$0
			Subtotals for Cleanup Site ID # 47		**$10,000,000**	**$0**	**$0**	**$0**	**$0**	**$10,000,000**	**$10,000,000**	**$0**
Cleanup Site ID 1372	**HARBOR ISLAND EAST WATERWAY**	**Located in SEATTLE**										
Seattle, Port of - Seaport Environmental Program	East Waterway Operable Unit - Harbor Island Superfund Site	Northwest	King	11	$26,879,000	$33,225,000	$40,225,000	$30,400,000	$631,000	$131,360,000	$65,680,000	$65,680,000
			Subtotals for Cleanup Site ID # 1372		**$26,879,000**	**$33,225,000**	**$40,225,000**	**$30,400,000**	**$631,000**	**$131,360,000**	**$65,680,000**	**$65,680,000**
Cleanup Site ID 1643	**LOWER DUWAMISH WATERWAY**	**Located in SEATTLE**										
Seattle, Port of - Seaport Environmental Program	Lower Duwamish Superfund Cleanup	Northwest	King	34	$11,259,000	$17,283,000	$24,050,000	$21,450,000	$15,488,000	$89,530,000	$44,765,000	$44,765,000
		Located in SEATTLE										
Seattle City Light	Lower Duwamish Waterway	Northwest	King	34	$1,146,658	$4,919,556	$5,368,645	$6,817,534	$7,131,983	$25,384,376	$12,692,188	$12,692,188
		Located in SEATTLE										
State-Directed	Lower Duwamish Waterway Source Control and Cleanup	Northwest	King	34	$0	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$12,000,000	$12,000,000	$0
			Subtotals for Cleanup Site ID # 1643		**$12,405,658**	**$25,202,556**	**$32,418,645**	**$31,267,534**	**$25,619,983**	**$126,914,376**	**$69,457,188**	**$57,457,188**
Cleanup Site ID 2876	**GAS WORKS PARK WA NATURAL GAS**	**Located in SEATTLE**										
Seattle, City of - Public Utilities Department	Gas Works Park Sediment Cleanup	Northwest	King	43	$0	$989,000	$4,802,000	$4,806,700	$292,800	$10,890,500	$5,445,250	$5,445,250
			Subtotals for Cleanup Site ID # 2876		**$0**	**$989,000**	**$4,802,000**	**$4,806,700**	**$292,800**	**$10,890,500**	**$5,445,250**	**$5,445,250**
Cleanup Site ID 3405	**ARKEMA INC**	**Located in TACOMA**										
Tacoma, Port of	Arkema Interim Action	Southwest	Pierce	27	$4,000,000	$0	$0	$20,000,000	$20,000,000	$44,000,000	$22,000,000	$22,000,000
			Subtotals for Cleanup Site ID # 3405		**$4,000,000**	**$0**	**$0**	**$20,000,000**	**$20,000,000**	**$44,000,000**	**$22,000,000**	**$22,000,000**
			Cleanup Projects Exceeding $10 Million		**$112,166,658**	**$259,721,556**	**$131,370,645**	**$105,767,234**	**$50,059,783**	**$659,085,876**	**$368,406,938**	**$290,678,938**

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Appendix C:
Focus on: MTCA Account and Revenue Changes

Focus on: MTCA Account and Revenue Changes

Port Gamble Bay and Mill site, Kitsap County, WA. A Puget Sound Initiative site—reaching the goal of a healthy, sustainable Puget Sound.

Background

In 1988, Washington voters passed Initiative 97 that led to the creation of the Model Toxics Control Act (MTCA), adopted as Washington's environmental cleanup law. This law provides a framework for managing, preventing, and cleaning up pollution. The initiative also created the Hazardous Substance Tax (HST).

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Special accommodations

To request ADA accommodation, including materials in an alternate format, call Ecology at 360-407-7117, Washington Relay Service at 711, or visit https://ecology.wa.gov/accessibility.

MTCA and the Hazardous Substance Tax support environmental and public health work across the state

The Hazardous Substance Tax (HST) provides funding for accounts created under the Model Toxics Control Act (MTCA), and is a tax on the first possession of hazardous substances in Washington. The HST applies to petroleum products and certain pesticides and chemicals. It is intended to raise sufficient funds to clean up all hazardous waste sites and to prevent creation of future hazards due to improper disposal of toxic waste into the state's land, air, and water. MTCA-funded activities improve the state's environment, economy, and quality of life.

MTCA supports Ecology's work to clean up, properly manage, and prevent releases of hazardous substances. Under MTCA, more than 7,000 contaminated sites in Washington have been cleaned up. The MTCA accounts are the largest source of funding for a broad range of environmental and public health work at Ecology, and support about 40 percent of the agency's base operating budget. The MTCA accounts also generally provide Ecology over $100 million in capital dollars each biennium to pass through to local governments and other persons for contaminated site cleanup, toxics prevention, air toxics mitigation, and stormwater pollution control projects.

ESSB 5993: Reforming the financial structure of the model toxics control program

The passage of Engrossed Substitute Senate Bill (ESSB) 5993 (Chapter 422, Laws of 2019) made major changes to the MTCA accounts and the HST. As described in section 101 of the bill, its purpose was to update the Model Toxics Control Program and its primary funding mechanism through the following changes:

- Increase funding for programs and projects related to clean air, clean water, and toxic cleanup and prevention, with specific focus on stormwater pollution.

MTCA authorized uses

MTCA Operating Account (RCW 70.105D.190) – partial list:

- Hazardous and solid waste planning, management, and recycling.
- Hazardous waste cleanup.
- Local solid waste financial assistance.
- Oil and hazardous materials spill prevention, preparedness, training, and response.
- Water and environmental health protection and monitoring.
- Public participation grant (PPG) program.
- Pesticide management.
- Air quality programs.

MTCA Capital Account (RCW 70.105D.200) – partial list:

- Contaminated site investigation and cleanup.
- Hazardous and solid waste planning, management, and recycling.
- Toxic air pollutant reduction programs.

MTCA – Stormwater (RCW 70.105D.210)

- Stormwater pollution control projects and activities that protect or preserve existing remedial actions or prevent hazardous clean-up sites.
- Stormwater financial assistance to local governments.

- Provide distinct and transparent financial separation of capital and operating budget funding.
- Improve the transparency and visibility of operating and capital project expenditures under the program.
- Eliminate the volatility of HST revenues by moving to a volumetric rate for liquid petroleum products.

Account Changes

ESSB 5993 eliminated the three prior MTCA Accounts—the State Toxics Control Account (STCA), the Local Toxics Control Account (LTCA), and the Environmental Legacy Stewardship Account (ELSA). It replaced them with three new accounts—the Model Toxics Control (MTCA) Operating Account, the Model Toxics Control (MTCA) Capital Account, and the Model Toxics Control (MTCA) Stormwater Account.

The authorized uses of the new accounts are similar to the prior MTCA accounts and include all of Ecology's previously authorized uses.

Revenue Changes

ESSB 5993 changed the HST structure for liquid petroleum products from a value-based tax to a volume-based tax (https://dor.wa.gov/find-taxes-rates/other-taxes/hazardous-substance-tax). Starting July 1, 2019, the HST rate on liquid petroleum products is $1.09 per barrel, and will increase annually by the Implicit Price Deflator (IPD) for non-residential structures. The Department of Revenue (DOR) will use the IPD for non-residential structures published each March by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), for the prior calendar year to set the new per-barrel rate for the upcoming fiscal year.

The first $50 million per biennium of liquid petroleum tax revenue is deposited into the Motor Vehicle Fund (MVF). The revenue deposited into the MVF must be used exclusively for transportation stormwater purposes. This deposit will continue each biennium until the Legislature passes a new $2 billion "additive transportation funding act."

The remaining liquid petroleum product revenue is deposited into the three new MTCA accounts:

- 60 percent into the MTCA Operating Account.
- 25 percent into the MTCA Capital Account.
- 15 percent into the MTCA Stormwater Account.

Revenue from all other substances subject to the HST, including non-liquid petroleum products and certain pesticides and chemicals, is still taxed at 7/10 of one percent of the wholesale value of the substance. Those revenues are deposited into the MTCA Capital Account.

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Appendix D:
2021–23 RAG Program Criteria for Oversight Grants & Loans

"Ecology evaluates Oversight Remedial Action Grant and Loan applications based on several criteria, which score mostly from 0 to 3 points. Those criteria are grouped into six evenly weighted categories. A project's score is determined by adding together the total score for each category. The categories are:

Category 1: Faster Cleanup
Category 2: Improve Human Health
Category 3: Improve the Environment and Natural Resources
Category 4: Equitable Distribution
Category 5: Redevelopment and Reuse in Cleanups
Category 6: Meaningful Investment in Communities

The evaluation criteria for each category are shown below in [tables for Categories 1–6]. The scorecard identifies each criteria, the maximum possible criteria score, and who provides the original score (that is, the Applicant or Ecology). Some criteria are initially answered by the Applicant when completing the application in EAGL. Ecology may update the Applicant's answers when evaluating the application. The remaining criteria are answered by Ecology only. For criteria answered by Ecology, the Applicant may provide relevant information related to the criteria when completing the application in EAGL.

The evaluation criteria and processes are the same for oversight remedial action grants as well as loans."

Source: Section 7.4 Evaluation Criteria [for Oversight] *in* Remedial action grant and loan guidance for the 2021–23 biennium: Oversight remedial action grants and loans, Area-wide Groundwater investigation grants, Safe Drinking Water action grants[91] (revised April 2020, Ecology Publication No. 20-09-055)

[91] https://fortress.wa.gov/ecy/publications/summarypages/2009055.html

Oversight RAG Criteria for Category 1: Faster cleanup

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
1.1	**Prior grant performance (one applies):** • **3 POINTS:** Applicant does not have an active grant for the site. • **2 POINTS:** Applicant has an active grant for the site, but it is expected to be spent by the beginning of the biennium. • **0 POINTS:** Applicant has an active grant and it is unclear that the grant will be spent by the beginning of the biennium.	Ecology	3
1.2	**Applicant's readiness to proceed sub-criteria (add up for final score for 1.2):** • **1 POINT:** Contracts are in place to begin the project (such as public works) or environmental consultant is hired (0 points if neither). • **2 POINTS:** All required local, state, and federal permits are currently in hand or no permits are required for the work funded by the 2021–2023 request (such as for RI/FS). o **1 POINT:** Identified all permits necessary for requested 2021–2023 funding. o **0 POINTS:** None of the above apply. • **1 POINT:** Matching funds are secured and ready to be spent (0 points if not). • **1 POINT:** Local government/staff project manager identified (0 points if not).	Applicant	5
1.3	**Leveraging other funds:** • **3 POINTS:** Applicant has secured additional grants, private funds (including contributions, insurance, public-private partnerships, etc.). • **2 POINTS:** Applicant is pursuing grant applications, private funds (including contributions, insurance, public-private partnerships, etc.). • **1 POINT:** Applicant has a capital plan for both cleanup and redevelopment or reuse of the site. • **0 POINTS:** None of the above apply.	Applicant	3
1.4	**Ecology's readiness to proceed** • **3 POINTS:** Order or decree for the work to be funded is effective or under negotiation. • **1 POINT:** Ecology Cleanup Project Manager (Site Manager) has been assigned to the site (as reflected in Ecology's Integrated Site Information System, ISIS). • **0 POINTS:** None of the above apply.	Ecology	3

Oversight RAG Criteria for Category 2: Improve human health

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
2.1	**3 POINTS:** Presence of Extremely or Very Hazardous Chemicals is confirmed or there is the potential for RI/FS stage projects. • 1,1,2-Trichloroethane • 2-Methylnaphthalene • Aldrin • Antimony • Arsenic • Benzene • Benzo(a)pyrene (or cPAH toxic equivalency quotient) • Cadmium • Chromium VI • cis-1,2-Dichloroethene (cis-DCE) • Dieldrin • Dioxins • Lead • Mercury • Methylmercury • Naphthalene • Per- or polyfluoroalkyl substances (PFAS)[92] • Polychlorinated biphenyls (PCBs) • Trichloroethene (TCE) • Vinyl chloride • Other substances identified by Ecology.[93] **0 POINTS:** Extremely or Very Hazardous chemicals are not present at the site.	Ecology	3
2.2	Potential exposure routes of concern: • Soil • Groundwater • Surface water • Vapor intrusion • Sediment 0 exposure routes = 0 points for criteria. 1 exposure route = 1 point for criteria. 2-3 exposure routes = 2 points for criteria. 4-5 exposure routes = 3 points for criteria.	Ecology	3
2.3	Potential exposure risk to a sensitive population located within or adjacent to the site, such as a daycare, nursing home, or hospital (3 points for yes, 0 points for no).	Ecology	3

[92] As of February 2020, Washington's Department of Health is reviewing five PFAS compounds to establish state action levels for drinking water.

[93] The list is based in part on data from the U.S. EPA, available at: https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm-query

Oversight RAG Criteria for Category 3: Improve the environment

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
3.1	Potential for contamination to spread (3 points for yes or unknown, 0 points for no).	Ecology	3
3.2	A designated sensitive environment or fishery resource exists within one mile of the site boundary (3 points for yes, 0 points for no).	Ecology	3
3.3	**3 POINTS:** Potential exposure of sensitive wildlife or plant species that might access the site or be impacted by the contamination spreading (such as redband trout, migratory birds, orcas, salmon, monarch butterflies, and/or endangered species) or potential exposure of priority habitat. **0 POINTS:** No expected exposure to sensitive wildlife or plant species or priority habitat.	Ecology	3
3.4	The project has the opportunity for significant fish/wildlife habitat restoration and/or other conservation benefits (3 points for yes, 0 points for no).	Applicant	3
3.5	**3 POINTS:** The project evaluates or implements green remediation principles to minimize the environmental impact from cleanup actions (such as minimizing greenhouse gas emissions or implementing water conservation) or a reputable sustainability or green remediation program (such as LEED or Envision). See Section 4.6: Climate Change in Cleanup Criteria for more information. **1 POINT:** The project incorporates sustainability or green remediation principles to some extent. **0 POINTS:** The project does not incorporate sustainability or green remediation principles.	Applicant	3

Oversight RAG Criteria for Category 4: Equitable distribution

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
4.1	**3 POINTS:** The site is east of the Cascades or the community is “economically disadvantaged,” as defined in WAC 173-322A-100(15) and (16) and Appendix B of this Guidance. **0 POINTS:** If the above does not apply.	Ecology	3
4.2	**3 POINTS:** Community where the contaminated site is located is a “highly impacted community,” as defined in WAC 173-322A-100(24) and Section 4.5: Environmental Justice Evaluation Criteria of this Guidance. **0 POINTS:** If the above does not apply.	Ecology	3

Oversight RAG Criteria for Category 5: Redevelopment and reuse in cleanups

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
5.1	The site contains a vacant, abandoned, or underutilized former industrial or commercial facility (3 points for yes, 0 points for no).	Applicant	3
5.2	Applicant already identified a purchaser, developer, operator, or lessee for the redeveloped site (3 points for yes, 0 points for no).	Applicant	3
5.3	**3 POINTS:** The project evaluates or implements green remediation principles to minimize the environmental impact from cleanup actions (such as minimizing greenhouse gas emissions or implementing water conservation) or using applicable concepts from a reputable sustainability or green remediation program (such as LEED and Envision). See Section 4.6: Climate Change in Cleanup Criteria for more information. **1 POINT:** The project incorporates or discusses climate change adaptation principles to some extent. **0 POINTS:** The project does not incorporate climate change adaptation considerations.	Applicant	3
5.4	**3 POINTS:** If project cannot start without funds, started but cannot be expeditiously completed without funds, or stopped and cannot continue without funds. **0 POINTS:** None of the above apply.	Applicant	3
5.5	Applicant provided documents or information demonstrating that a lack of local funding or ability to obtain financing is significantly delaying the cleanup and subsequent use, sale, or redevelopment of the site (3 points for yes, 0 points for no).	Ecology	3

Oversight RAG Criteria for Category 6: Meaningful community investment

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
6.1	**3 POINTS:** Site is located within a Redevelopment Opportunity Zone (ROZ) designated under RCW 70A.305.150. [formerly RCW 70.105D.150] **2 POINTS**: Site is located within an incorporated city, town, or urban growth area designated under RCW 36.70A.110. **0 POINTS:** None of the above apply.	Applicant	3
6.2	Local infrastructure (such as public transit, roads, water, sewer, utilities) to serve the redeveloped site are: **3 POINTS:** Already in place. **2 POINTS:** Under construction. **1 POINT:** Planned. **0 POINTS:** None of the above apply.	Applicant	3
6.3	**3 POINTS:** Redeveloped site will provide additional affordable housing stock when redeveloped. **2 POINTS:** Redeveloped site will preserve affordable housing stock when redeveloped. **0 POINTS:** Redeveloped site will not preserve or provide additional affordable housing stock.	Applicant	3

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
6.4	**3 POINTS:** Redeveloped site will be primarily for public use (for example, a park, museum, or library). **2 POINTS:** Redeveloped site will be partially for public use (example, site contains both a public trail and private housing). **0 POINTS:** Neither of the above apply.	Applicant	3
6.5	Project demonstrates a clear vision for future use of the property (3 points for yes, 0 points for no).	Applicant	3

Appendix E:
2021–23 RAG Program Criteria for Area-wide Groundwater Investigation Grants

"Ecology evaluates Area-wide Groundwater Investigation Grants applications based on several criteria, which score mostly from 0 to 3 points. Those criteria are grouped into four evenly weighted categories. A project's score is determined by adding together the total scores for each category. The categories are:

Category 1: Faster Cleanup

Category 2: Protect Human Health and the Environment

Category 3: Equitable Distribution

Category 4: Redevelopment and Reuse in Cleanups

The evaluation criteria for each category are shown below in [tables for Categories 1–4]. The scorecard identifies each criteria, the maximum possible criteria score, and who provides the original score (that is, the Applicant or Ecology). Some criteria are initially answered by the Applicant when completing the application in EAGL. Ecology may update Applicant answers when evaluating the application. The remaining criteria are answered by Ecology only. For criteria answered by Ecology, the Applicant may provide relevant information related to the criteria when completing the application in EAGL."

Source: Section 9.4 Evaluation Criteria [for Area-wide] *in* Remedial action grant and loan guidance for the 2021–23 biennium: Oversight remedial action grants and loans, Area-wide Groundwater investigation grants, Safe Drinking Water action grants[94] (revised April 2020, Ecology Publication No. 20-09-055)

[94] https://fortress.wa.gov/ecy/publications/summarypages/2009055.html

Area-wide RAG Criteria for Category 1: Faster cleanup

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
1.1	**Prior grant performance (one applies):** • **3 POINTS:** Applicant does not have an active grant for the project. • **2 POINTS:** Applicant has an active grant for the area, but it is expected to be spent by the beginning of the biennium. • **0 POINTS:** Applicant has an active grant for the area and it is unclear that the grant will be spent by the beginning of the biennium.	Ecology	3
1.2	**Applicant's readiness to proceed sub-criteria (adds up to final score out of four points):** • **1 POINT:** All legal access needed for study obtained (0 points if no). • **1 POINT:** Environmental consultant is hired or not needed (0 points if needed, but not hired). • **1 POINT:** All potentially liable parties (PLPs) or potentially responsible parties (PRPs) identified and notified (0 points if no). • **1 POINT:** Local government/staff project manager identified (0 points if no).	Applicant	4
1.3	**Leveraging other funds:** • **3 POINTS:** Applicant has secured additional grants, private funds (including contributions, insurance, public-private partnerships, etc.). • **2 POINTS:** Applicant is pursuing grant applications, private funds (including contributions, insurance, public-private partnerships, etc.). • **1 POINT:** Applicant has a capital plan for both cleanup and redevelopment or reuse of the site. • **0 POINTS:** None of the above apply.	Applicant	3

Area-wide RAG Criteria for Category 2: Improve human health and environment

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
2.1	Groundwater contamination is confirmed within study area (3 points for yes, 0 points for no).	Ecology	3
2.2	**3 POINTS:** Presence of Extremely or Very Hazardous Chemicals is confirmed or suspected. • 1,1,2-Trichloroethane • 2-Methylnaphthalene • Aldrin • Antimony • Arsenic • Benzene • Benzo(a)pyrene (or cPAH toxic equivalency quotient) • Cadmium • Chromium VI • cis-1,2-Dichloroethene (cis-DCE) • Dieldrin • Dioxins • Lead • Mercury • Methylmercury • Naphthalene • Per- or polyfluoroalkyl substances (PFAS)[95] • Polychlorinated biphenyls (PCBs) • Trichloroethene (TCE) • Vinyl chloride • Other substances identified by Ecology.[96] **0 POINTS:** Extremely or Very Hazardous chemicals are not present at the site.	Ecology	3
2.3	Potential exposure risk to a sensitive population exists within study area, such as a daycare, nursing home, or hospital (3 points for yes, 0 points for no).	Ecology	3
2.4	Potential for contamination to spread (3 points for yes or unknown, 0 points for no).	Ecology	3
2.5	A designated sensitive environment or fishery resource exists within one mile of the study area (3 points for yes, 0 points for no).	Ecology	3
2.6	Potential exposure of sensitive wildlife or plant species that might access the study area or be impacted by the contamination spreading (such as redband trout, migratory birds, orcas, salmon, monarch butterflies, and/or endangered species) or potential exposure of priority habitat (3 points for yes, 0 points for no).	Ecology	3

[95] As of February 2020, the Department of Health is reviewing five PFAS compounds to establish state action levels for drinking water.

[96] The list is based in part on data from the U.S. EPA, available at: https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm-query.

Area-wide RAG Criteria for Category 3: Equitable distribution

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
3.1	**3 POINTS:** The study area is east of the Cascades or the local government is "economically disadvantaged," as defined in WAC 173-322A-100(15) and (16) and Appendix B of this Guidance. **0 POINTS:** If the above does not apply.	Ecology	3
3.2	**3 POINTS:** Community within or immediately surrounding the study area is a "highly impacted community," as defined in WAC 173-322A-100(24) and Section 4.5: Environmental Justice Evaluation Criteria of this Guidance. **0 POINTS:** If the above does not apply.	Ecology	3

Area-wide RAG Criteria for Category 4: Redevelopment and reuse in cleanups

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
4.1	The study area contains one or more vacant, abandoned, or underutilized former industrial or commercial facilities (3 points for yes, 0 points for no).	Applicant	3
4.2	**3 POINTS:** The study area is located within a Redevelopment Opportunity Zone (ROZ), designated under RCW 70A.305.150. [formerly RCW 70.105D.150] **2 POINTS**: The study area is located within an incorporated city, town, or urban growth area designated under RCW 36.70A.110. **0 POINTS:** None of the above apply.	Applicant	3
4.3	Local infrastructure (such as public transit, roads, water, sewer, utilities) to serve the redeveloped area are: **3 POINTS:** Already in place. **2 POINTS:** Under construction. **1 POINT:** Planned. **0 POINTS:** None of the above apply.	Applicant	3

Appendix F:
2021–23 RAG Program Criteria for Safe Drinking Water Action Grants

"Ecology evaluates Safe Drinking Water Action Grant applications based on several criteria, which score mostly from 0 to 3 points. Those criteria are grouped into three evenly weighted categories. A project's score is determined by adding together the total score for each category. The categories are:

Category 1: Faster Cleanup

Category 2: Protect Human Health and the Environment

Category 3: Equitable Distribution

The evaluation criteria for each category are shown below in [tables for Categories 1–3]. The scorecard identifies each criteria, the maximum possible criteria score, and who provides the original score (that is, the Applicant or Ecology). Some criteria are initially answered by the Applicant when completing the application in EAGL. Ecology may update the Applicant's answers when evaluating the application. The remaining criteria are answered by Ecology only. For criteria answered by Ecology, the Applicant may provide relevant information related to the criteria when completing the application in EAGL."

Source: Section 10.4 Evaluation Criteria [for Safe Drinking Water] *in* Remedial action grant and loan guidance for the 2021–23 biennium: Oversight remedial action grants and loans, Area-wide Groundwater investigation grants, Safe Drinking Water action grants[97] (revised April 2020, Ecology Publication No. 20-09-055)

[97] https://fortress.wa.gov/ecy/publications/summarypages/2009055.html

SDW RAG Criteria for Category 1: Faster cleanup

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
1.1	**Prior grant performance (one applies):** • **3 POINTS:** Applicant does not have an active grant for the project. • **2 POINTS:** Applicant has an active grant for the project, but it is expected to be spent by the beginning of the biennium. • **0 POINTS:** Applicant has an active grant and it is unclear that the grant will be spent by the beginning of the biennium.	Ecology	3
1.2	**Applicant's readiness to proceed sub-criteria (adds up to 4 total possible points):** • **1 POINT:** All legal access needed for project obtained (0 points if no). • **1 POINT:** Environmental consultant is hired or not needed (0 if needed, but not hired). • **1 POINT:** Plan to reach safe drinking levels developed (0 points if no). • **1 POINT:** Local government/staff project manager identified (0 points if no).	Applicant	4
1.3	**Leveraging other funds:** • **3 POINTS:** Applicant has secured additional grants, private funds (including contributions, insurance, public-private partnerships, etc.). • **2 POINTS:** Applicant is pursuing grant applications, private funds (including contributions, insurance, public-private partnerships, etc.). • **1 POINT:** Applicant has a capital plan for both cleanup and redevelopment or reuse of the site. • **0 POINTS:** None of the above apply.	Applicant	3
1.4	Grant enables local government to more quickly provide safe drinking water to those affected (3 points for yes, 0 points for no).	Ecology	3

SDW RAG Criteria for Category 2: Improve human health

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
2.1	Project provides a permanent treatment system for drinking water at the source (3 points for yes, 0 points for no).	Ecology	3
2.2	Project treats the drinking water source as opposed to providing alternative drinking water such as bottled water (3 points for yes, 0 points for no).	Ecology	3
2.3	**3 POINTS:** Presence of Extremely or Very Hazardous Chemicals is confirmed or suspected. • 1,1,2-Trichloroethane • 2-Methylnaphthalene • Aldrin • Antimony • Arsenic • Benzene • Benzo(a)pyrene (or cPAH toxic equivalency quotient) • Cadmium • Chromium VI • cis-1,2-Dichloroethene (cis-DCE) • Dieldrin • Dioxins • Lead • Mercury • Methylmercury • Naphthalene • Per- or polyfluoroalkyl substances (PFAS)[98] • Polychlorinated biphenyls (PCBs) • Trichloroethene (TCE) • Vinyl chloride • Other substances identified by Ecology.[99] **0 POINTS:** Extremely or Very Hazardous chemicals are not present at the site.	Ecology	3
2.4	The impacted drinking water serves a sensitive population, such as a daycare, nursing home, or hospital (3 points for yes, 0 points for no).	Ecology	3
2.5	Potential for contamination to spread (3 points for yes or unknown, 0 points for no).	Ecology	3

SDW RAG Criteria for Category 3: Equitable distribution

Criteria Number	Evaluation Criteria	Score Provider	Maximum Score
3.1	Community immediately surrounding the site is a "highly impacted community," as defined in WAC 173-322A-100(24) and Section 4.5: Environmental Justice Evaluation Criteria of this Guidance.	Ecology	3

[98] As of February 2020, the Department of Health is reviewing five PFAS compounds to establish state action levels for drinking water.

[99] The list is based in part on data from the U.S. EPA, available at https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm-query.

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