



Basin Environmental Improvement Project Commission

COEUR D'ALENE BASIN CALENDAR YEAR 2025 WORK PLAN



East Fork Ninemile Waste Consolidation Area. Images provided by the CDA Trust.

TABLE OF CONTENTS

SITE BACKGROUND.....	4 -
INTRODUCTION	4 -
PART 1 – ENVIRONMENTAL CLEANUP WORK.....	5 -
1.1 HUMAN HEALTH REMEDIES	5 -
1.1.1 Residential and Commercial Property Remediation.....	5 -
1.1.2 Updated Residential Soil Lead Guidance	6 -
1.1.3 Lead Health Intervention Program.....	6 -
1.1.4 Recreation Use Activities	7 -
1.2 WASTE DISPOSAL AREA DEVELOPMENT AND MANAGEMENT.....	8 -
1.2.1 Repositories.....	8 -
1.2.1.1 Page Repository	8 -
1.2.1.2 Big Creek Repository.....	9 -
1.2.1.3 Big Creek Repository Annex	9 -
1.2.1.4 Lower Burke Canyon Repository	9 -
1.2.1.5 East Mission Flats Repository	9 -
1.2.2 Waste Consolidation Areas.....	9 -
1.2.2.1 East Fork Ninemile WCA.....	9 -
1.2.2.2 Canyon Complex Repository/Waste Consolidation Area.....	10 -
1.2.2.3 Siting of Lower Basin Waste Consolidation Area.....	10 -
1.3 REMEDIAL ACTIONS.....	10 -
1.3.1 Upper Basin/Box Remedies	10 -
1.3.1.1 The Box Remedial Actions.....	11 -
1.3.1.1.1 Central Impoundment Area Sludge Pond Closure.....	11 -
1.3.1.1.2 Pinehurst Elementary School.....	11 -
1.3.1.1.3 Airport Riverwalk Trails.....	11 -
1.3.1.1.4 East Smelterville Flats	11 -
1.3.1.1.5 Rights-of-Way, Sidewalks, and Parking Areas.....	11 -
1.3.1.2 The Upper Basin Remedial Actions	12 -
1.3.1.2.1 Ninemile Creek Basin	12 -
1.3.1.2.2 Canyon Creek.....	12 -
1.3.1.2.2.1 Canyon Creek Basin Investigations/Designs.....	12 -
1.3.1.2.2.2 Canyon Creek Basin Remedial Action - Hecla Star Mine Complex	12 -
1.3.1.2.2.3 Canyon Creek Basin Remedial Action – Tamarack No. 7	12 -
1.3.1.2.3 Pine Creek Basin Remedial Action – Douglas Complex.....	12 -
1.3.1.2.4 South Fork Coeur d’Alene River Investigations/Designs.....	12 -
1.3.2 Lower Basin Remedies	13 -

1.3.2.1	Riverbeds and Banks Projects.....	- 13 -
1.3.2.2	Dudley Reach Scour Hole Pilot Project.....	- 13 -
1.3.2.2.1	Cataldo Reach Riverbank Design – River Mile 166-167	- 13 -
1.3.2.2.2	Cataldo Reach Riverbank Investigation.....	- 14 -
1.3.2.3	Lower Basin Floodplains Projects	- 14 -
1.3.2.3.1	Gray’s Meadow Remediation and Restoration	- 14 -
1.3.2.3.2	Gleason Wetland Remediation and Restoration Project.....	- 14 -
1.4	BASIN ENVIRONMENTAL MONITORING	- 14 -
1.4.1	Environmental Monitoring.....	- 15 -
1.4.1.1	The Box.....	- 15 -
1.4.1.2	The Upper Basin	- 15 -
1.4.1.2.1	Ninemile Creek Basin	- 15 -
1.4.1.2.2	Canyon Creek Basin	- 15 -
1.4.1.2.3	South Fork Coeur d’Alene River Basin	- 16 -
1.4.1.3	The Lower Basin.....	- 16 -
1.4.1.4	Coeur d’Alene Lake.....	- 16 -
1.4.2	Biological Monitoring.....	- 16 -
1.5	OPERATION AND MAINTENANCE (O&M) RESPONSIBILITIES FOR REMEDIAL ACTIONS	- 17 -
1.5.1	Central Treatment Plant/Central Impoundment Area.....	- 17 -
PART 2 – OTHER ACTIVITIES AND RESPONSIBILITIES		- 18 -
2.1	IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY LAKE MANAGEMENT ACTIVITIES.....	- 18 -
2.2	COEUR D’ALENE TRIBE LAKE ACTIVITIES	- 21 -
2.3	FLOOD CONTROL AND INFRASTRUCTURE REVITALIZATION.....	- 21 -
2.4	COMMUNICATIONS AND PUBLIC INVOLVEMENT	- 22 -
2.5	STATE OF WASHINGTON ACTIVITIES.....	- 23 -
2.6	RESTORATION PARTNERSHIP	- 23 -

SITE BACKGROUND

The Bunker Hill Superfund Site, sometimes referred to as the Coeur d'Alene Basin Site, is located in northern Idaho, sections of the Coeur d'Alene Tribe's Reservation, and in northeastern Washington along portions of the Spokane River. The Site includes mining-contaminated areas in the Coeur d'Alene River corridor, adjacent floodplains, downstream water bodies, tributaries, and fill areas, as well as the 21-square-mile Bunker Hill "Box" where historical ore-processing and smelting operations occurred. The Bunker Hill Superfund Site, which was listed on the Superfund National Priorities List (NPL) in 1983, is divided into the following three study and cleanup areas called Operable Units or OUs:

- OU-1 includes the populated areas of the Bunker Hill Box.
- OU-2 comprises the non-populated areas of the Bunker Hill Box.
- OU-3 includes all areas of the Coeur d'Alene Basin outside the Bunker Hill Box where mining-related contamination is located. OU-3 is often called "the Basin."

The Site is also divided into two geographic areas with common sources of contamination: The Upper Basin and the Lower Basin. The Upper Basin is primarily in the eastern portion of OU-3 and extends from the headwaters of the South Fork Coeur d'Alene River (SFCDR) close to the Idaho/Montana border to the confluence of the South and North Forks of the Coeur d'Alene River near Kingston, Idaho. The Box is included as part of the Upper Basin when referring to remedies that improve water quality and lessen migration of contaminated sediment to the Lower Basin. It does not include, however, remedies in the Box that focus on reducing risks to people. The Lower Basin is primarily in the western portion of OU-3, west of the Upper Basin and Box. It includes the mainstem of the Coeur d'Alene River, and all lateral lakes, floodplains, and associated wetlands adjacent to this stretch of the Coeur d'Alene River to the mouth of the Coeur d'Alene River. It does not, however, include CDA Lake or the portions of the Spokane River in Washington State which are within OU-3.

INTRODUCTION

This work plan covers proposed environmental cleanup and improvement activities in the Coeur d'Alene (CDA) Basin scheduled for 2025 by the Basin Environmental Improvement Project Commission (BEIPC) and coordinating agencies and governments in accordance with their responsibilities as stated in the Memorandum of Agreement (MOA) dated August 2002. Actions noted in the work plan are intended to implement the goals and objectives of the BEIPC's 2025 - 2029 Five Year Work Plan. This work plan has been prepared by the BEIPC's Executive Director working with the coordinating agencies and governments with review, input, and approval by the Technical Leadership Group (TLG) and review and input from the Citizen Coordinating Council (CCC). The work plan is organized as follows:

- Part 1 – Environmental cleanup work performed through the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) by the Environmental Protection Agency (EPA) and State of Idaho through the Idaho Department of Environmental Quality (DEQ) or work performed by the Coeur d'Alene Custodial Work Trust (CDA Trust) and Potentially Responsible Parties (PRP).
- Part 2 - Other Activities and Responsibilities.

Part 1 includes work to implement the 2002 OU-3 Interim Record of Decision (ROD) and the 2012 Upper Basin (Box and OU-3) Interim ROD Amendment (RODA).

Part 2 includes work and responsibilities concerning management of Coeur d'Alene Lake (CDA Lake) by the Coeur d'Alene Tribe (CDA Tribe) and the State of Idaho, restoration of natural resources by the Natural Resource Trustees (Restoration Partnership) and work the BEIPC has assumed based on recommendations from the 2005 & 2022 National Academy of Sciences (NAS) Studies and requests from citizens and communities of the Basin.

The five-year plan outlines activities and work proposed to be implemented over the next five years; however, it does not sequence these activities. This one-year plan establishes and maintains the sequencing of activities that will be needed to complete the activities and work approved in the five-year plan. It may not address all work items noted in the five-year plan because some will not be initiated until later years.

PART 1 – ENVIRONMENTAL CLEANUP WORK

For Part 1, the scope of the proposed work corresponds to the source and level of funding anticipated for 2025 and work anticipated to be performed by the responsible parties. The proposal includes the following work:

- Human Health Issues including Residential and Community Property and Private Water Supply Remediation, Basin Property Remediation Program; Lead Health Intervention Program; and Recreation Use Activities.
- Waste Disposal Area Development and Management.
- Remedial actions in the Upper Basin including source control actions, water treatment, and related human health activities provided for in the 2012 Upper Basin RODA.
- Remedial actions and/or Pilot Projects in the Lower Basin.
- Basin Environmental Monitoring Program.
- Operation and Maintenance Responsibilities for Remedial Actions.

1.1 HUMAN HEALTH REMEDIES

Remediation in areas where human health exposures exist is a remedial action priority as defined in the 2002 OU-3 ROD. It includes maintaining the Institutional Controls Program (ICP) implemented by DEQ and managed by the Panhandle Health District (PHD) and conducting cleanups in residential, community and recreational areas in the Upper and Lower Basin. The 2012 Upper Basin RODA addresses source control remedies, water treatment remedies, and ecological cleanup projects with related human health activities.

1.1.1 Residential and Commercial Property Remediation

During 2024, the CDA Trust's Basin Property Remediation Program (BPRP) sampled three residential properties in the Coeur d'Alene Basin. One property's soil and drinking water were sampled. Additionally, two properties with private drinking water sources were sampled where soil sampling had previously been completed but drinking water from inside the residence had not been completed. At the conclusion of 2024, a total of 3,236 properties in the Box and 3,935 properties in the Basin have been remediated. Properties remaining to be sampled and/or remediated are those whose owners have refused access or have been unresponsive to repeated contact attempts by the CDA Trust and IDEQ.

The goal for 2025 is to complete sampling and remediation if sampling results are above action levels on parcels whose owners have granted access. Nine properties in the Box remain to be remediated once owners grant access, and 201 properties in the Basin require sampling and 38 properties require remediation based on previous sampling results.

EPA will continue to direct and oversee the CDA Trust BPRP work in 2025. IDEQ will continue an oversight and coordination role initiated in 2015 and will continue to encourage property owners to have their properties sampled and remediated, if necessary.

1.1.2 Updated Residential Soil Lead Guidance

On January 17, 2024, EPA updated its national residential soil lead guidance. The guidance, last updated in 1994, reflects an evolved understanding of the potential harms of even low levels of lead exposure across a lifespan. The updated guidance reduced the recommended residential soil lead screening levels from 400 parts per million (ppm) to 200 ppm or 100 ppm when multiple sources of lead exposure are present. The reduced screening levels are based on target blood lead levels of 5 µg/dL or 3.5 µg/dL when multiple sources of lead are present.

Screening levels are not cleanup levels. Screening levels are used during early site investigations and applied consistently to all contaminated areas being assessed to determine if the level of contamination is high enough to warrant further investigation. Cleanup levels are developed after consideration of investigations, assessments, site-specific risks, and other relevant site information. Cleanup levels are used to trigger cleanup actions which are specified in EPA decision documents (such as Records of Decisions). While a screening level of 400 ppm was used for evaluations at the Bunker Hill Superfund Site, the soil lead level used to trigger cleanup actions ranges from 700 to 1000 ppm depending on the location.

EPA Region 10 and the State of Idaho (including Idaho Department of Environmental Quality and Panhandle Health District) are evaluating implementation options at Bunker Hill under the updated guidance to ensure the cleanup levels and actions remain protective. In 2025, work will include an assessment to determine the potential need for changes to current residential soil cleanup levels considering the updated guidance. The work will include an assessment of the assumptions used to develop the cleanup levels currently in use at the site and ensure they are consistent with the recommendations in the updated guidance.

1.1.3 Lead Health Intervention Program

As part of the Site's Lead Health Intervention Program (LHIP), screening of children for elevated blood lead levels has been occurring annually in the CDA Basin since 1996 as a public health service to identify children with elevated blood lead levels and to provide follow-ups from a public health professional to identify ways to reduce lead exposures. The screening program also provides information to the Basin cleanup efforts; however, cleanup decisions are not based on annual blood lead testing results since the cleanup goal is to prevent lead exposures that could result in elevated blood lead levels.

In early 2012, the Centers for Disease Control & Prevention (CDC) changed its "level of concern" associated with childhood lead poisoning from a blood lead reference value (BLRV) of 10 micrograms per deciliter (µg/dl) to a new BLRV of 5 (µg/dl). On 10/28/2021, the CDC again lowered the BLRV to 3.5 (µg/dl) in children. This new lower value means that more children will be identified when lead exposure is occurring allowing parents, doctors, public health officials, and communities to act earlier to reduce the child's future exposure to lead.

In 2025, the LHIP will continue to offer free year-round blood lead screening for residents living within the Bunker Hill Superfund Site boundaries, individuals recreating within the site boundary, and individuals working within the site boundary in occupational settings where there is a potential for exposure to lead. In addition, the LHIP will be conducting its annual summer screening with a \$50 incentive for children between ages 6 months to 6 years of age residing within Site boundaries.

When an individual is identified as having an elevated blood lead level, it is recommended their physician be notified and PHD will schedule a free in-home consultation to identify potential sources of exposure in and around the home. These in-home consultations help PHD, and individual families identify ways to reduce exposure risks. In addition, PHD can help identify potential exposure pathways the cleanup project can address to prevent lead exposures.

Additional Services offered by the LHIP:

- Year-round blood lead screening and free follow-ups.
- High efficiency particulate air (HEPA) EPA vacuum loan program for cleaning residences.
- Education, outreach, and awareness for parents, children, community members, recreationalists, and visitors.
- Education classes in local schools for grades K-12.
- Education and outreach at community events.
- Sampling of soil, dust, paint, water, and other media as appropriate.
- Provide healthy homes items including dust cloths, surface cleaner, door mats, and replacement furnace filters.

1.1.4 Recreation Use Activities

In 2016, a Recreation Sites Program was created to address and manage human health risks from exposure to lead and other metals that can occur during recreation activities throughout the CDA Basin. A Basin Recreational Sites Strategy document was developed to lay out goals, ways to inventory recreation areas, ways to manage risks to people, and current outreach activities. This strategy was issued for public and stakeholder comments and suggestions. The same approach is being undertaken in the Box with plans to complete the Strategy and Implementation Plan documents in 2025.

Addressing contamination at recreation sites is different than other cleanup activities. Many places are re-contaminated with each high water or flood event making it difficult to just remove contaminated soil and replace it with clean soil. Other recreation areas are remote, hard to access, and spread out (example: hiking trails or all-terrain vehicle (ATV) areas), making cleanup of the entire area difficult. Overall, different approaches are needed for the diverse types and locations of recreation sites. In addition, community outreach and education are important ways to help people manage health risks while recreating. An outreach and education program has been in place for years and will continue to be implemented and expanded.

The Recreation Sites Program team, which includes the EPA, DEQ, PHD, CDA Tribe, BEIPC and the CDA Trust, will meet at least biannually in 2025 to evaluate and discuss priorities. In the Basin, the CDA Trust expects to monitor completed remediation projects and continue to update and install new signage at identified recreation sites. Additionally, the CDA Trust will evaluate sample results and potential cleanup options at an informal recreational site located on the east side of Thompson Lake, and they also anticipate completing additional characterization activities at other Lower Basin recreational areas. In the Box, DEQ and PHD will continue to update signage and evaluate access controls at mine and recreation sites where public use has been identified. Planning for further remediation recreation sites will continue as prioritized by the team and strategy document criteria. The overall goal is to

address and manage human health risks from exposure to lead and other metals while maintaining the benefits of recreation for people's health and the local economy.

1.2 WASTE DISPOSAL AREA DEVELOPMENT AND MANAGEMENT

Waste disposal area development and management is an ongoing process that must meet the demand for disposal of historic mining-related contaminated wastes from cleanup activities performed by DEQ, EPA, the CDA Trust, and waste generated by private parties and local government agencies under the Bunker Hill Superfund Site's Institutional Controls Program.

There are currently two primary types of waste disposal areas across the site:

- Repositories
- Waste Consolidation Areas

Repositories and Waste Consolidation Areas (WCAs) differ in the waste streams they accept, the proximity to a cleanup action or waste generation source, and how they are constructed based on, in part, how long they are to remain open. All, however, are engineered waste storage options and an effective way to remove and consolidate contaminated materials away from people and wildlife. Each waste disposal area is monitored during construction and placement of wastes, and after the waste disposal area is capped and closed to ensure wastes remain in place and to prevent contaminants from being released to surface water, groundwater, or air in concentrations above state and/or federal standards.

1.2.1 Repositories

Repositories are large, centrally located waste disposal areas where a variety of wastes from a variety of projects are transported to and secured. Repositories typically remain open for a longer period than WCAs.

There are currently five open or operating repositories at the Site. In general, the following tasks are performed each year of operation including in 2025:

- Receipt and placement of remedial action and ICP wastes.
- Segregation and appropriate re-use of non-soil waste such as wood and root wads, concrete, asphalt, large (greater than 6 inches) rock fragments and miscellaneous demolition debris to minimize disposal.
- Equipment decontamination, site stabilization, erosion, and sediment control installation.
- Surface and ground water monitoring and associated reporting.

1.2.1.1 Page Repository

The Page Repository, operated by DEQ, is in the city of Smeltonville and receives waste from Box remedial actions and from the ICP. Having reached its previous design capacity in 2010, Page is being expanded westward to provide capacity for an additional 700,000 cy of waste. Work in 2025 will include placement of concrete debris to continue construction of starter berms and foundation mattress in the Page expansion cells. Geotechnical monitoring equipment will be installed in the new expansion cells. At the end of 2024 384,174 cy of disposal space was available at Page.

1.2.1.2 Big Creek Repository

The Big Creek Repository (BCR), operated by the CDA Trust, is located at the mouth of Big Creek Canyon, and primarily receives wastes from the Upper Basin. The BCR has received waste since 2002. The BCR has undergone expansions in 2009 (200,000 cy), 2011 (126,000 cy), and 2017 (127,000 cy) increasing its waste holding capacity. BCR currently has a remaining capacity of approximately 81,500 cy.

1.2.1.3 Big Creek Repository Annex

The Big Creek Repository Annex (BCRA), operated by the CDA Trust, was constructed in 2015 and is located adjacent to the original BCR, just southwest of the original site on the west side of Big Creek. BCRA uses the existing BCR access, decontamination, and ICP staging facilities. The initial design waste capacity of BCRA was approximately 190,000 cy and has approximately 168,871 cy remaining.

1.2.1.4 Lower Burke Canyon Repository

The Lower Burke Canyon Repository (LBCR), operated by the CDA Trust, is in Canyon Creek/Burke Canyon on the Star Tailings Impoundment near the community of Woodland Park and primarily receives waste from the Upper Basin. The CDA Trust completed the LBCR design and construction in 2015. The remaining capacity at LBCR is about 1,028,025 cy.

1.2.1.5 East Mission Flats Repository

The East Mission Flats Repository (EMFR), operated by the CDA Trust, is located north of Interstate 90 off Exit 39, near Cataldo, and primarily receives waste from the Lower Basin. EMFR has been receiving waste since 2009 and was designed with a waste capacity of approximately 410,000 cy. EMFR has approximately 146,000 cy of volume remaining.

1.2.2 Waste Consolidation Areas

Waste consolidation areas are located near, and accept waste from, specifically identified sources such as mine and mill site remedial actions implemented by EPA, the CDA Trust, and DEQ. Unlike repositories, footprints of WCAs are developed using current and near future waste estimates from nearby remedial action project areas and are constructed to be open for a shorter period. WCAs are only expanded if additional wastes are encountered during the selected remedial actions. Currently, there is one operating WCAs within the Upper Basin as described below.

1.2.2.1 East Fork Ninemile WCA

Development of the East Fork Ninemile (EFNM) WCA began in 2013. This WCA was designed to consolidate mine waste materials, including waste rock and tailings from select remedial actions identified in the Ninemile Creek Basin. Wastes from the completed Interstate-Callahan Mine/Rock Dumps, the Success Complex, the Interstate Millsite, the Dayrock Complex/Lower East Fork Ninemile Creek Riparian Area, and the Tamarack Complex cleanups were placed and consolidated in the EFNM WCA.

All priority cleanups in the Ninemile Creek Basin were completed in 2024. Design of the final cover system will be completed in early 2025 and construction of the final EFNM WCA cover system will begin in 2025 and completed in 2026.

1.2.2.2 Canyon Complex Repository/Waste Consolidation Area

Development of the Canyon Complex Repository (CCR/WCA) began in 2019. Wastes from the completed Silver Valley Natural Resource Trustee (SVNRT) Repository cleanup have already been placed and consolidated in the CCR/WCA. While the facility is a repository, it will generally function as a WCA for the near future accepting waste materials from nearby identified Canyon Creek remedial actions. The CCR/WCA is designed to accommodate approximately 1,200,000 cy in addition to the transferred volume of the SVNRT Repository. Wastes from the Hecla Star Complex and Tamarack No. 7 cleanups will be placed in the CCR/WCA in 2025.

1.2.2.3 Siting of Lower Basin Waste Consolidation Area

In 2020, EPA began seeking public opinion for siting a WCA in the Lower Basin to accommodate nearby planned remedial actions such as the Dudley Reach Scour Hole Pilot Project. A Lower Basin WCA Project Focus Team (PFT) was formed in 2022 to verify the analysis of potential WCA Locations. A decision has not yet been made on the final location. In 2025, EPA will continue to evaluate stakeholder and technical considerations of siting a Lower Basin WCA. When a final decision is made, design activities will be scheduled to commence.

1.3 REMEDIAL ACTIONS

1.3.1 Upper Basin/Box Remedies

As stated earlier, the Box is included as part of the Upper Basin when referring to remedies that improve water quality and lessen migration of contaminated sediment to the Lower Basin. The 2012 Upper Basin RODA identified \$635 million dollars of work in the Upper Basin including potential work at 125 mine and mill sites. The goals of the 2012 Upper Basin RODA include:

- Prioritizing Upper Basin/Box source areas for cleanup to improve water quality and address risks to human health and the environment.
- Moving forward on the Box's OU-2 Phase 2 cleanup to improve water quality in the South Fork Coeur d'Alene River (SFCDR).
- Addressing changes in water treatment to accommodate additional contaminated water.
- Focusing on source control actions that address particulate lead which poses a risk to human health and ecological receptors.
- Protecting remedies in community areas from tributary flooding and heavy precipitation events (the construction portion of this work was finalized at the close of 2019 with completion of the Remedy Protection Program).

The prioritized cleanups under the 2012 Upper Basin RODA will continue to reduce human and wildlife risks to lead and other heavy metal exposures in the Upper Basin and are expected to significantly improve water quality. Upper Basin cleanups complement those in the Lower Basin by reducing the overall loading of contaminated materials to the Coeur d'Alene Basin watershed and the potential for recontamination in the Lower Basin.

1.3.1.1 The Box Remedial Actions

1.3.1.1.1 Central Impoundment Area Sludge Pond Closure

For the past 30 years, the old sludge pond has been used to store the sludge from the Central Treatment Plant (CTP) on top of the Central Impoundment Area (CIA). It reached capacity in June 2023 and has been replaced by the new lined sludge impoundments that were constructed as part of the CTIP upgrades. In Spring 2025, crews will begin mobilizing construction equipment to begin construction to cap and cover the old

sludge pond on top of the CIA. The sludge pond cover system will tie into the existing CIA cover system, consist of compatible materials, and meet the same performance standards as the existing cover on the CIA.

1.3.1.1.2 Pinehurst Elementary School

Pinehurst Elementary School serves many of the children living within the Box and others residing in the Lower Basin, ranging in ages from 4 to 12 years. Large sections of the playground are deteriorated leaving children exposed to underlying soil contamination. This deterioration is primarily due to inadequate grading of the site which does not provide proper drainage of snowmelt and rain. Remedial action will include removal of deteriorated sections, regrading to promote drainage, and repaving the playground area with asphalt or concrete, rubberized surfacing material around the play structures, and synthetic turf between play areas providing long-lasting, durable barriers to underlying soil contamination. The bulk of the construction and installation work will take place during the summer 2025.

1.3.1.1.3 Airport Riverwalk Trails

Remediation includes placement of concrete and gravel barriers at one or two Oasis pads along the previously completed trail, signage, vegetation along the pond, and access controls. Construction is anticipated to begin in spring 2025.

1.3.1.1.4 East Smelterville Flats

The 16-acre site is contaminated with historical mine tailings and wastes, with soil sampling indicating contaminated material is present at the surface to depths ranging from five to nine feet. Work crews will excavate and remove several piles of contaminated soil at the east end of the site that contain high lead concentrations. Cleanup will then focus on removal of contaminated soil from the floodway along the north bank of the South Fork of the Coeur d'Alene River. Contaminated material will be taken to Page Repository. After removal of contaminated soil, fabric will be placed across the site to function as a marker for underlying contaminated soil too deep to remove, followed by placement of one foot of clean materials (e.g., clean soil, gravel) on top. After this, crews will revegetate the site and install a fence and jersey barriers along the west and south property boundaries.

1.3.1.1.5 Rights-of-Way, Sidewalks, and Parking Areas

Several locations in the Box where rights-of-way (ROW), sidewalks, and parking area barriers have deteriorated with signs of underlying contaminated material evident will be remediated. Locations identified for remediation in 2025 include poor condition sidewalks in uptown Kellogg and the Galena Ridge Overview ROW. Failing sidewalks will be replaced with similar width sidewalks that include modern safe pedestrian ramps. The Galena Ridge Overview will be improved to reduce exposure to contaminated soil. DEQ will coordinate with the community regarding construction activities and will notify businesses and residents of upcoming construction work. Construction is planned between March and October of 2025. It is estimated that the following percent of each project will be completed in 2025: 33% of Uptown Kellogg Sidewalks and 100% of Galena Ridge Overview ROW.

1.3.1.2 The Upper Basin Remedial Actions

1.3.1.2.1 Ninemile Creek Basin

The Ninemile Creek Basin is located west of Wallace, Idaho and north of Interstate 90 (I-90). The CDA Trust completed cleanup at priority sites in the Ninemile Creek Basin in 2024. In 2025, the CDA Trust will continue Operation and Maintenance activities at these cleanup sites and will continue remedial action effectiveness monitoring in the Ninemile Creek Basin as discussed in Section 1.4.

1.3.1.2.2 Canyon Creek

The Canyon Creek Basin is also located north of Wallace and I-90 and is east of the Ninemile Creek Basin. In 2025, the CDA Trust will investigate contamination sources at several areas, continue design activities, and continue to implement cleanup projects as summarized below:

1.3.1.2.2.1 Canyon Creek Basin Investigations/Designs

Several investigations and designs are planned in 2025. Investigations will continue within the Lower Canyon Creek Riparian Area. The design of the Standard Mammoth Reach cleanup was initiated in 2024 and is expected to be completed in 2025. The design of the Frisco Reach will be initiated in 2025 and is expected to be completed in 2026.

1.3.1.2.2.2 Canyon Creek Basin Remedial Action - Hecla Star Mine Complex

The Hecla Star Mine Complex, near the town of Burke, is approximately 22 acres in size and consists of numerous mine and mills, mine adits, waste rock dumps, as well as mining-impacted floodplains along Canyon Creek. The design for cleanup of the Complex was completed in 2022 and cleanup was initiated in 2023 and continued in 2024. Cleanup will continue in 2025 and will include removal of mine wastes, placement of clean backfill materials, reconstruction of Burke Road and Canyon Creek following removal of mine wastes, and revegetation. Cleanup is anticipated to be completed in the fall of 2026.

1.3.1.2.2.3 Canyon Creek Basin Remedial Action – Tamarack No. 7

The Tamarack No. 7, near the community of Black Bear, is approximately 23 acres in size and consists of the Tamarack No. 7 mine and mill site as well as mining-impacted floodplain along Canyon Creek. The design for cleanup of the Complex was completed in 2022 and cleanup will be initiated in 2025. Cleanup will include removal of mine wastes, re-grading and capping of mine wastes, placement of clean backfill materials, reconstruction of Canyon Creek following removal of mine wastes, and revegetation. Cleanup is anticipated to be completed in the fall of 2026.

1.3.1.2.3 Pine Creek Basin Remedial Action – Douglas Complex

The Douglas Complex, located approximately 6 miles south of Pinehurst along East Fork Pine Creek Road, is approximately 4 acres in size and consists of multiple mine and mill sites. The design for cleanup of the Complex was completed in 2021 and cleanup will be initiated in 2025. Cleanup will include re-grading and capping of mine wastes, and placement of clean backfill materials. Cleanup is anticipated to be completed in the fall of 2025.

1.3.1.2.4 South Fork Coeur d'Alene River Investigations/Designs

In 2025, the CDA Trust anticipates that they will investigate contamination sources within the floodplain at several areas along the South Fork Coeur d'Alene River from Mullan downstream to the "Box". This investigation work will be used to identify sources of contamination and will help to prioritize potential future design and cleanup work.

1.3.2 Lower Basin Remedies

The major components of work described in the 2002 OU-3 ROD for the Lower Basin can be separated into Lower Basin Riverbeds and Banks, and Lower Basin Floodplains. Work in the Lower Basin also includes cleanup at identified recreational areas along the CDA River. Objectives of remediation in the Lower Basin focus on reducing human exposure to lead-contaminated soils and sediments, improving water quality, and reducing particulate lead and other heavy metals in the CDA Basin ecosystem.

The Draft Final Riverbed Management Plan (RMP) was completed in June 2021. The purpose of the RMP is to guide the interim remedy for the Lower Basin riverbeds and banks by providing information and analyses for selected integrated remediation scenarios for the riverbed and identifying high-priority riverbank segments for removal or stabilization. The RMP targets areas within the river for active remediation and divides the riverbed into sediment management areas (SMAs), evaluates the effects of remedial technologies, and identifies areas for natural recovery. The RMP will feed into a broader Lower Basin Prioritization Plan (LBPP) which was completed in November of 2024. The purpose of the LBPP is to provide an initial approach toward remedial action and related data gap prioritization, to aid in pilot project selection, and to apply an adaptive framework to guide pilot projects and remedial actions in the Lower Basin. Additional investigation of the riverbeds, banks, and the floodplains will be used to inform the conceptual design and feasibility of specific pilot projects that are being considered for implementation over the next two to five years under the LBPP. The results of these efforts continue to be shared with the subgroups of the BEIPC (e.g., TLG, Lower Basin PFT, and the CCC), interested stakeholders, and other citizen groups.

1.3.2.1 Riverbeds and Banks Projects

In 2025, EPA will continue with planning the following pilot projects focused on the riverbeds and banks of the CDA River.

1.3.2.2 Dudley Reach Scour Hole Pilot Project

To address contaminated sediment transport in the CDA River, the CDA Trust began remedial design characterization and planning for a pilot project to be implemented in the upper part of the Dudley Reach. Dudley Reach is considered the most significant lead loading segment in the river system, as identified in the 2002 ROD. The current area considered for a pilot project within the Dudley Reach is an approximate one-half mile scour hole located about one mile downstream of the Mission Boat Launch (near River Mile 158.8). The technologies to be constructed are a cap/dredge hybrid. The exact location for the pilot within this reach may be adjusted or the technology being considered may be modified, through adaptive management, as new information is obtained. Unarmored riverbanks adjacent to the pilot segment will be addressed as part of the pilot project. The pilot project will help inform future approaches to cleaning up mine waste in the river and allow evaluation of methods to prevent mine waste from moving downstream while getting some cleanup done. A 30% design has been completed for the project; however, further design phases remain on hold until a waste consolidation area is selected for the pilot. EPA will continue to evaluate Lower Basin WCA considerations in 2025 in pursuit of making a final decision.

1.3.2.2.1 Cataldo Reach Riverbank Design – River Mile 166-167

From 2022 through 2024, the CDA Trust completed remedial design characterization of a riverbank pilot project in the Cataldo Reach of the CDA River. The riverbank pilot project is anticipated to address

eroding banks at select locations between river mile 166 -167. In 2025, the CDA Trust will begin design on a riverbank pilot project and the design is expected to be completed in 2026.

1.3.2.2.2 Cataldo Reach Riverbank Investigation

In 2025, the CDA Trust will begin additional remedial design characterization of additional riverbanks in the Cataldo Reach of the CDA River. Characterization activities in the Cataldo Reach and the information obtained will be used to inform prioritization and design of additional pilot projects to address contaminated sediment transport in this reach of the river.

1.3.2.3 Lower Basin Floodplains Projects

In 2025, EPA will continue to coordinate with the Restoration Partnership and various landowners to characterize and identify project areas in the floodplains of the Lower Basin, including the lateral lakes and wetlands.

1.3.2.3.1 Gray's Meadow Remediation and Restoration

Gray's Meadow is 695 acres of former agriculture land to be converted to productive wetlands and waterfowl habitat. The property is owned by the Idaho Department of Fish and Game (IDFG) and is located within the Coeur d'Alene River Wildlife Management Area near the Coeur d'Alene River and Black Lake in Kootenai County, Idaho. The design for the cleanup was completed in June 2022. Construction is expected to be completed by the end of 2025, and Operations and Maintenance activities will begin in 2026 once construction is complete.

1.3.2.3.2 Gleason Wetland Remediation and Restoration Project

In 2022, the CDA Trust began remedial design characterization of a privately-owned, 250-acre conservation easement property located near East Killarney Lake Road. Characterization activities included installing monitoring wells, monitoring water levels, and collecting samples of groundwater, surface water, and soil. This property is a potential agriculture-to-wetland conversion project to be remediated and restored to provide clean habitat for water birds and other wildlife. In 2025, characterization activities will be completed to address data gaps to support the design of the project starting in 2026.

1.4 BASIN ENVIRONMENTAL MONITORING

The objectives of the Basin Environmental Monitoring Program (BEMP) are the following:

- Assess long-term status and trends of surface water, sediment, groundwater, and biological resource conditions in the Basin.
- Evaluate progress toward meeting Remedial Action Objectives (RAOs), Applicable or Relevant and Appropriate Requirements (ARARs), and Preliminary Remediation Goals (PRGs).
- Improve the understanding of Basin environmental processes and variability to improve the effectiveness and efficiency of remedial actions.
- Provide data for CERCLA required Five-Year Reviews of remedy performance.

EPA collaborates with the CDA Trust, DEQ, the CDA Tribe, the United States Fish and Wildlife Service (USFWS), and the United States Geological Survey (USGS) to periodically update and optimize the BEMP, which is the umbrella document that provides the framework for implementing basin-wide monitoring, area-wide monitoring, and project-specific remedial action effectiveness monitoring. The BEMP guides the collection, analysis, and interpretation of environmental data while providing

flexibility for adaptive management as remediation work is completed and information regarding site conditions evolves. In Spring 2025, the BEMP workgroup will continue annual meetings during the spring field planning season to effectively coordinate and communicate BEMP activities across all agencies and organizations.

1.4.1 Environmental Monitoring

1.4.1.1 The Box

In the south fork of the CDA River, surface water upstream and downstream of the Groundwater Collection System (GCS) will continue to be monitored as part of the BEMP. Four stations, which are associated with the Box's OU-2, are monitored twice per year, during peak spring runoff and late summer base flow conditions.

As part of the Remedial Action Effectiveness Monitoring Plan (September 2018) for the GCS, biological monitoring will be performed at two stations upstream and downstream of the Central Treatment Plan (CTP) because it has been five years since the completion of the upgrades to the GCS. These two stations upstream and downstream from the CTP were established in 2015 and 2016 to create a baseline data set and evaluate the longer-term effect of the GCS. Samples will be collected to analyze metals concentrations in benthic macroinvertebrates and benthic macroinvertebrate diversity and abundance. The results from this biological monitoring will be summarized in a monitoring report by USFWS.

1.4.1.2 The Upper Basin

1.4.1.2.1 Ninemile Creek Basin

Remedial action effectiveness monitoring has been ongoing in the Ninemile Creek Basin since 2012 to establish baseline conditions, help prioritize work and assess the effect of source area cleanups. The Area-wide Remedial Action Effectiveness Monitoring Plan for the Ninemile Creek Basin was finalized in 2021. As identified earlier in this workplan, cleanup of the Tamarack Complex and the combined Dayrock Complex/Lower EFNM Riparian Area will be completed in the fall of 2024. In 2025, surface water quality samples will be collected and analyzed two times per year during peak spring runoff and late summer base flow conditions. Results of site-specific and area-wide remedial action effectiveness monitoring will be summarized annually in a Ninemile Creek Basin monitoring report. Additional surface water quality samples will continue to be collected and analyzed by USGS four times per year during winter storm, peak spring runoff, late summer base flow, and late fall storm conditions. Results from this surface water monitoring will be summarized annually in a separate monitoring report by USGS.

1.4.1.2.2 Canyon Creek Basin

Remedial action effectiveness monitoring has been ongoing in the Canyon Creek Basin since 2015 to establish baseline conditions, help prioritize work and assess the effect of source area cleanups. The Area-wide Remedial Action Effectiveness Monitoring Plan for the Canyon Creek Basin was finalized in 2023. As identified earlier in this workplan, cleanup will continue at the Hecla Star Mine Complex in 2025 and is anticipated to be completed in the fall of 2026. The remainder of cleanups in the Canyon Creek Basin are being prioritized for future years. In 2025, surface water quality samples will be collected and analyzed two times per year during peak spring runoff and late summer base flow conditions. Results of Canyon Creek water monitoring will be summarized annually in a Canyon Creek Basin monitoring report. Additional surface water quality samples will continue to be collected and

analyzed by USGS four times per year during winter storm, peak spring runoff, late summer base flow, and late fall storm conditions. Results from this surface water monitoring will be summarized annually in a separate monitoring report by USGS.

1.4.1.2.3 South Fork Coeur d'Alene River Basin

Surface water monitoring was initiated in the South Fork Coeur d'Alene River Basin, upstream of the Box, in 2024 to establish baseline conditions and to help prioritize work. In 2025, surface water quality samples will be collected and analyzed two times per year during peak spring runoff and late summer base flow conditions. Results of this monitoring will be summarized annually in a South Fork Coeur d'Alene River Basin monitoring report.

Additional surface water quality samples will continue to be collected and analyzed by USGS at seven locations in the South Fork Coeur d'Alene River ranging from Mullan to Pinehurst. Depending on location, samples will be collected from two to twelve times per year during various conditions. Results from this surface water monitoring will be summarized annually in a separate monitoring report by USGS.

1.4.1.3 The Lower Basin

The goal of area-wide monitoring in the Lower Basin is to evaluate progress towards RAOs through assessment of biological conditions in fish and wildlife, and chemical conditions in surface water and suspended sediment after the implementation of remedial actions. The Lower Basin Area-wide Remedial Action Effectiveness Monitoring Plan is in progress and will continue to be drafted in 2025. Surface water quality samples will be collected and analyzed twelve times per year at seven locations in the Lower Basin targeted for high flow events and a fixed frequency approximately every 6 weeks. In 2023, EPA increased BEMP surface water monitoring up to 12 times per year at 7 of the 20 total USGS monitoring sites, in response to recommendations from the 2022 NAS report to better characterize conditions in the Lower Basin and inputs to CDA Lake. The increased sampling frequency represents 60% more samples and will continue in 2025.

1.4.1.4 Coeur d'Alene Lake

In response to other NAS recommendations regarding CDA River inputs to CDA Lake, EPA has funded the USGS for continuous monitoring of surrogate technologies to estimate concentrations of suspended sediment, lead, and phosphorus. This includes installation, monitoring, and model development at three established USGS monitoring locations in the Lower Basin: Cataldo, Rose Lake, and Harrison. This multi-year project was initiated in 2024, with installation at the three locations completed in 2024 and into 2025. The resulting models can be used to make real-time estimates of suspended sediment, lead, and phosphorus concentration at each site. Improved and higher-frequency estimates of sediment, lead, and phosphorus concentrations will provide more accurate estimates of contaminant loads within the Lower Basin and entering CDA Lake.

1.4.2 Biological Monitoring

Biological waterfowl research for wood ducks and tundra swans is anticipated to be completed in 2025 based on current funding, with potential future use under the BEMP. A multi-year applied research project has been occurring in the Lower Basin of the CDA River to develop biological monitoring tools to observe changes in lead exposure over time in tundra swan fecal samples and wood duck eggshells. Using analytical chemistry, molecular tools, stable isotopes, and movement data collected with this study, it is clear that lead exposure for tundra swans is site derived and that fecal samples can be used to

understand lead exposure as it relates to diet. The EPA project team and partners from IDFG, CDA Tribe, USGS, and USFWS work together toward development of non-invasive biomonitoring tools like these with the goal of helping EPA monitor remedy progress in the future.

1.5 OPERATION AND MAINTENANCE (O&M) RESPONSIBILITIES FOR REMEDIAL ACTIONS

Operation and maintenance (O&M) responsibilities for remedial actions and cleanup work across the Bunker Hill Superfund Site are as follows:

- Individual owners of properties remediated under the BPRP are responsible for O&M of the remedy and barriers on their properties in accordance with the ICP administered by the PHD.
- Operation and maintenance for public gravel and paved roads remediated in the gravel roads and paved roads remediation programs are the responsibility of the local governments with jurisdiction over those roads. Those jurisdictions include the East Side Highway District and Shoshone County, and the cities of Kellogg, Mullan, Pinehurst, Osburn, Smelterville, Wallace and Wardner.
- Operation and maintenance of projects constructed under the Remedy Protection Program are the responsibility of the governmental jurisdictions noted as the “Holder” of the Environmental Covenants executed for these projects and filed as riders to the deeds for the properties on which the work was performed. If no governmental jurisdiction is noted as the “Holder” the property owner holding title to the property involved is responsible.
- Generally, O&M for remedial work performed by the CDA Trust is the responsibility of the CDA Trust. However, there are exceptions such as with the roads and remedy protection projects. Other project examples where the CDA Trust will not be taking on long-term O&M include Gray’s Meadow where IDFG will take over O&M after the first five years.
- Operation and maintenance of the CTP and GCS in the Box are the responsibility of the State of Idaho for the life of the registry funds.
- Operation and maintenance of remedies performed by various parties under CERCLA authorities utilizing funding from appropriated funds and other sources placed in EPA’s Superfund Account are the responsibility of the State of Idaho.
- Operation and maintenance of remedies on Bureau of Land Management (BLM) and National Forest System Administered Lands within the Site and in the North Fork CDA River Drainage are the responsibility of the BLM and U.S. Department of Agriculture (USDA) Forest Service.

1.5.1 Central Treatment Plant/Central Impoundment Area

The IDEQ has been conducting operations and maintenance of the recently upgraded Central Treatment Plant/ Ground Water Collection (CTP/GCS) since Oct 21, 2021, using Hecla settlement monies that had been placed in a Registry Account Fund for the purposes of performing mine impacted water collection and treatment.

The CTP was upgraded to treat mine water, primarily from the Bunker Hill Mine, and groundwater from below the Central Impoundment Area (CIA). The upgrades allow for treatment to current effluent standards and reduction of the amount of solids called “high-density sludge” or “HDS” that are produced by the plant. Sludge storage has been transferred to the new sludge impoundment cells on the CIA as of June 2023. System optimization is ongoing at the plant to run as efficiently as possible and reduce operating costs while still meeting effluent discharge limits.

The GCS project includes an approximate 8,000-linear feet cutoff wall between the CIA and I-90, a series of extraction wells, and a conveyance pipeline to the CTP that extends along the north side and over the top of the CIA. Operation of the GCS has been continuous since startup. Groundwater monitoring is completed during high and low flow each year to build a database to determine remedial action effectiveness of the system.

Following treatment, the effluent (combined mine water and extracted groundwater) discharged from the CTP to the SFCDR must be in compliance with current water quality standards. The removal efficacy from the newly upgraded CTP is excellent, showing over 99% removal efficiency for zinc and lead. Phosphorus monitoring continues and is showing an average removal efficacy of 98%.

PART 2 – OTHER ACTIVITIES AND RESPONSIBILITIES

For Part 2, the scope of this work plan recognizes a number of work items that the BEIPC will be involved in and items of work needed to accommodate some of the recommendations of the 2005 and 2022 NAS studies; BEIPC and agency communications and public involvement activities; State of Washington activities; implementation of the CDA Lake Management Plan (LMP) by the State of Idaho and CDA Tribe and coordination with activities of the Natural Resource Trustees (Restoration Partnership).

The work plan includes the following work:

- DEQ Lake Management Activities
- CDA Tribe Lake Activities
- Flood Control, and Infrastructure Revitalization
- Communications and Public Involvement
- State of Washington Activities
- Coordination with the Restoration Partnership

2.1 IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY LAKE MANAGEMENT ACTIVITIES

The 2002 OU-3 ROD did not include CDA Lake in the Selected Remedy. Instead, it anticipated that the State, Tribe, federal agencies, and local governments would implement a Lake Management Plan (LMP) outside the CERCLA process using separate regulatory authorities. The updated LMP was approved in 2009 and implementation has been underway. The 2012 Upper Basin RODA indicated that a remedy for lakebed contamination is deferred contingent upon successful management through the LMP. The LMP's goal is to manage metals in contaminated lakebed sediments through reduction of nutrient inputs basin-wide from point and nonpoint sources.

The LMP includes actions related to lake water quality monitoring, coordination among basin stakeholders, education and outreach, and identification of funding sources for lake management efforts. Below are the objectives outlined in Section 3 of the LMP. These objectives are listed in the order they appear in the LMP, which does not necessarily reflect any prioritization.

- Improve Scientific Understanding of Lake Conditions through Monitoring, Modeling, and Special Studies.
- Establish and Strengthen Partnerships to Maximize Benefits of Actions under Existing Regulatory Frameworks.
- Finalize and Implement a Nutrient Reduction Action Plan.

- Increase Public Awareness of Lake Conditions and Influences on Water Quality.
- Establish funding mechanisms to support LMP goal, objectives, and strategies.

As of 2018, trends reports showed water quality triggers for lead, phosphorus, and dissolved oxygen were being exceeded. These triggers were developed by the CDA Tribe and DEQ as part of the 2009 LMP. As stated in the LMP, if trends show trigger levels being approached, a comprehensive review to guide future management actions should be conducted.

In response, the State of Idaho enlisted the National Academy of Sciences (NAS) to perform a third-party review of CDA Lake data to provide insight into nutrient, metal, and dissolved oxygen trends and offer recommendations for lake management data collection efforts moving forward. The review was sponsored by DEQ, Kootenai County, and EPA, with support from the CDA Tribe. The report was completed in late 2022. Observations and recommendations from the NAS report will help inform an appropriate response to undesirable water quality trends.

One recommendation from the NAS was the need to better coordinate data collection, utilization, and reporting throughout the basin. DEQ convened a Science Coordination Team (SCT) in 2023, including representatives from DEQ, the CDA Tribe, EPA, USGS, and the University of Idaho. The SCT will be instrumental in guiding scientific efforts related to management of CDA Lake and in working through the other recommendations included in the NAS report. In the meantime, DEQ staff continues to operate under the 2009 LMP. The following activities are planned for implementation in 2025.

Increase Scientific Understanding (LMP Objective 1):

- Conduct water quality monitoring in Coeur d’Alene Lake for metals, nutrients, and physical parameters.
- Coordinate with the SCT to review and implement NAS recommendations related to data collection and monitoring.

Nutrient Reduction and Implementation (LMP Objective 3):

- Work with funding recipients under the Leading Idaho (LI) Initiative to implement phosphorus reduction projects in Coeur d’Alene Basin:
 - South Fork Sewer District (SFSFD) tertiary wastewater treatment project – Pilot testing completed and groundbreaking in 2024. Construction will continue through 2025. City of Smelterville’s wastewater system will also be annexed into the SFSFD plant.
 - Santa-Fernwood wastewater treatment upgrade – Land purchased in 2024, and plans are under development for improvements and land application of treated wastewater. Planning and implementation will continue through 2025.
 - East Side Highway District roadway stormwater improvements – Marmot Trail and Sunnyside Road work completed in 2024. Final reports expected 2025.
 - City of Coeur d’Alene Stormwater Outfall Volume reduction projects – 3 of 4 outfalls completed. Fourth outfall (Third Street) will be completed in 2025.
 - City of Kellogg Stormwater Improvements – 3 outfalls completed and vac truck purchased. Two outfalls and assessment of remaining stormwater system planned for 2025.
 - Kellogg School District Stormwater Goes to School – construction completed 2024. Final report expected 2025.
 - Kootenai-Shoshone Soil and Water Conservation District nonpoint source projects:

- Schlagel Draw – Beaver Dam Analogs completed 2023. Further erosion control/runoff improvements completed 2024. Final report expected 2025.
 - Riverside Tracks (North Fork CDA River) bank stabilization project completed 2024.
 - Mica Creek Floodplain Restoration project – Final stabilization completed fall 2024. Final report expected 2025.
 - Wolf Lodge Creek erosion control/bank stabilization - on-the-ground work completion expected by end of 2024. Final report due 2025.
- Continue to analyze lake tributary monitoring data collected 2019-2022 to fill data gaps identified in the basin-wide nutrient inventory report.
 - Share relevant data gap monitoring results with stakeholders to aid in decision making.
 - Coordinate with CDA Tribe staff to facilitate the Tribe’s monitoring of nutrient loads in southern lake tributaries, the St. Maries River, and the St. Joe River through the LI Initiative.
 - Continue to collaborate on water quality improvement efforts in the CDA Basin with the CDA Lake Advisory Committee, Restoration Partnership, AVISTA Corporation, the Natural Resource Conservation Service (NRCS), the Soil & Water Conservation Districts, Counties, Cities, and others.
 - Identify opportunities to align nutrient reduction and remedial efforts in the Lower Basin.
 - Continue implementing aquatic plant surveys within the northern lake.

Increase Public Awareness (LMP Objective 4):

- Continue to partner with the CDA Tribe, University of Idaho (UI) and the Idaho Water Resources Research Institute (IWRRI), CDA Regional Chamber of Commerce, Kootenai County, Kootenai Environmental Alliance, BEIPC and other stakeholders to share information with the basin-wide community through the Our Gem Coeur d’Alene Lake Collaborative.
- Continue to participate in The Confluence Project to support Basin high schools by providing workshops, field trips, and guidance for teachers and students involved in local watershed science.
- Partner with UI/IWRRI, CDA Tribe, BEIPC, and area high schools and environmental organizations to host the annual Youth Water Summit, the culminating event of The Confluence Project
- Partner with UI/IWRRI to support the Bay Watchers program to provide volunteer monitoring opportunities and land management information and resources to residents around CDA Lake.
- Support the Local Gems program to recognize businesses and organizations that are taking action to protect basin water quality.
- Continue to coordinate with Alta Science and Engineering on the Leading Idaho-funded project to evaluate potential risk of metals exposure in recreational areas around CDA Lake and the Spokane River and communicate progress and findings to the community.

Continued coordination with BEIPC forums will maximize opportunities for information exchange and advice for all the parties that participate in the BEIPC activities. Future coordination with the BEIPC recognizes that DEQ retains their respective decision-making authorities under CERCLA and the Clean Water Act (CWA) with regards to implementation.

2.2 COEUR D'ALENE TRIBE LAKE ACTIVITIES

As noted, the LMP was approved in 2009. However, after collecting and analyzing water quality data under an EPA approved Quality Assurance Program Plan (QAAP), the CDA Tribe retracted their support of the LMP in 2019 as an adopting government. The CDA Tribe continues to be concerned about increased pressure on the landscape that may lead to declining water quality, as well as a myriad of other concerns prompted by the Tribe's retraction of support of the LMP. The CDA Tribe detailed their concerns about LMP effectiveness in a written critique asking EPA to formally evaluate how they will use their CERCLA authorities to address the legacy of mining pollution in CDA Lake. In 2025, the CDA Tribe will conduct the following activities outside of the LMP process:

- Continue to improve scientific understanding of lake conditions through monitoring and modeling of metals, nutrients, and physical parameters.
- Tribal staff will continue to use the AEM3D and WRTDS (USGS) models with data collected from the Lake, meteorological stations, and USGS gage stations.
- Tribal staff will continue to implement a Eurasian Watermilfoil Treatment Program as well as monitor aquatic plant communities in the southern lake.
- Tribal staff will continue to work with EPA to identify potential opportunities to align nutrient reduction and remedial efforts in the Lower Basin through modeling and coordination. Tribal staff will also continue to participate in the Lower Basin Project Focus Team to assist EPA and the CDA Work Trust on identifying locations for Lower Basin Waste Consolidation Areas.
- Tribal staff will continue to partner with the University of Idaho Water Resource Research Institute (IWRRI), PHD, CDA Regional Chamber of Commerce, BEIPC, interested citizens, and DEQ to support the Basin high school students through The Confluence Project (a hands on 'place based' learning program addressing watershed science-based solutions), and the Our Gem Coeur d'Alene Lake Collaborative.
- Tribal staff will continue to support The Local Gems program for local businesses through 2025. This program recognizes businesses and organizations that are taking action to protect basin water quality.
- The Tribe will work with DEQ to implement the St. Joe River Nutrient and Watershed Assessment Project that was approved for American Rescue Plan Act (ARPA) funding through the Coeur d'Alene Lake Advisory Council.
- The Tribe will continue to request that EPA develops criteria and conducts a review/ evaluation of their decision to "defer" a remedy for the CDA Lake.

2.3 FLOOD CONTROL AND INFRASTRUCTURE REVITALIZATION

Under a 2018 MOA, participating governments of the BEIPC and the Upper Basin jurisdictions (Local Flood Group) will continue to work on potential flooding issues on the SFCDR. The Local Flood Group and the BEIPC will continue to work with the U.S. Army Corps of Engineers (COE) and Federal Emergency Management Agency (FEMA) to implement an update to the 2009 Flood Inundation Maps based on the current flood zone analysis by the COE on a portion of the river from Elizabeth Park to the Theater Bridge in Smeltonville. Based on the new flood maps it is anticipated that updated analysis of the need for certified levees in the SFCDR will also be initiated in the planning period. The working group will also continue to support the City of Pinehurst's request for COE assistance in performing a similar flood zone analysis in Pine Creek.

2.4 COMMUNICATIONS AND PUBLIC INVOLVEMENT

During 2025, the BEIPC Assistant to the Executive Director and agency Community Involvement Coordinators (CICs) will work together to carry out public involvement, communication, and education related to BEIPC and agency activities. Agency CICs may include staff from EPA, DEQ, and PHD.

The Office of the BEIPC Executive Director, the CCC and agency CICs continue to facilitate the public involvement process in the Basin. The BEIPC Executive Director and/or Assistant, PF Team Chairpersons, and CCC Chairperson may request CIC support for public outreach regarding BEIPC activities. The CICs may in turn request BEIPC support for their agencies' public involvement activities.

Following is a partial list of community engagement activities and coordination opportunities for 2025:

- As required, the BEIPC will hold quarterly meetings open to the public. The CCC will hold meetings open to members and the public as issues or opportunities arise or discussions are warranted.
- The BEIPC will coordinate its annual tour in August of the Basin cleanup with publicity support from the CICs and technical support from agency project managers. The tour is open to everyone.
- The BEIPC/CCC and agency CICs will continue to sponsor activities such as open houses, workshops, training, or public meetings. The BEIPC Assistant and CICs may assist each other to coordinate public education and outreach associated with these events.
- The BEIPC/CCC will lead the development, production and distribution of BEIPC related items and the agency CICs will lead the development, production and distribution of agency items. The BEIPC/CCC and agency CICs will create and process flyers, public notices, and postings to their respective websites of their meetings and other information. The BEIPC/CCC will also create, process, and distribute their meeting announcements, agendas, and their meeting summary notes and other information by e-mail to CCC members and interested parties. The BEIPC Assistant will update and maintain the BEIPC website.
- CICs will continue to support the CCC meetings, support BEIPC communications, and explore ways to maximize the CCC's value to interested local people. Upon request, CICs may support BEIPC with suggestions for publicizing BEIPC events and meetings, participate in distributing meeting announcements, posting to social media, or by proposing and/or helping to implement communications strategies.
- Upon request, the BEIPC Executive Director will make presentations to public groups and participate in educational forums such as school district Science, Technology, Engineering and Math (STEM) fairs, etc. Assistance from agency CICs may be requested for these efforts.
- The BEIPC and agency CICs will help organize and participate in a joint booth for public outreach/education at the North Idaho Fair.
- The EPA will publish BEIPC/CCC information upon request in its triannual Basin Bulletin and on the CDA Basin Facebook page.
- CICs work directly with EPA, DEQ, PHD, and BEIPC project managers as needed to tailor communications outreach and/or education for specific projects under the programs listed in this work plan.
- CICs will report their outreach activities at the quarterly Basin Commission meetings, and activities are often reported and discussed at CCC meetings.
- The BEIPC Executive Director will participate in Regional Outreach and Educational Committees such as the Our Gem Collaborative and the Confluence Project.

2.5 STATE OF WASHINGTON ACTIVITIES

The Washington State Department of Ecology will continue to monitor the status of previous cleanups along the Spokane River. Site visits will be performed, along with visual documentation of cap performance and sediment accumulation. As part of the performance measures, exposed beach sediment sampling will be conducted to measure contaminant concentrations pre- and post-freshet. Samples that are collected will be analyzed by XRF as well as with laboratory analysis to confirm field screening results.

2.6 RESTORATION PARTNERSHIP

The Restoration Partnership is a consortium of the CDA Natural Resource Trustees, comprising representatives of agencies/governments who have management and stewardship responsibilities for fish, wildlife, and other natural resources in the Basin. They are the U.S. Department of Agriculture (USDA), represented by the U.S. Forest Service (USFS); the U.S. Department of the Interior, represented by the U.S. Fish and Wildlife Service (USFWS) and Bureau of Land Management (BLM); the Coeur d'Alene Tribe (Tribe); and the State of Idaho, represented by the Idaho Department of Environmental Quality (DEQ) and Idaho Department of Fish and Game (IDFG).

The following natural resource restoration projects will continue to be implemented in 2025:

- Management of a native willow plant nursery adjacent to Hepton Lake on the St. Joe River sponsored by the Tribe.
- Wetlands enhancement at Hepton Lake on the St. Joe River sponsored by the Tribe.
- Projects for the replacement of injured/lost tribal cultural services (culturally significant plants) in the Hangman Creek Watershed sponsored by the Tribe.
- Coeur d'Alene Lake monitoring and modeling sponsored by the Tribe.
- Wetlands restoration implementation/construction at Gray's Meadow along the Lower CDA by IDFG. This is a joint project with EPA conducting the remediation and the Restoration Partnership conducting the natural resource restoration sponsored by IDFG.
- Ongoing operations and maintenance for the Schlepp Agricultural to Wetlands Conversion Project with the landowner sponsored by the USFWS.
- North Fork Coeur d'Alene River Conservation Easement sponsored by IDFG.
- Cougar Bay Preserve Wetlands Enhancement and Stream restoration with BLM as the primary sponsor with assistance from the USFWS.
- Lake Creek Watershed Restoration sponsored by the CDA Tribe.
- Prichard Creek Phase 2: Restoration Planning with the Idaho Forest Group and Trout Unlimited and sponsored by DEQ.
- Assessing Fish Passage at Stream Crossings in the Coeur d'Alene Basin sponsored by IDFG.
- Beaver Creek habitat restoration to improve the hydrology and habitat function of tributary streams to serve as cold water refugia for westslope cutthroat trout, sponsored by the USFS.
- Little North Fork Coeur d'Alene River Watershed Enhancements, sponsored by the USFS.
- Enhancing design to restore fish passage and ecosystem function in Miesen Creek along the St. Joe River, sponsored by IDFG.
- Gleason Wetland Remediation and Restoration Planning, sponsored by USFWS.
- Benewah Creek stream and wetland restoration to mitigate for drought, sponsored by the Tribe.
- Big Creek fish passage and barrier removal, sponsored by the Tribe, USFS, and BLM.
- Lake Creek corridor protection and enhancement through a Conservation Easement, sponsored by the Tribe.
- Upper St. Joe River bull trout habitat enhancement, sponsored by the USFS.

- In the federal fiscal year 2025, the Trustees will be implementing the projects above and prepare for Project Idea solicitation in 2026.

In 2025, there will be ongoing coordination with EPA and the CDA Trust on remedy and restoration activities and participation in BEIPC and associated groups and committees. The Trustees will continue to work with the Public Affairs Officers and Communications staff among the Trustees on an Outreach Plan for future restoration project solicitation from the public.

For more information, refer to www.restorationpartnership.org.