

# BEIPC Coeur d'Alene Basin Five-year (2023-2027) Work Plan

## INTRODUCTION

This plan for calendar years 2023-2027 covers environmental cleanup and improvement activities in the Coeur d'Alene (CDA) Basin (the Basin) planned by the Basin Environmental Improvement Project Commission (BEIPC) and cooperating agencies and governments in accordance with responsibilities as stated in the Memorandum of Agreement establishing the BEIPC. This plan has been prepared by the Executive Director with review and approval by the Technical Leadership Group (TLG) and review by the Citizen Coordinating Council (CCC) and is based on their recommendations for activities and work to be performed in the 5-year period, 2023-2027. Annual work plans will address specific actions from this five-year plan. This proposed five-year 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 U.S. Environmental Protection Agency (EPA) and State of Idaho or work performed by responsible parties.

Part 2 - Other Activities and Responsibilities

Part 1 includes work to implement the 2002 Interim Record of Decision (ROD) for Operable Unit 3 (OU-3) and the 2012 Upper Basin Interim ROD Amendment (RODA) for OU-2 and 3.

Part 2 includes work and responsibilities concerning management of Coeur d'Alene Lake by the Coeur d'Alene Tribe (CDA Tribe) and 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 National Academy of Sciences (NAS) Study and requests from the government agencies, citizens, and communities of the Basin.

## PART 1 - ENVIRONMENTAL CLEANUP WORK

For Part 1, the scope of the proposed five-year work plan corresponds generally to the level of federal and state funding and the funding sources anticipated and work expected to be performed by the Coeur d'Alene Custodial Work Trust (CDA Trust) over the five-year period, 2023-2027. The 2023-2027 Work Plan proposes a cleanup approach and a listing of priority activities for the 5-year planning period. The proposal includes the following work:

- Human Health directed activities including Residential and Community Property and Private Drinking Water Supply Remediation (Basin Property Remediation Program, BPRP), and the Recreation Use Activities Program.
- Lead Health Intervention Program (LHIP)
- Repository and Waste Consolidation 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 Upper Basin Interim RODA.
- Remedial actions and/or Pilot Projects in the Lower Basin and risk reduction activities associated with recreational areas.
- Basin Environmental Monitoring (BEMP)
- Operation and Maintenance Responsibilities for Remedial Actions

PROPOSED ACTIVITY	SCOPE	OBJECTIVE	* LEAD AGENCY
<p>Human Health directed activities including the Basin Property Remediation (BPRP), and Recreational Use Activities programs.</p>	<p>Complete remediation of any identified residential and community property sites and private drinking water sources as they are identified during the 5-year planning period. Address human health risks associated with basin wide recreational activities. Provide educational resources and health advisories to manage the potential for metals exposure through the consumption of fish. Incorporate human health related activities in the environmental cleanup projects as needed.</p>	<p>Remediate properties as they are identified and sampled and accepted for work. Most properties remaining to be sampled and/or cleaned-up will be properties whose owners have withheld access or properties whose owners have not responded to numerous contact attempts. For these reasons, it is anticipated that most of the remaining remediation will occur after property transfer or sales occur. Remediation of high-risk properties will continue as agencies and the CDA Trust become aware of them. Implement actions to address human health risks from exposure to lead and other metals that can occur during recreational activities throughout the Upper and Lower Basin.</p>	<p>IDEQ EPA CDA TRIBE PHD</p>

PROPOSED ACTIVITY	SCOPE	OBJECTIVE	* LEAD AGENCY
<p>Lead Health Intervention Program (LHIP)</p>	<p>The Panhandle Health District (PHD) administers the LHIP which provides a variety of services to prevent elevated blood lead levels in children and others living or recreating within the Bunker Hill Superfund site. These services include education and awareness about the risks associated with lead contamination and annual voluntary blood lead screenings. The purpose of these blood lead screenings is to identify children with elevated blood lead levels and provide in-home follow-up services from a public health professional to identify sources of and ways to reduce lead exposures. Information from blood lead screenings provides the PHD with valuable information on the effectiveness of the LHIP, as well as other site cleanup programs such as interior house dust monitoring, yard remediations, and the Institutional Controls Program (ICP). The goal of each of these programs is to prevent lead exposures that could result in elevated blood levels. Community and area-wide results are made available to the public.</p>	<p>The Centers for Disease Control has established a reference value for blood lead levels in young children at 3.5 micrograms per deciliter of lead in blood. The reference is not health based and is not a regulatory standard. Stats independently determine action thresholds based on state laws, regulations, and resource availability. In response to this, PHD uses the 3.5 micrograms per deciliter as the trigger for follow up. Blood lead screening will continue during this 5-year period.</p>	<p>IDEQ PHD</p>

PROPOSED ACTIVITY	SCOPE	OBJECTIVE	* LEAD AGENCY
<p>Repository and Waste Consolidation Area (WCA) Development and Management</p>	<p>Repository and WCA activities center on these objectives: (1) operations at Big Creek Repository (BCR); (2) operations at the Big Creek Repository Annex (BCRA), East Mission Flats Repository (EMFR), Lower Burke Canyon Repository (LBCR), and Page Repository; (3) continued development and use of the East Fork Ninemile Canyon WCA for disposal of remedial action waste materials from the Ninemile drainage; (4) continued development and use of the Canyon Complex WCA and Quarry for remedial actions in Canyon Creek drainage; the siting and development of WCAs in the Lower Basin for implementation of remedial actions there.</p>	<p>Continue operation at BCR, BCRA and LBCR for Upper Basin remediation and the Institutional Controls Program (ICP). Continue operation at EMFR for remediation and ICP in the Lower Basin. Continue operation and expansion at Page to accommodate ICP wastes in OU-1 and 2 (the Box). Continue to utilize the WCAs in East Fork Ninemile and Canyon Creek for specific site remediation. Continue implementation of the Waste Management Strategy within the Area of Contamination. Evaluate repository and WCA cover design criteria and alternatives and develop cover plans which will include the final designs and monitoring plans. Consider the feasibility of future use options in the cap design phase for repositories and WCAs. Continue to explore potential sites and development plans for WCA sites in the Lower Basin.</p>	<p>IDEQ EPA PHD</p>

PROPOSED ACTIVITY	SCOPE	OBJECTIVE	* LEAD AGENCY
Upper Basin Remedies	Implement the source control and water treatment remedies, ecological cleanup projects, and related human health activities identified in the Upper Basin Interim RODA along with any accompanying coordination on natural resource restoration actions. Operate the groundwater collection system and upgraded Central Treatment Plant (CTP) in the Box to accommodate mine-impacted water from OU-2. Source control actions in the Ninemile and Canyon Creek watersheds will continue to be the focus for the 5-year period.	The Upper Basin RODA primarily includes source control remedial actions to address contaminated surface water, soil, sediments, and source materials. Upper Basin and Box remedies are prioritized in order to reduce human health exposures and reduce the contribution of contaminants to downstream areas including the Lower Basin. Those cleanup actions will be coordinated with natural resource restoration actions. The inherent adaptive management process will help ensure human health exposure is prioritized and that the most effective actions are taken in Ninemile and Canyon Creek watersheds which are the sources for the most significantly impacted water quality outside of the Box.	EPA IDEQ CDA Trust with Restoration Partnership (RP)

PROPOSED ACTIVITY	SCOPE	OBJECTIVE	* LEAD AGENCY
Lower Basin Remedies	<p>Evaluate and prioritize potential ecological and source control remedies noted in the OU-3 Interim ROD. Data sources to support this include Remedial Investigation/Feasibility Study (RI/FS) data, Clean Water Act (CWA) projects, and current data collection activities. Conduct pilot projects to address contaminated riverbed source areas and implement, as appropriate, remedies that are captured in decision documents and that have a low potential for recontamination and/or that may inform future remedy decisions. Characterize and prioritize additional riverbank segments for stabilization. Capture any such actions in annual work plans. Ensure that remedies are coordinated with natural resource restoration activities and the EPA's management plan. Coordinate as needed with the governmental structure that manages the Trail of the Coeur d'Alene's remedy. Identify recreation areas for remediation or develop substitute clean areas along the South Fork and main stem CDA River. Identify and implement programs to educate recreation site users regarding human health risks along the river corridor and how to minimize those risks.</p>	<p>Addressing risks to human health will remain a top priority through additional property cleanups, recreation site remedial actions, and education. Utilize information and recommendations from the Enhanced Conceptual Site Model (ECSM) for the Lower Basin, recent data collection efforts, and the sediment transport model to inform management plans (Lower Basin Prioritization Plan and Lower Basin Adaptive Management Plan) that target areas for active remediation over the next 3 to 5 years, evaluate the effects of remedial technologies, and identify areas for natural recovery. Utilize the Lower Basin Project Focus Team (PFT) process to evaluate multiple objectives for source control, cleanup of channel habitat, and protecting human health. Examine Lower Basin remedies previously selected in the 2002 OU- 3 Interim ROD as well as pilot projects to test supplemental actions that are not explicitly identified by the ROD with the goal of addressing riverbed mine waste source areas and reducing the downstream transport of lead and other mine waste contaminants. A ROD Amendment or Explanation of Significant Differences (ESD) may be necessary if additional actions are deemed necessary to address riverbed source areas.</p>	EPA with State and Federal agencies, CDA Tribe, and RP

PROPOSED ACTIVITY	SCOPE	OBJECTIVE	* LEAD AGENCY
<p>Lower Basin Remedies (continued)</p>		<p>Plan and implement habitat area design and remediation (including treatability studies for soil capping and amendments) and riverbed pilot projects.</p> <p>Continue to implement the Grays Meadow Remediation and Restoration Project in cooperation with the Idaho Department of Fish and Game (IDFG) and the Restoration Partnership. Evaluate and further characterize additional wetland properties for increasing feeding habitat for waterfowl. Begin implementation of a riverbed management plan to address contaminants mobilized in the Dudley Reach and begin planning actions for the entire river system. Update the inventory of recreational beaches and banks to identify those beaches or banks that may be considered for remediation during the immediate 5-year period and beyond. Adaptive management will be a key component of any implementation actions and management plans.</p>	<p>EPA with State and Federal agencies, CDA Tribe, and RP.</p>

PROPOSED ACTIVITY	SCOPE	OBJECTIVE	* LEAD AGENCY
Basin Environmental Monitoring	<p>Continue to implement remedy effectiveness and long-term monitoring. Analytical results from site surface water, sediment, and groundwater sampling through 2015 are available through WQX, EPA's Water Quality Exchange; data management for the Bunker Hill Site is transitioning to Scribe.net, an EPA data management system that will be administered by Bunker Hill stakeholders including EPA, IDEQ, and the CDA Trust with support from the EPA Environmental Response Team.</p>	<p>Continue implementing the CDA Basin environmental monitoring plan (BEMP) under updated, optimized management plan produced in 2020. The goal of the updated BEMP is to provide a framework and metrics for remedy-specific effectiveness monitoring, area-wide monitoring, and long-term/site wide monitoring to evaluate the progress of cleanup actions, and for adjusting the monitoring program to inform ongoing and upcoming near-term cleanup actions.</p>	EPA with IDEQ, USFWS, USGS and CDA Tribe.
	<p>*Note with planning and implementation of remedial activities, lead agencies will coordinate with federal, state, tribal and local agencies as appropriate.</p>		



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

Operation and maintenance responsibilities for remedial actions and cleanup work on the Site are as follows:

- Individual owners of properties remediated under the BPRP are responsible for operation and maintenance of the remedy and barriers on their properties in accordance with the Institutional Controls Program (ICP) administered by the Panhandle Health District (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, operation and maintenance for remedial work performed by the Coeur d’Alene Custodial Work Trust (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 Idaho Department of Fish & Game will take over O&M after the first five years.
- Operation and maintenance of the Central Treatment Plant (CTP) and Ground Water Collection System (GWCS) in Kellogg are the responsibility of the State of Idaho for the life of the registry funds from the Hecla settlement.
- 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.

## **PART 2 – OTHER ACTIVITIES AND RESPONSIBILITIES**

For Part 2, the scope of the five-year 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 NAS study; it also includes implementation of the Lake Management Plan by the State of Idaho and CDA Tribe, and coordination with the activities of the Natural Resource Trustees. The plan includes the following work:

- Lake Management Activities
- Flood Control, and Infrastructure Revitalization
- Communications and Public Involvement
- Coordinate with the Restoration Partnership

## **2.1 LAKE MANAGEMENT ACTIVITIES**

The OU-3 Interim ROD did not include CDA Lake in the Selected Remedy. The OU-3 Interim ROD anticipated that the State, Tribe, federal agencies, and local governments would implement a Lake Management Plan (LMP) outside the CERCLA (Superfund) process using separate regulatory authorities. The updated LMP was approved in 2009 and implementation has been underway.

The Upper Basin Interim RODA indicated that a remedy for lakebed contamination has been deferred contingent on 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.

As of the Summer of 2018, the CDA Tribe asserted that the LMP is inadequate, in itself, as an effective tool to protecting water quality in the Lake due to water quality triggers for lead, phosphorus and dissolved oxygen, in particular, being exceeded. These triggers were developed by the CDA Tribe and IDEQ in the 2009 LMP. As stated in the LMP, if trends show these trigger levels are approached, this will prompt a comprehensive review to guide future management actions.

In response to trends showing some trigger levels being approached (and some exceeded), the State of Idaho enlisted the NAS to perform a third-party review of data to provide insight into nutrient, metal, and dissolved oxygen trends and offer recommendations in data collection to better inform lake management efforts moving forward. The review was sponsored by IDEQ, Kootenai County, and EPA, with support from the CDA Tribe. Observations and recommendations from the 2022 National Academy of Sciences (NAS) report will be used to help inform an appropriate response to undesirable water quality trends. IDEQ staff continues to operate under the LMP as discussions with the CDA Tribe and EPA continue. This work plan includes activities planned for implementation by IDEQ and CDA Tribal staff.

Objectives of the LMP (as outlined in Section 3) include the following:

1. Improve Scientific Understanding of Lake Conditions through Monitoring, Modeling, and Special Studies.
2. Establish and Strengthen Partnerships to Maximize Benefits of Actions under Existing Regulatory Frameworks.
3. Develop and Implement a Nutrient Reduction Action Plan.
4. Increase Public Awareness of Lake Conditions and Influences on Water Quality.
5. Establish Funding Mechanisms to Support the LMP Goal, Objectives, and Strategies.

Below are activities envisioned for implementation throughout the 5-year planning period: These activities are categorized broadly under objectives 1, 3, and 4 from the LMP; Objectives 2 and 5 are intertwined throughout all objectives.

**Table 2-1 Summary of Coeur d'Alene Lake Management Activities Proposed for Implementation for 2023-2027**

<b>Objective 1. Increase scientific understanding</b>			
<b>Proposed Activity</b>	<b>Scope</b>	<b>Additional Objective(s)</b>	<b>Lead Participants</b>
Continue core lake water quality monitoring	Continue monitoring throughout CDA Lake for metals, nutrients, physical parameters, and biological communities.	Facilitates Objective 5	IDEQ CDA Tribe Support from EPA
Evaluate Third-Party Review	Analyze and utilize the NAS third-party review of lake data, coordinate on future data collection priorities, and strategize on the path forward.	Objectives 2, 3, 4	IDEQ CDA Tribe EPA
Science reporting	NAS report will be presented to the BEIPC and throughout the community.	Objective 2	IDEQ CDA Tribe
<b>Objective 3. Develop and implement a nutrient reduction action plan</b>			
<b>Proposed Activity</b>	<b>Scope</b>	<b>Additional Objective(s)</b>	<b>Lead Participants</b>
Basin-wide nutrient inventory	Nutrient monitoring data from lake tributaries collected through the end of 2022 will be analyzed and reported. Results will be shared with stakeholders to inform decision-making	Objectives 1, 2, and 5	IDEQ
Bank erosion inventory	Bank erosion inventories will be updated as appropriate.		IDEQ AVISTA SWCDs

<p>Implementation coordination</p>	<p>Continue to collaborate with the Coeur d’Alene Lake Advisory Committee (CLAC), Restoration Partnership (RP), AVISTA Corporation, the Natural Resource Conservation Service (NRCS), the Soil &amp; Water Conservation Districts (SWCDs), Counties, Cities, and others to identify water quality improvement projects</p>	<p>Objectives 2 and 5</p>	<p>IDEQ CLAC RP CDA Tribe AVISTA NRCS SWCDs</p>
<p>Aquatic Invasive Species</p>	<p>Continue implementing aquatic plant surveys. Identification of invasive species will be reported to AVISTA Corporation and Idaho State Department of Agriculture.</p>	<p>Objective 1</p>	<p>IDEQ CDA Tribe AVISTA ISDA Kootenai County</p>
<p>Remedy implementation support</p>	<p>Continue to participate in the Lower Basin PFT and TLG and support implementing projects identified in the 2002 OU-3 Interim ROD.</p>	<p>Objective 2</p>	<p>IDEQ CDA Tribe EPA BEIPC</p>

<b>Objective 4. Increase public awareness of lake conditions and influences on water quality</b>			
<b>Proposed Activity</b>	<b>Scope</b>	<b>Additional Objective(s)</b>	<b>Lead Participants</b>
LakeASyst	LakeASyst (Lakeshore Assessment System) materials will continue to be utilized.	Objectives 2, 3 and 4	IDEQ CDA Tribe U of I
Demonstration sites	Improvement projects will be utilized to demonstrate effective strategies and encourage further implementation. Utilize Leading Idaho projects for public outreach opportunities.	Objectives 2 and 3	IDEQ CDA Tribe SWCDs Stakeholders
Our Gem Coeur d'Alene Lake Collaborative	Participate in the Our Gem CDA Lake Collaborative education subgroup to share information and get feedback from the basin-wide community	Objectives 2 and 4	IDEQ CDA Tribe Stakeholders
K-12 Education	Continue to work with the CDA Tribe, University of Idaho, and area educators to incorporate water quality education into classroom programming.	Objective 2	IDEQ CDA Tribe U of I K-12 schools
General Outreach	Continue to participate in relevant education and outreach opportunities as time and resources allow	Objective 2	IDEQ CDA Tribe U of I
Local Gems	Continue to support the Local Gems Recognition and Awards program in Collaboration with the CDA Regional Chamber of Commerce.	Objectives 2 and 3	IDEQ CDA Tribe CDA Chamber

Coordination with BEIPC forums will maximize opportunities for information exchange and advice working under the BEIPC Memorandum of Agreement (MOA) and work plans. Future coordination with the BEIPC recognizes that IDEQ and the CDA Tribe retain their respective decision-making authorities under CERCLA and the Clean Water Act (CWA).

## **2.2 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 South fork Coeur d'Alene River (SFC DAR). During this 5-year planning period, 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 SFC DAR 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. Although much of the needed work outlined in the 2009 Drainage Control Infrastructure Revitalization Plan (DCIRP) is now complete, the BEIPC Executive Director will continue to assist Upper Basin communities and utilities in pursuing funding to implement the remainder of the DCIRP. The Executive Director will also coordinate with the local infrastructure jurisdictions on an Operation and Maintenance plan for existing drainage structures in the Upper Basin.

### **2.3 COMMUNICATIONS AND PUBLIC INVOLVEMENT**

During the 5-year planning period, the agencies will continue to address issues and facilitate public involvement and education in BEIPC activities. The agencies will also facilitate communication between the Basin community, the BEIPC, the Superfund cleanup, and natural resource restoration implementing agencies. The CCC will continue to be the focus organization to assist in implementing this process.

### **2.4 RESTORATION PARTNERSHIP**

The CERCLA natural resource trustees in the Coeur d'Alene Basin are the United States (represented by the USDA Forest Service, U.S. Fish and Wildlife Service, and U.S. Bureau of Land Management), the Coeur d'Alene Tribe, and the State of Idaho (represented by the Idaho Department of Fish and Game and Idaho Department of Environmental Quality). A series of lawsuits followed the Superfund designation in the Coeur d'Alene Basin for response costs and natural resource damages. Natural resources injured by contamination included but are not limited to; surface and groundwater, fish, birds, riparian resources, macroinvertebrates and phytoplankton.

Under CERCLA, settlements were reached with all parties. Following the final 2011 settlement agreement, the Trustees entered into a MOA to address the planning and implementation of restoration for natural resources and associated services injured, destroyed or lost as a result of the release of mining-related hazardous substances into the Coeur d'Alene Basin.

As specified in CERCLA the funds will be dedicated to projects that restore, rehabilitate, replace, and/or acquire the equivalent of the injured natural resources. The Trustees' goal is to restore the health, productivity, and diversity of injured natural resources and the services they provide in the Restoration Planning Area.

The Trustees will continue to implement their Restoration Plan which is a programmatic guide for restoration of injured natural resources in the Restoration Planning Area and those activities will be coordinated with remediation actions. During the 5-year planning period, the Partnership will continue to coordinate with the BEIPC and provide updates on restoration planning efforts and implementation of restoration projects that will be solicited by the Trustees and from interested parties. The Partnership will continue to coordinate closely with EPA and the CDA Trust to integrate restoration planning and implementation with remediation projects. See annual BEIPC Work Plans for more details or refer to [www.restorationpartnership.org](http://www.restorationpartnership.org).