



Basin Environmental Improvement Project Commission Accomplishment Report 2024

BEIPC Overview

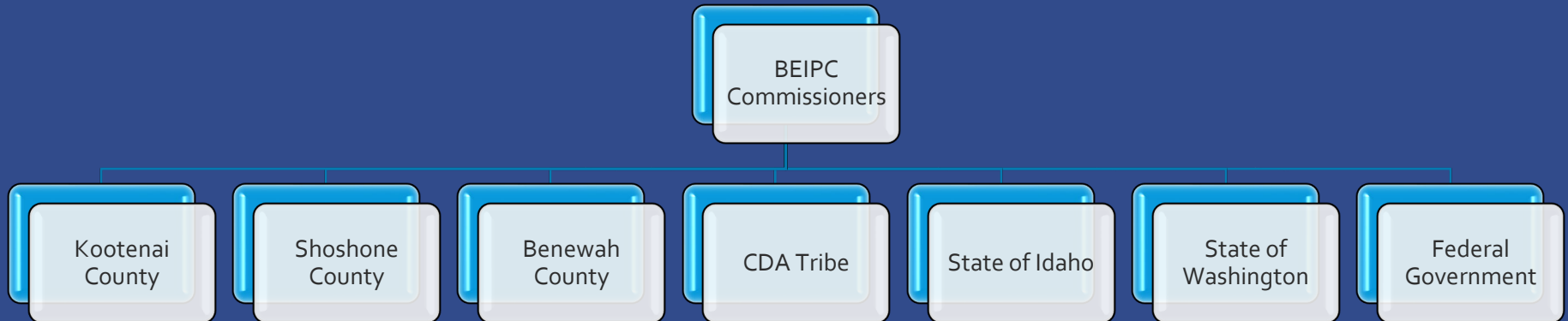
Legislation and the MOA creating the BEIPC authorized appointment of a seven-member board:

Name	Title	Representing
Leslie Duncan (Chair) Alternate: Marc Eberlein	Kootenai County Commissioner	Kootenai County
Brook Beeler (Vice Chair) Alternate: Karl Rains	Regional Director, Washington Dept. of Ecology	State of Washington
Jess Byrne (Secretary/Treasurer) Alternate: Michael McCurdy	Director, Idaho Department of Environmental Quality	State of Idaho
Philip Lampert	Benewah County Commissioner	Benewah County
Dave Dose Alternate: Melissa Cowles	Shoshone County Commissioner	Shoshone County
Caj Matheson Alternate: Scott Fields	Tribal Council Member	Coeur d'Alene Tribe
Casey Sixkiller Alternate: Calvin Terada	Regional Administrator EPA, Region 10	Federal Government

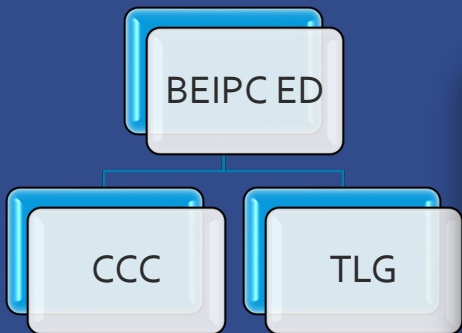
The Executive Director of the Basin Commission is Sharon Bosley

BEIPC Program Management

The BEIPC operates coordinating the activities of federal, tribal, state and local government agencies implementing the ROD for OU-3 and the Upper Basin RODA for human health and ecological remediation activities.



The CCC serves as the main avenue for public input into the BEIPC activities. Two CCC meetings were held in 2024. One meeting was held in Coeur d’Alene in April and another was held in Kellogg in June.



The TLG is the primary technical advisory group. There was no TLG in 2024. A recent TLG meeting was held on February 20th, 2025.

2024 Accomplishment Report

Public Outreach & Citizen Involvement

- BEIPC
- EPA
- IDEQ & PHD

Environmental Cleanup Work

- Lead Health Intervention Program (LHIP)
- Basin Property Remediation Program including Private Drinking Water Supply
- Contaminated Waste Disposal and Management
- Upper Basin Remedies
- Lower Basin Remedies
- State of Washington Projects
- Recreational Sites
- Basin Environmental Monitoring

Other Activities and Responsibilities

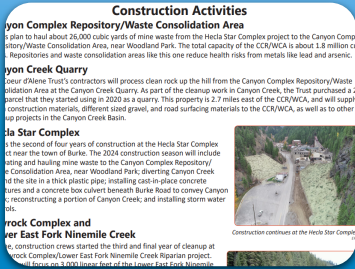
- Lake Management Activities
- Restoration Partnership

Public Outreach & Citizen Involvement



BEIPC Community Involvement Activities

- Updated website, shared important information with partners and attended outreach events.
- Participated in regional stakeholder meetings providing updates on Basin work.
- The BEIPC launched *The Dirt*, a collaborative effort focused on enhancing public awareness of contamination issues, promote health and keep community informed.



EPA Community Involvement Activities

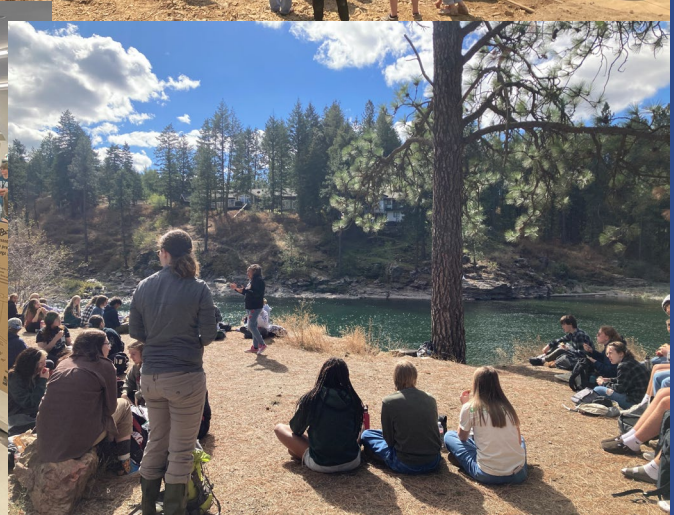
- Produced documents providing updates on work, sampling results, Basin tour, restoration work, Basin Bulletin and much more.
- Held an event to commemorate 50 years of cleanup successes at the Bunker Hill Superfund Site.
- Hosted the third Superfund Job Training Initiative (SJTI) Program for twelve people who after graduation were able to find stable jobs in the community.



IDEQ and Panhandle Health District Community Involvement Activities

- Conducted annual blood lead screening. **100 additional participants this year!!**
- Hosted booths at local events throughout the year.
- Attended local meetings and provided trainings as needed.

Public Outreach & Citizen Involvement



Lead Health Intervention Program

Screening of children for elevated blood lead levels has been occurring annually since 1996.

Year	2019	2020*	2021*	2022*	2023	2024
Number of Children	84	4	19	40	94	129
Minimum (µg/dL)	<1.9	<1.9	<1	<1.0	1.0	<1.9
Maximum (µg/dL)	14	6	7	30	7	14.8
Average (µg/dL)	2.5	3.5	1.9	4.2	2.0	2.4
Geometric Mean (µg/dL)	1.9	3.1	1.5	2.2	1.8	2.0



Basin Property Remediation Program

3,236 properties in "Box" have been remediated

3,935 properties in "Basin" have been remediated



Basin Activities

Maintained 6 reverse osmosis private water drinking filtration systems

Collected 33 soil samples on 1 residential properties

Collected 9 drinking water samples on 3 properties

Waste Disposal and Management

Built to accommodate disposal of contaminated waste and are engineered to reliably contain materials and prevent contaminants to be released in concentrations that exceed state/federal standards

General Repository Management

Stormwater Management

- Protect against erosion.
- Slopes are stabilized by track walking.
- Waste area is crowned in the center to encourage drainage to runoff collection areas.
- BCR, EMF, and Page are inspected weekly throughout winter months and haul routes are maintained for snow removal as needed.

Water Quality Monitoring

- Semiannual groundwater monitoring is conducted at all repositories except LBCR.
- Visual surface water monitoring is conducted at LBCR throughout the year.
- Groundwater and surface water monitoring results indicate that disposal activities have not impacted water quality near the repositories.

Waste Disposal and Management *Repositories*

Lower Burke Canyon

- Received 8,500 CY waste
- 1,019,525 CY remaining capacity

Canyon Complex

- Received 30,000 CY waste
- 1,200,000 CY remaining capacity

Big Creek

- Received 2,000 CY waste
- 81,022 CY remaining capacity

Big Creek Annex

- Received 350 CY waste
- 168,346 CY remaining capacity

Page

- Received 23,000 CY of waste
- 445,000 CY remaining capacity

East Mission Flats

- Received 1,500 CY waste
- 147,360 CY remaining capacity



Waste Disposal and Management

Waste Consolidation Areas

East Fork Ninemile

- Received 200,000 CY of waste
- Total waste received is 1,305,000 CY
- Quarry produced 350,000 CY rock and 375,000 CY soil
- Final cover in 2025/26



Lower Basin WCA

EPA is giving full consideration to the analyses performed by the PFT before deciding on the site for the Lower Basin WCA

Upper Basin Remedies

The Box

▶ Central Impoundment Area

- Old sludge pond reached capacity in 2023
- Construction contract awarded to cover sludge pond in 2025

▶ Pinehurst Elementary

- Design initiated to promote proper drainage, repave playground and add turf

▶ East Smeltonville Flats

- Excavated 4,000 CY contaminated soil and installed fencing to restrict access.

▶ Government Gulch

- Installed four monitoring wells to determine if selected groundwater remedy would be cost effective

▶ CTP & GCS

- Over 1 billion gallons of water treated
 - 51% mine water & 48% groundwater
- Reactor 2 had impellor replaced
- CTP removal efficiency
 - 99% zinc, 98% cadmium & zinc



Upper Basin Remedies

East Fork Ninemile

East Fork Ninemile

- Priority cleanup actions in the EFNM basin complete!
- Dayrock
 - 91,000 CY contaminated waste removed
 - 2,360 feet of stream channel were re-constructed
- Tamarack
 - 108,000 CY contaminated waste removed
 - 1,780 feet of tributary channel was re-constructed



Upper Basin Remedies

Canyon Creek

Canyon Creek

- **Star Complex**
 - 23,000 CY contaminated waste removed
 - 1,100 feet of concrete box culvert was installed
 - 180 feet of stream channel was re-constructed
- **Characterization initiated**
 - Gorge Gulch-upper
 - Canyon Silver (Formosa) – lower
 - Standard-Mammoth Millsite – lower
- **Design initiated**
 - Standard-Mammoth Reach – upper



Lower Basin Remedies

Gray's Meadow

- Cultural resource monitoring
- Localized dewatering
- Constructed 10 water control structures
- Built 20 loafing islands and 5 miles of water control berms
- Excavated 430,000 CY



Lead Bioaccessibility

- Contaminated soils treated using jarosite-based techniques
- Measuring the effects of oxidizing and reducing conditions in seasonal wetland sediments

River Channel Data Collection

- Riverbank erosion pin monitoring at 63 locations
- Cataldo Riverbank 165.9 – 167.1 Pilot Project Design Investigation Complete



The Lower Basin Prioritization Plan was completed

Other Projects

State of Washington

- Continued to monitor Spokane River

Recreational Sites Programs

- Box
 - 80 rec sites reviewed
 - Collected samples from 7 sites
- Basin
 - Sampled 2 rec sites in Lower Basin
 - Access controls installed at 2 sites
 - 7 signs installed



Basin Environmental Monitoring

BEMP programmatic Plan

Goal: Verify remedy effectiveness and long-term monitoring of Basin wide actions

Site-specific Remedial Action effectiveness and performance monitoring

- EX: Dayrock

Area-wide monitoring

- EX: Ninemile Basin

Site-wide long-term monitoring

- Entire BHSS



Technical staff from DEQ, USGS, USFWS, the Coeur d'Alene Tribe, the Coeur d'Alene Trust, and EPA meets annually to share and review basin-wide environmental monitoring results

Basin Environmental Monitoring

Surface Water

20 sites sampled

- 4 sites in OU-2 sampled twice
- 16 sites in OU-3 were sampled from 4-12 times
- 3 sites samples 2 extra time at GCS

Samples analyzed for:

- Nutrients
- Trace metals and ions
- Suspended sediments
- 32 samples analyzed mercury
- 16 samples analyzed to calculate Idaho copper criteria

Groundwater

Monitoring groundwater collection system at the CIA

- 91 sites sampled in May-high flow
 - 59 monitoring wells, 3 piezometers & 9 extraction wells
- 95 sites sampled in October-base flow
 - 72 monitoring wells, 3 piezometers & 9 extraction wells
- Water level monitoring with 72 in situ transducers

Samples analyzed for:

- Metals
- Phosphorus
- Other parameters

Biological Resources

Annual waterfowl survey in Lower Basin from early February to late April

Monitored wood ducks and tundra swans

Provides tools for monitoring ecological health and remedial action effectiveness

IDEQ Lake Management Activities

Science Core Program

Filled 3 vacant positions
CDA Lake core monitoring
Aquatic plant survey
Coordinate with U of I on wake/wave study
Draft conceptual lake complete
Science Coordination Team setting priorities
Risk-based evaluation of recreational areas field work complete
Worked with the Tribe to develop the Lake Coring Study

Education & Outreach

Provided LMP updates to community
Participated in TCP, Our Gem Collaborative & Local Gem
Provided Leading Idaho updates
Coordinated with U of I Bay Watchers
Participated in SEEP

Nutrient Inventory/Reduction

Analyzed water quality for 11 tributaries/10 smaller drainages
Sampled phosphorus during high flow events on the CDA river
Worked with the Tribe to fill tributary data gaps in the southern end of the lake
Implemented nutrient reducing Leading Idaho projects
Worked with Kootenai-Shoshone Water Conservation District on nonpoint source nutrient reduction projects.

Partnerships

Science Coordination Team: Alta Science, IDEQ, CDA Tribe, USGS, EPA & U of I
Lower Basin project prioritization with Avista Corp
CDA Chamber NRC, Our Gem, SEEP, 4-C, others
Facilitated /participated in BAG/WAG meetings
Coordinated with EPA sample collection in the Lower Basin
Worked with BEIPC

Coeur d'Alene Tribe Lake Activities

Science Core Program

CDA Lake monitoring & modeling
Milfoil control with bottom barrier and mechanical harvester treatments
Removed 188,279 lbs wet mass of aquatic vegetation

Education & Outreach

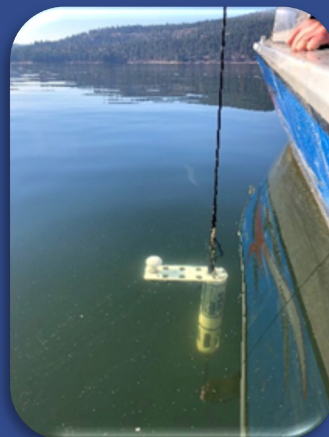
Provided Lake updates to community
Participated in TCP, Our Gem Collaborative & Local Gem
Coordinated with U of I Bay Watchers

Lake and River Water Quality Sampling

Continued to sample CDA river at Harrison, St Joe River, Chatcolet Lake, and CDA Lake
Analyzed WQ data and continued calibration of AEM₃D model for Lake

Partnerships

CDA Chamber NRC, Our Gem, 4-C, others
BAG & WAG meetings
Worked with BEIPC





Restoration Partnership

USDA, USFS, USFWS, BLM, CDA Tribe, IDFG and IDEQ

Mission: Implement a restoration plan to help restore the health, productivity, and diversity of injured natural resources from releases of mine waste contamination and the services they provide in the Coeur d'Alene Basin for present and future generations.

Supported O & M at
Schlepp Ag to Wetland
Conversion project

Coordinated quarterly
reporting and site visits to
projects

Implemented projects





WWW.BASINCOMMISSION.COM

Questions?