



Ambush Rock Restoration – Updates from 2024

Genny Hoyle and Karen
Schumacher

Kootenai Tribe of Idaho
Environmental Department

EPA Grant - Columbia River Basin Restoration Funding Assistance Program

- [2023 Tribal Grants to Reduce Toxics in the Columbia River Basin | US EPA](#)
- <https://www.epa.gov/columbiariver/2023-tribal-grants-reduce-toxics-columbia-river-basin>
- Project 100% funded by EPA
- Ambush Rock one of eight basin-wide projects.

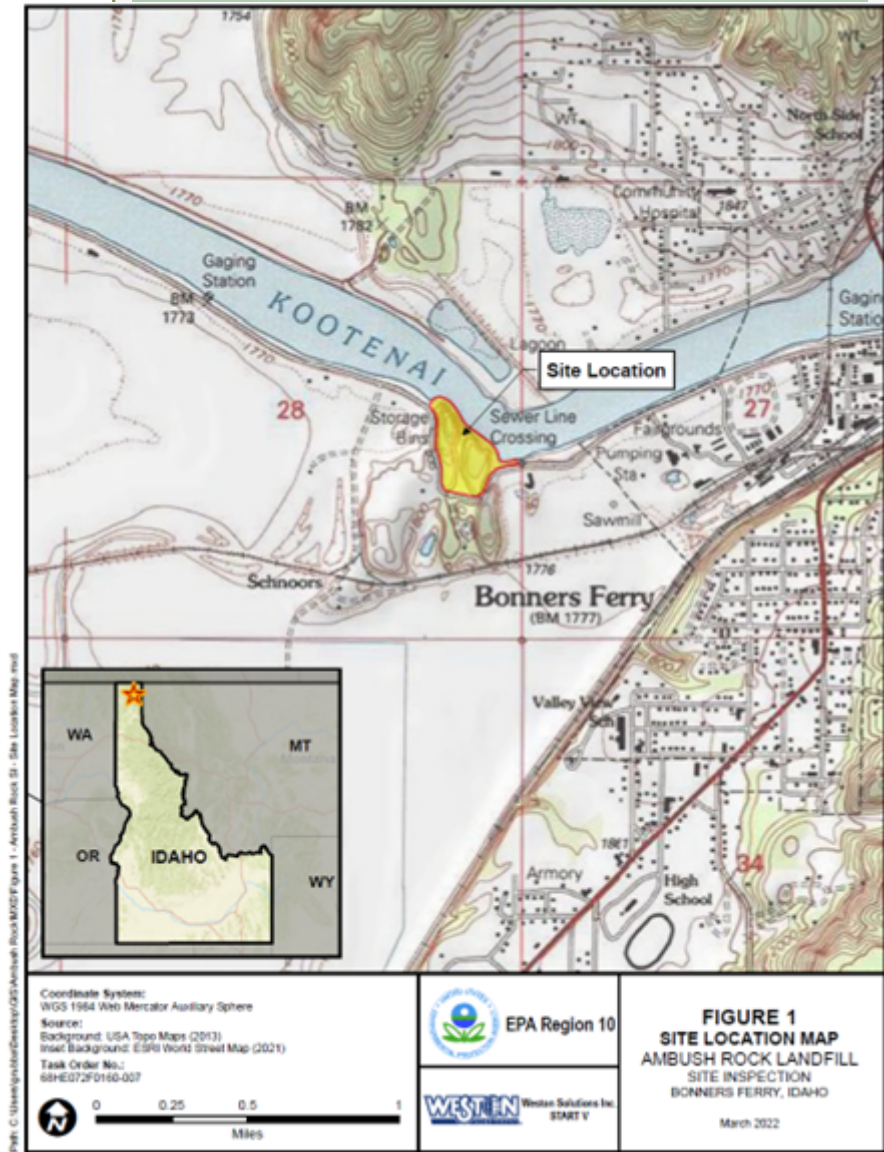
Acknowledgements



- US EPA Staff – Lauren McDaid and the Columbia River Basin Restoration Funding Assistance Program
- Goodfellow Bros. (<https://goodfellowbros.com>)
- GEUM Environmental Consulting (<https://geumconsulting.com/>)
- Northwest Tree and Reclamation
- Boundary Search and Rescue Dive Team

Photo credit: Shawn Young

Ambush Rock





History

- Used as a dump starting around 1910
- Unpermitted landfill until 1973
- Illegal dumping continued until the mid-1990's
- Extent and types of waste material disposed are unknown
- Site inspection performed in 2022 to determine if CERCLA (Superfund) is warranted

Current History

- Boundary County deeded the 10-acre property back to the Tribe in 1993
- “as is” – no remediation
- Various site assessments by the EPA
- 2022 Site Inspection Report



EPA 2022 Site Inspection Report

- Characterization of waste
- Off-site migration?
- Estimate waste load

SITE ASSESSMENT TECHNICAL SUPPORT

*Ambush Rock Landfill
Site Inspection Report
Bonners Ferry, Idaho*

*Task Order No.: 68HE0720F0160
Subtask Order No.: 68HE0720F0160-007*



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March 2022

What was the Problem?

Photo No. 7	Date: 05/05/2021
Photo Coordinates	
Lat	48.700383
Long	-116.324325
Direction Photo Taken: North	
Description: Open drum waste, central area	




Photo No. 8	Date: 05/05/2021
Photo Coordinates	
Lat	48.693656
Long	-116.333825
Direction Photo Taken: Southwest	
Description: Buried and exposed household / mixed waste, central area	




Photo No. 9	Date: 05/05/2021
Photo Coordinates	
Lat	48.693653
Long	-116.334381
Direction Photo Taken: Southeast	
Description: Buried and exposed concrete waste, West Rock area	



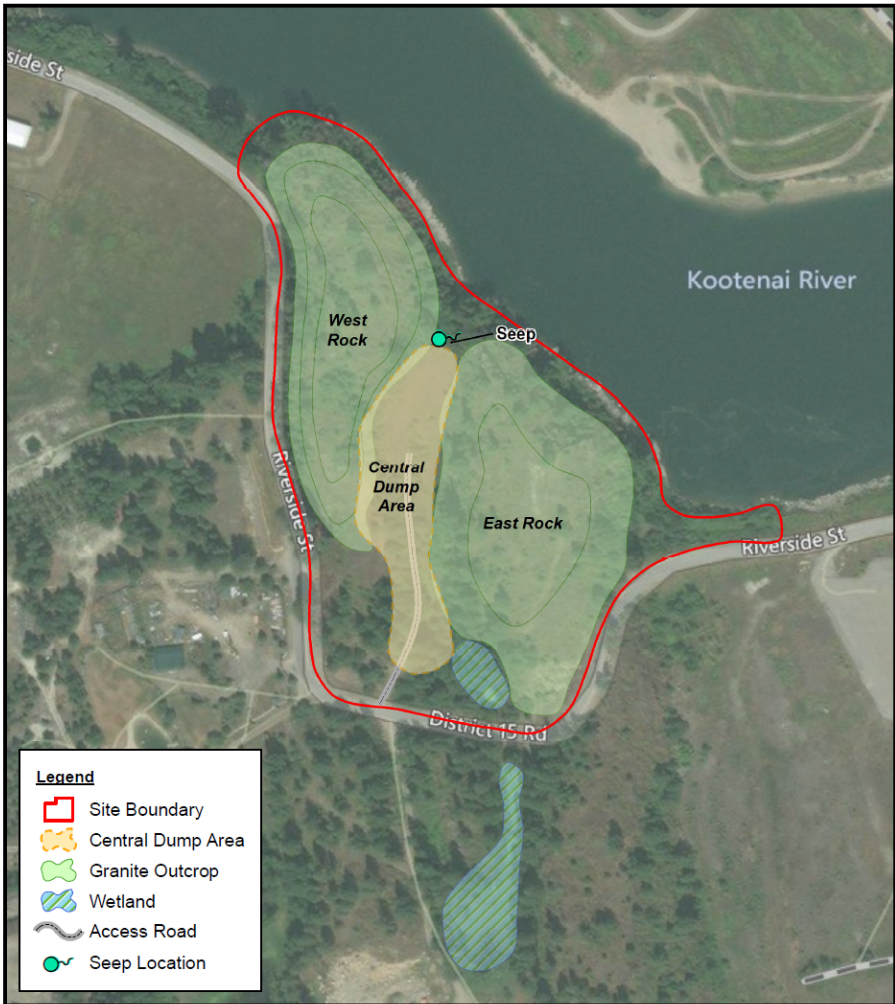


Photo No. 10	Date: 05/05/2021
Photo Coordinates	
Lat	48.693967
Long	-116.333983
Direction Photo Taken: West	
Description: Buried and exposed concrete waste, West Rock area	





EPA Region 10

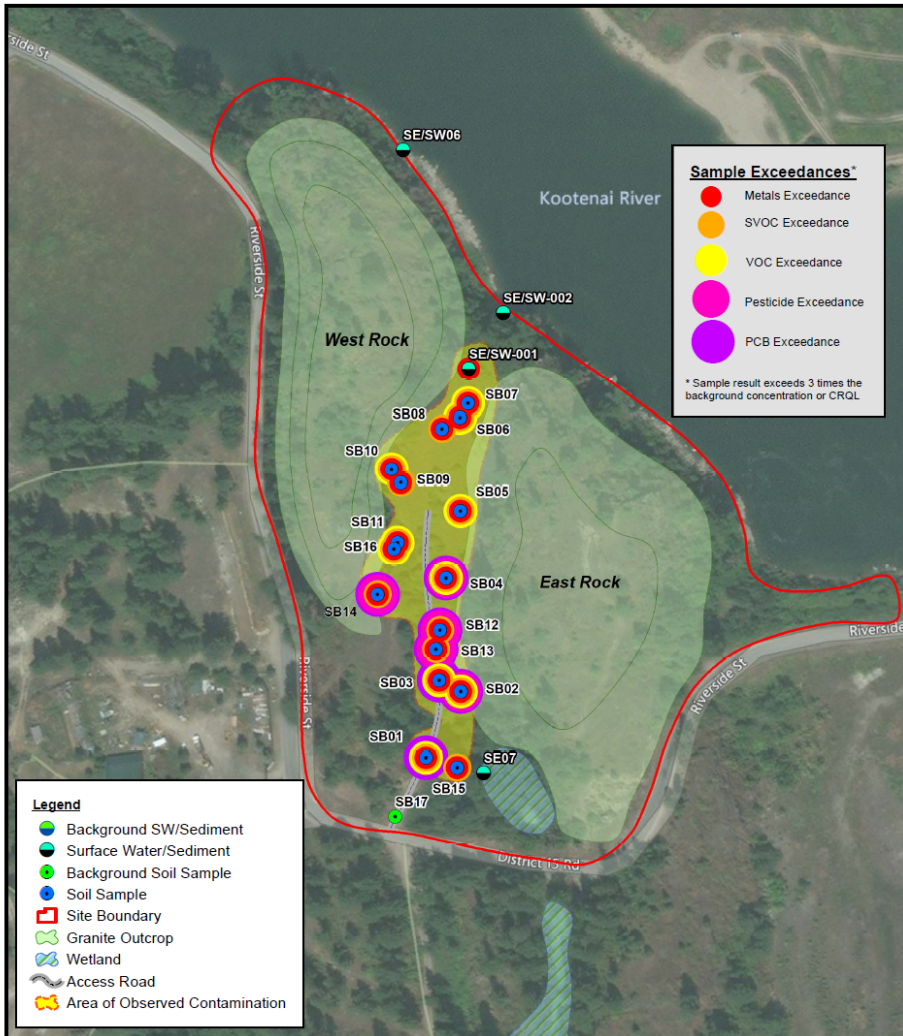
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FIGURE 2
SITE LAYOUT
AMBUSH ROCK LANDFILL
SITE INSPECTION
BONNERS FERRY, IDAHO
March 2022

Core Dump Area

- @2 acres of heavily impacted land
- Nested between two rock outcroppings
- Estimated 23000 cubic yards of waste

Path: C:\Users\grubal\Desktop\GIS\Ambush Rock\MXD\Figure 2 - Ambush Rock, St - Site Layout.mxd



Sample Exceedances*

- Metals Exceedance
- SVOC Exceedance
- VOC Exceedance
- Pesticide Exceedance
- PCB Exceedance

* Sample result exceeds 3 times the background concentration or CRQL

Legend

- Background SW/Sediment
- Surface Water/Sediment
- Background Soil Sample
- Soil Sample
- Site Boundary
- ▨ Granite Outcrop
- ▨ Wetland
- Access Road
- ⊕ Area of Observed Contamination

Notes:
 PCB = polychlorinated biphenyl
 SVOC = semi volatile organic compound
 VOC = volatile organic compound

Coordinate System:
 WGS 1984 Web Mercator Auxiliary Sphere
 Source: Background: Bing Maps Hybrid (2022)
 Task Order No.: 68HE072FD160-007

EPA Region 10

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FIGURE 4
SAMPLE EXCEEDANCES
 AMBUSH ROCK LANDFILL
 SITE INSPECTION
 BONNERS FERRY, IDAHO

March 2022

This Year's Most Powerful Fly Spray
IS LIQUID DDT KILL-COAT
***The 2-WAY SPRAY!**

*** YES SIR 2-WAY BECAUSE**

- * 3 MONTHS KILLING WHEN SPRAYED ON SURFACES!
- * INSTANT KILLING WHEN SPRAYED ON INSECTS!

QUICK KILLING! When you spray DDT Kill-Coat all insects it kills at once.

3 MONTHS LASTING ACTION
 When you spray a coat of DDT Kill-Coat on walls, window sills, wire screens, carpet edges, etc., it leaves a "killing-coat" of 99% DDE. This "killing-coat" remains effective for 3 months. No insect can walk on it and live.

KILLS ALL HOUSEHOLD INSECT PESTS! Used either way DDT Kill-Coat kills Flies, Silverfish, Mosquitoes, Meths, Fleas, Ants, etc.

Liquid D.D.T.
KILL-COAT

3 OZ. CAN / \$
 3 OZ. CAN COMPLETE WITH PUMP TO FIT 38

THIS YEAR'S MOST POWERFUL FLY SPRAY

6/24/68 1/1 1/64

What's There?

- PCB's
- VOC's
- Pesticides (DDT, Aroclor, etc.)
- Heavy metals

NO FLIES ON ME



THANKS TO DDT

Black Flag, long preferred by housewives everywhere for quickly killing flies and mosquitoes on contact, now does *double duty*. The amazing DDT ingredient now in Black Flag stays on walls, floors, doorways to *keep on* killing flies for weeks! To use wonderful DDT *safely and effectively* in your home use only a well-known and reliable insecticide—ask for *Black Flag*.

5% DDT
In Black Flag Insect Spray

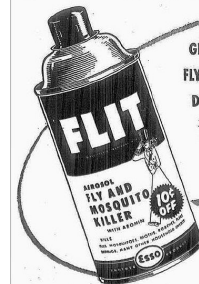
10% DDT
In Black Flag Powder



Ask for it by **NAME**



**SAVE 10¢
ON NEW FLIT.**



GET NEW **FLIT**
FLY AND MOSQUITO KILLER
DURING THIS SPECIAL OFFER!

Pick up the specially labeled Flit Aerosol at your nearby store today—get 10¢ off right at the cash register. Stocks are limited, so hurry!

New supercharged Flit kills more flying insects than many so-called "all purpose" insecticides. Because Flit is tailor-made for a fast, sure kill. Its new, pleasant fragrance makes it nice to use.



ANOTHER DEPENDABLE **ESSO** PRODUCT

"Quick, Henry, the FLIT!"

NEW!

KILLS
ROACHES · ANTS
WATERBUGS
SILVERFISH

contains

CHLORDANE

The most effective and sure way to eliminate household insect pests. Just spot spray infested baseboards, sinks, crevices, etc., deposits invisible film, insects die after contact. Economical, easy to use. Amazing results. *As reported in Reader's Digest.

only **89¢**

FAMOUS JO INSECTICIDES SINCE 1874

Why We care?

- Ambush Rock is adjacent to The Kootenai River
- Critical spawning habitat for ESA-listed Kootenai River white sturgeon
- Some toxics exceed criteria for human health
- Concerns of off-site migration
- Environmental justice



EPA Grant Funding

- 2022 application package for an EPA grant
- Columbia River Basin Toxics Reduction focus
 - small site, non-CERCLA clean-up
- EPA to provide funds
- 3-Year process

EPA Columbia River Basin Restoration Program

Discussion on Upcoming Tribal
Government Request for
Applications

Columbia River Basin Tribal Government
Webinars
Sept 21 and Sept 27, 2022



Project Overview

- Remove vegetation from impacted area
- Remove large metal and wood debris



Soil Restoration

- Clay-based cap layer
– inhibits percolation through the site
- Soil layer to improve survivability of native plants, shrubs, and trees
- Mitigate human health hazards



June 17 – Clean-up Begins











Debris Removal







Wetland Preservation





Clean-up Statistics

- 31.4 tons of debris removed and recycled
- Metal taken to the scrap yard
- 14,367 cubic yards of cap and cover material
- Clean-up ran from 6/17 through 7/24
- **Fun Fact: Due to the era of the dump, plastic was not present**



Soil Augmentation





Before and After



Road and Trail Construction



Main Gate Installation

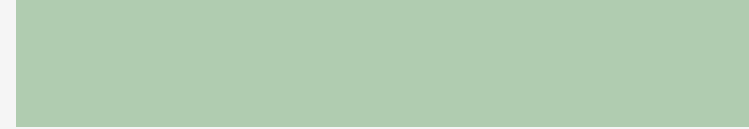


Northside Gate Installation



Shoreline Clean-up - July 3

- Boundary Search and Rescue Dive Team
– Dave Kramer, Rich Stephens, Caleb Watts, Tony Jeppesen, Travis Stolley
- Volunteered to rig cars/practice using new equipment
- Two jetboats
- GBI staff and KTOI staff





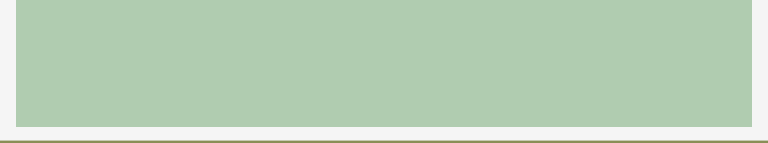












Revegetation

- Native plants – resilient to drought
- Browse protection
- Scheduled watering and maintenance





- 10 fence enclosures
- 40 individual browse protector cages



- 181 native trees and shrubs
- Seeded 1.08 acres with reclamation seed mix
- Installation of erosion control measures





Native Plants

Scientific Name	Common Name	Container Size	Number
<i>Asclepias speciosa</i>	Showy milkweed	7 cubic inch	10
		1 gallon	1
<i>Echinacea angustifolia</i>	Narrowleaf purple coneflower	7 cubic inch	10
		1 gallon	1
<i>Geranium viscosissimum</i>	Sticky purple geranium	1 gallon	1
<i>Geum triflorum</i>	Old man's whiskers	1 gallon	1
<i>Monarda fistulosa</i>	Wild bergamot	7 cubic inch	10
		1 gallon	1
<i>Penstemon eriantherus</i>	Fuzzytongue penstemon	7 cubic inch	10
<i>Rudbeckia occidentalis</i>	Western coneflower	7 cubic inch	10
		1 gallon	1
TOTAL			56

Current Project Status

- Second planting in the spring of 2025
- Seed with native pollinator plants
- Work with NWT to maintain and water the plantings
- Early summer open house for the public
TBD





The Future....

- Years to fully recover
- Limit access until vegetation established

Questions?

