Bonneville Dam Superfund Acronym Guide

June 2026

COLUMBIA RIVERKEEPER®

Background

Given the highly technical nature of the Bonneville Dam Superfund site, much of the written information about the cleanup is full of acronyms. We decided to help explain what is up with all that jargon. So we created the Bonneville Dam Superfund Acronym Guide.

This guide contains over 40 acronyms, the meanings, and an explanation of how they relate to the Superfund site at Bonneville Dam. We hope this guide helps lower some of the technical barriers that prevent people who are directly affected from accessing clear information about the cleanup.

People deserve to catch healthy fish they can feed their families. Cleaning up the Army Corps' mess will be complex, but it is possible. We hope the Acronym Guide is a helpful tool in the campaign to clean up the Superfund site at Bonneville Dam.

Summary of Acronyms

ATSDR: Agency for Toxic Substances and Disease Registry

AOPC: Areas of Potential Concern

BI: Bradford Island

BMPs: Best Management Practices

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

CIP: Community Involvement Plan

DEQ: Department of Environmental Quality (Oregon)

DOD: Department of Defense

DOH: Department of Health (Washington)

ECOLOGY or ECY: Washington Department of Ecology

EE/CA: Engineering Evaluation/Cost Analysis

EPA: Environmental Protection Agency

FFA: Federal Facility Agreement

FS: Feasibility Study

LTM: Long-Term Management

MIS: Multi-Increment Sampling

MOU: Memorandum of Understanding

NAPL: Non-Aqueous Phase Liquid

NPL: National Priorities List

NTCRA: Non-Time-Critical Removal Action

OHA: Oregon Health Authority

Summary of Acronyms

O&M: Operations and Maintenance

OU: Operable Unit

PA: Preliminary Assessment

PAHs: Polycyclic Aromatic Hydrocarbons

PBDEs: Polybrominated Diphenyl Ethers

PCBs: Polychlorinated Biphenyls

PFAS: Per- and Polyfluoroalkyl Substances

RA: Remedial Action

RAB: Restoration Advisory Board

RCRA: Resource Conservation and Recovery Act

RI: Remedial Investigation

RD: Remedial Design

ROD: Record of Decision

SI: Site Inspection

SMP: Site Management Plan

SRI: Supplemental Remedial Investigation

TAG: Technical Assistance Grant

USACE: United States Army Corps of Engineers (also: “the Corps”)

USGS: United States Geological Survey

YN: Yakama Nation

VOCs: Volatile Organic Compounds

Acronyms: In Detail

ATSDR: Agency for Toxic Substances and Disease Registry
The Agency for Toxic Substances and Disease Registry is a federal public health agency focused on hazardous waste issues and toxic exposures. Once a cleanup site is placed on the National Priorities List, the Superfund law requires ATSDR to assess the presence and nature of health hazards to communities living near Superfund sites, help prevent or reduce harmful exposures, and expand the knowledge base about the health effects that result from exposure to hazardous substances. In states that have specific grants from ATSDR, those states do site assessment work on ATSDR's behalf and following ATSDR's guidance. Oregon is one of those states, and the Oregon Health Authority is the agency doing the site assessment work for ATSDR at the Bradford Island Superfund Site.
https://www.atsdr.cdc.gov/pha-guidance/understanding_the_pha_process/mandates.html

AOPC: Areas of Potential Concern
Areas of Potential Concern are locations that have been identified as potentially having contamination present that require cleanup action. Currently the four AOPC on the eastern tip of Bradford Island include the landfill, sandblast area, pistol range and bulb slope.

BI: Bradford Island
Bradford Island is located within the Bonneville Dam Complex, where hazardous substance releases from the Bonneville Dam Complex were first reported.

BMPs: Best Management Practices
Best management practices, in the context of a Superfund site, refer to strategies and practices designed to reduce the environmental footprint of cleanups. These practices are used to reduce contaminated stormwater runoff, energy consumption, air pollutants, water usage, and waste generation during the remediation and cleanup of contaminated sites.
https://www.epa.gov/superfund/superfund-green-remediation

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
The Comprehensive Environmental Response, Compensation, and Liability Act (also commonly known as Superfund) is a federal law that was enacted in 1980. The major emphasis of CERCLA is on the cleanup of inactive hazardous waste sites, and the liability for cleanup costs on operators, generators, and transporters of hazardous substances, and on current and former owners of facilities where hazardous substances were disposed.
https://www.epa.gov/enforcement/comprehensive-environmental-response-compensation-and-liability-act-cercla-and-federal

Acronyms: In Detail

CIP: Community Involvement Plan
A Community Involvement Plan (CIP) is a site-specific strategy to enable meaningful community involvement throughout the Superfund cleanup process. CIPs specify EPA-planned community involvement activities to address community needs, concerns, and expectations that are identified through community interviews and other means.
https://semspub.epa.gov/work/11/174739.pdf

COC: Contaminants of Concern
Contaminants of Concern are chemicals identified during in-depth site studies (Remedial Investigation/Feasibility Study) that need to be addressed by a cleanup action because they pose a potential threat to human health or the environment.
https://www.epa.gov/superfund/superfund-glossary#c

DEQ: Department of Environmental Quality (Oregon)
The Oregon Department of Environmental Quality is a state regulatory agency responsible for protecting and restoring Oregon's air, land, and water quality, with a commitment to advancing environmental protection and justice for all communities and ecosystems in Oregon, now and for future generations. DEQ is responsible for the cleanup, water quality, and other environmental protection issues on the Oregon portion of this site.
https://www.oregon.gov/deq/about-us/Pages/default.aspx

DOD: Department of Defense
The Department of Defense is the agency of the federal government that oversees the United States Army Corps of Engineers (USACE). USACE is both the liable party responsible for the pollution at the site and the lead agency for overseeing cleanup of the site.

DOH: Department of Health (Washington)
The Department of Health is the Washington state agency that works with others to protect and improve the health of all people in Washington state, and fights to defend the public's health from threats in a rapidly evolving world. DOH's programs and services are implemented in collaboration with local health departments and state, federal, and private partners.
https://doh.wa.gov/about-us

ECOLOGY or ECY: Washington Department of Ecology
The Department of Ecology is the Washington State regulatory agency responsible for preserving and enhancing Washington's environment for current and future generations. Ecology is responsible for cleanup, water quality, and other environmental protection issues on the Washington portion of the site.
https://ecology.wa.gov/

Acronyms: In Detail

EE/CA: Engineering Evaluation/Cost Analysis
Required by CERLA, the Engineering Evaluation/Cost Analysis document is a comparative analysis of removal action options designed to identify the objectives of a removal action and to analyze the cost effectiveness and implementability of the various alternatives that may be used to satisfy these objectives for a Superfund hazardous waste site. The EE/CA process is the procedure used by response personnel to develop, evaluate, and select removal actions. At this site, a 2025 EE/CA was completed for the Upland NTCRA.
https://semspub.epa.gov/work/01/444465.pdf
https://www.epa.gov/superfund/superfund-glossary#e

EPA: Environmental Protection Agency
The Environmental Protection Agency is a federal agency responsible for protecting human health and the environment (air, water, and land). CERCLA allows the EPA to clean up contaminated sites. It also forces the parties responsible for the contamination to either perform cleanups or reimburse the government for EPA-led cleanup work. Because the Bonneville Dam site was listed on the National Priorities List, EPA was required to enter into an interagency agreement called a Federal Facility Agreement (FFA) with the US Army Corps of Engineers, Oregon, and Washington to ensure a protective and timely cleanup.
https://www.epa.gov/superfund/what-superfund#:~:text=Lead,Superfund%20sites%20to%20productive%20use

FFA: Federal Facility Agreement
A Federal Facility Agreement is an interagency agreement that CERCLA requires EPA to enter into with federal agencies to ensure protective and timely cleanups under CERCLA at federal Superfund sites. FFAs specify milestones for the federal facility to complete remedial activities, stipulate penalties for missing milestones, and include arrangements for long-term operation and maintenance at the facility. The 2024 FFA for the site is an agreement between EPA, USACE, Washington, and Oregon, Within the FFA, annual updates are made to the Site Management Plan (SMP), which includes the timeline for key deliverables.
https://www.epa.gov/enforcement/federal-facility-agreements

Acronyms: In Detail

FS: Feasibility Study

A feasibility study is the study of a hazardous waste site conducted by a federal facility, which serves as a mechanism for the development, screening, and detailed evaluation of alternative remedial actions. The FS serves to: (1) evaluate alternative remedial actions from technical, environmental, and cost effectiveness perspectives (2) recommend cost-effective remedial action (3) prepare a conceptual design (4) prepare a cost estimate for budgetary purposes and (5) prepare a preliminary construction schedule. The Remedial Investigation (RI) and FS are conducted concurrently. Data collected in the RI influence the development of remedial alternatives in the FS, which in turn affect the data needs and scope of treatability studies and additional field investigations. There can be multiple remedial investigation/feasibility studies (RI/FS) conducted at a site. At this site, past upland and river FS work completed in 2017 is on hold and a Supplemental Remedial Investigation is underway.
https://www.epa.gov/superfund/superfund-remedial-investigationfeasibility-study-site-characterization

LTM: Long-Term Management

LTM generally refers to ongoing monitoring to determine the long-term protective efficacy of the completed remedial action.
https://www.epa.gov/superfund/superfund-operation-and-maintenance-and-long-term-response-actions

MIS: Multi-Increment Sampling

MIS refers to a suite of planning, sampling, sample preparation, and subsampling techniques that addresses heterogeneous soil contamination, increases sample representativeness, and reduces data variability. Soil heterogeneity refers to the un-uniform distribution pattern of soil components (e.g. nutrients, minerals, organic matter, air, water and microbes). For example, at this site, multiple soil samples were collected over a larger area (area of suspected sandblast grit dumping) and composited (mixed together) to reduce analytical costs and data variability.
https://www.epa.gov/sites/default/files/2019-08/documents/incremental_sampling_methodology_at_pcb_cleanup_sites.pdf

Acronyms: In Detail

MOU: Memorandum of Understanding

Memorandums of Understanding are formal, non-binding agreements between two or more parties. MOUs generally outline the intentions, objectives, roles, and other key details of the agreement. There are seven Federally recognized Tribes with treaty rights or other expressed interest in the Bradford Island environment. The seven Tribes are: the Confederated Tribes and Bands of the Yakama Nation, the Cowlitz Indian Tribe, the Confederated Tribes of Grand Ronde, the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Confederated Tribes of Siletz Indians of Oregon. At this site, USACE has entered into MOUs with multiple Tribes, including the Confederated Tribes and Bands of the Yakama Nation, the Cowlitz Indian Tribe, and the Confederated Tribes of the Grande Ronde Community of Oregon.
https://share.google/iWEJ5HL3xuuXSEevn
https://cdm16021.contentdm.oclc.org/customizations/collection/p16021coll7/pages/CERCLA/Bradford-Island/Bradford-Island-Administrative-Record.html (Search: "Memorandum of Understanding")

NAPL: Non-Aqueous Phase Liquid

Non-aqueous phase liquids are organic liquid contaminants characterized by their relative insolubility, or inability to blend, with water (e.g. oil and water). Common examples of NAPLs are petroleum products, coal tars, chlorinated solvents, and pesticides. At the site, the typical NAPL mixtures (petroleum and PCBs) are denser than water and therefore sink to the river bottom.
https://www.epa.gov/remedytech/light-nonaquaeous-liquids

NPL: National Priorities List

The National Priorities List (NPL) is the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation. NPL site cleanup falls under CERCLA, the federal Superfund law. This site was added to the NPL on March 17, 2022.
https://www.epa.gov/superfund/superfund-national-priorities-list-npl

Acronyms: In Detail

NTCRA: Non-Time-Critical Removal Action

Non-Time-Critical Removal Action refers to a classification of a removal action. Removal responses are common at Superfund sites when the contamination poses an immediate threat to human health and the environment. Removals are classified as either emergency, time-critical, or non-time-critical depending on the extent and type of contamination. At this site a NTCRA will be implemented on the eastern end of Bradford Island in the summer and fall of 2026 to remove contamination from the landfill, sandblast, bulb slope, and pistol range areas.
https://www.epa.gov/superfund/non-time-critical-removal-actions

OHA: Oregon Health Authority

Oregon Health Authority is a state agency that is responsible for ensuring that all people and communities in Oregon can achieve optimum physical, mental, and social well-being through partnerships, prevention, and access to quality, affordable health care. OHA works with the Washington Department of Health and other stakeholders to develop the fish advisory around Bonneville Dam. As the grantee of ATSDR, OHA is also the agency doing the site assessment work on ATSDR's behalf and following their guidance at the Bradford Island Superfund Site.
https://www.oregon.gov/oha/pages/portal-about-oha.aspx

O&M: Operations and Maintenance

Operations and Maintenance refers to the activities associated with a remedy that must be performed after the completion of a remedial action. O&M is an important component of a Superfund response, ensuring that the remedy continues to perform as intended and remains protective of human health and the environment. O&M activities may include remedy operation, maintenance, and monitoring.
https://www.epa.gov/superfund/superfund-operation-and-maintenance-and-long-term-response-actions

OU: Operable Unit

Operable units are distinct areas within a site. OUs may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site. The cleanup of a site can be divided into a number of operable units, depending on the complexity of the problems associated with the site. At this site, there are currently three OUs: (1) Upland OU on the eastern end of Bradford Island, (2) River OU, and (3) Cascade Island OU.
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-J/part-307/subpart-A/section-307.14

Acronyms: In Detail

PA: Preliminary Assessment
The preliminary assessment is an assessment of information about a site and its surrounding area that involves gathering historical and other available information about site conditions to evaluate whether the site poses a threat to human health and the environment and/or whether further investigation is needed. The preliminary assessment also helps identify sites that may need immediate or short-term response actions. A facility-wide PA has not been conducted for the Bonneville Dam facility. However, a 2025 PA was completed specific to Cascade Island.
https://www.epa.gov/superfund/about-superfund-cleanup-process#:~:text=Reuse/Redevelopment-,Preliminary%20Assessment/Site%20Inspection%20(Site%20Assessment),they%20are%20investigating%20the%20site

PAHs: Polycyclic Aromatic Hydrocarbons
Polycyclic aromatic hydrocarbons are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot. Some PAHs are manufactured. PAHs are found in coal tar, crude oil, creosote, and roofing tar, and a few are used in medicines or to make dyes, plastics, and pesticides. PAHs are harmful to human health and the environment.
https://www.atsdr.cdc.gov/toxfaqs/tfacts69.pdf

PBDEs: Polybrominated Diphenyl Ethers
Polybrominated diphenyl ethers are flame-retardant chemicals that were added to plastics and foam products to make them difficult to burn. These substances are not single chemical compounds, but rather mixtures of several brominated substances. The entire family of PBDEs consists of over 200 possible substances that are referred to as congeners. PBDEs are harmful to human health and the environment.
https://www.atsdr.cdc.gov/toxfaqs/tfacts207.pdf

PCBs: Polychlorinated Biphenyls
Polychlorinated biphenyls are mixtures of over 200 individual chlorinated compounds (known as congeners). There are no known natural sources of PCBs. PCBs are either oily liquids or solids that are colorless to light yellow. Some PCBs can exist as a vapor in air. PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977 because of evidence they build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils. PCBs are harmful to human health and the environment.
https://www.atsdr.cdc.gov/toxfaqs/tfacts17.pdf

Acronyms: In Detail

PFAS: Per- and Polyfluoroalkyl Substances
PFAS are a category of over 15,000 human-made chemicals commonly used to make products resistant to water, grease, and heat. These "forever chemicals" are defined by a strong carbon-fluorine bond that prevents them from breaking down and causes them to build up over time in the environment, water, and the blood of living organisms. PFAS are harmful to human health and the environment. At this site, it is likely that PFAS were included in several historical activities and chemical uses. However, because PFAS were often additives and not an "active ingredient" in these uses, they are not well documented. DOD policy has limited PFAS investigations to only sites where fire-fighting activity was conducted. USACE has been directed by DOD to not investigate PFAS use at this site because PFAS fire-fighting methods at this site were not documented.
http://pubmed.ncbi.nlm.nih.gov/33125022

PHA: Public Health Assessment
An Agency for Toxic Substances and Disease Registry (ATSDR) public health assessment (PHA) is a formal evaluation of hazardous substances at a site to determine if, how, and to what degree people are exposed. It assesses if these exposures could cause harm and provides recommendations to reduce exposure and protect community health, and it is often required for Superfund sites. Oregon Health Authority is producing this assessment for Bradford Island.
https://www.atsdr.cdc.gov/pha-guidance/understanding_the_pha_process/index.html

RA: Remedial Action
Remedial action is the phase in Superfund site cleanup that involves the actual construction or implementation phase of Superfund site cleanup. It follows the remedial design RD) phase. The RD/RA is based on the specifications described in the Record of Decision (ROD).
https://www.epa.gov/superfund/superfund-remedial-design-remedial-action

RAB: Restoration Advisory Board
Restoration Advisory Boards are intended to bring together people who reflect the diverse interests within the local community, enabling the early and continued flow of information between the affected community and environmental oversight agencies. RABs are created to ensure that all affected parties have a voice and can actively participate in a timely and thorough manner in the review of restoration documents. RAB community members provide advice as individuals to the decision-makers on restoration issues. The RAB complements other community involvement efforts, but does not replace them.
https://www.epa.gov/fedfac/restoration-advisory-board-rab-implementation-guidelines#:~:text=RABs%20bring%20together%20people%20who,statutorily%20mandated%20public%20involvement%20requirements.

Acronyms: In Detail

RCRA: Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act was enacted by Congress in 1976 and is the primary federal law that governs the disposal of solid and hazardous waste. The primary goals of RCRA are: protecting human health and the environment from the potential hazards of waste disposal; conserving energy and natural resources; reducing the amount of waste generated; and ensuring that wastes are managed in an environmentally-sound manner.
https://www.epa.gov/history/epa-history-resource-conservation-and-recovery-act#:~:text=The%20Resource%20Conservation%20and%20Recovery,in%20an%20environmentally%2Dsound%20manner

RD: Remedial Design

Remedial design is the phase in Superfund site cleanup where the technical specifications for cleanup remedies and technologies are designed. Remedial action (RA) follows the remedial design phase. The RD/RA is based on the specifications described in the Record of Decision (ROD).
https://www.epa.gov/superfund/superfund-remedial-design-remedial-action

RI: Remedial Investigation

The remedial investigation serves as the mechanism for collecting data to characterize site conditions, determine the nature of the waste, assess risk to human health and the environment, and conduct treatability testing to evaluate the potential performance and cost of the treatment technologies that are being considered. A 2012 RI was completed for the Upland and River OUs. However, data gaps remain and a Supplemental RI is underway. In addition, an RI will be completed for the Cascade Island OU, which was added in 2025.
https://www.epa.gov/superfund/superfund-remedial-investigationfeasibility-study-site-characterization

ROD: Record of Decision

The Record of Decision explains which cleanup alternatives will be used at NPL sites. It contains information on site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, description of the response actions to be taken, and the remedy selected for cleanup. The development of the ROD also includes consideration of how the site could be used in the future. As of 2026, no ROD has been completed for the site.
https://www.epa.gov/superfund/about-superfund-cleanup-process#:~:text=the%20Proposed%20Plan.-,Record%20of%20Decision%20(ROD)%20(Remedy%20Decisions),respond%20to%20public%20comments%20received

Acronyms: In Detail

SITE: Bradford Island Superfund Site
"Bradford Island" is the site name for releases at the Bonneville Dam because the site was initially reported as the landfill and in-water dumping at the eastern tip of Bradford Island. However, a site includes the area(s) where hazardous substances were released as well as where they have come to be located. Therefore, the site boundary and area of related investigations has expanded.

SI: Site Inspection
A site inspection is the process of collecting site data and samples (e.g. air, water, and soil) to determine what hazardous substances are present at the site. The SI determines whether these substances are being released to the environment and assesses if they are a threat to human health. Site inspection activities occurred in the late 1990s.
https://www.epa.gov/superfund/about-superfund-cleanup-process#:~:text=the%20Proposed%20Plan.-,Record%20of%20Decision%20(ROD)%20(Remedy%20Decisions),respond%20to%20public%20comments%20received

SMP: Site Management Plan
A site management plan is an annually updated plan established through the Federal Facility Agreement (FFA). It lays out the site schedule and any new areas for investigation. An SMP can define long-term, post-remedial protocols for monitoring, maintaining, and controlling access to contaminated sites to ensure the effectiveness of the remedy. It outlines essential, ongoing actions—including institutional controls, inspections, and reporting—needed to protect human health and the environment after cleanup is complete.
https://semspub.epa.gov/work/HQ/100003040.pdf

SRI: Supplemental Remedial Investigation
A supplemental remedial investigation is a follow-up to a remedial investigation (RI). It is a targeted investigation conducted when initial data is insufficient, or new information requires updating the site conceptual model.
https://www.epa.gov/superfund/superfund-remedial-investigationfeasibility-study-site-characterization#:~:text=The%20remedial%20investigation%20(RI)%20serves,data%20and%20maximizes%20data%20quality

TAG: Technical Assistance Grant
Technical Assistant Grants help communities participate in Superfund cleanup decision-making. It provides funding to community groups to contract their own technical advisor to interpret and explain technical reports, site conditions, and EPA's proposed cleanup proposals and decisions.
https://www.epa.gov/superfund/technical-assistance-grant-tag-program

Acronyms: In Detail

USACE: United States Army Corps of Engineers (also: "the Corps")
The United States Army Corps of Engineers, within the Department of Defense (DOD), is a public engineering organization with both civil works and military functions. USACE operates the Bonneville Dam complex. At the Bonneville Dam Superfund Site, USACE is the party responsible for the pollution and is also the party responsible for cleanup.

YN: The Confederated Tribes and Bands of the Yakama Nation (also: "Yakama Nation")
Yakama Nation is one of several Tribal Nations involved in the cleanup efforts at Bonneville Dam—protecting their traditional lands, where they have lived, fished, hunted, and gathered since time immemorial. Yakama Nation's leadership was a critical factor in getting the site listed on the National Priorities List and they continue to be powerful advocates for a swift and thorough cleanup.

VOCs: Volatile Organic Compounds
Volatile Organic Compounds are a class of human-made chemicals that are volatile (evaporate easily) and are organic compounds (contain carbon atoms). Some common VOCs include acetone and automotive gasoline. Many VOCs are used and produced in the manufacture and use of paints, pharmaceuticals, refrigerants, industrial solvents, petroleum fuels, hydraulic fluids, paint thinners, and dry cleaning agents. VOCs are common ground-water contaminants and VOCs are a primary contributor to ground-level ozone. VOCs are harmful to the environment and to human health.
https://wwwn.cdc.gov/tsp/substances/ToxChemicalListing.aspx?toxid=7
https://www.epa.gov/indoor-air-quality-iaq/what-are-volatile-organic-compounds-vocs

Learn more about how Columbia Riverkeeper advocates for clean water

COLUMBIA RIVERKEEPER®

Learn more:

columbiariverkeeper.org

@columbiariverkeeper

P.O. Box 950
Hood River, OR 97031

This product is funded through a Public Participation Grant from the Washington State Department of Ecology. The content was reviewed for grant consistency but is not necessarily endorsed by the agency.