US Army Corps of Engineers®
Seattle District

Frequently Asked Questions

Albeni Falls Dam

The U.S. Army Corps of Engineers (Corps) was authorized by Congress in Section 204 of the Flood Control Act of 1950, (PL 81-516, 17 May, 1950) to construct, operate, and maintain Albeni Falls Dam for multiple uses. The Corps operates Albeni Falls Dam according to its congressionally delegated authority to meet these multiple purposes which benefit the local community and regional interests, including hydropower generation, flood risk management, navigation, recreation and fish and wildlife conservation. A graphic of the annual operating cycle can be found on line at:
http://www.nws.usace.army.mil/Missions/CivilWorks/LocksandDams/AlbeniFallsDam.aspx by clicking on "Lake Pend Oreille Summary Hydrograph."

The Multiple Purposes of Albeni Falls Dam:

Hydropower
As part of the Federal Columbia River Power System (FCRPS), Albeni Falls Dam provides storage for 15 downstream federal and non-federal hydroelectric projects on the Columbia and Pend Oreille Rivers. The top 11 feet of Lake Pend Oreille is regulated by Albeni Falls Dam, and contributes nearly 1/3 of the water found in the Columbia River. Water stored in Lake Pend Oreille during the spring and summer is later released in the fall and winter to generate hydropower during the winter when users have the highest demand for electricity.

Flood Risk Management
Prior to dam construction in the early 1950s, the natural falls located at the current site of the dam restricted flow of the river. During high spring runoff periods, this narrowed channel was unable to rapidly pass the large flows of water and thereby caused flooding upstream along the river and the lake. Construction of the dam enlarged the size of the channel at this location thereby allowing more water to pass through and reduce upstream flooding. To a lesser extent, flooding downstream on the Pend Oreille and Columbia Rivers can also be eased by the ability of Albeni Falls Dam to temporarily impound spring flows until downstream flooding has subsided – this isn't possible in very high-flow periods. Water released in the fall and winter reduces flood risk above the dam as well as providing hydropower during the period of high electricity demand.

Recreation and Navigation
Before construction, the natural lake level annually peaked at various times and elevations during the spring runoff. This peak occurred for a brief two to three weeks before the natural lake level would then typically drop to an elevation significantly below the current summer elevation of 2062.5 feet in the summertime, still during the prime recreation season. The current regulation of the top 11 feet of the lake aims to hold lake elevation at a constant high elevation throughout the summer providing increased opportunity for safe navigation and water recreation.

The Corps also administers nine recreation areas as part of Albeni Falls Dam, including four developed campgrounds/day-use areas, two day-use only areas, and three primitive access areas. Albeni Cove, Priest River, Riley Creek, and Springy Point have developed campsites (no hookups, except at Riley Creek) with a variety of day-use facilities. The Visitor Center and Trestle Creek are day-use areas only. Morton Slough, Johnson Creek and the Driftyard (managed by the Idaho Department of Fish and Game) offer primitive camping and boat launch facilities. In fiscal year 2013 Albeni Falls Dam recreation facilities hosted 277,898 visitors.

Fish and Wildlife Conservation
Project lands in the delta regions were specifically set aside for fish and wildlife conservation. These lands are currently managed by Idaho Department of Fish & Game under license from the Corps. Albeni Falls Dam is also regulated throughout the year in consideration of fish and wildlife species.

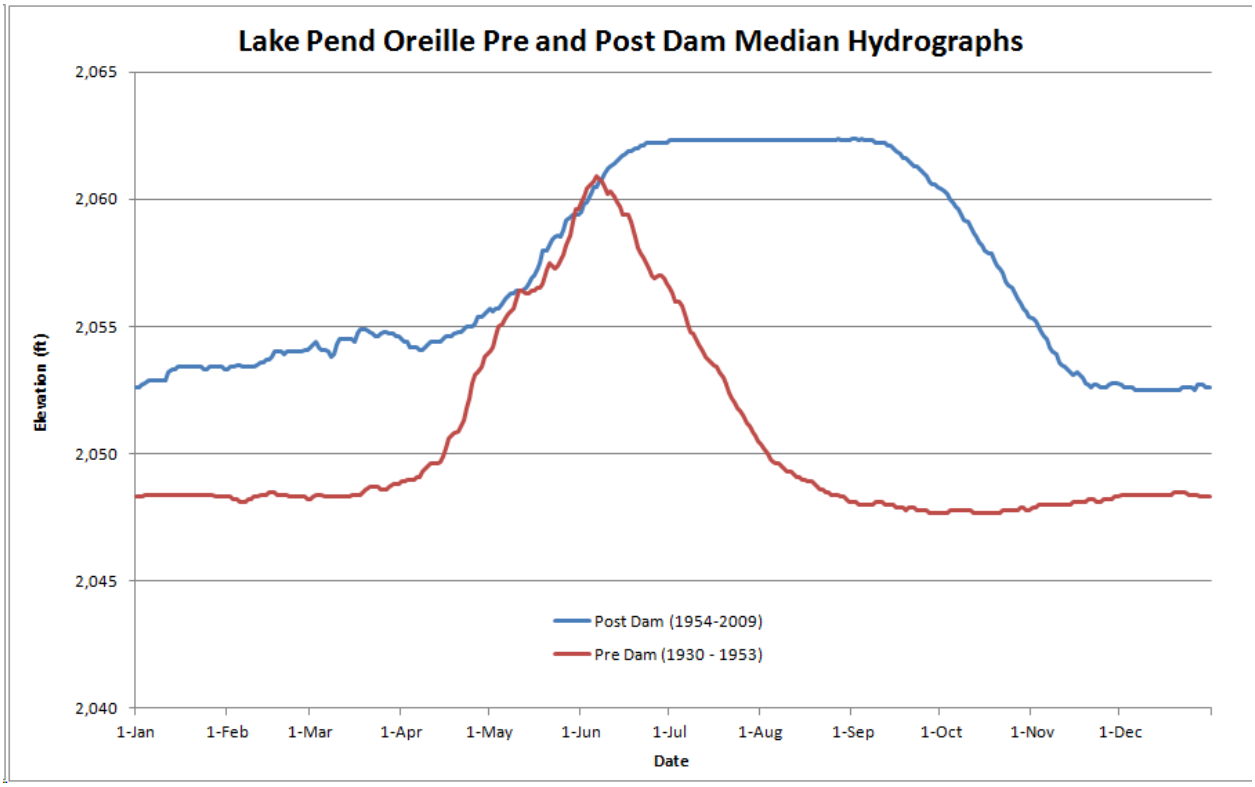
Seasonal operational parameters

Operations of Albeni Falls Dam are in accordance with both the water control plan detailed in the Water Control Manual and the regionally coordinated annual water management plan, and are generally as follows:

- During the winter holding season, (from approximately January to March) the lake level is held to no lower than the minimum control elevation. This minimum elevation is set to avoid dewatering kokanee redds. The minimum control elevation can be set anywhere between 2,051 and 2,055 feet annually, with 2,056 feet as a maximum elevation. If the determined minimum control elevation is not met prior to the start of kokanee spawning, the lake is not lowered below the level at which kokanee are spawning to avoid dewatering kokanee redds.
    - During flood risk management operations in this season, the lake elevation may increase during this period (up to elevation 2,060 feet). Water stored above elevation 2,056 feet must be evacuated by April 1 for flood risk management.
- During the spring flood season (from approximately April through June) the objective is to manage runoff for flood risk management. The project will frequently go on "free flow" to pass as much water as possible through the project which helps minimize flood elevations on Lake Pend Oreille.
    - After the lake is stabilized following the spring runoff and refill, the lake is operated within a 0.5 foot range between 2,062 and 2,062.5 feet, stream flows permitting.
- During the summer, the lake elevation is held between 2,062 and 2,062.5 feet from the end of the spring runoff (sometime in June to early July) until early to mid-September.
- During the fall, the lake is operated between elevations 2,060 to 2,062.5 feet in September and targets a draft to an elevation no lower than the minimum control elevation by mid-November. The November objective is to stabilize the lake within a 0.5 foot range of the minimum control elevation for kokanee spawning, prepare for winter floods and generate coordinated power for the whole FCRPS. In December the lake level is managed to avoid dewatering kokanee redds.
- Albeni Falls Dam operational targets are set to the elevation of Lake Pend Oreille at the Hope gage. However, elevations may vary at different lake locations. Targets are provided in ranges (generally 0.5 to 1.0 foot range) since operating to a specific elevation is difficult given the size of the watershed, the changing operations of upstream dams, local weather conditions and the size of Lake Pend Oreille itself.

The elevation of Lake Pend Oreille without the presence of Albeni Falls Dam

Lake Pend Oreille elevations would only peak for a few weeks each year if Albeni Falls Dam was not constructed. Some years the peak annual elevation would not exceed elevation 2,062 feet, with a range in peak annual elevation from 2,055 to 2,070 feet. Once the spring snowmelt receded, the lake elevation would decrease through the summer to below the current minimum operating level of 2,051 feet by early September, with lake levels during the winter generally around 2,049 to 2,050 feet. The Graph below shows the median elevations for Lake Pend Oreille as measured at the Hope gage before and after the construction of Albeni Falls Dam.



FREQUENTLY ASKED QUESTIONS RELATED TO OPERATIONS:

What is Senate Document No. 9?
Senate Document No. 9 is the transmission of the Interim Report of the Chief of Engineers to the Senate Committee on Public Works discussing the evaluation of the proposed "Albeni Falls Project". This document is referenced in the Flood Control Act of 1950 which authorized the construction of the Albeni Falls Project "substantially in accordance with the recommendation of the Chief of Engineers in Senate Document numbered 9". Pursuant to congressional authority, the proposed operational plan by the Chief of Engineers was refined upon project completion in 1955 and finalized in the 1960 Water Control Manual. Congress itself additionally refined project operations through subsequent statutes such as the Endangered Species Act and the Northwest Power Act. Current operations reflecting such changes are contained in the most recent Water Control Manual.

How do you decide the minimum control elevation each winter? For the last several years, the minimum control elevation was set annually through coordination with Idaho Department of Fish and Game and other entities based on kokanee spawning numbers through the use of a "decision tree". Recent studies completed by the Idaho Department of Fish and Game and the University of Idaho called into question the link between kokanee spawning numbers and use of the "decision tree" to determine the minimum control elevation; the decision tree is no longer in use to set the minimum control elevation. In light of this change, the Corps is currently updating the coordination process for determining the minimum control elevation.

Why is the lake held low in the winter?
The lake is held lower in the winter for many different considerations, including but not limited to: Flood risk management, opportunities to enhance power generation at downstream dams, providing system flexibility in meeting Endangered Species Act requirements and hydropower reliability requirements, meeting fish and wildlife conservation needs (kokanee), and to minimize soil erosion.

What is the reason to provide flexible winter lake levels?
If requested by Bonneville Power Administration, flexible winter lake levels allow the Corps to store water in Lake Pend Oreille in the winter within the project's existing authorized operating limits. The Corps would then release the water days or weeks later for power generation when it is more valuable to the region, such as when a cold snap drives up energy demand or during a power plant outage.

How do you consider Kokanee in your operations?
See the general description of seasonal operations above. During winter operations the lake is not dropped below the level at which kokanee are spawning, once spawning has commenced, to protect kokanee eggs.

What is flood stage for Lake Pend Oreille?
2,063.5 feet as measured at the Hope gage.

What is flood stage for Pend Oreille River?
The Pend Oreille River has a flood flow designated by the National Weather Service as measured by downstream releases of the project. The flood flow was revised downward in 2014 from 100,000 to 95,000 cfs.

What is full powerhouse discharge capacity?
Full powerhouse discharge capacity is between 25,000-32,000 cubic feet per second, depending upon lake elevation.

What is the natural lake constriction and how does it impact operations?
The constriction is the transition from Lake Pend Oreille to the Pend Oreille River near Dover. At times flows downstream of this constriction are limited and upstream lake levels are determined by the bottom of the lake at this constriction point. This constriction can restrict/control the amount of water that can move down the river to the dam. The constriction affects the amount of water that the river can transport and level of the lake when the project is on free flow. In other words, there is a maximum amount of water that can pass over this constriction at any time. When the flows from the lake into the river reach that maximum, for example during a heavy rain or run-off event, the dam no longer is the limiting factor determining the water level. No matter how much water the dam itself passes, flows in the river both upstream and downstream of the dam, as well as in the lake are limited by the "bottle neck" at Dover.

What property easement does the Corps hold around the lake?
Approximately 9,256 acres of flowage easements were acquired on private lands around the lake for the purpose of accommodating wave action, erosion and ground water effects that might occur as a result of the operation of the project. Easements were acquired at fair market value and allow for permanent flooding up to elevation 2,062.5 feet and intermittent flooding up to elevation 2,067.5 feet. Easement boundaries are loosely tied to the 2067.5 level, but each easement has its own legal description. Additional easements were acquired that restrict habitation below 2,067.5 feet in locations where the original easements were determined to be inadequate. There was a recognition in the mid-90's that easements which contain a no-habitation restriction were too strict for the Pend Oreille River above the dam and below the Long Bridge and consequently the Corps was authorized to release this restriction for dwellings with a first floor elevation above 2,065 feet. Such a release includes language that will release the Corps from liability for flood events that occur where flood waters exceed the 2,065 feet elevation.

Will you change operation of the lake without public comment?
If the operation of the lake falls within the current operating limits of the Water Control Manual for Albeni Falls Dam the operation does not require public comment. If the operation is outside of those bounds, the National Environmental Policy Act (NEPA) may require a public comment period prior to undertaking the operation. In general, however, the Corps holds annual public meetings to discuss past and future operations. To receive e-mail notifications about these meetings, please join our stakeholder list by e-mailing the public affairs office at: DLL-NWS-PAOTeam@usace.army.mil

How do I get more information / track operations?
Data for recent operations can be found online here:
http://www.nwd-wc.usace.army.mil/nws/hh/www/index.html

Short term modeling forecasts are provided by the Northwest River Forecast Center. Their projections for Albeni Falls Dam inflow, outflow and the Lake Pend Oreille at the Hope gage can be found here: http://www.nwrfc.noaa.gov/river/station/flowplot/flowplot.cgi?lid=ALFW1

Modeling for the next 3 to 6 months can be found here: http://www.nws.usace.army.mil/About/Offices/Engineering/HydraulicsandHydrology/OperationalProjections.aspx

In addition, individuals can also request to receive flow notification updates whenever Seattle District Water Management makes a change at Albeni Falls Dam. Please contact the public affairs office at DLL-NWS-PAOTeam@usace.army.mil.

FREQUENTLY ASKED QUESTIONS RELATED TO THE KALISPEL MOA

What is the Memorandum of Agreement, referred to in the flier sent out by the "Save Our Pend Oreille Alliance"?
The Corps, Bonneville Power Administration, Bureau of Reclamation and Kalispel Tribe of Indians signed a Memorandum of Agreement (MOA) in July 2012. The Kalispel MOA is modeled after the "Columbia Basin Fish Accords" discussed below. The MOA and comments received during the public review process are on line at: http://efw.bpa.gov/environmental_services/Document_Library/Kalispel_MOA/

Was the MOA process conducted publicly?
Yes. Columbia Basin Fish Accords, including the Kalispel MOA, were each negotiated among the signatories, with subsequent public review of the proposed MOAs prior to signing. Public comments were considered and reflected in the decisions to sign. The Kalispel MOA had a 30-day public comment period which ran from June 30, 2011 – August 1, 2011. Comments were received by Idaho state entities, local power entities, environmental interests, and local citizens. During this time the Lake Pend Oreille, Pend Oreille River, Priest Lake and Priest River Commission (Lakes Commission) was not funded by the State of Idaho and did not have quarterly meetings. The Corps and BPA briefed the Lakes Commission about the MOA and other activities once funding was restored by the State of Idaho.

Comments that were submitted during this process can be viewed at: http://www.bpa.gov/applications/publiccomments/CommentList.aspx?ID=132

What are the Corps' responsibilities when working with Tribal governments?
The United States has a unique legal and political relationship with Indian tribal governments, established through and confirmed by the U.S. Constitution, treaties, statutes, Executive Orders, and judicial decisions. In recognition of that special relationship, the federal government is charged with engaging in regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications. In accordance with the provisions of these treaties, laws, Executive Orders as well as principles lodged in the Constitution of the United States, the U.S. Army Corps of Engineers has a responsibility to meet Tribal trust obligations, protect trust resources, and obtain Tribal views regarding trust and treaty responsibilities or other actions carried out or administered by the Corps.

What are the "Fish Accords"?
The Columbia Basin Fish Accords (Fish Accords) are designed to supplement biological opinions for listed salmon and steelhead and the Northwest Power and Conservation Council's Fish and Wildlife Program. They provide firm commitments to hydro, habitat and hatchery actions; greater clarity about biological benefits and secure funding for 10 years. Under these agreements, the federal agencies, tribes and states work together as partners to provide tangible survival benefits for fish and wildlife, by upgrading passage over federal dams, by restoring river and estuary habitat, and by effective use of hatcheries.
Since 2008, the Accords partners have:

- Opened up more than 1,100 miles of new spawning habitat – a span of stream and tributary, added up, that is almost as long as the Columbia itself.
- Protected or improved more than 175,000 acres of fish and wildlife habitat – roughly the size of Crater Lake National Park.

- Protected more than 35,000 acre feet of water. This is equivalent to the annual residential water consumption of the city of Portland, Oregon.

The Kalispel Memorandum of Agreement was signed in 2012 in the continued spirit of the Columbia Basin Fish Accords. For more information visit: http://www.salmonrecovery.gov/Partners/FishAccords.aspx .

OTHER FREQUENTLY ASKED QUESTIONS

How will the Columbia River Treaty (CRT) negotiations affect lake level?
Idaho has been prominently at the table with the region's other states and sovereign tribes from the very beginning. The draft treaty recommendation recently submitted to the U.S. State Department calls for no changes to current management operations at Lake Pend Oreille.

What is the Northwest Power & Conservation Council?
Congress passed the Northwest Power Act in 1980, which called for the establishment of an interstate compact of Idaho, Montana, Washington and Oregon. The compact, known as the Northwest Power and Conservation Council is charged with developing a Power Plan and a Columbia Basin Fish and Wildlife Program to serve two primary objectives: to provide an adequate, reliable, economic, and efficient power supply while protecting, mitigating, and enhancing fish and wildlife impacted by the hydro-system. For more information about the Northwest Power & Conservation Council please go to http://www.nwcouncil.org/ . The State of Idaho has two representatives on the NWPCC appointed by the Governor, currently, Jim Yost and Bill Booth.

What was the "Columbia River Compact"?
The attempted "Columbia River Compact" was never ratified by Congress and is therefore not in effect and does not have bearing over the operations of Albeni Falls Dam.