
Bighorn Dam



Alberta



Background

The Bighorn Dam is located west of Nordegg in Clearwater County, off the David Thompson Highway (#11). The area borders the Stoney Nakoda First Nations reserve, is downstream from popular Abraham Lake and is located in the Kiska/Willson Public Land Use Zone (PLUZ) of the Bighorn Backcountry. Many people use the spot as a base point to enjoy nearby designated off-highway vehicle (OHV) trails.



Ecological sensitive area

- The region is an ecologically sensitive montane environment that provides valuable habitat to a variety of wildlife, as well as connectivity and a corridor for wildlife movement. The area is identified as grizzly bear Priority Area and an Environmentally Significant Area.
- Water quality is a key concern because of the presence of several headwater streams that flow directly into the North Saskatchewan River, and are important habitat for native trout species, including bull trout and cut-throat trout.
- This popular recreation spot is in close proximity to the Stoney Nakoda First Nations reserve, which is illegal to trespass on. The Bighorn Dam area is used for traditional hunting, prayer and medicinal purposes, and we encourage everyone to be respectful of culturally significant ceremonial lands west of the dam in the Kootenay Plains.
- Hoodoos are a unique geological feature of the region and a site significant to the Stoney Nakoda First Nation. They are formed naturally in sandstone and are vulnerable to human impact.



TransAlta hydroelectric plant

The Bighorn Dam and hydroelectric plant is managed by TransAlta, a private company. The lands occupied by TransAlta's plant, spillway and reservoir is leased Crown Land, licensed to TransAlta for power development. TransAlta has full legal authority to control public access to the area.



Dam and public safety concerns

High recreational use of the area has eroded slopes and sensitive landscapes around the dam, as well as damaged structures, monitoring equipment, roads and signage. This damage can impact operation and safety of the dam and reservoir.

In addition to the hazards you should expect around slopes, rivers and lakes in a remote area, be aware of the following:

- Most electrical and equipment hazards at the plant and spillway are marked and fenced off. Keep out of fenced-off sections and watch for any unmarked hazards.
- Flow in the river downstream of the plant can change quickly and increase up to 1 m without warning. Areas around and downstream of the spillway will become hazardous during floods.
- Lake levels vary through the year. Changes are mostly gradual, but can rise up to 1 m/day in summer as the lake refills. Vehicles driven onto the lake bottom have gotten stuck and quickly flooded, releasing pollutants.
- Avoid swimming or boating near the intake. Mountain weather and wind can change quickly and blow watercraft across the lake.
- In winter, ice around the lake and particularly at the intake can be thin, broken or suspended.
- There is limited cellphone service and longer emergency response times.

Increased recreation

Over the past 10 years, the Bighorn Dam region has increased in popularity for random camping and OHV use. This increase in vehicle traffic has caused damage to the environment around the dam causing erosion. In addition, there's been an increase in the following issues:

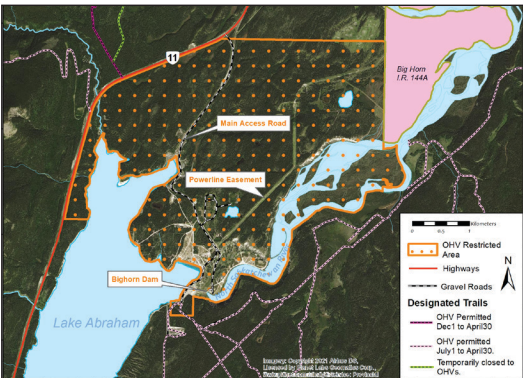
- vandalism and damage to structures
- threats of violence and verbal abuse
- public safety concerns
- incidents of trespassing
- improper disposal of human waste, garbage and pollutants.



Recreation management

Alberta's government is committed to improving and protecting the Bighorn Dam area. In an effort to conserve the Bighorn Dam area and ensure public safety is protected, the following measures are being implemented:

- **May 1 – June 30:** OHV use is not permitted in the Bighorn Dam area to align with seasonal designated trail timing restrictions. Random camping in this area is still permitted.
- **April 1 – December 1:** Vehicles are restricted below the high-water mark or on the lake bottom of Abraham Lake.
- Education and enforcement efforts will be increased.



Funding investments

Funding is being put towards the following new amenities and infrastructure:

- Eight outhouses have been installed along Highway 11 and three additional ones in the Bighorn Dam area.
- Remediation of erosion on and around the dam to ensure structural integrity.
- Physical barricades and fences installed around remediation areas and dam infrastructure.
- Signage to raise awareness of the safety concerns, area closures and unique local features.
- A new kiosk with a map of the area closures.

FOR MORE INFORMATION:

[Alberta.ca/BighornBackcountry](https://alberta.ca/BighornBackcountry)

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