



Hook Canyon Pump Storage Project

On Bear Lake

A Position Statement by Bear Lake Watch

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POSITION:

Bear Lake Watch is steadfastly opposed to the Hook Canyon Pump Storage Project. Furthermore, Bear Lake Watch opposes any invasive use of the lake that has the potential to disrupt the physical characteristics and natural ecosystem of Bear Lake.

BACKGROUND:

Bear Lake is a large natural lake, approximately 109 sq. mi. in size that straddles the Idaho-Utah border. It is approximately 20 mi. long and 7 mi. wide and sits at an elevation of 5,924 ft. It is 208 ft. deep when the lake is full (5923.65 ft. UP&L datum). It is one of the world's most unique lakes considering its age, seismic formation, water chemistry, number of endemic fishes and aquatic beauty.

In 1917, the Bear Lake Reservoir Project was completed by UP&L (now PacifiCorp Energy) which diverted the entire Bear River into Bear Lake. Since that time, Bear Lake has been used as a reservoir. The flows into Bear Lake from the tributaries and the diversion of the Bear River are seasonal and follow a natural rhythm. The power company holds the storage rights for the top 21.65 ft. of Bear Lake water and has contractual obligations to deliver that water to irrigators downstream in both Utah and Idaho.

The water in Bear Lake is the public's domain until it is pumped out of the lake by PacifiCorp. Bear Lake is a navigable water body and the lands exposed by the lake level fluctuations and the bed of the lake are sovereign lands that are owned by the people of the respective states, held by the states in trust for the benefit of the public and managed for the public's right of use and enjoyment by Utah's Division of Forestry, Fire and State Lands and Idaho's Department of State Lands. Idaho Department of Parks and Recreation manages the Bear Lake State Park that has two recreation areas. Utah's Division of State Parks & Recreation manages a state park, also called the Bear Lake State Park, which is comprised of three recreation areas.

The two surrounding counties derive a substantial portion of their tax base from property taxes of the upland owners who are taxed at a higher rate based on their proximity

to the lake, their status as a secondary homeowner and the premium property values of Bear Lake real estate. The local economies are heavily dependent on tourism and recreation that is associated with the aesthetic qualities of the Bear Lake Valley and the unique turquoise blue color of the lake.

PROBLEM:

The proposed Hook Canyon Pump Storage Project would build a new 270 ft. high dam to create an upper reservoir capable of holding 19,510 acre feet of water. That would be connected via tunnels, pump-turbine units and a tailrace that daylight on the bed of Bear Lake 120 feet below the surface. The project would discharge water into Bear Lake 8-10 hours daily while generating power and pump water back into the upper reservoir for 14-16 hours, exchanging 15,400 AF daily and fluctuating the lake level 2.6 to 3.2 inches.

ISSUES:

1. Bear Lake Ecosystem

The daily release and extraction of water caused by a pump storage project are not a natural part of the "lake ecosystem" and are contrary to the existing currents in the lake. This constant mixing of the water and the creation of an unnatural, reversing current may, among other things:

- negatively affect any part of the complex food chain in the lake ecosystem by disrupting the temperature stratification, water chemistry or nutrient balance of the lake.
- increase the amount of suspended solids reducing the amount of photosynthesis and solar radiation, potentially causing water quality problems and possibly changing the appearance and color of the lake.
- affect the endemic fish populations by limiting food sources, disrupting spawning cues, suffocating eggs with redistributed sediment and other unknown consequences.
- disrupt the biology of the littoral zone affected by the daily lake level fluctuations.
- result in entrainment and death of endemic fish into the pump system
- inhibit the formation of ice exposing more open water to evaporation and changing the local weather.
- UPLANDS

The project risks significant discharge of materials into the lake during the construction process. The project will also disrupt the natural habitat of fauna, including mammals, birds, and reptiles.

2. Legal Complexities

The proposed operation of the pump storage project and the potential cumulative effects it may have raise many legal questions including the possible adverse impact on public land

uses, interstate water rights disputes and water quality stewardship. Environmental and species conservation issues are also likely to initiate a variety of legal actions which will be costly to the states and interested parties.

- State Land Management

If the project continues forward in the face of strong public opposition and against the recommendations of local government as reflected in adopted resolutions, the states actions to grant the required easements, permits and approval may be seen as contrary to the Public Trust Doctrine.

The Mission Statements from Utah Parks & Recreation, Idaho Parks & Recreation, Utah Forestry, Fire and State Lands, the Utah State Lands Sovereign Land Management Objectives (*Utah R652-2-200*) and the Public Trust Doctrine, as stated in the Bear Lake Comprehensive Management Plan Introduction Document all speak to “preserving and providing natural, cultural, and recreational resources for the enjoyment, education, and inspiration of this and future generations”, “the protection of navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality will be given due consideration and balanced against the navigational or economic necessity or justification for, or benefit to be derived from, any proposed use” and “the right of the public to use and enjoy these trust waters, lands and resources for a wide variety of recognized public uses. . . . Protection of these resources remains paramount.”

- Water Rights

Numerous legal documents, contracts, settlement agreements, court decisions plus an interstate compact deal with the volume of water in Bear Lake. These legal documents are apart from, but integral to, the application to Utah for water rights for this project.

The Amended Bear Lake Settlement Agreement determines the allocation for downstream irrigation based upon lake levels. The Settlement Agreement does not allow PacifiCorp to grant additional contracts for water use.

The “Irrigation Reserve” clause of the Amended Bear River Compact, holds that when the lake elevation is below 5914.7 ft. (UP&L datum) water may only be used for irrigation and cannot be used for the generation of power. PacifiCorp Energy data, from 1919 to 2005, shows that the lake level was below 5914.7 ft. 59% of the time. The Compact also restricts upstream storage when Bear Lake elevation is below 5911 ft.

Idaho Water Right No. 11-7406 was filed May 13, 1993 by the State of Idaho for the water below lake elevation 5902 ft. The beneficial use is minimum lake elevation which is defined in Idaho code as the minimum lake level required to protect the fish and wildlife habitat, aquatic life, recreation, aesthetic beauty . . . or water quality in the public interest.

- Water Quality

The Clean Water Act requires every state to establish and maintain water quality standards designed to protect, restore and preserve water quality in the state. Idaho has designated Bear Lake as a Special Resource Water.

If the project causes re-suspension of sediment that leads to impaired water quality in the lake, either or both states may be liable. Any impairment to the water quality may also negatively affect the habitat and wildlife in the Bear Lake Wildlife Refuge and water quality downstream in the Bear River.

- Endangered Species Act and the Range-Wide Conservation Agreement for BCT

The four endemic fishes of Bear Lake are currently petitioned to be listed under the ESA. A multi-state, multi-agency agreement, the Range-Wide Conservation Agreement for BCT, has been a key component in keeping the BCT from getting listed under the ESA.

If any of the endemic species or the BCT gets listed under the ESA, the habitat protection could reduce or stop the release of storage water for downstream irrigation, stop the use of Swan Creek, Big Creek, Fish Haven Creek and St. Charles Creek water for irrigation, reduce or stop the storage of water upstream from Bear Lake, curtail recreation uses, limit management options for state agencies and result in lost revenues in the Bear River basin.

The Range-Wide Conservation Agreement for Bonneville Cutthroat Trout was signed in Dec. 2000 by, among others, Utah Dept. of Natural Resources and Idaho Dept. of Fish & Game. The basis of the agreement is the conservation and enhancement of BCT and the ecosystems upon which they depend. Bear Lake has the largest single population of BCT and comprised 99 % of their lentic habitat.

3. Recreation

The project construction, start-up and operation may cause a loss of recreational opportunities for the public and may pose an increased safety risk for those recreationalists.

During project construction, there will be equipment, traffic, noise, etc. that restricts the use or reduces the enjoyment of recreation in the Cisco Beach and Rainbow Cove areas. Other recreational opportunities that may be affected are: the traditional Cisco Disco, long line fishing, sport fishing from boats and scuba diving.

Operation of the proposed project may also negatively impact recreational opportunities on Bear Lake. Re-suspension of sediment will reduce the aesthetic appeal of boating and swimming and reduce underwater visibility for scuba divers. Project induced currents and sediment may reduce solar radiation resulting in colder water temperatures at the surface and along the shore. The currents and constant fluctuation of the water level will inhibit ice formation making the ice unsafe or unusable for ice fishermen and other winter recreation.

4. Socio-economic

The socio-economic impacts will be both immediate and cumulative.

The 5 ½ years of uncertainty during the licensing process will immediately affect outside investment in developments, infrastructure, businesses and home building. The project construction may bring some short term economic opportunities in the valley, but will also negatively impact recreation and will negatively impact the residents and property owners on the all sides of Bear Lake.

The project startup and operation has the potential to erase the premium value associated with Bear Lake's aesthetic appeal and recreational value. Any loss of recreational opportunities translates directly into a loss of income, jobs and reduced property values.

If even one of the endemic fishes or the BCT becomes listed under the ESA as threatened or endangered, it will be the residents, second homeowners, local businesses, recreationalists and tourists that are affected the most. The habitat protection measures of the ESA may also affect the entire Bear River basin by nullifying water delivery contracts and agreements, reduce or eliminate storage of water upstream of Bear Lake and reduce or eliminate use of Bear Lake storage water for irrigation downstream of Bear Lake.

SOLUTIONS:

If pump storage is deemed to be an essential part of Utah's energy policy, these projects should be located at sites where two manmade reservoirs exist or could be built without the environmental risks and legal complications that are intrinsic with such a project on Bear Lake.

CONCLUSION:

Risk is defined as “the possibility that the actual outcome may be different from those expected”. There will be no guarantees from Symbiotics, LLC or from the FERC process that there will be NO adverse environmental impacts on Bear Lake as a result of the proposed project. The FERC process seeks only to minimize impacts and uses negotiated settlement as a means to mitigate for potential environmental impacts. If (see Risk) there are unintended, short term or cumulative effects, it will be the residents, second homeowners, local businesses, investors, recreationalists, tourists and possibly the entire agricultural community that relies on Bear River and Bear Lake water who pay the ultimate price.

Under the Public Trust Doctrine, it is the State’s responsibility to protect the resources for the public use. An irreplaceable, unique natural resource such as Bear Lake should not be put at any risk to further the advancement of another source of electrical power. There is overwhelming opposition to the project by community leadership and the public at large.

Bear Lake’s unique blue color may be an emotional issue to some but that aquatic beauty commands a premium value. It is that uniqueness and aesthetic value that stops over 500,000 visitors a year at the overlook to admire the beauty. It is that color and perceived value that is the backbone of the valley’s economy and growth – tourism, recreation, vacation and residential homes, construction and property values. It is that distinctive color and future value that attracts investors and buyers. In the eye of the families and citizens of the region, the sparkle of Bear Lake Blue may well surpass the glint of white snow or the lure of red rocks.

Bear Lake is not the place for this or any other project that has the potential to put this unique natural resource at risk.