

Chikuminuk Lake Hydroelectric Project

by Bretwood Higman, Elisa Mader, David Coil

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Summary

The Chikuminuk Lake Hydroelectric Project is a proposed 13.4 MW project in southwest Alaska that would raise the level of Chikuminuk Lake by 60 feet in order to generate year-round hydropower. The project (by Nuvista Light & Electric Cooperative, Inc.) is currently in the preliminary stages of permitting.



Background



BETHEL — Summer 2011 — Get Photo (/photos/bethel_3/)

Chikuminuk Lake is located in <u>Wood-Tikchik State Park (http://</u><u>dnr.alaska.gov/parks/units/woodtik.htm</u>), at the park's northwest edge. The project site would be located at the lake outfall, roughly 120 miles southeast of Bethel. Hydropower has been studied as an energy source in the region near Bethel, Alaska, for almost 40 years. The most <u>recent analysis (2011)</u> (<u>http://www.nuvistacoop.org/LinkClick.aspx?</u> <u>fileticket=PFdf6hT4FNg%3d&tabid=2823)</u> (25 MB) examined river hydropower sites on the Kisaralik River and the outfall of Chikuminuk Lake. The study authors concluded that sites on the Kisaralik River would negatively impact salmon and provide the

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bulk of their power during the summer, when demand is low. However, the lake would generate hydropower year-round and would not directly impact salmon, which do not migrate that far upriver.

The \$400-500 million project would require a 128-foot rockfill dam and associated support infrastructure, such as a powerhouse, maintenance facilities, and transmission lines. Two turbines would provide up to 13.4 MW total capacity, for an estimated 89 GWh per year. The facility would potentially provide power to Akiachak, Akiak, Kwethluk, Tuluksak, Bethel, Oscarville, Napakiak, Napaskiak, Atmautluak, Kasigluk, Nunapitchuk, Tuntutuliak, Eek and Quinhagak. <u>Another version (http://www.alaskadispatch.com/article/20130419/permitchikuminuk-lake-dam-western-alaska-fails)</u> of the proposal would also send transmission lines south to Dillingham.

Opposition

As with virtually all hydropower projects in Alaska, the main objections to the Chikuminuk Lake project have been aesthetic and economic. The area is used for recreational fishing (including lodges), hunting, hiking, and <u>subsistence activities (/</u> <u>Issues/OtherIssues/Subsistence.html</u>), though not a lot of this activity happens on Chikuminuk itself. Some opponents of the project are concerned about the downstream effect on fisheries due to changes in water flow and sedimentation. Other opposition has come from sport fishing guides, the Bristol Bay Native Association, and the Wood-Tikchik State Park Management Council.



Broadly, there is more support in the Bethel region than the Dillingham region for the project.

Current Status

The Alaska state legislature approved \$10 million in funding for the project in 2011. In March 2012, Nuvista applied for <u>permits</u> (http://www.hydroreform.org/projects/Chikuminuk-Lake-<u>P-14369</u>) from the Federal Energy Regulatory Commission (FERC). The permits were approved in August 2012.

In April 2013, special legislation that would have allowed geotechnical surveys for the project within the park boundaries <u>failed (http://www.alaskadispatch.com/article/20130419/permitchikuminuk-lake-dam-western-alaska-fails)</u>. Therefore, the only work ongoing in 2013 will be "non-intrusive" studies such as those related to fish and wildlife.

Further Reading

> Nuvista Light & Electric Cooperative page on the Chikuminuk project (http:// nuvistacoop.org/resource-library/)

> Kisaralik River and Chikuminuk Lake Reconnaissance and Preliminary Hydropower Feasibility Study (2011, 28MB) (http://nuvistacoop.org/wp-content/ uploads/2014/02/Final-Kisaralik-and-Chikuminuk-Hydro-Study-Report-20110322.pdf)

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> Nuvista presentation to the Alaska legislature on the Chikuminuk project (2012, 1MB) (http://nuvistacoop.org/wp-content/uploads/2014/02/Presentation-to-House-Energy-and-Resources-Committee-Feb-2012.pdf)