



Senator Lyman F. Hoffman

Senate Finance Committee Member

Alaska State Legislature * State Capital * Juneau, AK 99801-1182
Toll Free 1-866-465-4453 * (907) 465-4453 * Fax (907) 465-4523

District S

Adak
Akiachak
Akiak
Akutan
Aleknagik
Aniak
Anvik
Atka
Atmauthluak
Attu Station
Bethel
Chefornak
Chignik
Chignik Lagoon
Chignik Lake
Chuathbaluk
Clark's Point
Cold Bay
Crooked Creek
Dillingham
Dutch Harbor
Eek
Egegik
Ekwok
False Pass
Flat
Goodnews Bay
Grayling
Holy Cross
Igloo
Iliamna
Ivanof Bay
Kasigluk
King Cove
King Salmon
Kipruk
Kokhanok
Koliganek
Kongiganak
Kwethluk
Kwigillingok
Lake Minchumina
Levelock
Lime Village
Lower Kalakag
Manokotak
Marshall
McGrath
Mekoryuk
Mertarvik
Naknek
Napakiak
Napaskiak
Nelson Lagoon
Newhalen
New Stuyahok
Newtok
Nightmute
Nikolai
Nikolski
Nondalton
Nunapitchuk
Oscarville
Pedro Bay
Perryville
Pilot Point
Platinum
Pope-Vannoy Landing
Port Alsworth
Port Heiden
Portage Creek
Quinhagak
Red Devil
Russian Mission
Saint George Island
Saint Paul Island
Sand Point
Shageluk
Sleetmute
South Naknek
Stony River
Takotna
Togiak
Toksook Bay
Tuntutuliak
Tununak
Twin Hills
Ugashik
Unalaska
Upper Kalakag

SB 91 Nuyakuk River, Hydroelectric Site

SB 91 adds the operation of a hydroelectric site at Nuyakuk River to the Wood-Tikchick Management plan stating that it "is not considered an incompatible use in the Wood-Tikchick State Park".

Nushagak Electric & Telephone Cooperative (NETC) has advanced this project through public outreach, desktop feasibility research using existing data, and onsite work that is permissible under the current statutory and management plan restrictions. SB 91 allows further onsite studies to advance the project evaluation process.

There are two potential hydroelectric sites currently in the Park enabling statutes, Grant Lake and Elva Lake. SB 91 adds Nuyakuk to that list.

The Nuyakuk site is preferable for several reasons;

- Low impact, this is a diversion project with no dam and no significant change in the natural course of the river
- Production, the project has the potential to provide 100% of the current electric needs for several communities
- Location, this site is close to the Park boundaries and would have a very small footprint in the Park

The Nuyakuk Hydroelectric Project is a regional infrastructure development that will bring both low cost, renewable energy and broadband telecommunications to at least six communities throughout northern Bristol Bay. This design would divert water from above the falls, flow the diversion through an underground 1500' penstock (pipe), through a powerhouse and back into the river in a tail race below the falls. The powerhouse would have a very low visual impact.

The overall cost of this 30-megawatt regional hydroelectric project, including transmission facilities and communications fiber, is estimated at \$140 million. This would be first hydroelectric project in SW Alaska with regional service. In addition to Dillingham, the communities served include Aleknagik, Koliganek, New Stuyahok, Ekwok and Levelock. The potential also exists for service to additional communities.

This project has enjoyed the support of local stakeholders, public administration and park management in the efforts to date. SB 91 is necessary to further project evaluation and permitting.

SB 91

Nuyakuk River, Hydroelectric Site

****Sectional****

Section 1: Adds "or the Nuyakuk River Falls" to AS 41.21.167(c) to include it on a list of sites that are not considered an incompatible use of the Wood Tikchik State Park.

Section 2: Instructs the Wood-Tikchik State Management Council along with the Department of Natural Resources to amend the Wood Tikchik Management Plan to conform with the change made in Section 1.

Nuyakuk Hydroelectric Project Update

Nushagak Electric & Telephone Cooperative

January 2019



The Nuyakuk Hydroelectric Project is a regional infrastructure development that will bring both low cost, renewable energy and broadband telecommunications to communities throughout northern Bristol Bay. This design would divert water from above the falls, flow the diversion through an underground 1500' penstock (pipe), through a powerhouse and back into the river in a tail race below the falls. The powerhouse would have a very low visual impact.

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Nushagak Electric & Telephone Cooperative (NETC) advanced the project in 2018 through a combination of intensive outreach, support from State and Federal entities and capital investment by NETC. Specifics include:

- Over 70 presentations including Tribal entities, State and Federal agencies, Wood Tikchik Management Council, researchers and stakeholders
- Obtained a FERC preliminary permit and a State Parks special use permit
- Field activity including:
 - Water temperature and water quality monitors installed

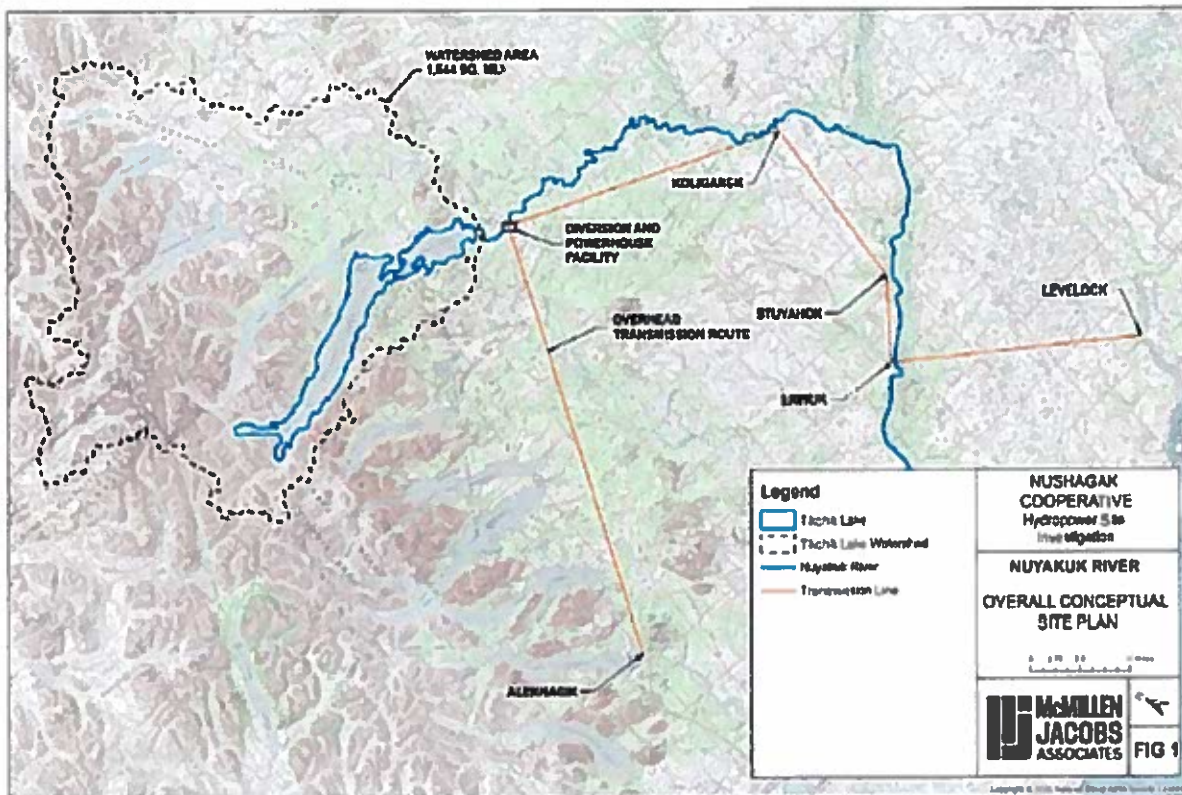
- Initial site survey
- Topographical assessment

Benefits of this project include:

- Displacement of 1.5 million gallons of diesel a year, at current consumption levels
- Yearly average generation capacity to accommodate substantial economic growth in the region, equivalent to 233 percent of current electrical consumption
- Extension -- for the first time -- of fiber communications to all communities served by the hydroelectric project's transmission/distribution system

Benefits for State of Alaska include:

- Potential reduction or elimination of annual PCE assistance:
 - The six communities benefiting from this project over the years 2012 to 2016 have an overall PCE assistance of \$1.75million/year
- The potential economic benefit to these communities in reduced power cost for residential and business consumers who don't qualify for PCE could be as much as \$4.8million/year (based on 15cents/kilowatt hour)
- Direct savings to State agency budgets through reduced energy and communications costs



Proposed transmission system. Size of the watershed is highlighted also. The Tikchik Lakes system provides an immense reservoir for the natural dam/spillway that is the falls.