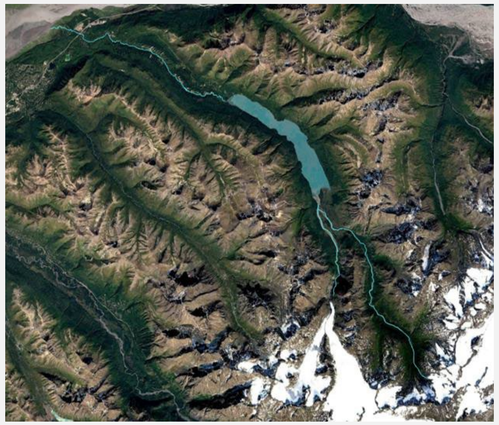
Spawning Habitat at and above Eklutna Lake

Native Village of Eklutna



Satellite view of Eklutna Lake and its tributaries. Two main tributaries feed Eklutna Lake from Eklutna Glacier and ground water. Currently the river below the lake is mainly fed by ground water until the confluence with Thunderbird Creek near Eklutna Village.

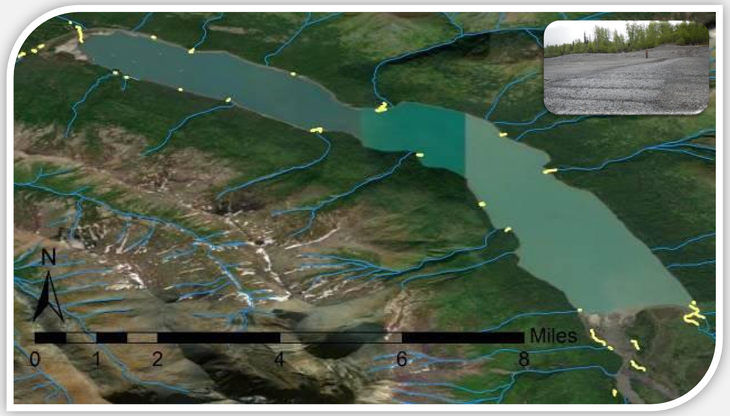
1944 Photo of Eklutna Lake showing the lake connected to the lower Eklutna River. This connection was severed with the building of the first lake dam in the 1960's and has been severed since.

Spawning habitat in the river tributaries system above Eklutna Lake

Six elders, now deceased, told now Elder Maria Coleman that the Eklutna River used to be "overflowing" with "abundant" fish before the dams. Elder Louis Munson recalled stories of her family fishing for salmon (Łiq'a – the generic Dena'ina term for all salmon species) at the cabin that was located at the upper end of Eklutna Lake prior to the dams being built. Stories included a fish rack and smoking of salmon in quantities to bring back to the village.

Above Eklutna Lake are two tributaries, the East Fork and the West Fork. These two tributaries feed glacier melt and ground water into Eklutna Lake. This area was rich in wild game, harvestable plants, and salmon. Many families hunted and gathered in this area, relying on the food harvested for winter stores. The area is still rich in game and plant, but now lacks all salmon.

Spawning habitat in a feeder creek to the East Fork Eklutna River. The East Fork is high gradient, but clear. Feeder creeks and side channels provide spawning habitat.



Eklutna Lake Potential Spawning Habitat

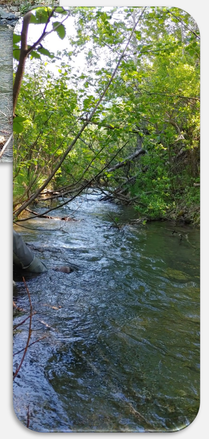
Areas of Eklutna Lake shoreline (yellow) identified as potential areas for [sockeye] spawning habitat during a 2022 study.

Inset: Groundwater seepage in (shore) varial zone of drawn down Eklutna Lake

Lake levels need to be kept higher year-round to cover these areas for spawning.

Picture credits: Eklutna Hydroelectric Project Draft 2022 Lake Aquatic Habitat and Fish Utilization Study Interim Report)

The West Fork Eklutna River is silty and high gradient, but many tributaries come into the West Fork with clear water and excellent [sockeye] spawning habitat. Many of these tributaries are well established.



One tributary to the West Fork Eklutna River above Eklutna Lake is full of good spawning habitat. This particular tributary is miles long and well established. Dolly Varden Char are abundant. Spawning king and silver salmon can be imagined with restored fish passage at the lake dam.

All pictures of the East and West Fork of the Eklutna River are from a NVE Habitat Characterization Survey.

Kokanee specimens collected from Eklutna Lake 2022

"*A total of 331 spawned-out kokanee were observed (at Eklutna Lake) during the survey period…" "Spawned kokanee ranged from 4.5 – 6.5 inches…*" Biologists say these would grow to normal sockeye size if allowed to develop in the ocean. - Figure 3.1-2. P. 14 of the Eklutna Hydroelectric Project Draft 2022

Spring photo showing no water flow through the dam .