

Eklutna Lake and Tributaries Salmon Habitat

E Illustrating the potential value of salmon passage past the lake dam



Eklutna
Lake Dam

East and West
Forks Eklutna
River



Spawning habitat in a feeder creek to the West Fork River Lake Tributary

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.

Eklutna Lake, Alaska

N6123 W14907

Rec'd 7/22/41 from 2nd Photo Sqdn., Elmendorf
Field, Anchorage, Alaska. *Original Neg.*
rec'd 1 May 1944.



(01-2507-2ND)(6-29-41-1000A)(12-6000) EKLUTNA LAKE, ALASKA

INDEXED

28776-AC.



Figure 1.2-2. (P. 4)

Aerial view of the current Eklutna Lake “outlet”. No water flows below the dam. The River below the current dam is dry (the blue line is just drawn through it). A contributing tributary is noted (blue line). Water actually flows backwards from the contributing tributary above the current dam, into Eklutna Lake. The dry varial zone is shown in the upper right, on the shores of the lake. **This dam blocks fish passage to the lake and upriver salmon habitat.**

Eklutna Lake Potential Spawning Habitat

Figure 3.1-1. (P. 13) Upper: Groundwater seepage in (shore) varial zone of drawn down Eklutna Lake
Lower: Areas of Eklutna Lake shoreline identified as potential areas for (sockeye) spawning habitat...

(Lake study figures and some text from: Eklutna Hydroelectric Project Draft 2022 Lake Aquatic Habitat and Fish Utilization Study Interim Report)

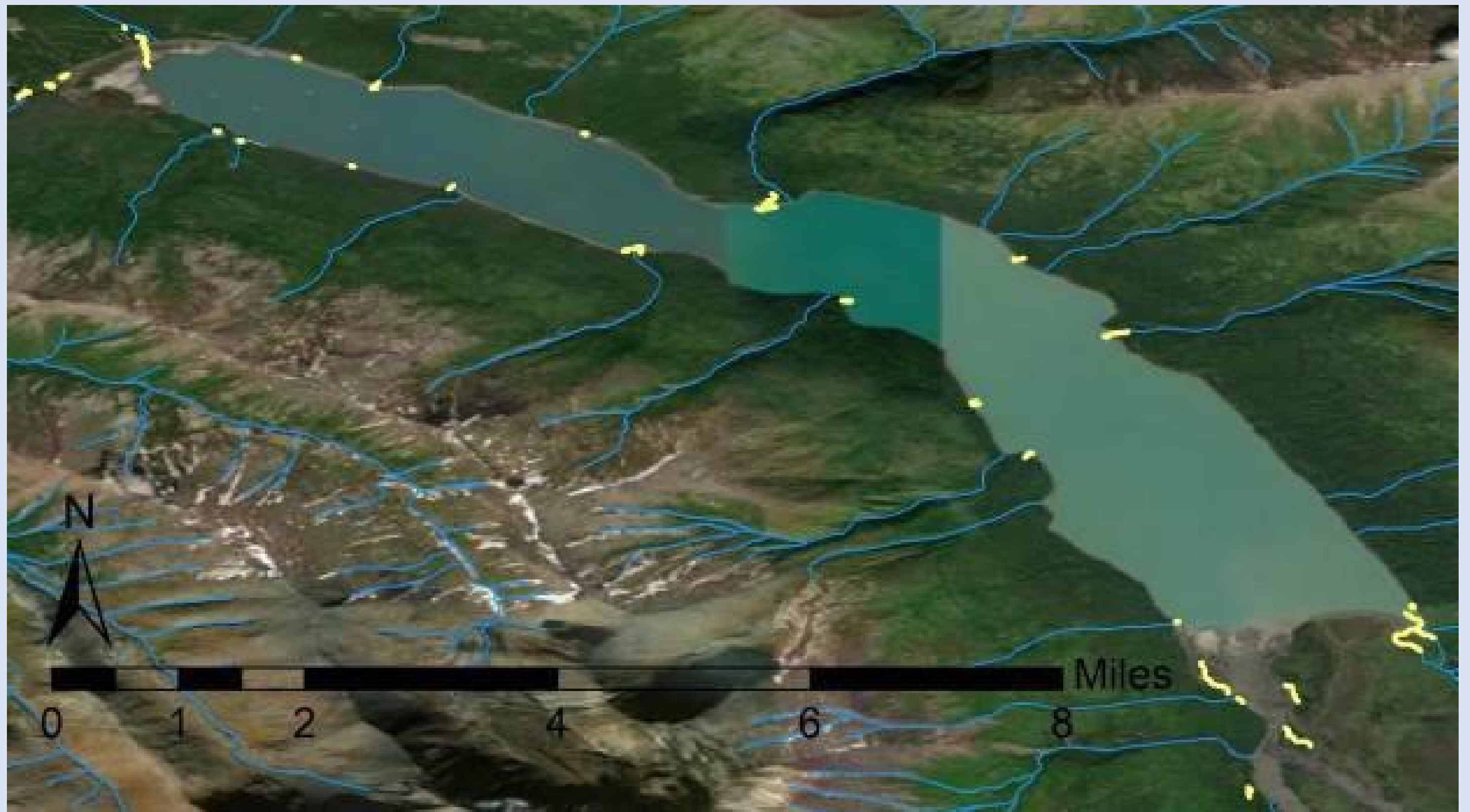




Figure 3.1-2. P. 14 “A total of 331 spawned-out kokanee were observed (at Eklutna Lake) during the survey period...” “Spawned kokanee ranged from 4.5 – 6.5 inches...” Biologists say these would grow to normal sockeye size if allowed to develop in the ocean.



Spawning habitat in the river tributaries system above Eklutna Lake

This entire tributary to the East Fork Eklutna River above Eklutna Lake is good spawning habitat.



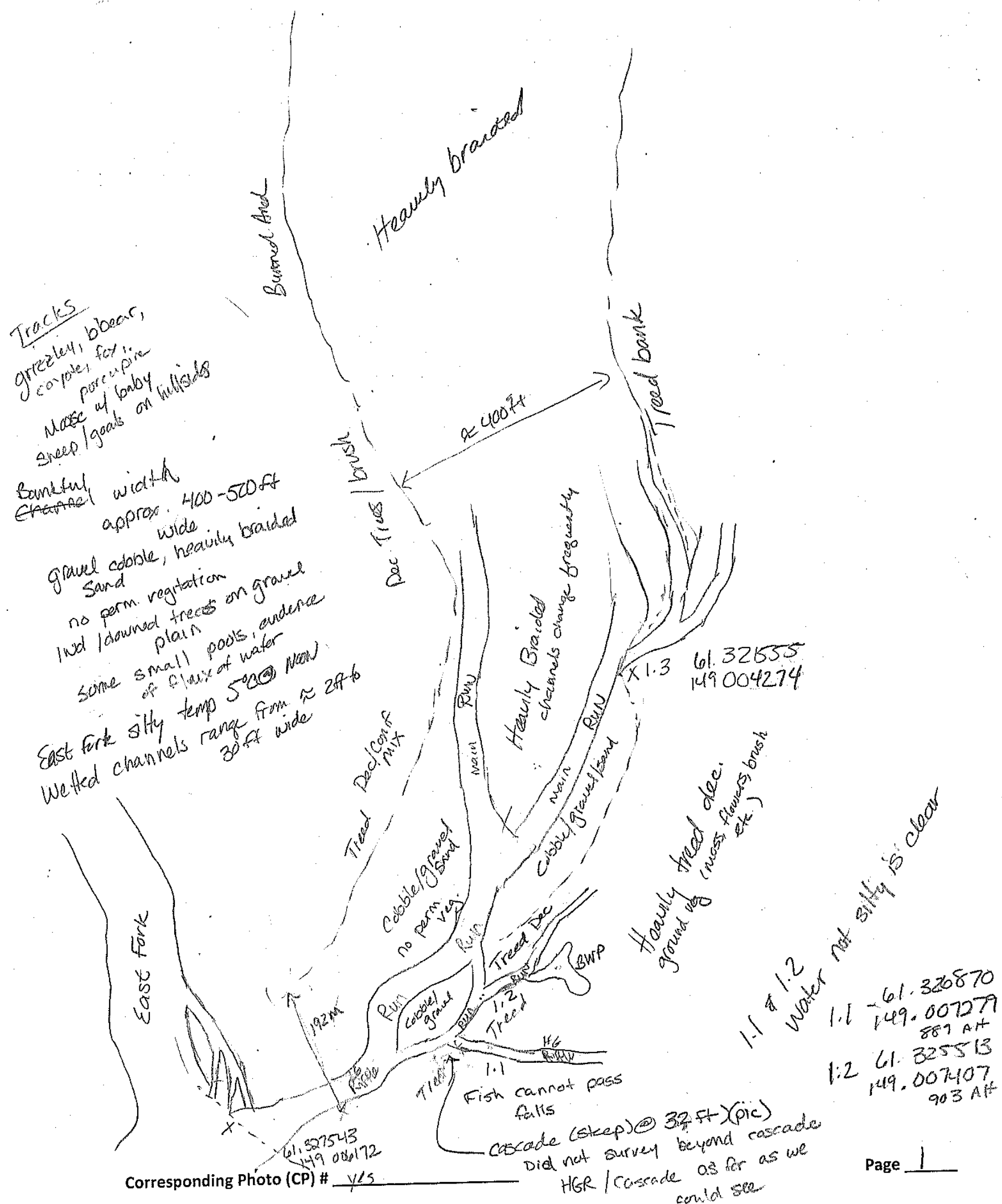
West Fork Tributaries





More West Fork tributaries pictures. Dolly Varden Char are abundant. Spawning king and silver salmon can be imagined with restored passage at the lake dam.

Unit 1
Unit Starting Coordinates: 61.327543 N
149.006172 W
Alt 876 ft



Tracks
grizzly, b bear,
coyote, fox,
porcupine
nose of baby
sheep/goats on hillsides

Bankful
Channel width
approx. 400-500 ft
wide
Gravel cobble, heavily braided
Sand
no perm. vegetation
incl. downed trees on gravel
plain
Some small pools, evidence
of flow of water
East fork silty temp 52°C near
Wetted channels range from ~ 2ft to
30 ft wide

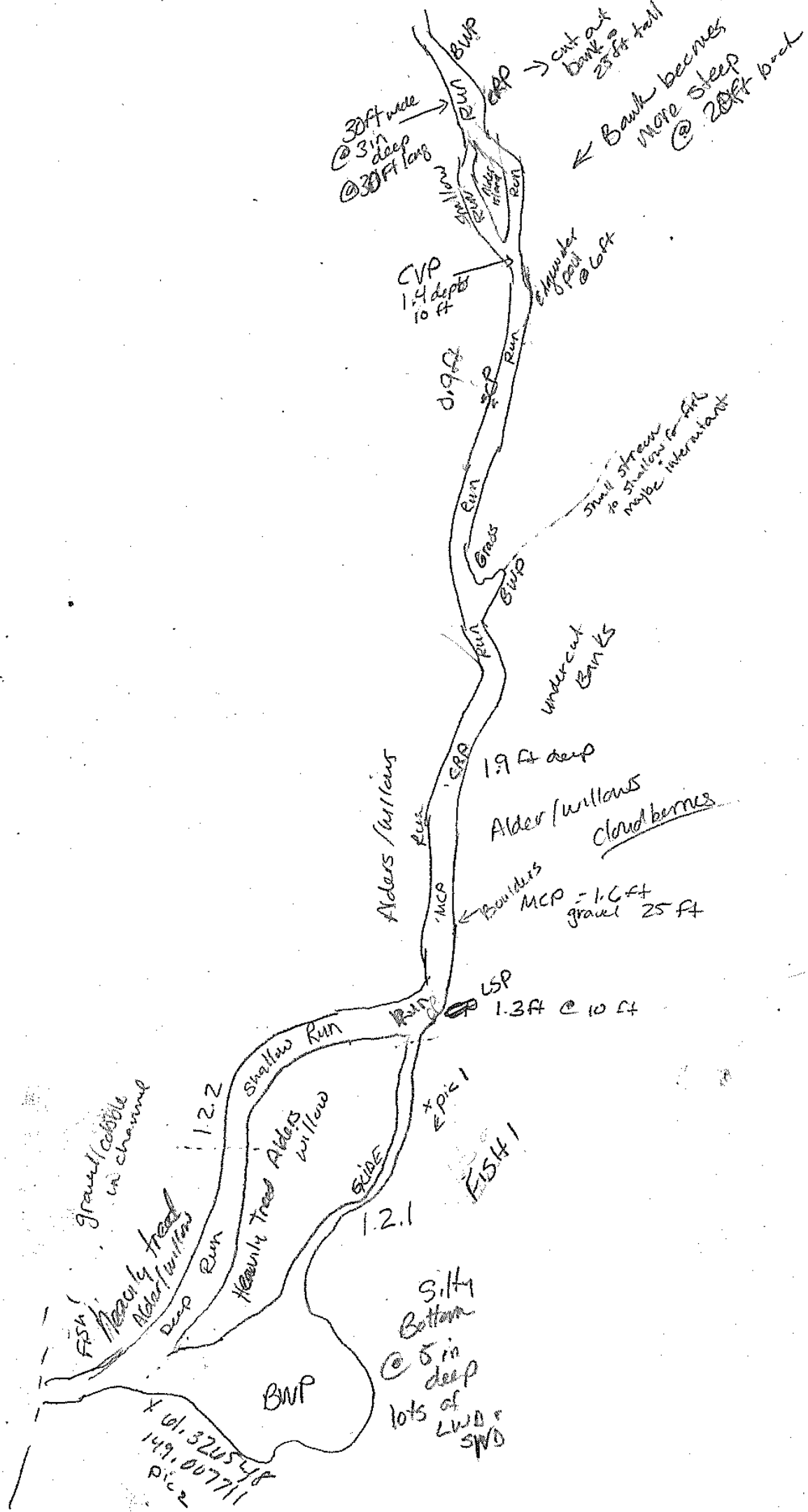
Heavily
grounded
dec.
(moss, flowers, brush
etc.)

1.1 # 1.2
Water not silty is clear

Fish cannot pass
falls
cascade (steep) @ 32 ft (pic)
Did not survey beyond cascade
HGR / cascade as far as we
could see

Sample map of West Fork
with tributaries to Eklutna
Lake, from the Native
Village of Eklutna habitat
study, 2022

1.2.2
41.326188
149.007727



Extension of field map of clear water tributary to the West Fork – most of which was good spawning habitat.

NVE study estimates over 20 miles of salmon habitat in the lake tributaries system.