State of Alaska
Department of Fish and Game
Division of Sport Fish

Nomination Form
Anadromous Waters Catalog

Region: Southcentral

USGS Quad(s): Seward A-3

Anadromous Waters Catalog Number of Waterway: 226-40-16670

Name of Waterway: "Anderson Creek" ☐ USGS Name ☑ Local Name

☐ Addition ☐ Deletion ☑ Correction ☐ Backup Information

For Office Use

Nomination # 120324		Fisheries Scientist	11/2/12 Date
Revision Year: 2013		Habitat Operations Manager	11/2/12 Date
Revision to: Atlas ____ Catalog ____ Both X		AWC Project Biologist	9/19/12 Date
Revision Code: E-9, D-1		Cartographer JDG	11/3/12 Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
					☐
					☐
					☐
					☐
					☐

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments

During a stream evaluation for a hydroelectric project, I observed a 10-foot high barrier that will not pass fish. The specified portion of this creek should be reducted to the location of the barrier. See the August 29, 2012 trip report.

Add barrier to stream and shorten stream to barrier location ref nom # 12-323, 12-324

Name of Observer (please print): Will Frost, Habitat Biologist

Signature: [signature] Date: ~~6/4/2012~~ 8/30/2012

Agency: ADF&G, Division of Habitat

Address: 333 Raspberry Road

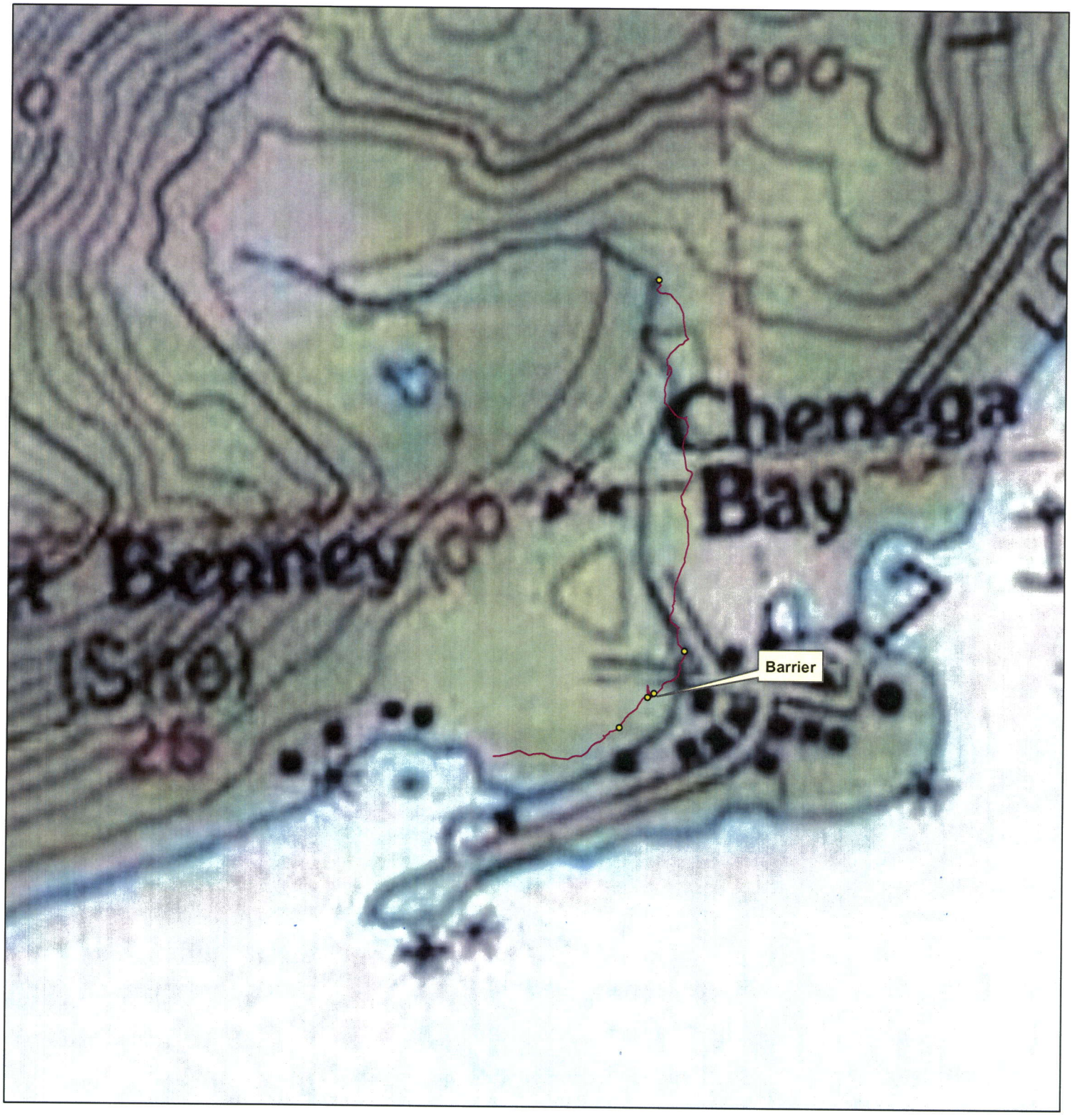
Anchorage, AK 99518

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Anadromous Waters Catalog.

Signature of Area Biologist: _____ Date: _____

Name of Area Biologist (please print):

Revision 05/08


500
Chenega
Bay
Benney
(Site)
26
Barrier

MEMORANDUM

State of Alaska
Department of Fish and Game
Division of Habitat

TO: Michael Daigneault
Central Region
Regional Supervisor

DATE: August 30, 2012

PHONE NO: 267-2813

FROM: Will Frost WF
Habitat Biologist

SUBJECT: Trip Report – Anderson Creek
Chenega Hydro Electric Project

On August 29, 2012, I traveled to Chenega Village with Kate Arduser, Solstice Alaska, Daniel Hertrich, Hatch, and Audrey Alstron, Alaska Energy Authority. The Chenega Corporation is evaluating the potential of a small-scale hydroelectric facility to provide an alternate energy source for the village of Chenega Bay in Prince William Sound. Evans Creek (Stream No. 226-40-16670) has been identified to be the source of water for the project. Evans Creek is locally known as "Anderson Creek" and will be referenced as Anderson Creek in this trip report. Water in the upper reach of the creek will be diverted from the creek through a pipe, producing energy then discharged back into the creek near the village. The water diversion may remove most of the water from a portion of the creek.

The Alaska Department of Fish and Game (ADF&G) was requested to evaluate if a barrier located near tidewater will allow adult salmon to pass upstream. Fish presence above the barrier was also evaluated. The Anadromous Waters Catalog indicates sockeye salmon are present above the barrier. We arrived in Chenega Bay at 2:00 p.m. The weather conditions were clear and warm.

Ms. Arduser and I walked to tide water to begin sampling with an electrofisher. We observed about 125 adult pink salmon spawning in the tidally influenced portion of the stream below the barrier. I did not use the electofisher where adult salmon were present. We walked upstream to the barrier. The barrier is a bedrock controlled falls/cascade about 10-feet high on a 20-25% slope (Figures 1 to 3). There are no pools along the cascade.

We walked upstream above the barrier about 0.5 mile sampling for fish presence. The stream is a low gradient channel with riffle-pool habitat in a mature spruce/hemlock forest. The stream channel has moderate sinuosity. Pools were formed primarily from large woody debris (Figures 4 and 5). The substrate is primarily of gravel and cobbles (Figure 6). We captured about 35 Dolly Varden 70 to 165 mm Fork Length (Figure 7). We ended our sampling at an abandoned log dam (Figure 8). The dam was built to provide water to a saltery that was operated in the area before the village of Chenega Bay was built.

We walked upstream to an impoundment on Anderson Creek. The impoundment is the village drinking water supply. Surplus water that flows over the impoundment will be used to power the proposed hydroelectric facility (Figure 9).

The name of Evans Creek will be changed in the Anadromous Waters Catalog to the locally used name of Anderson Creek. Pink Salmon in the lower reach of Anderson Creek will be nominated for addition to the Anadromous Waters Catalog. The ADF&G has determined that the barrier in the lower reach of Anderson Creek will not allow fish passage. Based on fish sampling conducted by HDR Alaska, Inc. in 2009 and by the ADF&G, the upper limit of the specified portion of Anderson Creek will be moved to the location of the barrier.

cc: D. Bosch, ADF&G
A. Ott, ADF&G
M. Marie, ADF&G
K. Arduser, Solstice Alaska
D. Hertrich, Hatch

Figure 1. Barrier in Anderson Creek. View looking upstream.

Figure 2. Barrier in Anderson Creek. View looking upstream.

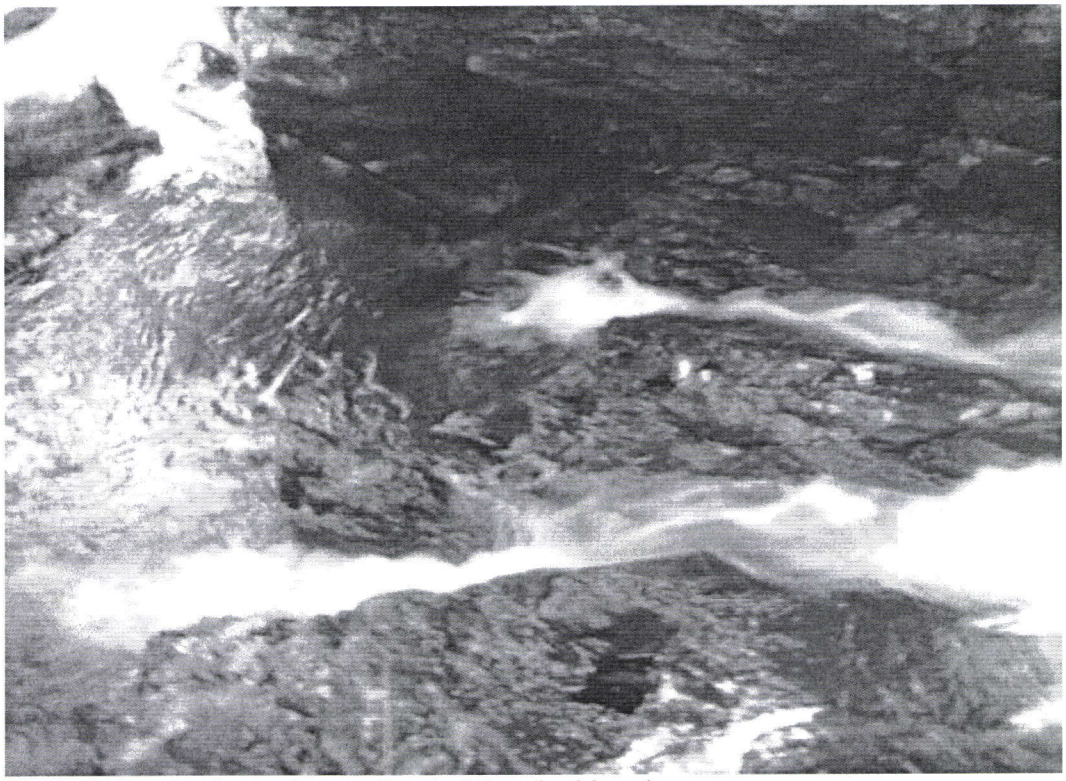


Figure 3. Barrier in Anderson Creek. View looking downstream.

Figure 4. Large woody debris in Anderson Creek. View looking upstream.

Figure 5. Large woody debris in Anderson Creek. View looking upstream.

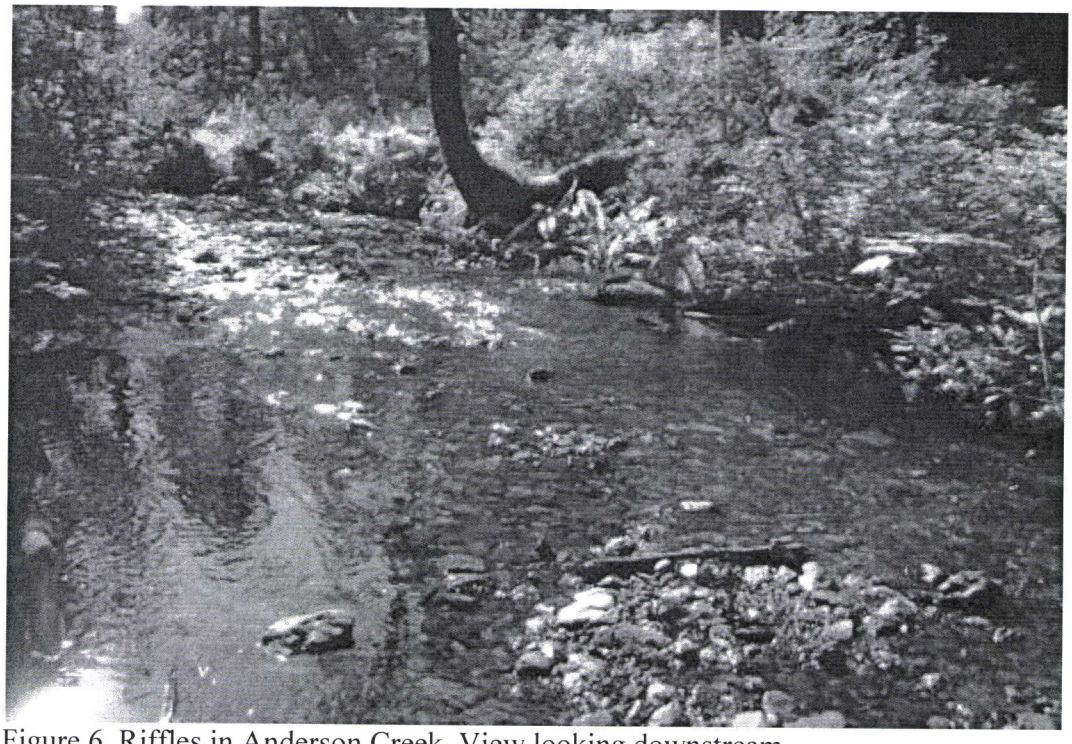


Figure 6. Riffles in Anderson Creek. View looking downstream.

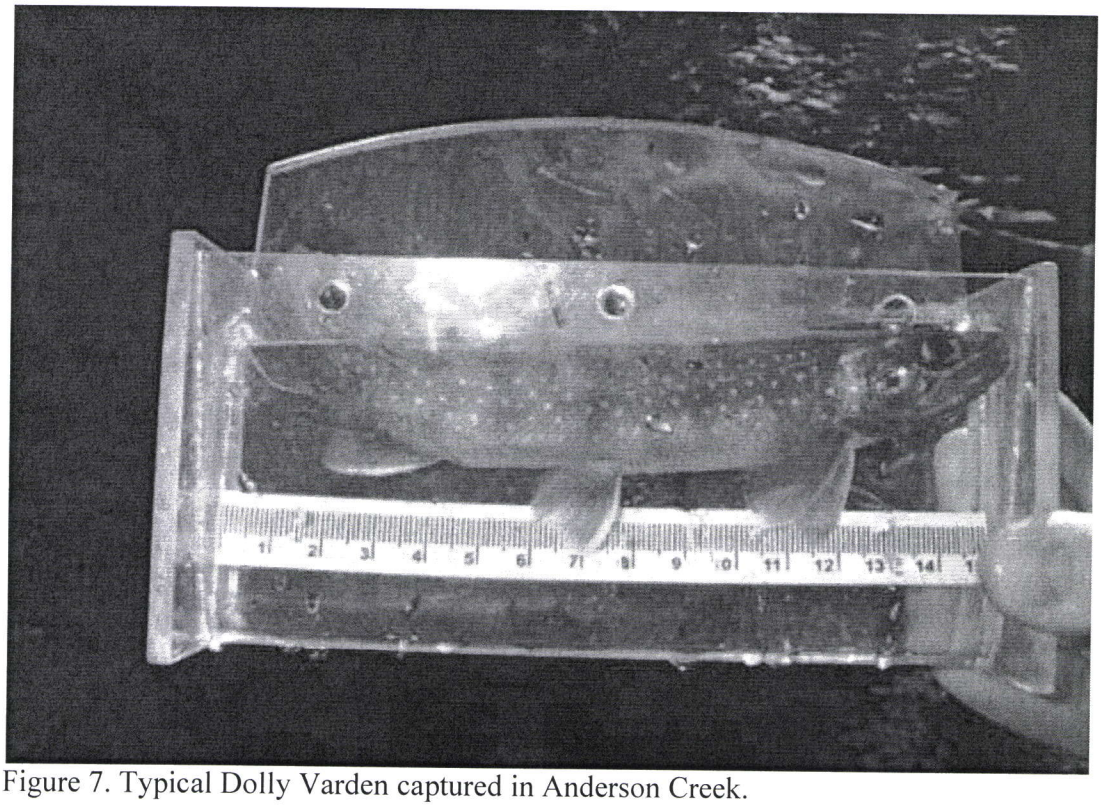


Figure 7. Typical Dolly Varden captured in Anderson Creek.

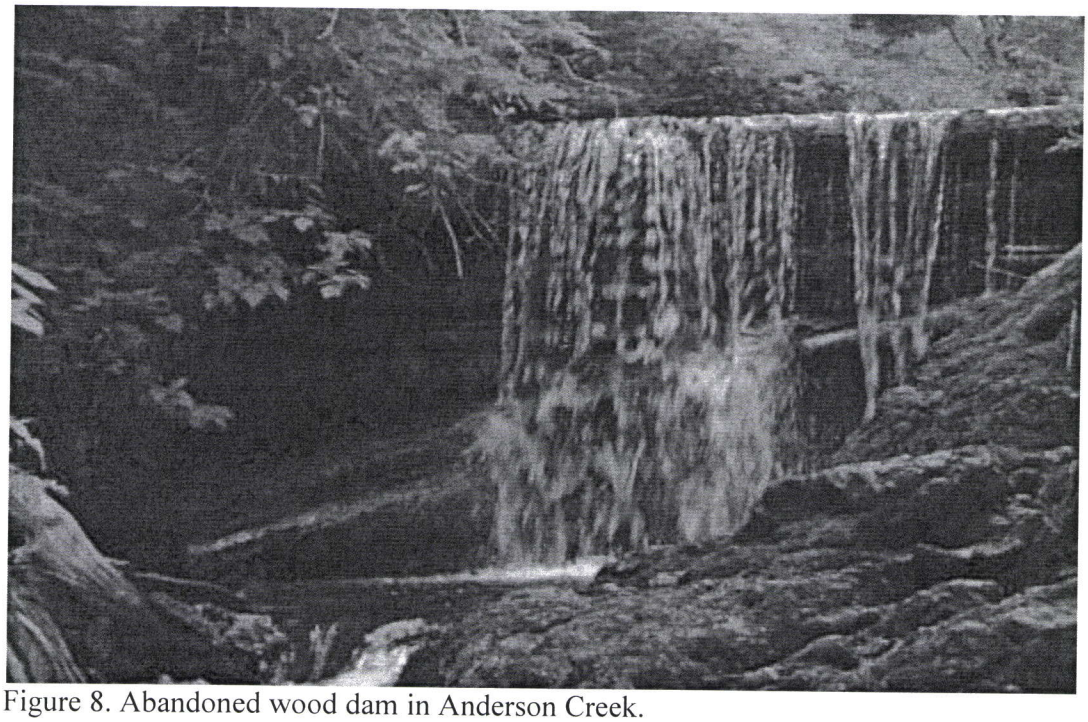


Figure 8. Abandoned wood dam in Anderson Creek.

Figure 9. Surplus water flowing over impoundment in Anderson Creek.