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

Nomination Form
Anadromous Waters Catalog

Region: Southwest

USGS Quad(s): Iliamna D-5

Anadromous Waters Catalog Number of Waterway: 324-10-10150-2207-3026

Name of Waterway: Bible Camp Creek

☐ USGS Name ☒ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination #	130018	Fisheries Scientist	Date 8/27/13
Revision Year:	2014	Habitat Operations Manager	Date 8/27/13
Revision to:	Atlas ____ Catalog ____ Both X	AWC Project Biologist	Date 1/29/13
Revision Code:	A-2, A-3	Cartographer	Date 9 5 13

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	8/14/12		X	X	☒
longnose sucker	8/14/12			X	☐
					☐
Add local name "Bible Camp Ck" to DB					☐
add new stream w/ coho salmon rearing					☐

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: Tributary to Newhalen River (east side) - Section 30 T. 3S / R. 32W
Drains series of lakes - 2 minnow traps set near lake outlet, 2 coho salmon captured at 85 and 115 mm in length
- longnose suckers observed visually

Name of Observer (please print): Josh Brekken

Signature: Josh B

Date: 11/8/12

Agency: ADFG

Address: 333 Raspberry Rd
Anchorage, AK 99517

ALASKA DEPT. OF FISH & GAME
JAN 18 2013

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: _____

02/08 Revision

Bible Camp Lake Creek: Aerial image showing trap locations.

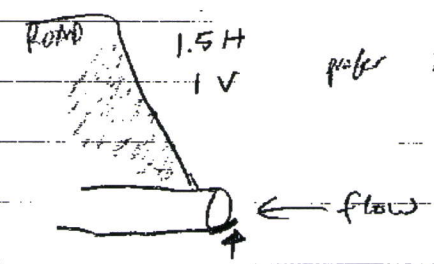
8/14/12

0700 Begin Day

Windy, partly cloudy, 50°

P. Jahnke, Mark B., Josh B.

0740 @ Bear Creek



prefer 2:1 w/ cohesionless gravel fill

797 + 798 photos of Bear Creek Culvert looking Downstream

Culvert invert had been jacked 6"

799 Upstream of culvert - downstream view

800 Upstream of culvert - upstream view

NOTE: 250' above (upstream) of culvert creek is single channel, gravel/cobble sand substrate, overhanging veg (willow + sweet gale)

suitable spawning grounds →

801 embankment (upstream)

802 weirs @ USGS gage

803 - 804 minnow trap site (250' upstream of culvert)

805 806 substrate

808 - 810 substrate piling up upstream of culvert + jacked up creating partial velocity barrier - probably doesn't pass juv.

8/14/12 - Bear Creek

813 Downstream of culvert (upstream view)
814 " " " (downstream view)
815 back H_2O area/overflow channel downstream of culvert (juv. fish obs. here)
816-817 downstream embankment (1¼ : 1)

Culvert is failing - coming apart @ seams and allowing road material through

Appears subsurface flows may be freezing & jacking invert end of culvert

Sediment build-up on upstream and downstream end of culvert.

819 Downstream View
820 Upstream View

0915 Lover's Creek

821 Outlet of culvert w/ sediment
822 DS view @ culvert outlet
823 Lover's Creek mouth
824 Road fill over Lover's
825 } from Road DS view (Newhalen visible)
826 } US view

8/14/12 - Lover's Creek

827 } Upstream end of culvert looking
828 } downstream

Sediment buildup on DS end of culvert is probably from road fill slope failing down into creek

190' culvert - seem towards outlet is failing

~5' wide stream
T = 8°C

Rock weirs on downstream end may not work for passage according to Paul - RE: narrow stream

Downstream of culvert all the way to Newhalen (<¼ mile) - stream is swift w/ very little holding water - appears to have some spawning gravel, ~~and~~ some rearing habitat, but almost no back H_2O or pools.

Paul would like to replace culvert w/ headwall

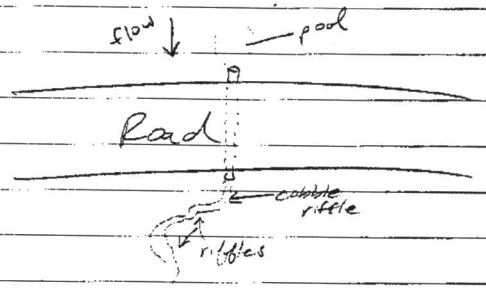
Suitable spawning gravel upstream + down of culvert

835 DS view @ culvert outlet

Swift stream (esp. down from culvert) w/ gravel/cobble substrate - better ~~holding~~ rearing hab. above culvert.

8/14/12

834 gravel substrate upstream of culvert



838 DS view downstream from culvert.

Bear Creek - appears to pass adult fish but partial or temporal barrier to juvenile fish

Lover's Creek - appears to pass both life stages of most fish species

1040 S Fork Alsea Creek

photo 839 DS view from Road

840 US " " "

841, 842 } erosion gully on upstream side of Road

843 + 844 large pile of sediment that has washed down the slope and into creek

8/14/12

Upstream of Culvert

juvenile coho observed

gravel/sand substrate, less gradient than Lover's or Bear

Great rearing habitat

Rating: upstream habitat above culverts

Immediately upstream of culvert

Bear - good to fair rearing

good spawning gravel

Lovers - swift - poor to fair

- fair spawning

S Fork Alsea - good to excellent

fair spawning

→ lots of overhanging veg.

photo 845 } upstream of culvert - DS view

846 } US view

T = 5°C

Bear - replace culvert *

Lover's - replace or repair w/ weir or other structures, bio-engineering *

S Fork Alsea - leave culvert, address sediment coming down hill *

large pile of fill on upstream/inlet end of culvert should be removed and prevented from happening again

8/14/12

S Fork Alexcy

No ~~Invert jacked ~ 8" - 2nd thought maybe not~~

JMB 8/14

photo 847 - 850

video upstream of culvert

and outlet of culvert

Outlet has some scour w/

4-5" drop - could be

temporal/partial barrier

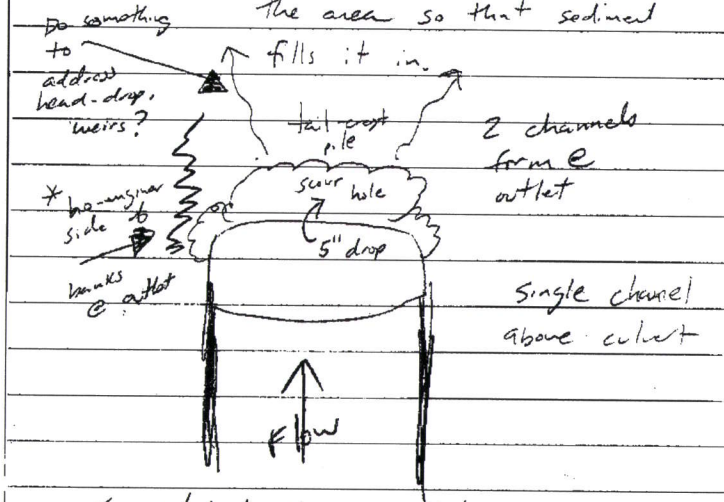
from scour hole/drop

Problem: How to address scour

@ outlet w/out backwatering

the area so that sediment

fills it in.



Trapped/dead otter @ outlet

8/14/12

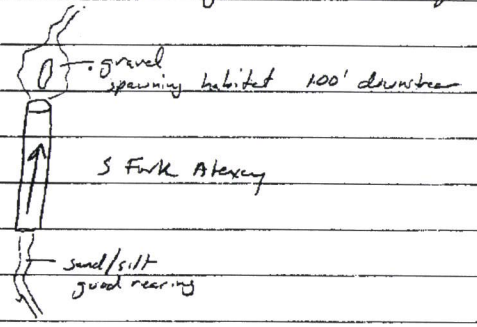
S Fork Alexcy

- Single channel above (entrenched)
- two channels below (more braided)
- silty sand substrate above
- gravel sand below
- good rearing habitat above culvert
- poor spawning " " "

opposite below (fair rearing)

possibly need grade control structure

on downstream end of S Fork Alexcy



Bible Creek

photo 872

juvenile coho obs upstream

of culvert

lake upstream

silty, sand, gravel substrate

good rearing habitat - few spawning gravels

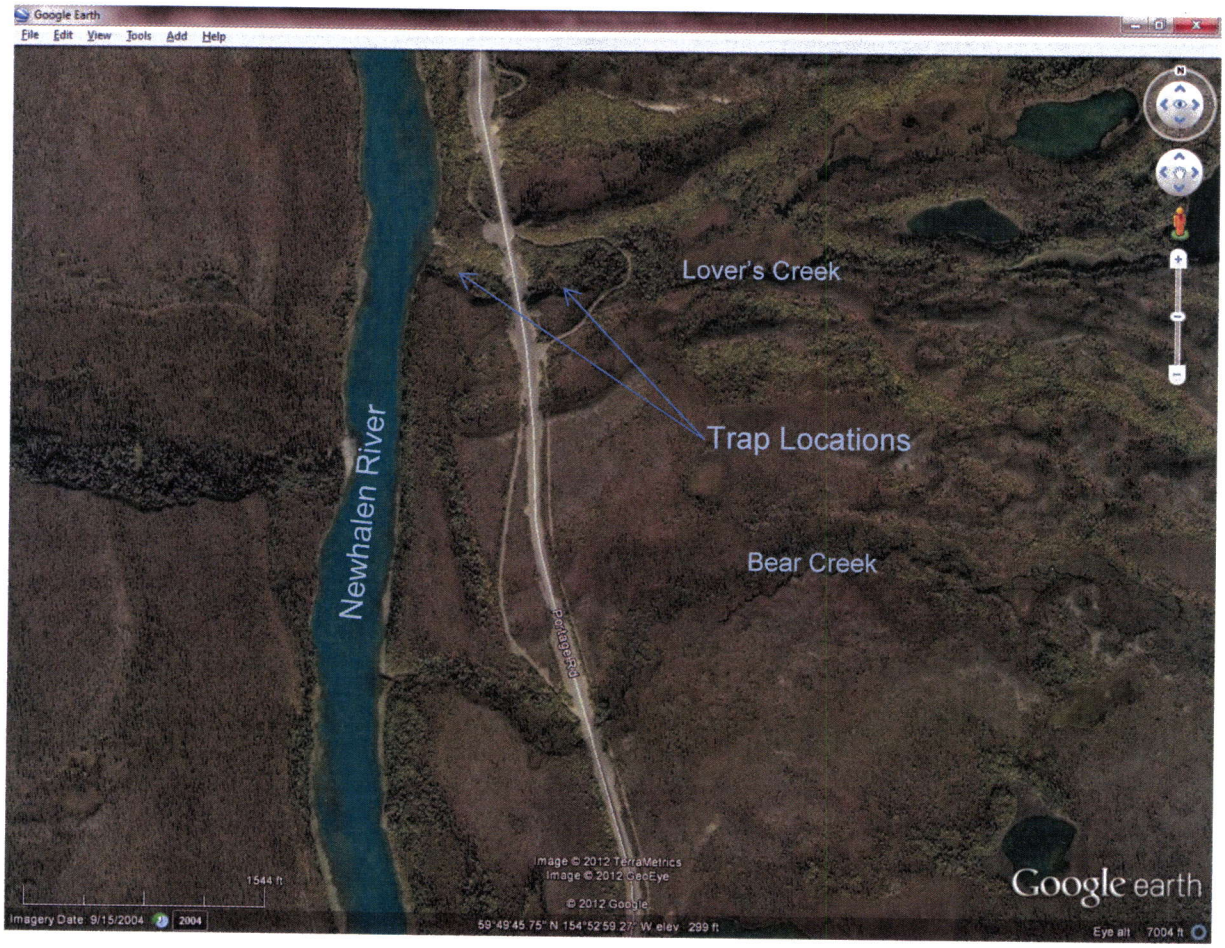
873 DS view of culvert inlet

"Bible Camp Creek" - juvenile coho salmon captured

AWC Streams

Bible Camp Creek: Lake outlet and start of stream (looking downstream).

Bible Camp Creek: Juvenile coho salmon captured at culvert inlet.

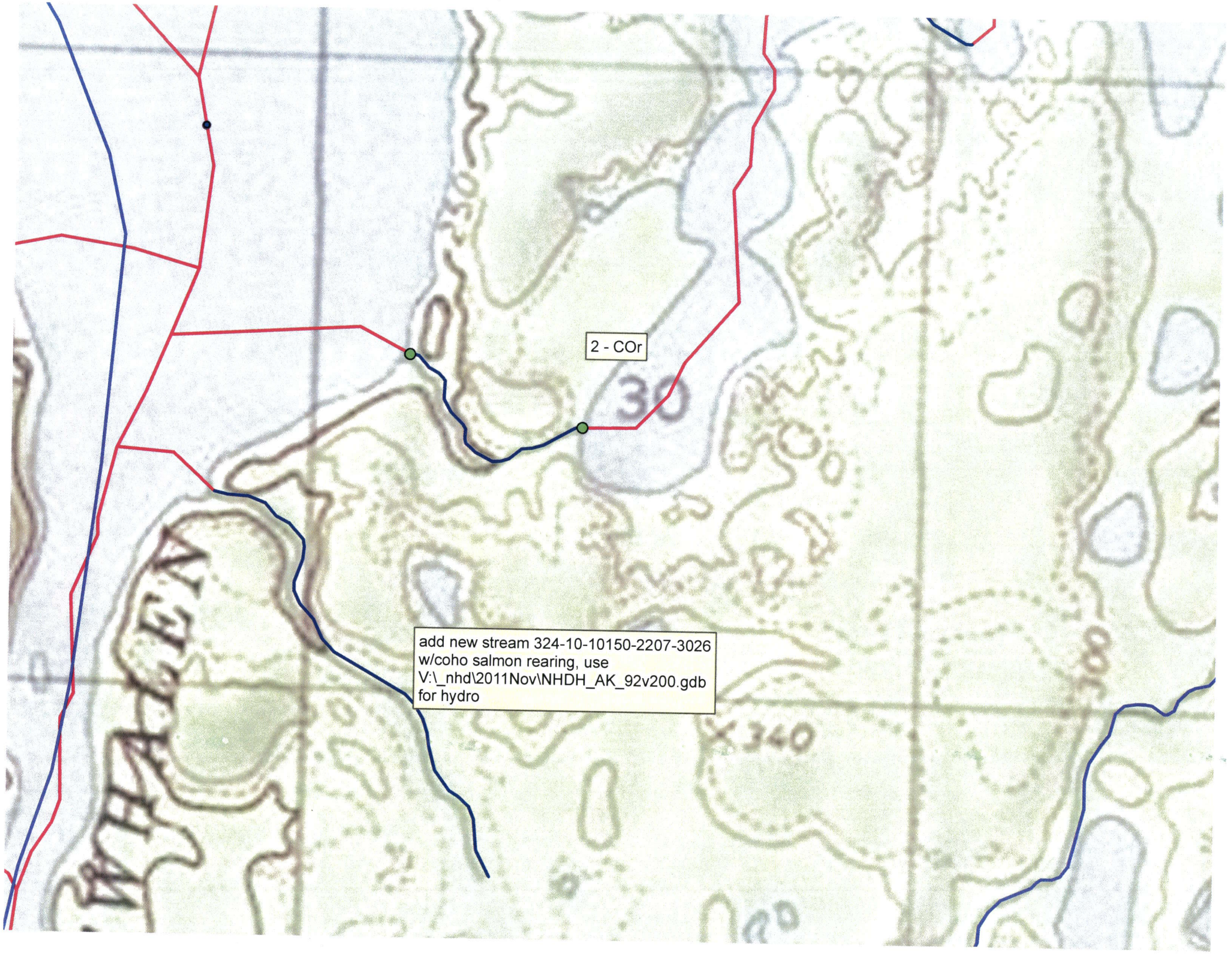


Lover's Creek and Bear Creek: Aerial image showing trap locations.

Bible Camp Creek

The Iliamna-Nondalton road crosses Bible Camp Lake Creek at 59.88647°N and 154.84872°W. The culvert appears passable to juvenile salmonids, but adults likely have a tough time passing during low water. Downstream of the culvert the stream enters a wetland complex and exists as multiple, shallow, undefined channels with water depths between one and four inches. The substrate is sandy silt and willows are abundant in this reach. The undefined channels come back together as a single channel about 400 feet downstream of the crossing. Longnose suckers (four to six inches in length) were observed downstream of the crossing in the wetlands reach. Upstream of the crossing the stream has a silty sand substrate with mixed gravels. Multiple channels and backwater pools exist and water depths are greater than the downstream reach (six to ten inches depth). Alders are the dominate vegetation and multiple juvenile coho salmon were observed in this upstream reach. Spawning habitat is poor for salmonids both up and downstream of the crossing. Rearing habitat for salmonids is fair downstream and good upstream of the crossing. The stream temperature was 15°C at 1230.

Two minnow traps were set in the Bible Camp Creek, one at the upstream end of the culvert and one about 100 feet further upstream near the lake outlet. The traps were set at 1200 and retrieved at 1330. One **115 mm coho salmon** was captured adjacent to the culvert's inlet and one **85 mm coho salmon** was captured near the lake's outlet.


2 - COr
30
add new stream 324-10-10150-2207-3026
w/coho salmon rearing, use
V:_nhd\2011Nov\NHDH_AK_92v200.gdb
for hydro
WHALEN
340