State of Alaska
Department of Fish and Game
Sportfish Division

Nomination Form
Anadromous Waters Catalog

mmp JB

Region: STEA

USGS Quad(s): Juneau B6

Anadromous Waters Catalog Number of Waterway: 114-23-10199 -2100

Name of Waterway: Boey's Ditch

☐ USGS Name ☑ Local Name

☑ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination #	08-520		
Revision Year:	2009	Fisheries Scientist	10/6/08 Date
Revision to: Atlas		Habitat Operations Manager	10/6/08 Date
Both	✓	AWC Project Biologist	9/8/08 Date
Revision Code:	~~[illegible]~~, A-2	Cartographer	10/20/08 Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
coho salmon	10/03/2006		✓		✓

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:

Nominated stream is a straightline ditch that was dug decades ago to provide drainage for Rink Creek Road (waypoint Datum NAD83). Carl Schrader and I trapped two coho, each measuring 80mm TL, in one minnow trap set to soak for two hours. See attached Page 2 of Carl's trip report dated 10/27/06.

Coordinates (Lat,Long): Upper(58.4337,-135.7049) Lower(58.4301,-135.7065)

Add new stream 114-23-10199-2100 w/coho salmon ~~Spawning~~ Rearing

Add local name Boey's Ditch Fau 114-23-10199-2100

Name of Observer (please print): Kate Kanouse

Signature: 205.166.26.233 (Web Nomination) Date: 09/02/2008

Agency:

Address: ADF&G Habitat ADF&G Habitat
Juneau, AK 99811

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 02/08

Johnson, J D (DFG)

From: Kanouse, Katrina M (DFG)
Sent: Thursday, September 04, 2008 8:13 AM
To: Johnson, J D (DFG)
Subject: RE: Nomination 08-520

Hi J –

I don't have an aerial of the airport, but could probably get one from DOT if you'd like it.

I walked the stream and I know it IS a straight line between the upper and lower points. I also know that the intersection of the ditch with the stream 114-23-10199 is at an angle, there is no curvature at all. So, connecting the dots by a straight line and intersecting the main stem at an angle matches the existing conditions. Since the ditch was manmade several years ago, I don't know if hydrography will help you much…

Thanks,
Kate

From: Johnson, J D (DFG)
Sent: Thursday, September 04, 2008 7:02 AM
To: Kanouse, Katrina M (DFG)
Subject: RE: Nomination 08-520

Kate

I've plotted the two points (green dots) described on nom # 08-520
I'm trying to locate orthoimagery to help display ditch hydrography
Do you have a good aerial of the airport area?
In the absence of good imagery, I'll instruct cartographers to "connect the dots" and add arc as a straight line intersecting "main stem" at an angle
What do you think?

J. Johnson
ADF&G
Anadromous Waters Catalog
Project Biologist
907-267-2337

From: Kanouse, Katrina M (DFG)
Sent: Tuesday, September 02, 2008 3:28 PM
To: Johnson, J D (DFG)
Subject: Nomination 08-520

Hi J –

For nomination 08-520, the upper waypoint is where Carl and I set the trap that caught the two coho. We believe this location is the upper most extent for fish habitat, as the upstream of this location the stream is choked with vegetation and likely impassable by fish. The ditch drains Rink Creek Road, and two culverts under the road convey water from uphill.

Kate

Johnson, J D (DFG)

From: Kanouse, Katrina M (DFG)
Sent: Tuesday, September 02, 2008 3:28 PM
To: Johnson, J D (DFG)
Subject: Nomination 08-520

Hi J –

For nomination 08-520, the upper waypoint is where Carl and I set the trap that caught the two coho. We believe this location is the upper most extent for fish habitat, as the upstream of this location the stream is choked with vegetation and likely impassable by fish. The ditch drains Rink Creek Road, and two culverts under the road convey water from uphill.

Kate

MEMORANDUM

STATE OF ALASKA
Department of Natural Resources
Office of Habitat Management and Permitting

TO: Jackie Timothy
Juneau Area Manager
OHMP

DATE: October 27, 2006

FILE NO:

THRU:

SUBJECT: Gustavus Gravel Pits and Airport Fish Sampling Trip Report

FROM: Carl Schrader
Habitat Biologist

TELEPHONE NO: 465-4287

Background: DNR owns a gravel source located north of the airport that is the main source for Gustavus. The gravel source currently has little management oversight. The Division of Mining Land and Water (DMLW) and the City of Gustavus want to develop a Management and Reclamation Plan for the site. Fish have been observed in the pit ponds, which drain to a ditch (Stream No. 114-23-10199) documented as rearing habitat for coho salmon. The ditch is cataloged from the culverts on Wilson Road just below the ponds, through the airport and to the outlet to the south in Icy Straight.

Gustavus Airport showing DNR gravel pits to the north. Icy Straight is to the south.

Since the gravel pits are connected to anadromous fish habitat, the management plan needs to consider impacts to fish during operations and at reclamation. The purpose of the trip was to document fish habitat in the project to guide development of the management and reclamation plan.

The Trip: On October 3, Kate Kanouse and I met in Gustavus with Ted Deats of DMLW, Gustavus Mayor Sandi Marchbanks, Gustavus City Council member Ken Klawunder, and Gustavus DOT Airport Manager Doc Pedersen, to discuss the City's plans for the area, and discuss our field work. Doc took us around the airport property to look at the drainage system and set minnow traps in the cataloged portion of the system. After lunch we borrowed a DOT truck and set traps in the pit area. The weather was overcast, with recent heavy rains.

Airport Ditches

We walked the airport "fish ditch" from within sight of the mouth to above the gravel pits. The lower end of the ditch is straight, about 10' wide and shallow with little in-stream structure. Upstream from about the middle of the runway the stream narrows and begins to meander, and fish habitat quality improves. The stream bottom is sandy, providing poor spawning habitat. We set traps in 7 locations from past the south end of the runway up to where it enters the pit area and caught sticklebacks, but no salmon. We also trapped "Boey's Ditch" that drains the area from Wilson Road to the east and discharges to the cataloged stream at about even with the middle of the runway. At the confluence, the drainage is about 5' wide, 6-8" deep, and appears to provide fish rearing habitat.

Trapping lower end of airport stream

Boey's Ditch at confluence

A minnow trap set in Boey's Ditch about 1500' upstream of the confluence caught 2 coho salmon 80 mm in length. We will nominate this drainage for inclusion in the Anadromous Waters Catalog (AWC).

Gravel Pit Ponds

Juvenile coho salmon and sticklebacks were found in all 4 of the main ponds. Field identification of the juvenile salmon based on color and fin shape suggested the fish were king salmon, which haven't been documented in the area, rather than coho which are common. Laboratory examination of several retained specimens confirmed they were coho. We will nominate the ponds for inclusion in the Anadromous Waters Catalog (AWC).

Ditch at lower end of ponds at Wilson Rd.

Trapping fish at south central pond

Kate returned October 24, and documented spawning coho salmon in the drainage above and below the northern-most culvert in the project area. She also caught a Dolly Varden char about 210 mm long. Developing salmon eggs were found in the gut of a juvenile salmon.

Spawning coho salmon

Kate Kanouse with a Dolly Varden char

Discussion

We documented that the gravel pit ponds and associated drainage system provide spawning and rearing habitat for coho salmon and Dolly Varden char. The presence of anadromous fish in the ponds must be considered in managing operations at the gravel source. Pursuant to AS 41.14.840 fish passage must be ensured, and once the ponds are included in the AWC, the ponds will also be regulated under AS 41.14.870. Classification as fish-bearing or anadromous waters will not preclude continued operation and development as a materials source for Gustavus, but authorization by OHMP will be required.

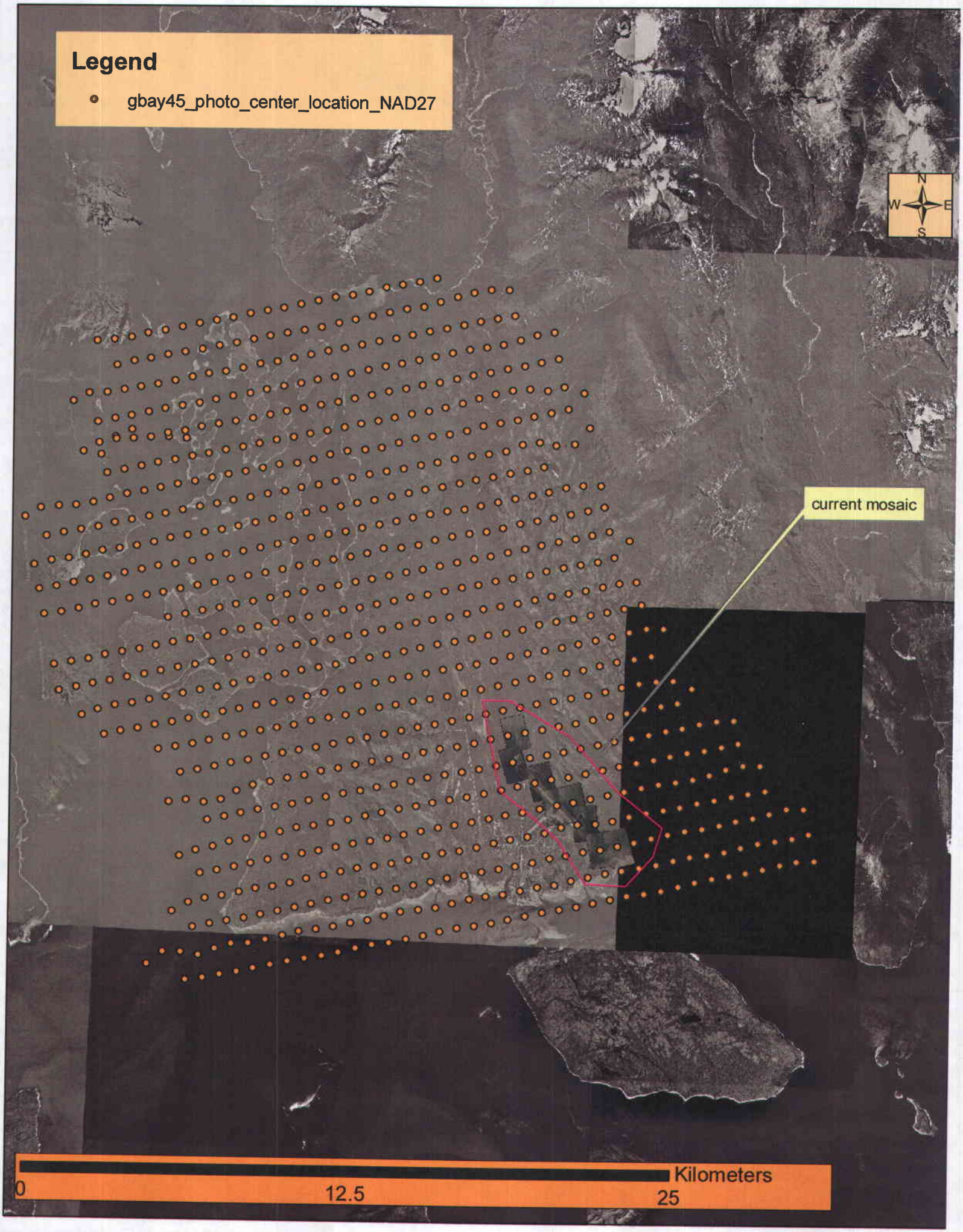
OHMP will require that drainage be provided between the ponds and the ditch/stream system so that fish can move between the ponds and the stream. The stream currently flows through the western pond, but passage between ponds is restricted by missing or inadequate culverts. With the current pond

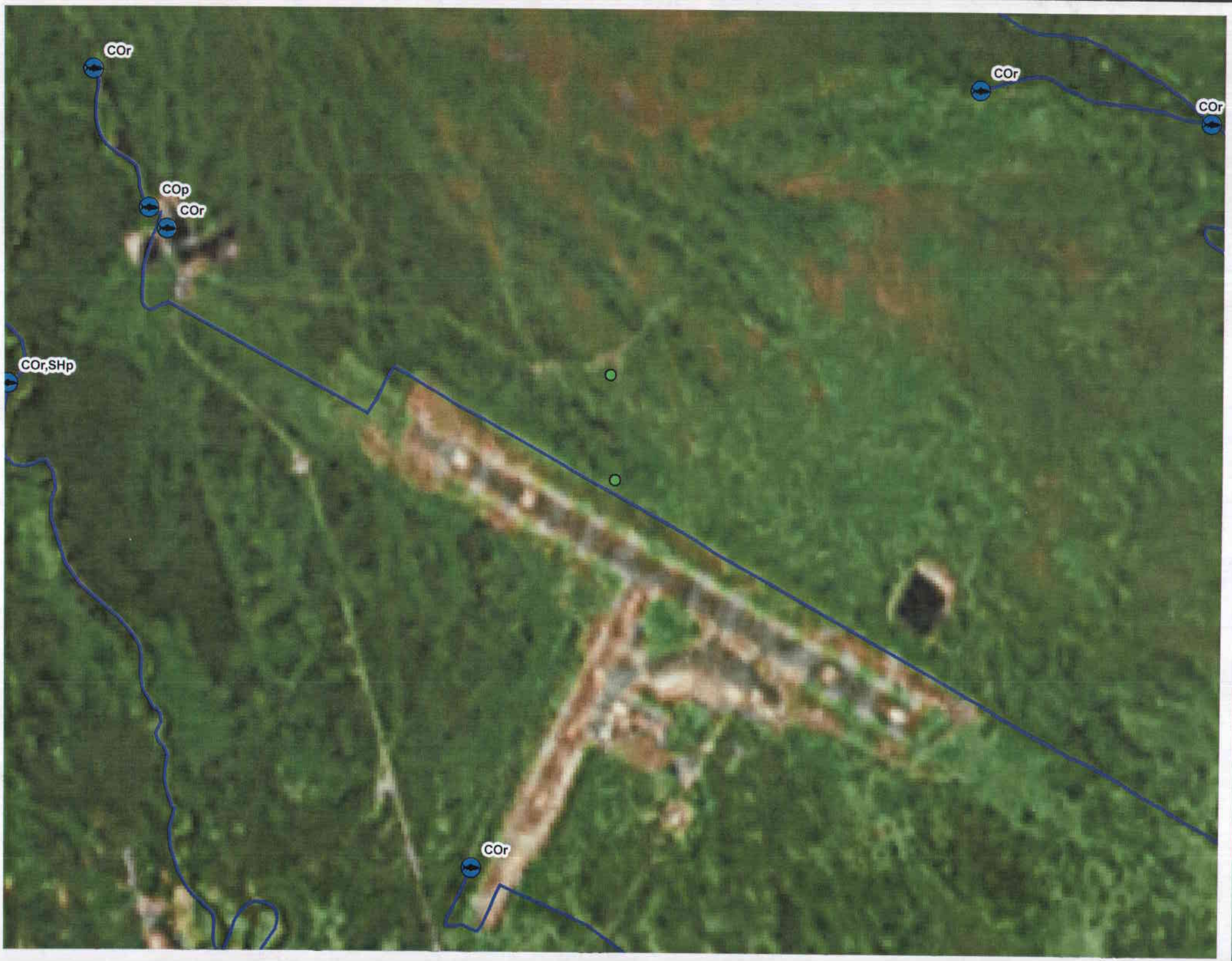
configuration fish may enter some ponds during flood events, but become trapped for an extended period of time, and may not be able to migrate out to sea when they need to during spring.

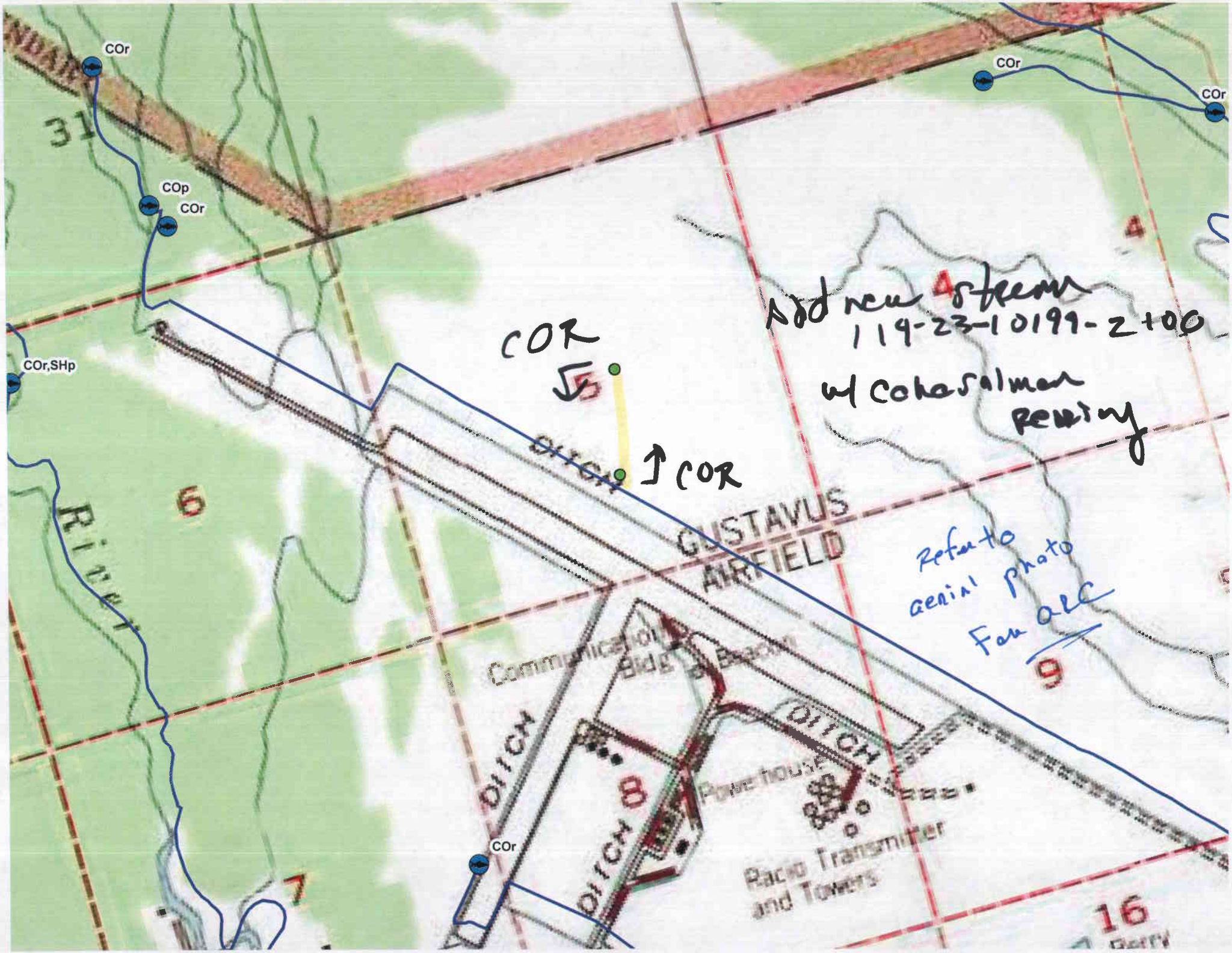
The ponds have the potential to be reclaimed to enhance fish rearing habitat. We will need to sample fish during winter, and measure pond depth and dissolved oxygen levels which could limit over-wintering fish habitat. Once we have the above information, we can recommend a design for reclamation of the ponds.

Email cc:

Al Ott, DNR/OHMP, Fairbanks
Carl Schrader, DNR/OHMP, Juneau
Mark Fink, ADF&G, Anchorage
Brian Glynn, ADF&G, Douglas
Ted Deats, DNR/DMLW, Juneau
Brady Scott, DNR-MLW, Juneau
Ben White, DOT&PF, Juneau
Doc Pedersen, DOT&PF, Gustavus
Greg Streveler, Gustavus
Chad Soiseth, NPS, Gustavus


Legend
gbay45_photo_center_location_NAD27
N
W
E
S
current mosaic
Kilometers
0
12.5
25


COr
COr
COr
COp
COr
COr,SHp
COr


COr
COp
COr
COr,SHp
COr
COr
COr
31
6
7
8
9
16
4
4
5
COR
COR
DITCH
GUSTAVUS
AIRFIELD
Communication Bldg
Beacon
DITCH
DITCH
DITCH
Powerhouse
Radio Transmitter and Towers
Add new stream
119-23-10199-2100
w/ Coho salmon
Rearing
Refer to aerial photo
For ARC