

State of Alaska  
 Department of Fish and Game  
 Nomination for Waters  
 Important to Anadromous Fish

AWC Volume (SE) SC SW W AR IN USGS Quad CRAIG B-2

102-60-10578

Anadromous Water Catalog Number of Waterway (NOT CONNECTED TO ANY NAMED OR NUMBERED SYSTEM)

Name of Waterway NONE USGS name — Local name —

Addition X Deletion — Correction — Backup Information —

For Office Use

Nomination # <u>94 317</u>	<u>Samal Shea</u>	<u>11-4-93</u>
Revision Year: <u>-94</u>	Regional Supervisor	Date
Revision to: Atlas <u>—</u> Catalog <u>—</u>	<u>Ed Wein</u>	<u>11/19/93</u>
Both <u>X</u>	<u>Z. Irone</u>	<u>1/5/94</u>
Revision Code: <u>A-2</u>	Drafted	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Migration	Anadromous
COHO	6-22-93		X		YES
CUTTTHROAT	"		X		NO
DOLLY VARDEN	"		X		?

(PRESUMABLY RESIDENT)

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 any other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments: BEAVER DAMMED STREAM/LAKE SYSTEM EXAMINED USING BAITED MINNOW TRAPS DURING 6-22-93 FOREST PRACTICES INSPECTION. ANADROMOUS HABITAT DOCUMENTED THROUGH THE CAPTURE OF NUMEROUS COHO FRY (SPECIFIC NUMBERS OF WHICH WERE NOT COUNTED) BOTH WITHIN THE STREAM AND ABOVE THE BEAVER DAM IN THE LAKE. TRAPS WERE ALLOWED TO SOAK FOR 1.5 TO 3 HOURS ~ THOSE SET IN STREAM YIELDED COHO, CUTTHROAT, DOLLY VARDEN, & SCULPIN, WHILE THOSE SET IN LAKE YIELDED COHO AND STICKLEBACK. SEE ATTACHED FOREST PRACTICES INSPECTION REPORT DATED 6-24-93.

Name of Observer (please print) KEVIN J. HANLEY, HABITAT BIOLOGIST ALASKA DEPT. OF FISH & GAME  
 Date: 11-1-93 Signature: Kevin J. Hanley  
 Address: ADF&G - HABITAT & RESTORATION DIVISION, KETCHIKAN NOV 05 1993  
 REGION II HABITAT AND RESTORATION DIVISION

This certifies that in my best professional judgement and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

Signature of Area Biologist: Stephen J. Hoffman

# MEMORANDUM

# STATE OF ALASKA DEPARTMENT OF FISH AND GAME

**TO:** Al Peterson  
Forest Practices Forester  
Department of Natural  
Resources  
Ketchikan

**DATE:** June 24, 1993

**FILE NO:** SE-88-001

**PHONE:** 225-2027

**FROM:** Kevin J. Hanley *KJH*  
Habitat Biologist  
Habitat and Restoration Division  
Ketchikan

**SUBJECT:** Forest Practices  
Inspection and  
Variation Request -  
Smith Cove

On June 22, 1993, you, Tom Wolford, and I conducted a Forest Practices Inspection to examine the 29 trees requested for harvest variation within the riparian buffer on the east side of an unnamed, uncataloged stream and lake system adjacent to Unit 93-8.3 at ITT Rayonier's Smith Cove tract.

Prior to beginning the variation inspection, we examined the small, 3 to 5 foot wide, low gradient stream that flows through the northeastern portion of Unit 93-10.1 for the purpose of determining its classification and riparian protection needs. Stream flow was extremely low at the time of the inspection. Two baited minnow traps were set at successive downstream locations between the 2000 Mainline road and the lake located just south of the unit boundary to determine the presence of stream rearing anadromous fish. After soaking for approximately 30 to 40 minutes, both traps yielded only resident cutthroat trout, Dolly Varden char, and sticklebacks. Given the lack of evidence of anadromous fish and its low gradient and gravelly/silty substrate, this reach of the stream can only be described as an unclassifiable waterbody as it fails to meet the criteria for type A, B, and C streams. Although a 66 foot buffer is not required along this reach, we would request that commercial timber be directionally felled and yarded away from the stream during the harvest of Unit 93-10.1. In addition, all low value and nonmerchantable trees should be retained within the riparian zone to maintain stream bank stability and to provide additional protection for the population of resident fishes that inhabit this reach of the stream.

As mentioned during the inspection, the culvert proposed for this stream on the 2000D Spur alignment must be bedded to prevent perching and allow for unimpeded fish passage. In addition, the existing 36-inch CMP culvert at the 2000 Mainline crossing is perched at its outlet by approximately 8 inches and, per AS 16.05.840 (the Fishway Act), must be pulled, reinstalled, and properly bedded to allow for the efficient passage of resident fish. Tom indicated that this will be done during the construction of the 2000D Spur and the harvest of Unit 93-10.1.

Variation Request

This request involved a total of 29 trees within the riparian buffer on the east side of an unnamed, uncataloged stream and beaver dammed lake system adjacent to clearcut Unit 93-8.3. Type A characteristics, including a gradient of 2 to 5 percent, a cobbly substrate, and banks that are controlled primarily by vegetation predominate throughout the reach of stream below the beaver dam. Trapping conducted concurrently with our examination of the requested trees yielded coho fry within both the stream and the lake thus verifying the type A classification of this system. Of the total 29 trees requested for harvest variation, 6 occur within the streamside buffer with the remaining 23 occurring within the lakeside buffer. A summary of their characteristics is as follows:

Trees #1 - 6; Stream Buffer

Tree #1: A 41-inch dbh hemlock occurring 31 feet from the ordinary high water mark of the stream. The adjacent unit was harvested in the late 1980's with only a few very small diameter trees left in the vicinity of this tree. As a result, it is substantially the largest and virtually the only effective component of this sparse portion of the buffer.

Tree #2: A 38-inch dbh hemlock leaning away and occurring 35 feet from the stream. It occurs within a relatively well stocked stand of small to moderate diameter hemlocks, one of which has a slight lean towards the stream.

Trees #3, 4, 5, and 6 occur in close proximity to one another just downstream of the beaver dam.

Tree #3: A 58-inch dbh redcedar leaning slightly away and occurring 35 feet from the stream. This tree occurs immediately adjacent to tree #4 at the effective outer edge of the buffer. Several smaller diameter hemlocks occur between it and the stream.

Tree #4: A 63-inch dbh redcedar occurring 25 feet from the stream between trees #3 and #5 at the effective outer edge of the buffer.

Tree #5: A 26-inch dbh hemlock with a pronounced lean away and occurring 24 feet from the stream. An approximate 24-inch diameter hemlock with a pronounced lean towards the stream occurs in the immediate vicinity.

Tree #6: A 32-inch dbh redcedar occurring 12 feet from the stream and showing no apparent lean. This tree occurs at the deflective outer edge of a bend in the stream immediately below a short high gradient cascade reach.

Trees #7 - 29; Lake Buffer

Tree #7: A 36-inch dbh spruce leaning slightly away and occurring 57 feet from the dammed lake outlet.

Tree #8: A 34-inch dbh spruce leaning away and occurring 30 feet from the lake. An approximate 28-inch diameter pistol butted spruce occurs on the shoreline and leans over and towards the lake. Numerous live and dead hemlock and redcedar occur in the surrounding vicinity of trees #8, 9, and 10.

Tree #9: A 29-inch dbh redcedar leaning away and occurring 38 feet from the lake.

Tree #10: A 45-inch dbh redcedar occurring just south of tree #9 and 45 feet from the lake. This tree leans slightly away from the lake.

Tree #11: A 19-inch dbh redcedar leaning strongly away and occurring 43 feet from the lake.

Tree #12: A 24-inch dbh redcedar leaning towards and occurring 14 feet from the lake.

Tree #13: A 22-inch dbh spruce leaning slightly towards and occurring 5 feet from the lake.

Tree #14: A 41-inch dbh redcedar leaning towards and occurring 31 feet from the lake. This tree occurs immediately adjacent to tree #15.

Tree #15: A 19-inch dbh hemlock leaning away and occurring 39 feet from the lake.

Tree #16: A 29-inch dbh redcedar leaning away and occurring 19 feet from the lake.

Tree #17: A 28-inch spruce occurring 8 feet from the lake.

Tree #18: A 37-inch dbh redcedar leaning towards and occurring 10 feet from the lake.

Tree #19: A 26-inch redcedar leaning slightly away and occurring 43 feet from the lake.

Tree #20: A 29-inch redcedar leaning away and occurring 30 feet from the lake.

Tree #21: A 28-inch dbh spruce occurring 29 feet from the lake and leaning in such a manner that it shows very little potential for recruitment to the lake.

Tree #22: A 35-inch dbh redcedar leaning slightly towards and occurring 21 feet from the lake.

Tree #23: A 39-inch dbh redcedar occurring at the outer edge of the buffer and 66 feet from the lake.

Tree #24: A 32-inch dbh redcedar occurring 36 feet and leaning slightly away from the broad grassy margin of the lake.

Trees #25, 26, and 29: These redcedars are three separate boles that share a common base. Their diameters are 31-inches, 18-inches, and 19-inches, respectively. They occur 56 feet from the extensive grassy wetland margin of the lake.

Tree #27: A 33-inch dbh redcedar occurring 60 feet from the extensive grassy wetland margin of the lake. We never found this tree, but given its location in the buffer and the extent of the grassy wetland between the buffer and the lake, it was approved for harvest sight unseen.

Tree #28: A 30-inch dbh redcedar leaning away and occurring 40 feet from the lake.

#### Decisions Concerning the Variation Request

The Forest Resources and Practices Act of 1990 states that the management intent for riparian areas such as this is the adequate preservation of fish habitat by maintaining short- and long-term sources of large woody debris, stream bank stability, channel morphology, water temperatures, stream flows, water quality, adequate nutrient cycling, food sources, clean spawning gravels, and sunlight (AS 41.17.115). Each of these ten habitat components was considered for each tree and for the buffer as a functional whole during our evaluation of this variation request. As was stated during the inspection, the Department of Fish and Game does not object to the harvest of trees #2, 3, 5, 7, 8, 9, 10, 11, 15, 16, 19, 20, 21, and 23 through 29, provided they are directionally felled away from the buffer with minimal damage to the residual stand. Trees #1, 4, 6, 12, 13, 14, 17, 18, and 22 were mutually denied for harvest by ADF&G and ADNR for the following reasons:

Tree #1: This tree is substantially the largest and virtually the only effective component of this sparse portion of the buffer. It is currently important for shading and, given its slight lean towards the stream, is a likely source of large woody debris from windthrow, especially since there are no other trees around it to deflect strong southerly and southeasterly winds.

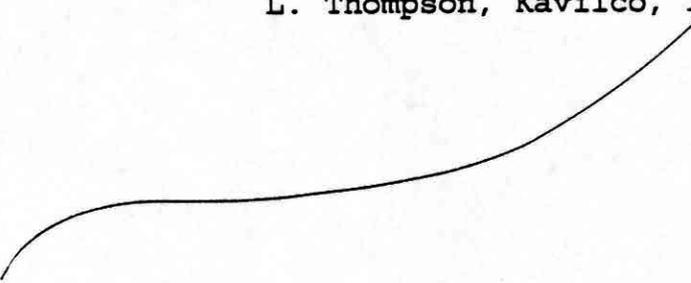
Tree #4: This tree is important in maintaining the overall integrity of this portion of the buffer. Its retention enabled us to agree to the harvest of nearby trees #3 and #5.

Tree #6: Located only 12 feet from the deflective outer edge of a bend in the stream, this tree is important for maintaining long-term bank stability and channel morphology. Its roots consolidate the stream bank and anchor those of adjacent smaller diameter trees.

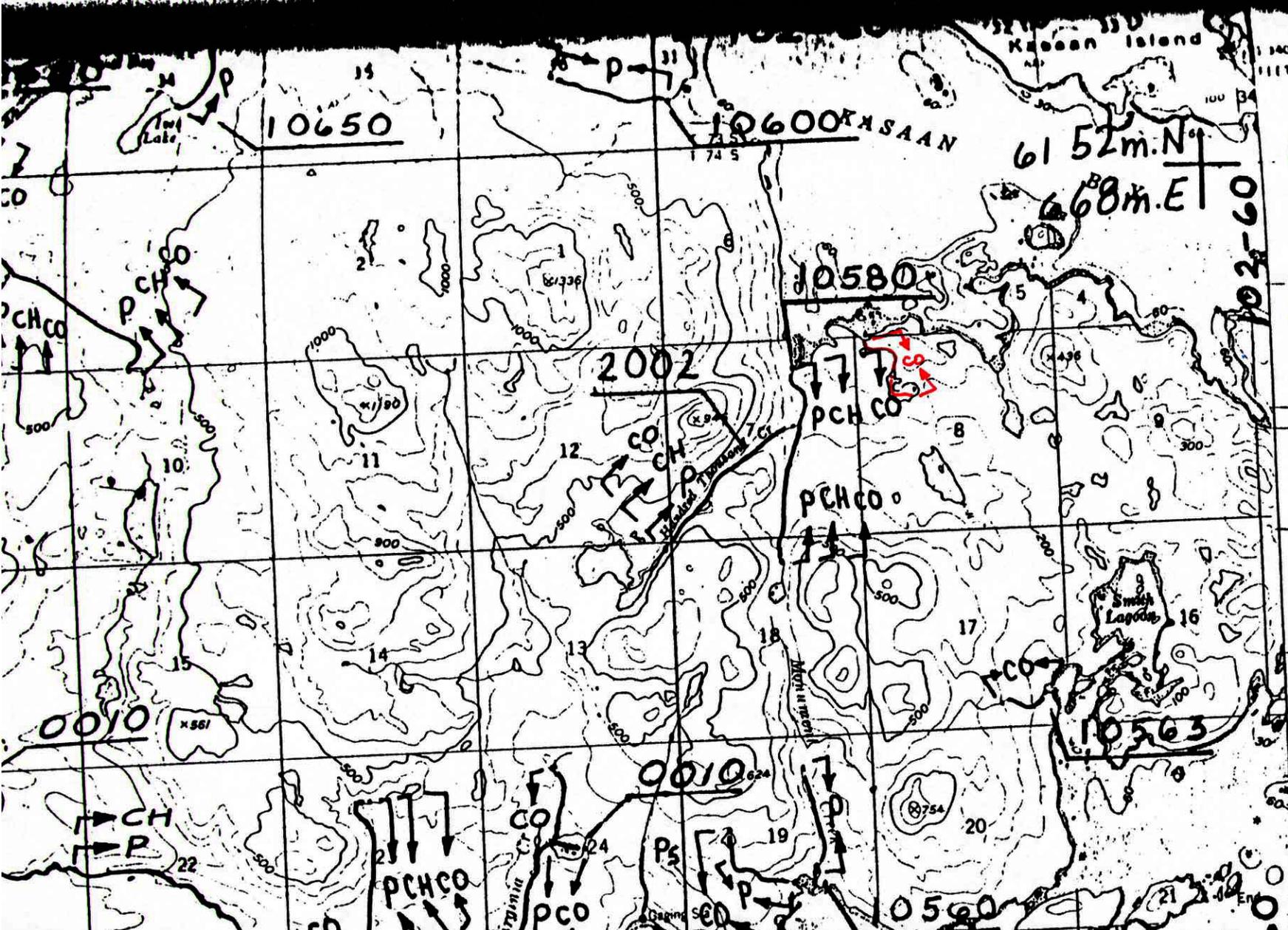
Trees #12, 13, 14, 17, 18, and 22: Given their close proximities to and leans towards the lake, these trees show a high potential for recruitment as large woody debris (LWD). LWD in a lake such as this is important in providing cover for coho fry which utilize the nearshore area to escape predation by larger fish in deeper water.

Thanks for arranging this inspection. If you have any need to discuss this report, please contact me at 225-2027.

cc: L. Shea, ADF&G, Douglas  
J. Gustafson, ADF&G, Ketchikan  
B. Hogarty, ADEC, Ketchikan  
J. Ferguson, ADEC, Juneau  
T. Wolford, ITT Rayonier, Ketchikan  
C. Clark, ITT Rayonier, Ketchikan  
L. Thompson, Kavalco, Inc., Kasaan







CRAIG B-2  
 (ENLARGED SCALE)

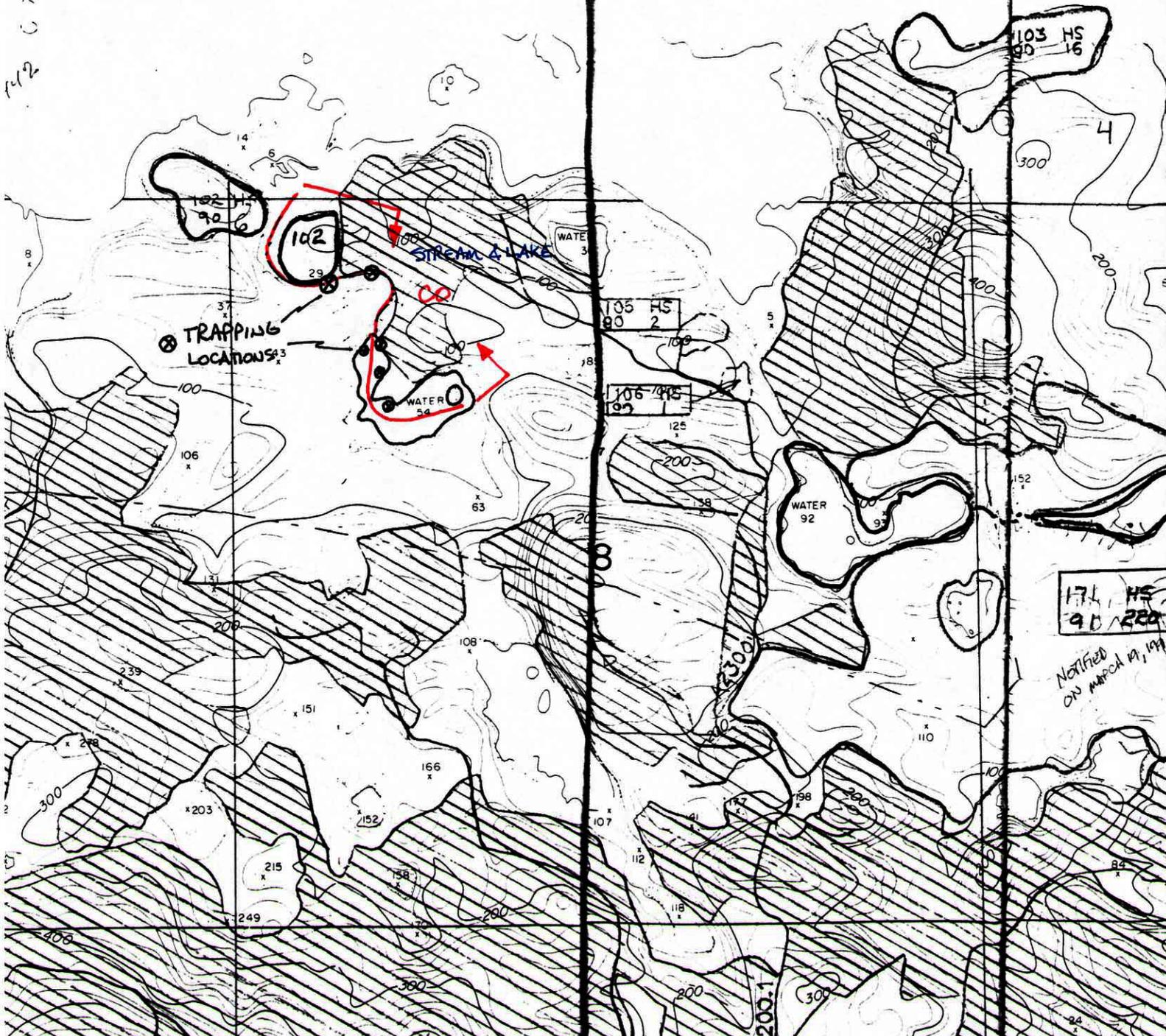
T.745, R.86E, NW 1/4 S.E  
 STREAM & LAKE

HELICOPTER LIFT  
ZONE #1

HELICOPTER LIFT  
ZONE #2

T. 74S, R. 86E, NW 1/4 S. 8

20K  
1-12



174 HS  
90 220  
Notified  
ON APRIL 19, 1994