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 Solomon C-5

Anadromous Water Catalog Number of Waterway 333-10-11700-XX

Name of Waterway Willow Creek USGS name X Local name ____

Addition X Deletion ____ Correction ____ Backup Information ____

For Office Use

Nomination # 94 349	[signature] 10/7/93 Regional Supervisor Date
Revision Year: 1994	[signature] 8/26/02
Revision to: Atlas ____ Catalog ____ Both N/A	____ ____
Revision Code: F-2	Drafted Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Migration	Anadromous
Dolly Varden	8/11/93		X		X

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: LARGE NUMBERS OF 50-120 mm DOLLY VARDEN OBSERVED IN LOWER ONE MILE OF STREAM. STREAM CHANNEL ~ 6' wide, 2-3 cfs, 2-3% gradient, WITH STEP POOL/RIFFLES.

ALASKA DEPT. OF FISH & GAME
NOV 08 1993
REGION II HABITAT AND RESTORATION

Name of Observer (please print) ROBERT F. McLEAN

Date: 10/7/93 Signature: [signature]

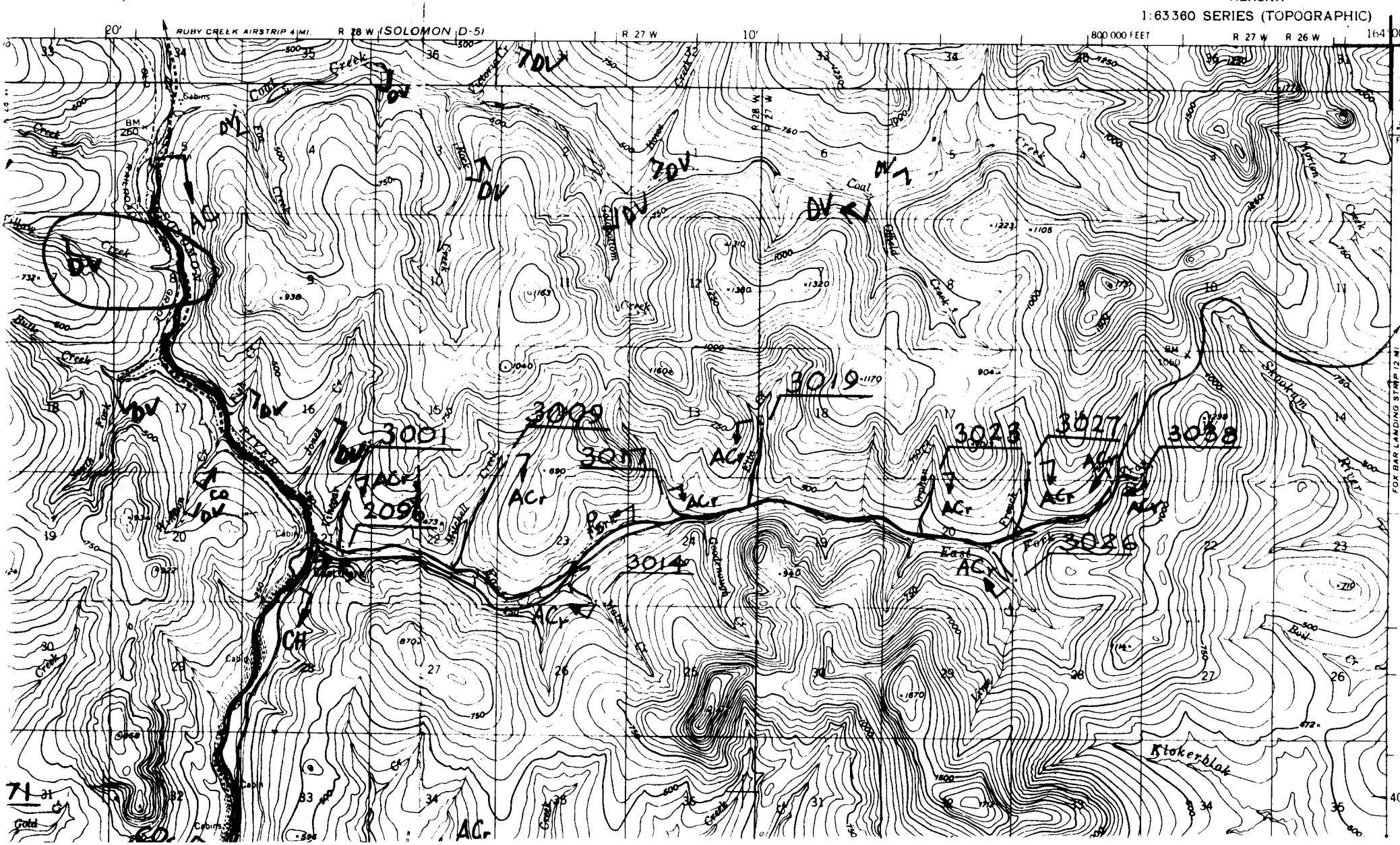
Address: Alaska Dept. of Fish and Game
Habitat Division
1300 College Road
Fairbanks, Alaska 99701

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

Signature of Area Biologist: [signature]

Rev. 7/93

SOLOMON (C-5) QUADRANGLE
ALASKA
1:63360 SERIES (TOPOGRAPHIC)



MEMORANDUM **State of Alaska**

To: Lance Trasky
Regional Supervisor
Habitat and Restoration Division

Date: November 1, 1993

File No:

Telephone Number: 451-6192

From: Alvin G. Ott, Regional Supervisor
Habitat and Restoration Division
Department of Fish and Game

Subject: 1994 Anadromous Catalog

RE: 1994 Anadromous Catalog Nominations

Enclosed are Region III's proposed changes to the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes. Also enclosed are two memos which specifically address nominations made for the Seward Peninsula Area. Should there be any questions, please contact either me or Mr. McLean at 451-6192.

Enclosures

cc: Lana Shea, ADF&G, Juneau
Phil Brna, ADF&G, Anchorage

AGO/ago

MEMORANDUM

State of Alaska
Department of Fish and Game

ALASKA DEPT. OF FISH & GAME
NOV 08 1993
REGION II HABITAT AND RESTORATION DIVISION

To: Lance Trasky
Regional Supervisor
Habitat and Restoration Division

Date: October 26, 1993

File No:

Telephone Number: 451-6192

From: Alvin G. Ott
Regional Supervisor
Habitat and Restoration Division
Department of Fish and Game

Subject: 1994 Anadromous Catalog Nominations

RE: 1994 Anadromous Catalog Nominations -- Justification for Designation of Visually Observed Juvenile Arctic Char (Dolly Varden) and Coho Salmon within the Seward Peninsula Area.

The following justification has been prepared for the record and reflects the factual basis and professional judgement exercised in our determination to accept visually documented juvenile Arctic char (Dolly Varden) and coho salmon for submission to and inclusion in the 1994 Update to the Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fish. While internal measures have been adopted to ensure accurate species identification (and thus maintain the department's credibility), it is important to recognize that AS 16.05.870 provides protection for all anadromous fish species. Species identification is required only to understand life history requirements that warrant permit protection under AS 16.05.870(b), but not necessarily for designation of a waterbody under AS 16.05.870(a)

Background

Anadromous Catalog nominations were submitted for the following streams based on visual observations of juvenile Arctic char (Dolly Varden) and/or coho salmon by Habitat and Restoration and Commercial Fisheries and Development division area biologists:

Stream Name	Species	Approx. #	Date	Observer
Osborn Creek (Nome R.)	Dolly Varden	Unspecified	6/23/91	Lean
North Fork (Kougarok R.)	Dolly Varden	Several 100s	8/12/93	McLean
Neva Creek (Kougarok R.)	Dolly Varden	21	8/12/93	McLean
Coffee Creek (Kougarok R.)	Dolly Varden	Several 100s	8/12/93	McLean
Goldbottom Ck. (Snake R.)	Dolly Varden	Several dozen 3 net seined	8/04/93	McLean
Saunders Creek	Dolly Varden	Several dozen	8/06/93	McLean
Hastings Creek	Dolly Varden	Several 100s	8/06/93	McLean
West Fk. Solomon	Coho Salmon	Several dozen +	8/11/93	McLean
	Dolly Varden	Several dozen +	8/11/93	McLean
Willow Creek	Dolly Varden	Several 100s	8/11/93	McLean
Butte Creek	Dolly Varden	Several dozen +	8/11/93	McLean
Johns Creek	Dolly Varden	Several dozen +	8/11/93	McLean
Cheyenne Creek	Dolly Varden	Several dozen +	8/11/93	McLean

Background (Continued)

Stream Name	Species	Approx. #	Date	Observer
Jones Creek	Dolly Varden	Several dozen +	8/11/93	McLean
	Coho Salmon	One	8/11/93	McLean
Winston Creek	Dolly Varden	Several dozen +	8/11/93	McLean
	Coho Salmon	Dozen +	8/11/93	McLean
Fish Creek	Dolly Varden	Several dozen	8/11/93	McLean
Montana Ck.	Dolly Varden	Several dozen	8/11/93	McLean
Coal Creek	Dolly Varden	Hundreds	8/11/93	McLean
Ruby Creek	Dolly Varden	Several dozen +	8/11/93	McLean
Casadepaga River	Dolly Varden	Several	8/11/93	McLean
Fox Creek	Dolly Varden	Several dozen	8/11/93	McLean
Unnamed Trib. (Coal Ck.)	Dolly Varden	Six	8/11/93	McLean
Rock Creek	Dolly Varden	Several dozen	8/11/93	McLean
Victoria Creek	Dolly Varden	Several 100s	8/11/93	McLean
Offield Creek	Dolly Varden	Seven	8/11/93	McLean

Requirements for Visual Identification

1. All visual observations were made under full light conditions in slack water (step pools, lateral scour pools, side channel sloughs, etc).

2. Species designation was not recorded unless observer could detect and observe sufficent distinguishing characteristics (noted below) to provide positive identification.

3. Visual identification accepted only for upper limit extension or inclusion of additional undocumented tributaries within river segments or stream systems previously documented (fish in hand) to contain the identified species. Within the identified waterbodies, only coho salmon and/or Dolly Varden have previously been documented. Chinook salmon, cutthroat, or steelhead have not been documented in these waterbodies.

4. Observers routinely electroshock/trap both juvenile coho salmon and Dolly Varden; thereby providing opportunity for constant visual "recalibration" of distinguishing characteristics.

Distinguishing Factors for the Visual Identification of Juvenile Dolly Varden and Coho Salmon in Norton Sound Drainages

Coho Salmon	Size:	Typically 35 to 130 mm in Norton Sound drainages.
	Parr Marks:	Fairly even spaced; tall, vertical, bar shaped.
	Anal Fin:	Sharply angled; first ray elongated (generally observable, though not always); black/darkish along leading edge.
	Dorsal Fin:	Black/dark tinge along leading edge; generally clear elsewhere; rarely spotted.
	Color:	General dark green/silver coloration on back; silver coloration along sides.

Dolly Varden	Size:	Typically 40 to 170+ mm in Norton Sound drainages (most less than 130 mm).
	Parr Marks:	Irregularly spaced; rounded, oval or rectangular shaped. Overall impression - parr marks generally much wider than intervening spaces.
	Anal Fin:	Fin triangular shaped - not angled; first ray does not extend beyond base of last ray; general coloration is lightly hued and frequently streaked with orange pigmentation.
	Dorsal Fin:	Generally spotted or dark
	Color:	Generally dark; mottled green blotches along dorsal surface. Lateral sides mottled with blotchy parr marks, occasionally light orange/yellowish pigmentation but rare on fish under 170 mm.

cc: Frank Rue, ADF&G-H&R, Juneau
Lana Shea, ADF&G-H&R, Douglas
Phil Brna, ADF&G-H&R, SPCO
Charlie Lean, ADF&G-CF, Nome
Fred Andersen, ADF&G-SF, Fairbanks
Fred DeCicco, ADF&G-SF, Fairbanks

AGO:BM