



State of Alaska  
Department of Fish and Game  
Sportfish Division

Nomination Form  
Anadromous Waters Catalog

mp/ db

Region Western USGS Quad(s) TAYLOR MOUNTAINS C-8  
Anadromous Waters Catalog Number of Waterway 335-20-16600-2400-3431 (all downstream too)

Name of Waterway \_\_\_\_\_  
 Addition  Deletion  Correction  Backup Information  
 USGS Name  Local Name

For Office Use

Nomination # <u>08-078</u>	<u>[Signature]</u> Fisheries Scientist	<u>10/6/08</u> Date
Revision Year: <u>2009</u>	<u>[Signature]</u> Habitat Operations Manager	<u>10/6/08</u> Date
Revision to: Atlas _____ Catalog _____ Both <u>X</u>	<u>[Signature]</u> AWC Project Biologist	<u>4/20/08</u> Date
Revision Code: <u>B-3</u>	<u>[Signature]</u> Cartographer	<u>11/4/08</u> Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

**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:** Remove DVr from 335-20-16600-2400-3431 and DVP from AWC waters downstream to mouth (335-20-16600-2400, 335-20-16600, 335-10-16600). Anadromy of Dolly Varden cannot confirmed at this time.

Braid Inlet A-2, B-1, B-2, C-1,  
Pethel C-1, D-1, C-2, D-6, D-7, D-8  
Taylor Mt C-8  
Russell Mission A-5, A-6, B-4, B-5, A-1, B-1, C-1, C-4, A-1, C-2  
C-3

Name of Observer (please print): \_\_\_\_\_  
Signature: [Signature] Date: 01/23/08  
Agency: \_\_\_\_\_  
Address: \_\_\_\_\_

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: \_\_\_\_\_ Revision 02/08  
Name of Area Biologist (please print): \_\_\_\_\_



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

Fish Survey  
Nomination Form  
Fish Distribution Database

Region: Western

USGS Quad: Taylor Mts C-8

Fish Distribution Database Number of Waterway: NA 335-20-16600-2400-3431

Status: N/A

Name of Waterway: \_\_\_\_\_

USGS Name

Local Name

Addition

Deletion

Correction

Backup Information

For Office Use

Nomination #	<u>06-932</u>	<i>[Signature]</i>	<u>11/20/06</u>
Revision Year:	<u>2007</u>	ADFG Fisheries Scientist	Date
Revision to:	Atlas _____ Catalog _____	<i>[Signature]</i>	<u>11/20/06</u>
	Both	ADNR OI/MIP Operations Mgr.	Date
Revision Code:	<u>A-1, B-1</u>	<i>[Signature]</i>	<u>11/19/06</u>
		FDD Project Biologist	Date
		<i>[Signature]</i>	<u>11/20/06</u>
		Cartographer	Date

**Site Information** Station: FSN0606E01 Date Observed: 8/7/2006 Legal Desc.: Sec 20, T. 5 N., R. 55 W., S.M. Latitude: Longitude: Datum: Station Coordinates 60.51375 -158.97955 WGS84

Stream Depth (m) Width (m) Water Temp. (C): 8.5  
Parameters: OHW 0.9 10.0 Stream Stage: Medium  
Wetted 0.5 6.4 Dominant Substrate: Gravel

Rosgen Channel Type: C4 Low gradient, meandering, point-bar, riffle/pool, alluvial channels with broad, well-defined floodplains.

Station Comments: Limestone substrate. Bear tracks along bank; evidence of feeding on fish.

**Observation Information**

Life History: Obligate anadromous population

Species/Lifestage: Chinook salmon carcass

Samp. ID (# Fish): B (1)

Species/Lifestage: coho salmon juvenile

Samp. ID (# Fish): A (3)

Life History: Facultative anadromous population, unknown individual life history

Species/Lifestage: Dolly Varden juvenile

Samp. ID (# Fish): A (5)

Life History: Resident

Species/Lifestage: slimy sculpin adult

Samp. ID (# Fish): A (4)

**Key to Samp. ID**

Samp. ID: A Method: Portable Electrofisher

Electrofisher Time(s): 479 Efficiency: Fair

Samp. ID: B Method: Visual Observation, Ground

*Only one Chinook salmon ~~to~~ Extent 335-30-16600-2400-3431 w/ coho salmon and Dolly Varden rearing add coho salmon present to -2400 Add Dolly Varden present to 335-30-16600-2400 and 335-30-16600 to north*

Additional Comments: This nomination supports adding to the FDD in this stream (335-20-16600-2400-3431 downstream) spawning Chinook salmon and rearing coho salmon and Dolly Varden.

335-20-16600  
335-10-16600

Name of Observer: Michael Wiedmer

Phone: (907) 267-2292

Date Printed: 11/1/2006

Signature: *[Signature]*

Address: Alaska Department of Fish and Game, Division of Sport Fish  
353 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 Fish Distribution Database.

Signature of Area Biologist: \_\_\_\_\_ Date: \_\_\_\_\_

# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

*Division of Sport Fish*

FRANK MURKOWSKI, GOVERNOR

333 Raspberry Road  
Anchorage, AK 99518-1599  
PHONE: (907) 267-2292  
FAX: (907) 267-2464  
EMAIL: [mike\\_wiedmer@fishgame.state.ak.us](mailto:mike_wiedmer@fishgame.state.ak.us)

### MEMORANDUM

TO: J. Johnson  
Habitat Biologist

FROM: Michael Wiedmer  
Habitat Biologist  
Region V

DATE: November 1, 2006

SUBJECT: 2006 Aniak River headwater nomination

Attached is a Fish Distribution Database/Anadromous Waters Catalog (FDD/AWC) nomination for an unnamed Aniak River headwater (335-20-16600-2400-3431 downstream of our observation). In 2006, our freshwater fish inventory (Wiedmer 2006) of the Nushagak/Mulchatna drainage yielded 1 fish sampling effort on this stream.

This sampling effort supports adding to the FDD/AWC spawning Chinook salmon (Figure 1), rearing coho salmon (Figure 2), and rearing Dolly Varden (Figure 3). In 2006, spawning anadromous Dolly Varden were collected in the Aniak River system downstream from our sampling location (M. Lisac, U. S. Fish and Wildlife Service, Togiak National Wildlife Refuge, Dillingham, personal communication).

#### References Cited.

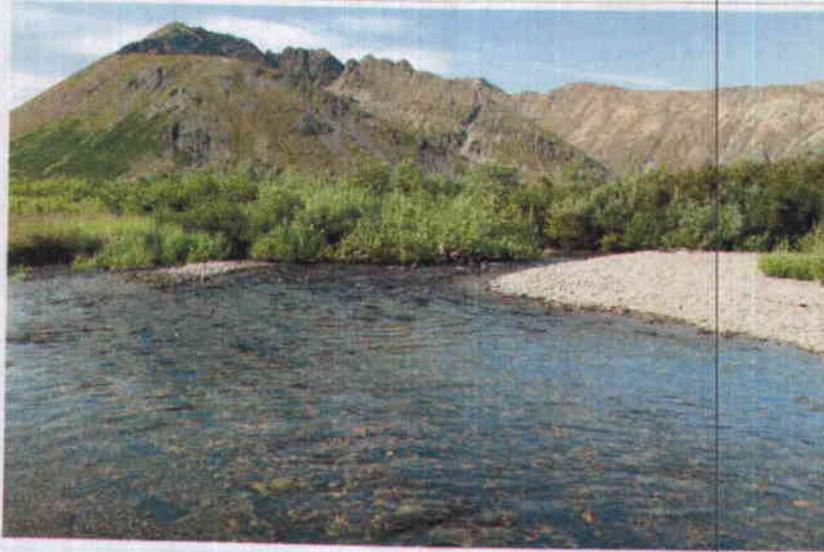
Wiedmer, M. 2006. Inventory and modeling of fish distribution in Nushagak—Mulchatna drainage streams: FY 2007 Operational Plan. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage.



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

Fish Survey  
Nomination Form  
Fish Distribution Database

Continuation of Station: FSN0606E01 Page: 2



FSN0606E01122.jpg



FSN0606E01123.jpg



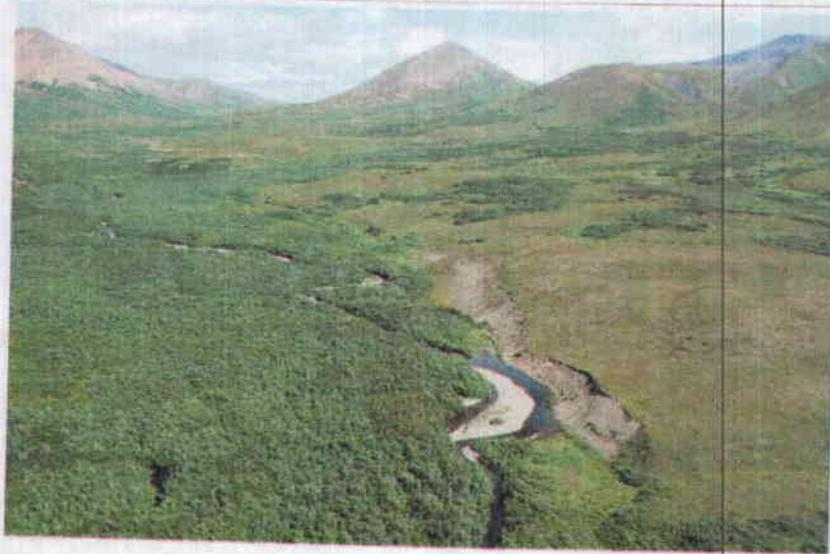
FSN0606E01124.jpg



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

Fish Survey  
Nomination Form  
Fish Distribution Database

Continuation of Station: FSN0606E01 Page: 3



FSN0606E01125.jpg

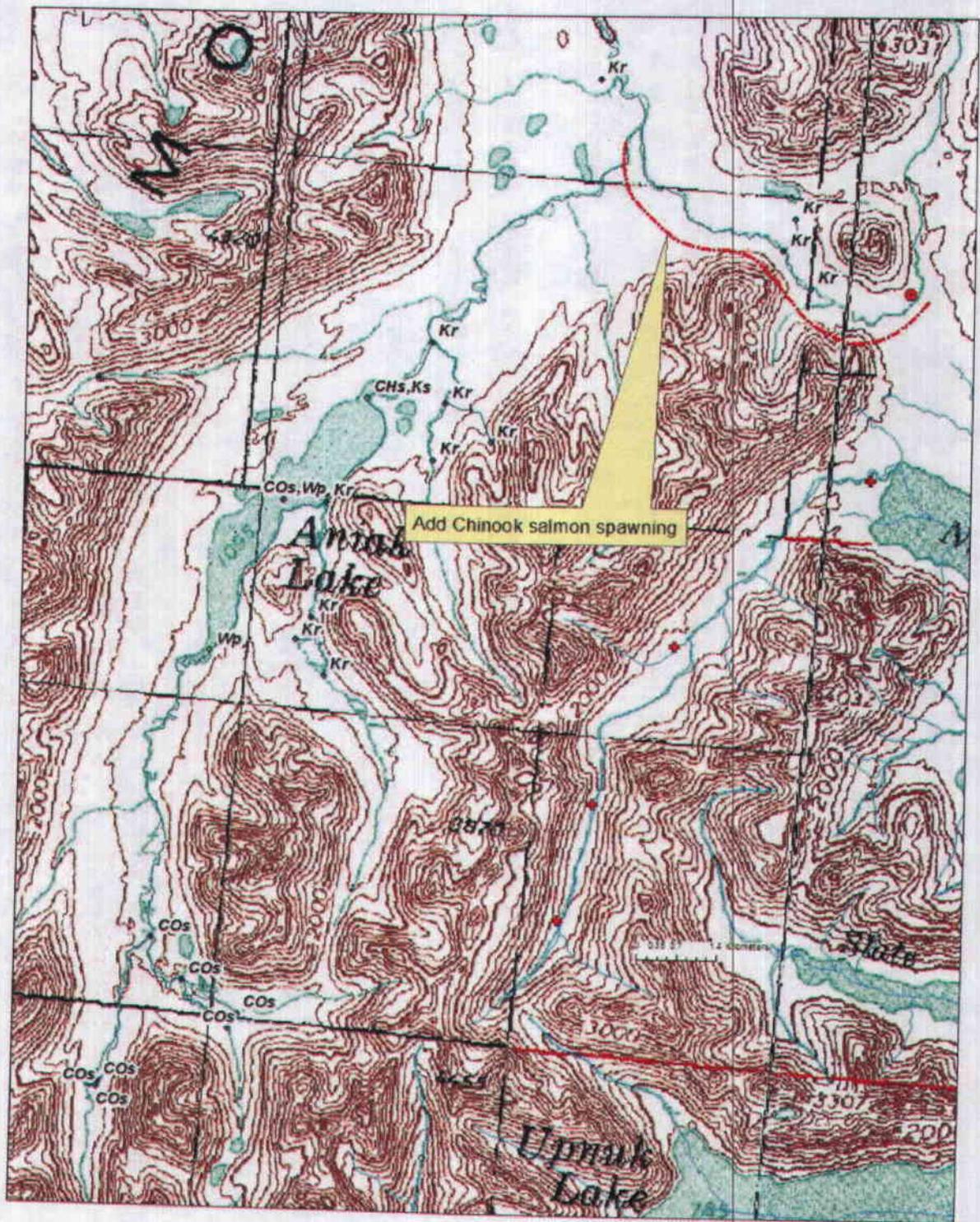


Figure 1.-Location of 335-20-16600-2400-3431 spawning (carcass) Chinook salmon observation.

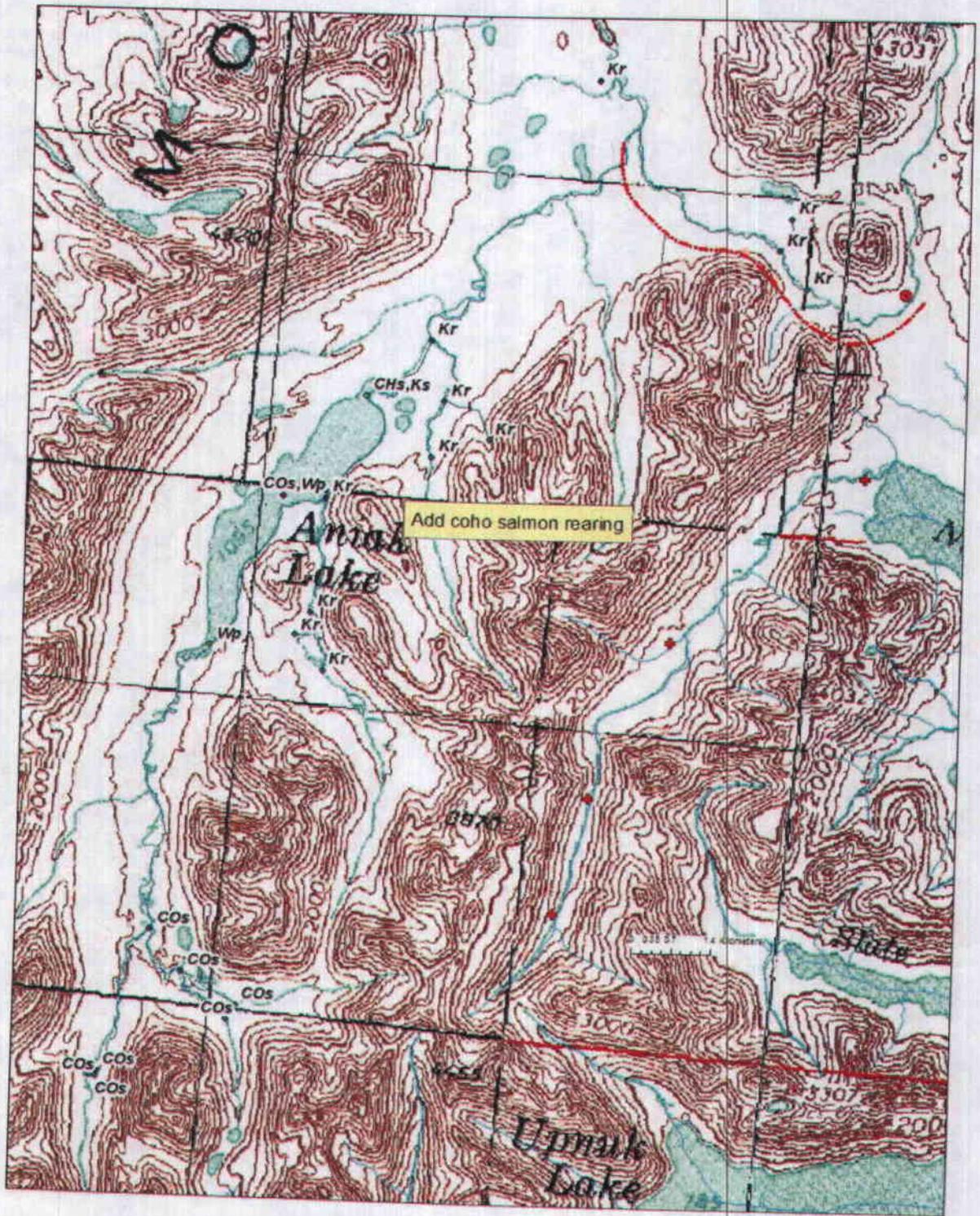


Figure 2.- Location of 335-20-16600-2400-3431 rearing coho salmon observation.

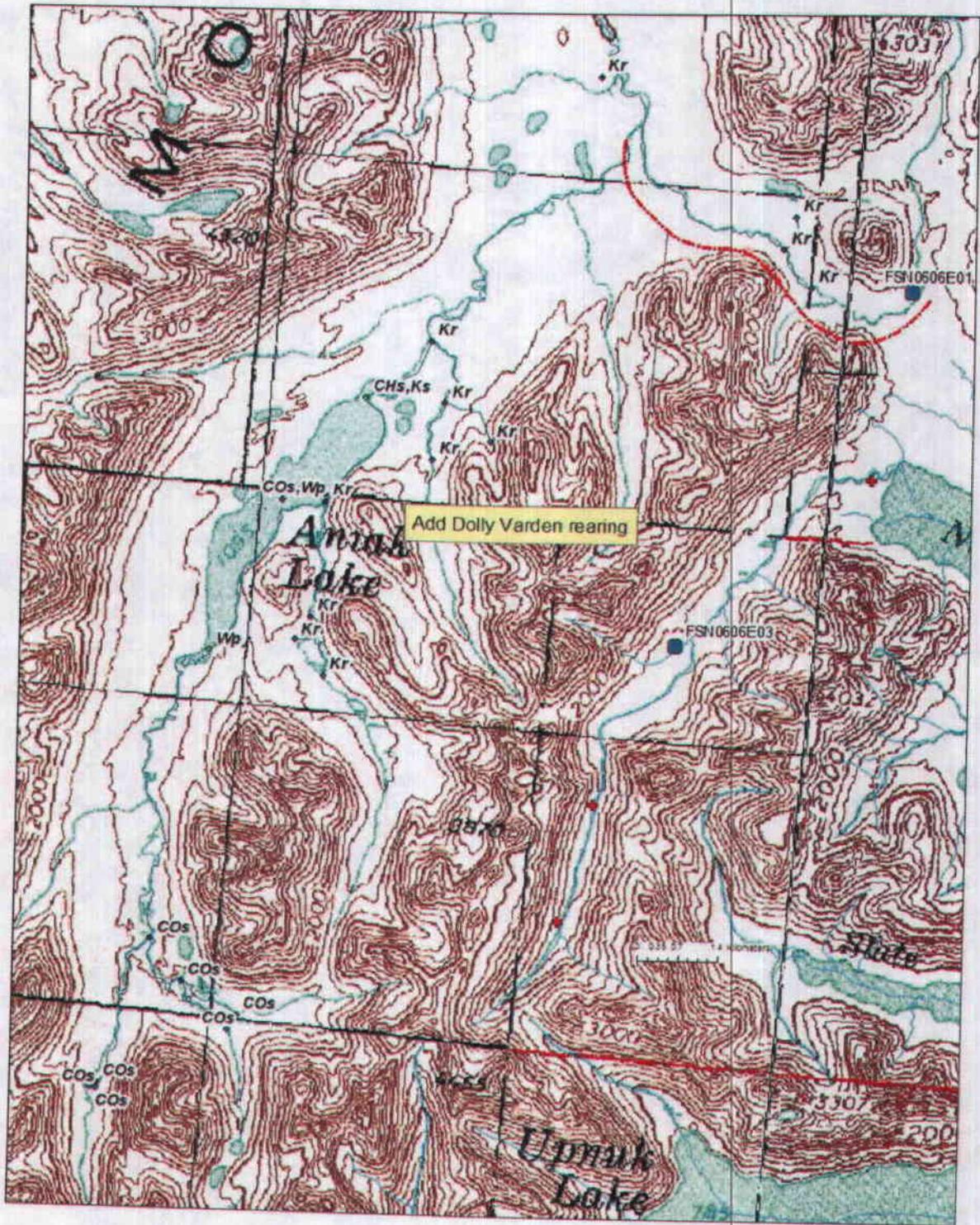
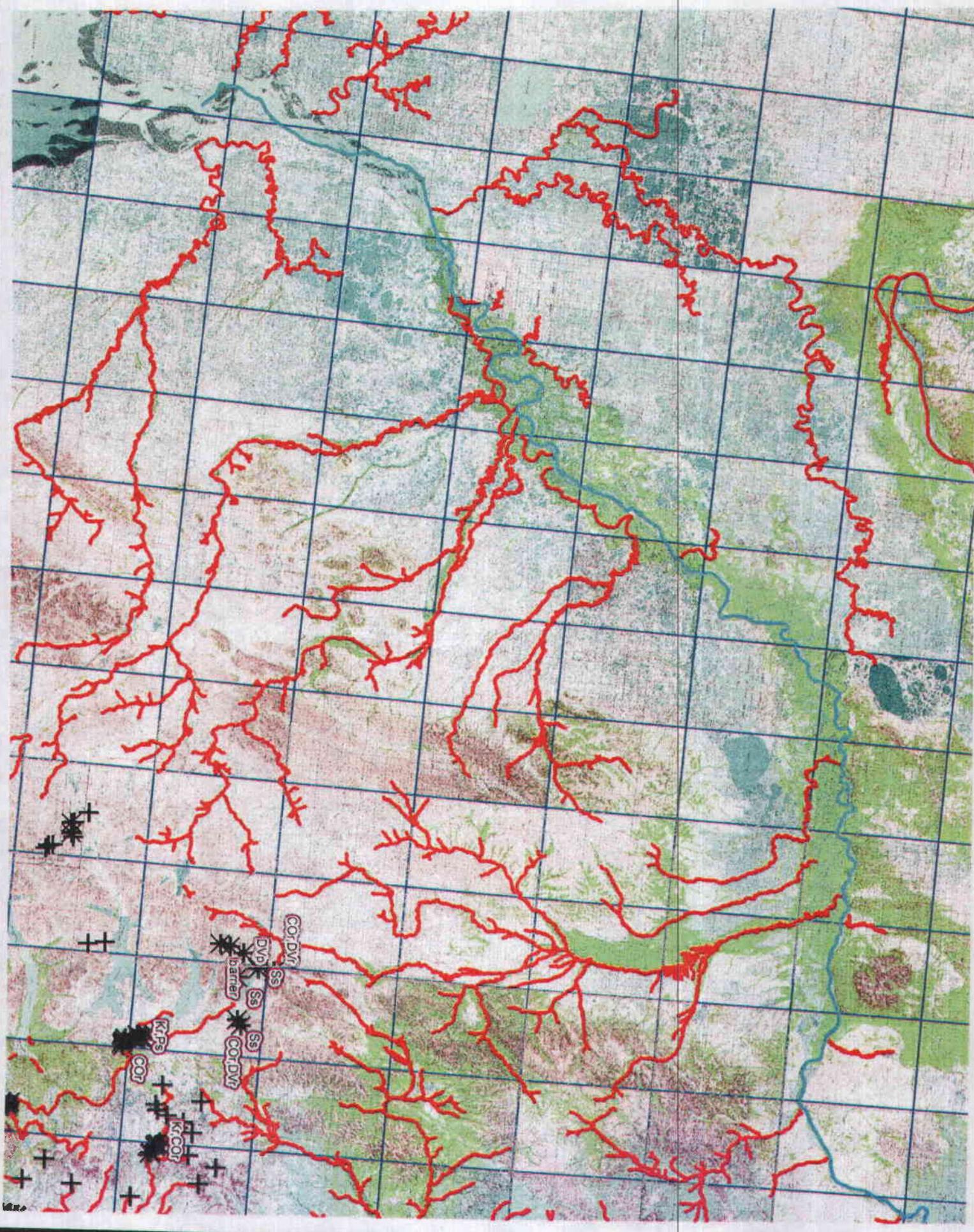


Figure 3.- Location of 335-20-16600-2400-3431 rearing Dolly Varden observation.



06-932 83-1245-  
335-20 16600 2400-3431

# MEMORANDUM

## State of Alaska

TO: Bruce H. Baker  
Deputy Director  
Habitat Division  
Department of Fish and Game

DATE: November 5, 1985

FILE NO: ~~A-2321~~ F-1.5.4

FROM: Lance L. Trasky  
Regional Supervisor  
Region IV  
Habitat Division  
Department of Fish and Game

TELEPHONE NO: 344-0541

SUBJECT: Char Stream  
Deletion **F6**

*WST Taylor Mt C-E*

We have asked Kim Francisco and Rae Baxter to review Ken Alt's proposal to delete all char streams in the Yukon-Kuskokwim drainages from the anadromous catalog. According to Rae Baxter, who worked in that area for over 15 years, there are no anadromous char in the Kuskokwim River upstream of the Eek River. However, anadromous char apparently spawn in the Eek River. Therefore, I agree that anadromous char should be deleted from the catalog as an anadromous species from all streams upstream of the Eek River; however, the Eek River and all the currently listed downstream char streams should remain in the catalog, unless there is additional information which proves that the char inhabiting these streams are not anadromous.

We do not have too much information on the Yukon River; however, Ron Regnart, Mike Geiger, and the Yukon River management biologists told me on November 4, 1985 that they catch char in the test fishing nets in the mouth of the Yukon (salt water), and in fish wheels upstream as far as the old Village of Andreafsky. They feel these are true anadromous char. They did say, however, there were no anadromous char in the Anvik River or upstream from that point. However, it is interesting that there are anadromous lampreys in the Anvik, and there is no biological reason why char could not migrate a similar distance up the Yukon. The Commercial Fisheries staff has worked more extensively in the Lower Yukon than any other fisheries group. Based on the information that they have provided, I believe that it would be appropriate to delete anadromous char from all listed streams upstream of the Andreafsky River, but that the Andreafsky River and all other downstream char streams should remain in the anadromous catalog.

I have also checked with Stewart Seaberg, and he believes that deletion of char will not affect the anadromous status of any streams in either of these drainages, so change of status is not a critical point. However, we obviously have a dilemma in that two divisions within ADF&G have differing opinions on the presence or absence of anadromous char in

# MEMORANDUM

# State of Alaska

TO: Kim Sundberg  
Habitat Coordinator  
Region IV  
Anchorage

DATE: October 30, 1985

FILE NO: 28.8.0

TELEPHONE NO:

A-2.3.21

FROM: Kim Francisco <sup>KF</sup>  
Kuskokwim Area Biologist  
Commercial Fisheries  
Bethel

SUBJECT: Char to be or not to be  
anadromous

I think I will back pedal a bit on our earlier conversation when I said I did not think we knew if the Kuskokwim River's char (Salvelinus sp.) were anadromous or not. I talked with Rae Baxter who has been examining the local char (including scales) for some time and the evidence does indicate that upstream of the Eek River drainage char are not anadromous.

The char complex in the Eek River is probably still an open question, but Rae did feel some of the fish he has taken and seen taken there were probably anadromous.

The strongest evidence for the lack of anadromous char in the Kuskokwim River is the intense subsistence fishery that occurs in the lower river with gill nets and jigs throughout the year which harvests pike (Esox lucius), whitefish (Coregonus sp.), and burbot (Lota lota). Char are susceptible to these same gear types, but are not taken in any number at any time. The ones that Mr. Baxter has examined taken in these fisheries were spawn outs that had probably drifted out of tributary streams. Scale examination indicated that they were resident char.

Rae also noted that the lack of char in the winter subsistence catch below the Tuluksak River indicates that the lower Kuskokwim River probably does not serve as a primary over wintering area for char. Above the Tuluksak River, the incidence of char in the catches increases indicating that the main river becomes more important for overwintering and migration in the middle and upper reaches.

As I mentioned, char are occasionally taken by burbot jiggers at the fish processing barges. Those are the ones that the Japanese technician thought were cherry spot salmon (Onchorhynchus masou). Unfortunately, he and I were unable to obtain a sample after he talked to me because the catch rate is so low. These are probably resident fish attracted by the head grinders.

There are a number of char bearing coastal streams west and north of the Kuskokwim River on Nelson and Nunivak Islands and the mainland. Since these are small drainages with direct access to the ocean such as those in Kuskokwim Bay, I suspect that they may contain anadromous char. I'm unaware of any documentation, but F.W.S. did basin surveys on Nunivak Island this year that may shed some light on the subject.

cc: Regnart

ALASKA DEPT. OF  
FISH & GAME

NOV 04 1985

REGION IV  
HABITAT DIVISION

November 5, 1985

certain areas. This would make it very difficult to enforce AS 16.05.870 on any stream which only contained char. Wherever this can be determined to be an important issue we should ask the fishery divisions to make a special point to confirm or deny the presence of anadromous char. Because there are no genetic differences between the anadromous and non-anadromous stocks, and identification is based on size, coloration, and run timing, this is a difficult task. We should be very careful before we add char streams to the catalog in the future because of the difficulty in distinguishing between the various types.

cc: Al Ott  
Kim Sundberg  
Stewart Seaberg

LLT:tw

Specific comments on the Kuskokwim and Yukon rivers follow:

Kuskokwim River

If anadromous Dolly Varden char have been documented for the Eek River by other fishery workers then I suggest that this river be added to the catalog. But how far up the Eek River is this presence documented? When I conducted my netting surveys in the Eek River in late July 1976, all the char I caught I considered to be resident. They were found mainly above the forks, were dark colored and of various sizes including mature fish. Anadromous char of course, could migrate into this same area later in the summer. Sampling in August and September would provide clarification.

Yukon River

Have anadromous char been documented in the Andreafsky or other Yukon River tributaries below the Andreafsky? I conducted fisheries investigations on the Andreafsky River in mid June 1980 and captured a considerable number of char. These fish were generally  $\frac{1}{2}$  to  $2\frac{1}{2}$  lbs., of darker coloration and obviously stream residents. Anadromous char could also be present but sampling would have to be conducted in August and September. My test fishing on the Anvik River provided similar results.

There are a number of small streams coming into the Yukon from the north between Kaltag and Anvik that have considerable potential for recreational fishing. Char are present in their lower reaches in June. These char are probably resident species. I consider these streams to be high on our list of waters to be surveyed.

Enclosure: Trasky memo of Nov. 5

cc: Regnart  
Clark  
Trasky

# MEMORANDUM

## State of Alaska

TO: Al Ott, Regional Supervisor  
Habitat Division  
Fairbanks

DATE: November 8, 1985

FILE NO: 503.02

THRU: John H. Clark, Reg. Supvr.

TELEPHONE NO: 456-8819

FROM: Kenneth T. Alt, Fishery Biologist  
Sport Fish Division  
Dept. of Fish and Game, Fairbanks

SUBJECT: Char Anadromy - Yukon  
and Kuskokwim Rivers

As we discussed in our informal meeting two weeks ago, char (Dolly Varden and Arctic char) in Alaska exhibit a bewildering number of life history forms. Of major interest to Title 16 designation is whether or not char or populations of char are anadromous.

In most cases where char are present in a stream of the Yukon or Kuskokwim River one or more species of salmon are also present. In these cases it would be better to base Title 16 protection on presence of salmon.

The few instances where only char are present (such as a tertiary tributary of the Yukon River) would pose a special problem. Generally in these small streams char are present in the rearing stage. I agree with Lance that Fish and Game would have difficulty enforcing Title 16 on such a water if all Yukon River char had been declared non-anadromous. I maintain that if Fish and Game attempts to enforce Title 16 in such a case they will have considerable difficulty proving that these char are indeed anadromous whether the Yukon River is declared anadromous or non-anadromous for char. This would not help Alaska Department of Fish and Game's credibility.

If documented proof of anadromous populations in the Yukon or Kuskokwim is now available then an exception could be entered with my nomination. Otherwise, I suggest going ahead and deleting both streams and resubmitting specific tributaries of the Yukon or Kuskokwim as proof of anadromy becomes available. Meanwhile, further taxonomic research, genetic research, tagging studies, documentation of smolt outmigration in early June, and immigration of pre-spawners in August and September should be conducted.

Since there probably will still be disagreement among the Fisheries Divisions over the best source of action to take concerning the char question I suggest that a policy decision be made at the regional supervisor level (Regnart, Clark, Ott, Trasky).

DEC 17 1990

MEMORANDUM

REGION II  
State of Alaska  
Department of Fish and Game  
HABITAT DIVISION

To: Lance Trasky  
Regional Supervisor  
Habitat Division

Date: December 12, 1990

File No:

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

Telephone Number: 451-6192

Subject: 1991 Anadromous  
Catalog  
Nominations

RE: Justification for designation of Arctic char as anadromous; Seward Peninsula Area.

In response to Stewart Seaberg's request, the following justification has been prepared for the record and reflects the factual basis for our determination that Seward Peninsula Arctic char (now recognized as Dolly Varden) are predominately anadromous.

As you are aware, arctic and sub-arctic char populations exhibit a number of life history patterns. This variation is further complicated in that char within a single drainage exhibit considerable "plasticity" in which sympatric and allopatric forms exist with different life history patterns. McCart (1980) describes four life history types. Three of these types (isolated stream residents, residual and anadromous) occupy stream habitats while the fourth type resides in lakes. The lake resident type is generally regarded to be a resident, non-anadromous, population (recent taxonomic clarification regards this morph type as a true Arctic char - other char morph types are now considered to be Dolly Vardens). However, McCart concludes that all three stream morphs cannot be distinguished by meristic characteristics. The only way to distinguish anadromous and non-anadromous populations is to document the life history pattern of the fish in question or examine external characteristics such as parr-marks and coloration. All three stream morphs are identical for the first several years of life and are indistinguishable until either (1) anadromous populations undertake their first sea-ward migration (Age III to V) or (2) stream residents and residual morphs first reach sexual maturity (typically Age VI).

Within this framework, research conducted by Dr. Hans Norbeng of Norway is particularly noteworthy. Dr. Norbeng artificially spawned both resident and anadromous char as separate groups and presented the results of his research at the First International Symposium on Arctic char in 1981. Dr. Norbeng's research demonstrated that both matings between resident adults and matings between anadromous adults produced the same ratio of resident versus anadromous offspring. Regardless of whether resident or anadromous adults were spawned, the offspring produced were 30% small residents, 10% large residents, and 60% anadromous. He concluded that small and large resident char were analogous to precocious individuals in salmon populations and that the life history pattern that develops may be a function of gene ratio.

Based on these findings, we believe that a reasonable basis exists for concluding that a significant percentage of juvenile char collected in mainstem and tributary streams on the Seward Peninsula are anadromous morphs. This finding is further strengthened by the following observations by department staff:

1. All nominations to the catalog for the Seward Peninsula which are based on the presence of juvenile char have been for tributary streams in close proximity to documented adult anadromous char spawning areas or locations where adult ocean-run fish have been observed:
  - (a) Nome River drainage - adult spawners documented to approximately 1 mile north of David Creek (within 2 miles of new nominations).
  - (b) Salmon Lake/Pilgrim River drainage - anadromous adults documented in Pilgrim River, Salmon Lake, and the Grand Central River. All nominations are immediately proximate to these waterways.

In addition, confirmation was received from Sport Fisheries Division (Fred DeCicco) this summer (August) that spawning anadromous char were observed by him in lower Iron Creek (mouth located approximately 10 to 12 miles downstream of the Salmon Lake outlet) in the early 1980's.
  - (c) Fox River drainage - anadromous adults documented in the mainstem Fox River to approximately 1/2 mile upstream of Hugh Rowe Creek. All juvenile anadromous char nominations are either immediately proximate to the documented mainstem anadromous char distribution or upstream (within several miles) of previously documented anadromous adult distribution.
  - (d) Bluestone Creek drainage - anadromous adults documented in the mainstem. All juvenile anadromous char nominations are either immediately proximate to the documented mainstem anadromous char distribution or upstream (within several miles) of previously documented anadromous adult distribution.
  - (e) Feather River/Wooley Lagoon drainages - anadromous adults previously documented in the Feather River and Wooley Lagoon. Anadromous adults annually harvested in the Wooley Lagoon subsistence fishery. All juvenile nominations are proximate tributaries to known anadromous char distributions.
2. The extremely infrequent collection of large, dark-colored char (?? potentially resident) in electro-shock, seine or minnow trap surveys (less than 10%);
3. The predominate collection of small (less than 120 mm), brightly colored, parr-marked juveniles in electro-shock, seine and minnow trap surveys (suggestive of anadromous populations);
4. The nearly absent documentation of sexually mature char less than 300 mm in length (to date, only two brightly colored char less than 300 mm have

been collected - one 170 mm char was collected in an old dredge channel and one 192 mm char was collected from a bedrock plunge pool);

5. Saltwater interception and high subsistence catch rates of anadromous char proximate to river mouths; and
6. The close proximity of inland streams and tributaries to Norton Sound.

If there are any questions regarding this analysis, please contact Mac McLean at 451-6192.

**Literature Cited**

McCart, P.J. 1980. A review of the systematics and ecology of Arctic char, *Salvelinus alpinus*, in the Western Arctic. Can. Tech. Rep. Fish. Aquat. Sci. 935:vii+ 89 p.

cc: Stewart Seaberg

AGO:BM

SOLOMON D-6





1990 NORTON SOUND FISHERIES INVESTIGATIONS

Stream Name: Slate Reach: 300 yd Upstream of Road  
 Date: 8/9/90 Time: 1310 Surveyors: McLean  
 Fisheries Data: 700 v 90 cycle

Species Fork Length (mm) Weight (gm) Sex Other

Large, low gradient, backwater pools w/ g tides				
Est 15 cfs				
Electro -		Start	774	
		Stop	894	
Temp = 10.25°C		pH =	6.0	
DV	93			
SCUL	84			
SMUL	62			
SCUL	69			
DV	50			
SCUL	44			
SCUL	42			
SCUL	44			
TWIN 42" CMP 3x1/2" < 0.5% slope				
South CMP inlet partially crumpled				
Rock/gravel/sand w/ some cobble				
thick coating of algae				

RFM  
11/1/90



**Edward W. Weiss**

---

**From:** Kathleen Jensen [kathleen\_jensen@fishgame.state.ak.us]

**Sent:** Friday, September 13, 2002 4:39 PM

**To:** ed\_weiss@fishgame.state.ak.us

**Subject:** RE: AWC Dolly Varden / Arctic Char

Hi Ed. We have bull trout on some of the rivers I work on - is that a concern for this GIS data?

-----Original Message-----

**From:** Edward W. Weiss [mailto:ed\_weiss@fishgame.state.ak.us]

**Sent:** Friday, September 13, 2002 4:21 PM

**To:** Fishgame - All Statewide Habitat; Fishgame - All Statewide CF

**Subject:** AWC Dolly Varden / Arctic Char

We've recently completed the draft conversion of the AWC atlas maps into the GIS system. This conversion transcribed the hydrography and species information present in the AWC atlas into a GIS environment. Having this information in an electronic environment will greatly increase our capabilities to query and analyze the data in addition to the eventual production of the AWC Atlas maps in digital formats.

One outstanding issue that I want to address is the designation of Arctic Char versus Dolly Varden in the Arctic, Interior and Western regions. Initially, these fish were primarily added as Arctic Char in these regions. Subsequent additions over the last 20 years have been added as either Dolly Varden or Arctic Char dependent on the species noted on the observer's submission. The current recognized view is that there are very limited if any "anadromous" arctic char in this area and that the anadromous species are actually Dolly Varden. This has been known for several years but due to the complexities of changing this designation on thousands of paper maps we left them as is. Now that the data is in the GIS database the AC designations can very easily be changed to Dolly Varden. Hence, I am planning on changing all the Arctic char designations within the Western, Arctic and Interior regions to Dolly Varden.

I would like to hear back about any specific locations within this area where the char species are actually believed to be anadromous arctic char rather than Dolly Varden. In these systems we can retain the Arctic Char designation. I am also interested in hearing opposing viewpoints so if you have a problem with this proposed change let me know. Please, have any comments back to me by September 15, 2002.

*Edward W. Weiss*

Habitat Biologist

Habitat & Restoration Division

Alaska Department of Fish & Game

333 Raspberry Rd.

Anchorage, AK 99518-1599

Phone: (907)-267-2305

FAX: (907)-267-2464

[ed\\_weiss@fishgame.state.ak.us](mailto:ed_weiss@fishgame.state.ak.us)

9/18/2002

**Edward W. Weiss**

**From:** Bob Lafferty  
[robert\_lafferty@fishgame.state.ak.us]  
**Sent:** Friday, September 13, 2002 4:45 PM  
**To:** ed\_weiss@fishgame.state.ak.us  
**Subject:** RE: REVISED -- AWC Dolly Varden / Arctic Char Ed,

Although, I understand your position trying to correct the AWC database, I would offer a compromise to the labeling of Arctic char and Dolly Varden. I would suggest you label them AC/DV until we know the identity, if we ever do? This would avoid the whole argument, which are they AC or DV's. This would be consistent with the Sport Fishing regulations. This is a very complex issue and we really have so little data to define the boundaries. You asked that my viewpoint on the issue.

-----Original Message-----

**From:** Edward W. Weiss [mailto:ed\_weiss@fishgame.state.ak.us]  
**Sent:** Friday, September 13, 2002 4:27 PM  
**To:** Fishgame - All Statewide Habitat; Fishgame - All Statewide CF; Fishgame - All Region III SF; Fishgame - All Region II SF; Fishgame - All Region I SF  
**Subject:** REVISED -- AWC Dolly Varden / Arctic Char

Sorry for the duplication, I revised the comment due date.

We've recently completed the draft conversion of the AWC atlas maps into the GIS system. This conversion transcribed the hydrography and species information present in the AWC atlas into a GIS environment. Having this information in an electronic environment will greatly increase our capabilities to query and analyze the data in addition to the eventual production of the AWC Atlas maps in digital formats.

One outstanding issue that I want to address is the designation of Arctic Char versus Dolly Varden in the Arctic, Interior and Western regions. Initially, these fish were primarily added as Arctic Char in these regions. Subsequent additions over the last 20 years have been added as either Dolly Varden or Arctic Char dependent on the species noted on the observer's submission. The current recognized view is that there are very limited if any "anadromous" arctic char in this area and that the anadromous species are actually Dolly Varden. This has been known for several years but due to the complexities of changing this designation on thousands of paper maps we left them as is. Now that the data is in the GIS database the AC designations can very easily be changed to Dolly Varden. Hence, I am planning on changing all the Arctic char designations within the Western, Arctic and Interior regions to Dolly Varden.

I would like to hear back about any specific locations within this area where the char species are actually believed to be anadromous arctic char rather than Dolly Varden. In these systems we can retain the Arctic Char designation. I am also interested in hearing opposing viewpoints so if you have a problem with this proposed change let me know. Please, have any comments back to me by September 27, 2002.

Please pass this on to anyone else you think may be interested. Thanks.

*Edward W. Weiss*  
Habitat Biologist  
Habitat & Restoration Division  
Alaska Department of Fish & Game  
333 Raspberry Rd.  
Anchorage, AK 99518-1599

9/18/2002

**Edward W. Weiss**

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**From:** Mac McLean [mac\_mclean@fishgame.state.ak.us]

**Sent:** Monday, September 16, 2002 11:44 AM

**To:** Edward W Weiss

**Subject:** FW: REVISED -- AWC Dolly Varden / Arctic Char

Ed - we concur with the proposed change - at least until information on specific populations becomes available in the future..

-----Original Message-----

**From:** Fred DeCicco [mailto:fred\_decicco@fishgame.state.ak.us]

**Sent:** Monday, September 16, 2002 10:57 AM

**To:** Robert F Mclean

**Subject:** FW: REVISED -- AWC Dolly Varden / Arctic Char

Mac, I discussed this stuff with Ed Weiss some time ago, and agree with the change in designation of AC to DV in all anadromous cases in Alaska until we know more about specific populations.

Fred

-----Original Message-----

**From:** James Durst [mailto:james\_durst@fishgame.state.ak.us]

**Sent:** Monday, September 16, 2002 9:47 AM

**To:** Alfred L Decicco

**Subject:** FW: REVISED -- AWC Dolly Varden / Arctic Char

Fred:

For your information and input. Let Mac know what your thoughts are.

-Jim

-----Original Message-----

**From:** Edward W. Weiss [mailto:ed\_weiss@fishgame.state.ak.us]

**Sent:** Friday, September 13, 2002 4:27 PM

**To:** Fishgame - All Statewide Habitat; Fishgame - All Statewide CF; Fishgame - All Region III SF; Fishgame - All Region II SF; Fishgame - All Region I SF

**Subject:** REVISED -- AWC Dolly Varden / Arctic Char

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9/18/2002

# MEMORANDUM

*State of Alaska*  
*Department of Natural Resources*

*To:* Tom Brookover, Regional Supervisor  
Sport Fish Division  
Department of Fish and Game

*Date:* December 1, 2006

*File No:*

*Telephone Number:* 459-7289  
*FAX Number:* 456-3091

*From:* Al Ott, Operations Manager  
Office of Habitat Management and Permitting  
Department of Natural Resources

*Subject:* Dolly Varden  
Nominations  
Nushagak Drainage

On November 20, 2006, Bob Clark and I reviewed and signed a number of nominations to the Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes (Anadromous Waters Catalog). There also were a number of nominations that would change Arctic char (AC) to Dolly Varden in the Nushagak Drainage, including streams in the upper portion of the Koptuli River drainage. As we discussed with you that day, it would be inappropriate for nominations that would change AC to Dolly Varden (DV) to go to public notice for inclusion in the Anadromous Waters Catalog until such time as we pull together supporting information that strongly indicates that these streams support anadromous Dolly Varden.

The purpose of this memorandum is to request that the Sport Fish Division compile the data necessary to document that the streams being nominated for Dolly Varden do indeed support the anadromous form of Dolly Varden. Information that would be useful includes, but is not limited to, the following:

- historical data that would support these are anadromous Dolly Varden;
- identification of specific locations within the drainage where there are documented anadromous Dolly Varden;
- descriptions (including photographs) of adult Dolly Varden that would provide direct evidence that the fish is anadromous;
- collection of Dolly Varden that would be described as smolts (i.e., silver)
- otolith microchemistry results from juvenile Dolly Varden that would clearly indicate that the female parent was anadromous;
- otolith microchemistry of large Dolly Varden in specific reaches of the drainage that would clearly indicate that they are anadromous;

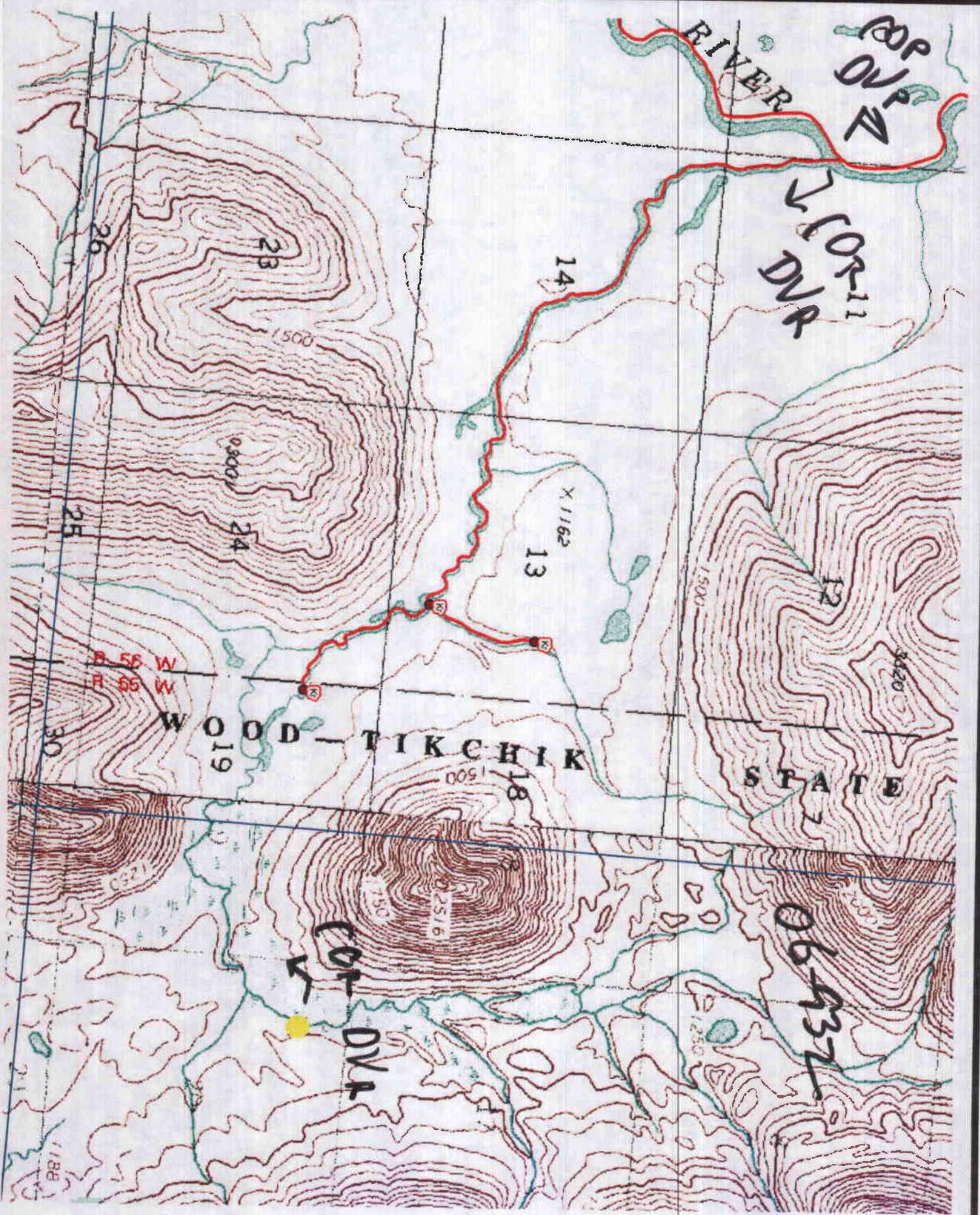
- supporting information or literature references on the validity of the otolith microchemistry data to determine anadromy of the female parent; and
- any other information that would support the nominations for Dolly Varden in the Nushagak River drainage, including its headwater streams.

Our office is ready to assist in compiling information, and in reviewing a draft of information, that supports or does not support designation of anadromous Dolly Varden in the Nushagak River drainage.

cc: Kerry Howard, OHMP, Juneau  
Mike Wiedmer, ADF&G, Anchorage  
J. Johnson, ADF&G, Anchorage

Ed Weiss, OHMP, Anchorage  
Bob Clark, ADF&G, Anchorage  
Scott Maclean, OHMP, Anchorage

AGO/ago



RIVER  
COR 11  
DVA

COR 11  
DVA

14

13

B 55 W  
R 55 W

WOOD-TIKCHIK STATE

COR  
DVA

06-432

23

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COP

DVP COP

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335-30-16600-2400-3471

335-30-16600-2400 A

335-30 16600 to month A

Add CER and DVP

add DVP to 31

Add COP to portion of

335-30-16600-2400