



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

Nomination Form  
Anadromous Waters Catalog

ALASKA DEPT. OF  
FISH & GAME  
NOV 19 2009

Region Interior USGS Quad(s) TANANA D-1  
 Anadromous Waters Catalog Number of Waterway 334-40-11000-2661  
 Name of Waterway Unnamed #53  USGS Name  Local Name  
 Addition  Deletion  Correction  Backup Information

For Office Use

Nomination #	<u>100331</u>	<u>[Signature]</u> Fisheries Scientist	<u>7/19/10</u> Date
Revision Year:	<u>2011</u>	<u>[Signature]</u> Habitat Operations Manager	<u>7/14/10</u> Date
Revision to:	Atlas <u>    </u> Catalog <u>    </u> Both <input checked="" type="checkbox"/>	<u>[Signature]</u> AWC Project Biologist	<u>7/14/10</u> Date
Revision Code:	<u>A-1, 3A, 4A</u>	<u>[Signature]</u> Cartographer	<u>10/20/10</u> Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Chinook Salmon	8/22/2009		8		<input checked="" 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:** Extend occurrence of Chinook salmon rearing upstream to location shown on map & data sheet coordinates.  
 All chinook captured with minnow trap (all age-0 juveniles) 65.79322°N  
 All sampling conducted in stream, above Yukon River influence. -150.11218°W  
 Fry rearing extends from tributary mouth upstream to uppermost capture site (map).  
 Habitat extends beyond upstream sampling location.  
 It is recommended that CO<sub>2</sub> be deleted from the catalog unless positively confirmed.

Name of Observer (please print): David W. Drumm nom # 0009-479 added catch data  
 Signature: [Signature] Date: 11/12/2009 do not remove  
 Agency: U.S. Fish & Wildlife Service  
 Address: 101 12<sup>th</sup> Ave, Room 110  
FAIRBANKS, AK 99701

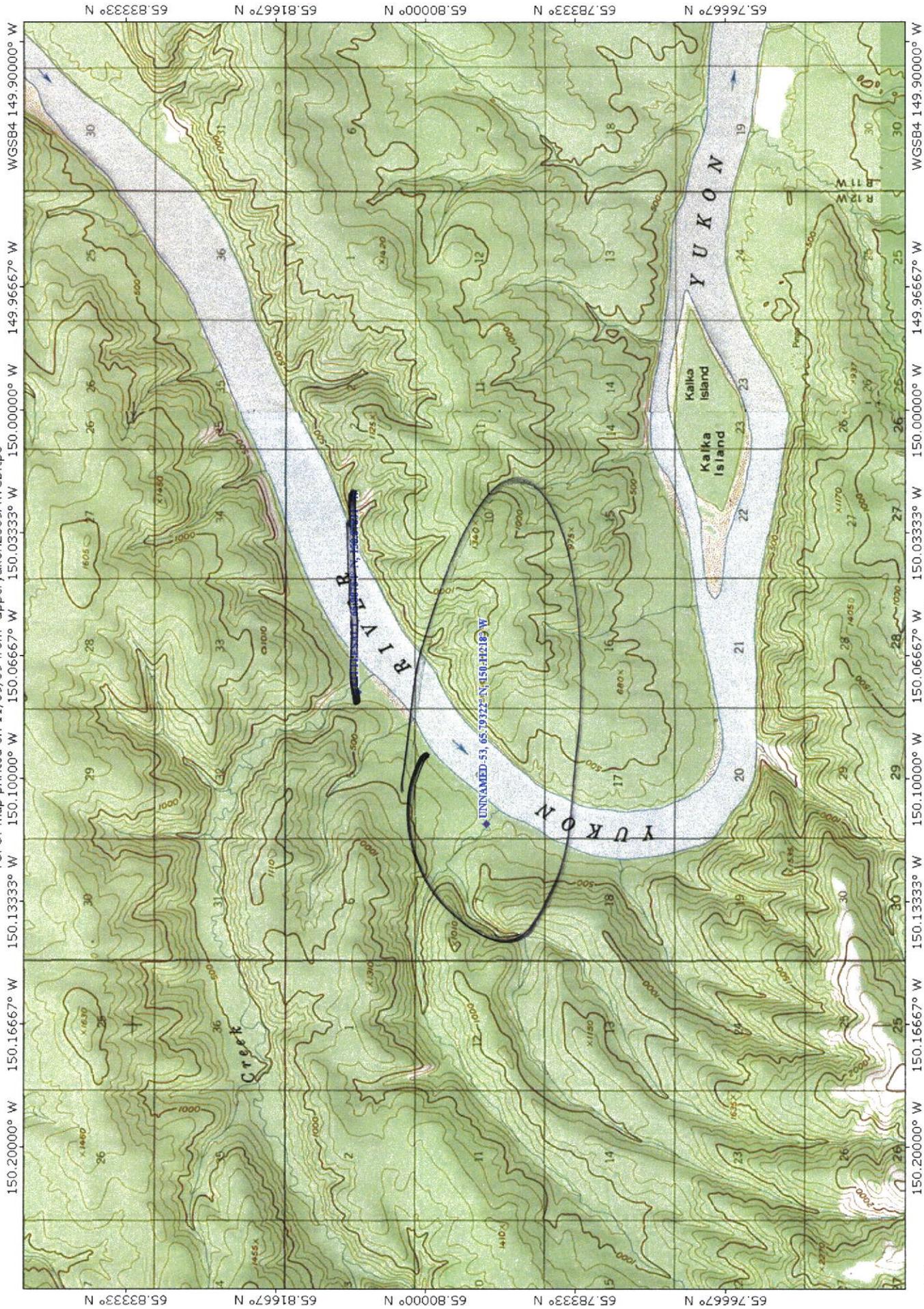
This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Anadromous Waters Catalog.

Signature of Area Biologist: [Signature] Date: 16 NOV 2009 Revision       
 02/08

Chinook juvenile sampling - upper Yukon mainstem tributaries - 2009										
Stream		coordinates from GPS in field		coordinates replotted from map		Sample date		Sample time (h)		Length range of sample (mm)
Site 1	Site 2	Lat deg (N)	Long deg (W)	Lat deg (N)	Long deg (W)	Sample date	Sample time (h)	Number of traps deployed	Number Chinook sampled	Length range of sample (mm)
Unnamed Creek 53		65.79322	-150.11218	Same	Same	8/22/2009		8	6	24.00
Other fish captured: silmy sculpin, juvenile Arctic grayling										

# TANANA D-1

TOPOI map printed on 11/09/09 from "upper yukon2009AWCb.tpo"



TN /MN  
21°

Unnamed #53



MOUTH



Site 1



State of Alaska  
Department of Fish and Game  
Sportfish Division

Nomination Form  
Fish Distribution Database

RECEIVED

NOV 08 2004

STATE OF ALASKA  
FISH & GAME

Region  USGS Quad   
 Fish Distribution Database Number of Waterway   
 Name of Waterway   USGS Name  Local Name  
 Addition  Deletion  Correction  Backup Information

For Office Use

Nomination #	<u>U4 479</u>	<u>MS</u>	<u>2/24/05</u>
Revision Year:	<u>2006</u>	<u>[Signature]</u>	<u>2/24/05</u>
Revision to:	Atlas <input type="checkbox"/> Catalog <input type="checkbox"/>	Fisheries Scientist	Date
	Both <input checked="" type="checkbox"/>	<u>[Signature]</u>	<u>12-02-01</u>
Revision Code:	<u>A-2 J</u>	FDD Project Biologist	Date
		<u>[Signature]</u>	<u>4-29-04</u>
		Drafted	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Chinook	7/27/2004		6		<input checked="" type="checkbox"/>
Coho	7/27/2004		5		<input checked="" type="checkbox"/>
Longnose Sucker	7/27/2004			3	<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:

See attached: Site 4579. Sampling site 100 Ft From mouth of stream  
add new stream w/ RR COR

Name of Observer (please print): Nancy Ihlenfeldt-McNay  
 Signature: [Signature]  
 Address: ADNR, OHMP, 1300 College Rd.  
Fairbanks, AK 99701

Date: 10/19/04

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: [Signature] John Burr  
 Name of Area Biologist (please print):

Revision 04/03

## Consideration of removal of coho salmon AWC documentation in Yukon River systems.

Issue – Based on an extensive sampling effort trapping juvenile fishes downstream from the Canadian border, Dave Daum (USF&WS) has submitted several nomination forms to delete coho salmon rearing, spawning, or presence from a number of AWC listed water bodies. The water bodies listed below are being considered for revision. Existing AWC coho salmon life stage documentation and lower pt fish species/life stage info (in parenthesis) is included.

334-45-11000-2325 (Kandik River (Charley Creek)) – coho salmon present (CHp,COp,Ksr)

334-45-11000-2325-3013 – coho salmon rearing (COr,Kr)

334-45-11000-2325-3017 – coho salmon rearing (COr,Kr)

334-45-11000-2325-3021 – coho salmon rearing (COr,Kr)

334-45-11000-2325-3021-4006 – coho salmon rearing (COr,Kr)

334-45-11000-2501 (Tatonduk River) – coho salmon present/spawning (CHp,COp,Ks)

334-40-11000-2661 – coho salmon rearing (COr,Kr)

334-40-11000-2665 – coho salmon rearing (COr,Kr)

334-40-11000-2681 – (Big Salt River) coho salmon rearing/present (CHs,COp,Kr)

(J. Johnson) AWC documentation for Kandik River (334-45-11000-2325) & tribs or 334-45-11000-2501 (Tatonduk River) to add coho salmon does not exist (no nom), 334-40-11000-2661 - added with Chinook & coho salmon rearing, nom # 04-479 (OHMP), 334-40-11000-2665 - added with Chinook & coho salmon rearing nom# 04-473, 334-40-11000-2681 – (Big Salt River) added with coho salmon, nom # 04-482 (AFFI).

Following are excerpts from emails or phone conversations -

(Dave Daum) I would delete these records unless there is definitive proof that these juvenile fish are actually coho. I have done genetics on over 800 age-0 juveniles in this part of the Yukon and they are all Chinook so far. As I have been saying for years now, the NOAA, Morrow, etc. keys for juvenile salmon identification can be very misleading for upper Yukon River Chinook salmon. I have caught fish with sickle-shaped anal fins, white leading edges, orange hue, parr marks narrow relative to space, etc. and so far they have been all genetically identified as Chinook. I had fish removed out of the UAF museum collection that were misidentified by ADF&G personnel as coho in the 1970's in the upper Yukon area (I sent to Ray Baxter, and he confirmed through meristics as Chinook). USFWS conducted a contaminants study in the Innoko River in the 1990's and misidentified numerous coho and Chinook salmon fry using these keys. Our genetics lab since those days screens ALL salmon fry for species before doing analysis. They do this because mis-identification of juvenile salmonids has been a common occurrence,

Consideration of removal of coho salmon AWC documentation in Yukon River systems.

especially in some areas of the Yukon River. We have recently done some work on the Tanana River and did pyloric caeca counts to confirm speciation in age-0 juvenile Chinook and coho. I sampled Minook Creek (directly across from Squaw Creek) on Aug 29, 2006. I captured 104 juvenile salmonids, they ranged from 65 - 95 mm, and all were genetically screened as Chinook salmon.

(Bonnie Borba) Only kings and chum salmon noted in the Charley Creek in the aerial survey database, local report of coho salmon in the Black River as well as in the local subsistence fisheries.

(Roger Dunbar) Reports capture of coho salmon @ Eagle sonar site, but very few

(Pat Milligan- DFO) Documentation of coho salmon in the Porcupine River (Canadian side) and rearing coho salmon in Fishing Branch River (trib of Porcupine R.). The coho run within the Porcupine River drainage appears to be much stronger than the one to the upper Yukon. Coho are often caught in the aboriginal fishery located on the main stem Porcupine River near Old Crow late in the season by individuals fishing under the ice.

(Joe Buckwalter) I haven't had genetic tests run on any voucher specimens, but I routinely use meristic counts (esp. pyloric caeca and branchiostegals) to confirm difficult ID on difficult specimens. White leading edge of anal fin means nothing—however, a white leading edge *followed by a black stripe/zone*, when present, seems to be a very good indicator for coho (although the black can fade on larger specimens). However, so far I'm not convinced there is sufficient evidence to retract any coho listings, at least not for Squaw Creek or Big Salt River (which I can vouch for).

(Robert Clark) The best way to confirm coho presence will be to confirm adults spawning in drainages, which I am relatively sure does occur in the upper Yukon, albeit infrequently. CF aerial surveys aren't late enough in the year to detect coho salmon adults. It's a shame, but deletion probably should (will) occur until we can confirm adults in these rivers, which will be infrequent based on my experience.

(James Durst) Attached is a spreadsheet summarizing field and laboratory examinations of juvenile salmon in the Tanana River basin near Big Delta. In this reach, live juvenile coho salmon and Chinook salmon can be tricky to tell apart in the hand if using parr marks, dorsal fin shading, or anal fin shading or shape. The definitive external characteristic turned out to be adipose fin pigmentation.

(Robert Karlen) Reports he has no reason to doubt the validity of the fish species identifications, does not recall any difficulty or issues w/identification. Streams added were 334-40-11000-2661 - added with Chinook & coho salmon rearing, nom # 04-479  
334-40-11000-2665 - added with Chinook & coho salmon rearing nom# 04-473,  
(OHMP)

Consideration of removal of coho salmon AWC documentation in Yukon River systems.

Streams under consideration for revision w/SF AB & CF/AB

334-45-11000-2325 - John Burr, John Linderman  
334-45-11000-2325-3013 - John Burr, John Linderman  
334-45-11000-2325-3017 - John Burr, John Linderman  
334-45-11000-2325-3021 - John Burr, John Linderman  
334-45-11000-2325-3021-4006 - John Burr, John Linderman  
334-45-11000-2501 - John Burr, John Linderman  
334-40-11000-2661 – John Burr, John Linderman  
334-40-11000-2665 – John Burr, John Linderman  
334-40-11000-2681- John Burr, John Linderman

334-45-11000-2325 – Kandik River is documented in AWC w/Chinook salmon rearing to the US-Canada border and coho salmon present to the mouth of 334-45-11000-2325-3021, revision would not affect the extent of AWC documentation in the Kandik River, only result would be deletion of single species (coho salmon). Since no documentation can be located to substantiate coho salmon observations, recommend deleting coho salmon present from stream.

334-45-11000-2325-3013 – Delete coho salmon rearing due to lack of substantiating occurrence observations.

334-45-11000-2325-3017 - Delete coho salmon rearing due to lack of substantiating occurrence observations.

334-45-11000-2325-3021 – Delete coho salmon rearing due to lack of substantiating occurrence observations.

334-45-11000-2325-3021-4006 - Delete coho salmon rearing due to lack of substantiating occurrence observations.

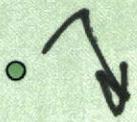
334-45-11000-2501 – Delete coho salmon present & spawning due to lack of substantiating occurrence observations.

334-40-11000-2661 – Observers are confident in their identification of juvenile coho salmon, do not delete coho salmon rearing.

334-40-11000-2665 – Observers are confident in their identification of juvenile coho salmon, do not delete coho salmon rearing.

334-40-11000-2681- Observers are confident in their identification of juvenile coho salmon, do not delete coho salmon rearing or present.

Extend  
334- 40- 11000- 2661  
W/ Chinook salmon  
Recovery



CO<sub>2</sub>, Kr

CO<sub>2</sub>, Kr

Redraw ORC to match

hydrography ~~map~~ <sup>from</sup> catch imagery see

BDL  
NHS

