



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

Nomination Form  
Anadromous Waters Catalog



Region Southeast USGS Quad(s) Craig C-2  
 Anadromous Waters Catalog Number of Waterway 102-60-10870-2004 - 0010 - 3030  
 Name of Waterway Unnamed Tributary 2 to Karta River (see map) USGS Name \_\_\_\_\_ Local Name \_\_\_\_\_  
 Addition  Deletion  Correction  Backup Information

For Office Use

Nomination # <u>15-009</u>	<u>James J. Hasbrouck</u> Fisheries Scientist	<u>5/8/2015</u> Date
Revision Year: <u>2016</u>	<u>Michelle J. ...</u> Habitat Operations Manager	<u>5/8/15</u> Date
Revision to: Atlas _____ Catalog _____ Both <input checked="" type="checkbox"/>	<u>[Signature]</u> AWC Project Biologist	<u>30 Apr 15</u> Date
Revision Code: <u>C-9, B-2, C-1a</u>	<u>T.A.</u> Cartographer	<u>5/13/15</u> Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho Salmon	July 22-24, 2014		X	X	X
Dolly Varden	July 22-24, 2014			X	
Cutthroat Trout	July 22-24, 2014			X	

Reference #  
15-010  
15-014  
15-015

**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 supplemental information. Add Coho Salmon Reampt to 102-60-10870-2004-0010  
 This application was prepared by Cathy Needham who may be reached at 907-723-4436 or cathy@kaienvironmental.com.  
Add 102-60-10870-2004 hydro and add coho salmon  
Reampt, Re number upstream portion of 102-60-10870-2004 as 2004-3030

Name of Observer (please print) Robina Moyer  
 Signature [Signature] Date: 10/7/14  
 Agency Kai Environmental Consulting Services, LLC  
 Address 9000 Glacier Hwy, Suite 302  
Juneau, AK 99801

ALASKA DEPT. OF  
FISH & GAME  
OCT 13 2014

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

## **Supplemental Information for Karta River – Unnamed Tributaries 2 and 2a**

In the summer of 2014 a stream crew from the Organized Village of Kasaan (OVK) mapped habitat, took stream survey data and trapped minnows on the Karta River, including Unnamed Tributary 2, a northern tributary that flows into the left bank of the Karta (AWC 102-60-10870-2004). As shown on the attached map, from where it enters the Karta, Tributary 2 continues north for 0.2 miles, where it flows out of a small lake before narrowing into a creek at the northeast end of the lake. Stream mapping and survey data was taken on seven reaches for Tributary 2 and its tributary, referred to as Tributary 2a. Reach data is included in this packet and the corresponding locations are shown on the attached figure.

On July 22-24, 2014 eight baited minnow traps were set in a tributary on the north side of the Karta River and left to soak for between 1.5 and 17 hours (see map for locations). The trap at GPS Point 815 caught one stickleback (45mm), three juvenile coho (75mm, 80mm, 80mm) and five Dolly Varden (95mm, 110mm, 110mm, 120mm, 145mm). The trap at GPS Point 920 caught two juvenile coho (65mm, 80mm) and three salamanders. The trap at GPS Point 919 caught one coho (50mm). The trap at GPS Point 832 caught one cutthroat trout (70mm) and two coho (55mm, 65mm). The trap at GPS Point 887 caught no fish. The trap at GPS Point 897 caught one cutthroat trout (130mm). The trap at GPS Point 910 caught no fish and none were observed in the reach. The trap at GPS Point 869 caught no fish and none were observed above the cascade at GPS Point 863 (photo 1). An ADF&G fish trapping permit data sheet is attached to this nomination packet which includes further details on fish trapping on Tributaries 2 and 2a.

It is believed that the cascade at GPS Point 863, which is approximately 4.5 meters high with a bedrock substrate is a barrier to both adult and juvenile fish passage and marks the upper extent of fish habitat on this tributary.

The trap at GPS Point 897 was set below a mid-sized rock cascade (photo 2) which no fish were seen or trapped above. It is believed that this is a barrier to fish passage and marks the upper extent of fish habitat in the smaller tributary shown on the map.



**Photo 1: Cascade at GPS Point 863.**



**Photo 2: Cascade on smaller tributary at GPS Point 897 which is a potential barrier to fish passage.**

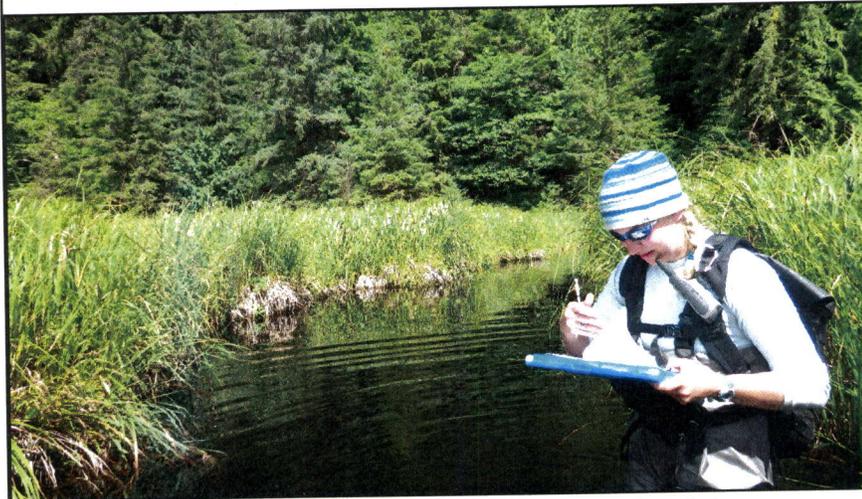
**Reach Data for Unnamed Northern Tributary to Karta River**  
(AWC 102-60-10870-2004)

	<b>Reach 6</b>	<b>Reach 10</b>	<b>Reach 11</b>
<b>Average stream gradient</b>	2.15	0.43	4.78
<b>Average bankfull width</b>	4.3	3.1	5.6
<b>Average channel bed width</b>	4.1	3.6	2.0
<b>Average incision depth</b>	0.55	1.0	0.7
<b>Bank composition</b>	organic	organic	organic
<b>Dominant substrate</b>	large cobble	organic	large cobble
<b>Sub-dominant substrate</b>	small cobble	medium gravel	small cobble
<b>Large wood count</b>	19	3	62
<b>Key wood count</b>	1	0	10
<b>Macro-pool count</b>	2	0	8

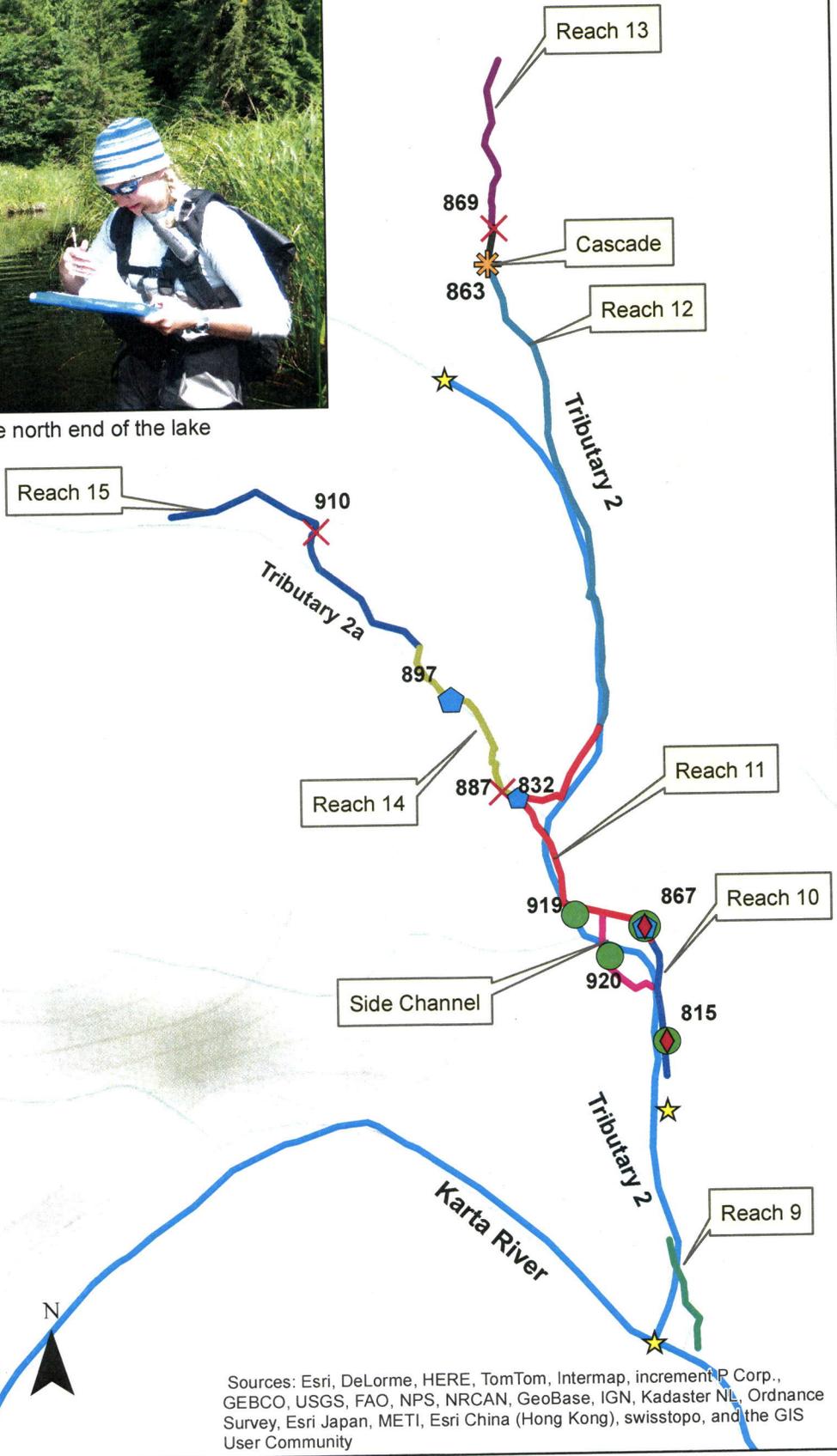
**Reach Data for Unnamed Northern Tributary to Karta River cont'd**  
(AWC 102-60-10870-2004)

	<b>Reach 12</b>	<b>Reach 13</b>	<b>Reach 14</b>	<b>Reach 15</b>
<b>Average stream gradient</b>	15.18	3.03	6.55	10.48
<b>Average bankfull width</b>	2.8	0.9	2.6	15
<b>Average channel bed width</b>	3.4	1.5	2.4	0.8
<b>Average incision depth</b>	0.65	0.35	0.45	0.4
<b>Bank composition</b>	organic	organic	organic	organic
<b>Dominant substrate</b>	small cobble	very coarse gravel	bedrock	bedrock
<b>Sub-dominant substrate</b>	large cobble	small cobble	very coarse gravel	very fine gravel
<b>Large wood count</b>	102	20	50	46
<b>Key wood count</b>	13	6	12	11
<b>Macro-pool count</b>	11	11	16	12

# Karta River Northern Tributary 2 July 22-24, 2014



Example of habitat found at the north end of the lake



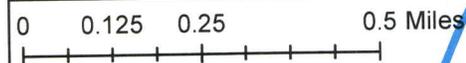
Numbered reaches mapped by  
Organized Village of Kasaan

**Legend**

- ★ AWC Points
- AWC Mapped Reaches

**Fish Trapping Data**

- ✕ No Fish
- Coho Salmon
- ⬠ Cutthroat Trout
- ◆ Dolly Varden



Sources: Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

## Summary report of fish collection activity.

The area biologist was contacted on: [6:43am/May 30, 2014](#)

Location ID (optimal)	Latitude	Longitude	Date	Coordinate method	Name of water body	Date	Fish collection method	Species	Life stage	Length (mm)	Method	Disposition (1)	Comments
815	55.568981	-132.589363	WGS84	GPS	Karta	7/22/2014	Minnow Trap	Dolly Varden	juvenile	110 Fork	measured	and released	
815	55.568981	-132.589363	WGS84	GPS	Karta	7/22/2014	Minnow Trap	Dolly Varden	juvenile	95 Fork	measured	and released	
815	55.568981	-132.589363	WGS84	GPS	Karta	7/22/2014	Minnow Trap	Dolly Varden	juvenile	120 Fork	measured	and released	
815	55.568981	-132.589363	WGS84	GPS	Karta	7/22/2014	Minnow Trap	Dolly Varden	juvenile	110 Fork	measured	and released	
815	55.568981	-132.589363	WGS84	GPS	Karta	7/22/2014	Minnow Trap	Dolly Varden	juvenile	145 Fork	measured	and released	
815	55.568981	-132.589363	WGS84	GPS	Karta	7/22/2014	Minnow Trap	coho salmon	juvenile	80 Fork	measured	and released	
815	55.568981	-132.589363	WGS84	GPS	Karta	7/22/2014	Minnow Trap	coho salmon	juvenile	80 Fork	measured	and released	
815	55.568981	-132.589363	WGS84	GPS	Karta	7/22/2014	Minnow Trap	coho salmon	juvenile	75 Fork	measured	and released	
815	55.568981	-132.589363	WGS84	GPS	Karta	7/22/2014	Minnow Trap	stickleback- unspecified	juvenile	45 Fork	measured	and released	
832	55.572241	-132.592782	WGS84	GPS	Karta	7/22/2014	Minnow Trap	coho salmon	juvenile	65 Fork	measured	and released	
832	55.572241	-132.592782	WGS84	GPS	Karta	7/22/2014	Minnow Trap	cutthroat trout	juvenile	70 Fork	measured	and released	
832	55.572241	-132.592782	WGS84	GPS	Karta	7/22/2014	Minnow Trap	coho salmon	juvenile	55 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	coho salmon	juvenile	90 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	coho salmon	juvenile	95 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	cutthroat trout	juvenile	120 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	90 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	75 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	70 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	100 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	coho salmon	juvenile	90 Fork	ID'd and released		set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	115 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	75 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	115 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	70 Fork	measured	and released	set on 7/22, left overnight

Location ID (optical nail)	Latitude	Longitude	Datum	Coordinate system	Name of water body	Date	Fish collection method	Species	Life stage	Length (mm)	Method	Disposition (1)	Comments
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	85 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	80 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	100 Fork	measured	and released	set on 7/22, left overnight
867	55.570506	-132.589847	WGS84	GPS	Karta	7/23/2014	Minnow Trap	Dolly Varden	juvenile	75 Fork	measured	and released	set on 7/22, left overnight
869	55.579797	-132.593155	WGS84	GPS	Karta	7/23/2014	Minnow Trap	no fish collected or observed		100 Fork	measured	and released	set on 7/22, left overnight
887	55.572321	-132.593156	WGS84	GPS	Karta	7/23/2014	Minnow Trap	no fish collected or observed					placed in pool below small cascade
897	55.573555	-132.594321	WGS84	GPS	Karta	7/23/2014	Minnow Trap	cutthroat trout	juvenile	130 Fork	measured	and released	no fish observed on reach
910	55.575798	-132.597444	WGS84	GPS	Karta	7/23/2014	Minnow Trap	no fish collected or observed					no fish observed on reach

update hydro for 102-60-10870-2004  
using 2016\noms\nneedham\OVK\_mapped.shp &  
2016\noms\nneedham\Karta\_LN.shp, add coho salmon rearing,  
add coho salmon rearing to 102-60-10870-2004  
renumber upstream portion of 102-60-10870-2004  
as 102-60-10870-2004-3030 w/coho salmon &  
Dolly Varden present @ upper & lower pts

