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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-2

Anadromous Waters Catalog Number of Waterway: 103-25-10470

Name of Waterway: Hetta Creek (Outlet Creek) [X] USGS Name [X] Local Name

local name in parentheses

[X] Addition [ ] Deletion [ ] Correction [ ] Backup Information

For Office Use

Nomination # 130019		
Revision Year: 2014		
Revision to: Atlas ____ Catalog ____ Both X	Fisheries Scientist	8/27/13 Date
	Habitat Operations Manager	8/27/13 Date
	AWC Project Biologist	1/28/13 Date
Revision Code: B-2, C-7, C-9	Cartographer	9/5/13 Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho Salmon	June 19, 2012		X		X
Add coho salmon rearing to stream					
Revise hydrography, reposition lower mouth pt					

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: Five baited minnow traps were set in Hetta Outlet Creek and soaked for 4-6 hours. Trap locations are shown on attached material, referenced as GPS locations 1, 5, 7, 9, and 11. The GPS 1 trap had 4 sculpin and 2 juvenile coho salmon (<100mm). The GPS 5 trap had 2 sculpin and 3 coho salmon (<100mm). The GPS 7 trap had 1 coho salmon (<100mm). The GPS 9 trap had 1 sculpin and 1 coho salmon (<100mm). The GPS 11 trap had 5 coho salmon (<100mm). Timing of data collection and life stage of coho salmon show that juveniles are using all of Hetta Creek (Outlet) as rearing habitat. Attached are datasets from fish handling permit data submitted to ADFG Sportfish and stream habitat data for 3 reaches within Hetta Creek (Outlet). This application was prepared by Cathy Needham (907)723-4426 or cathy@kaienvironmental.com for additional information.

Name of Observer (please print): Tony Sanderson
Signature: Tony Sanderson
Date: Jan. 7, 2013
Agency: Hydaburg Cooperative Association
Address: P.O. Box 349
Hydaburg, Alaska 99922

ALASKA DEPT. OF FISH & GAME
JAN 18 2013

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

Hetta Creek (Outlet Creek)
June 19, 2012

Legend

- Fish Trap - Coho salmon
- AWC Points
- AWC Line

N

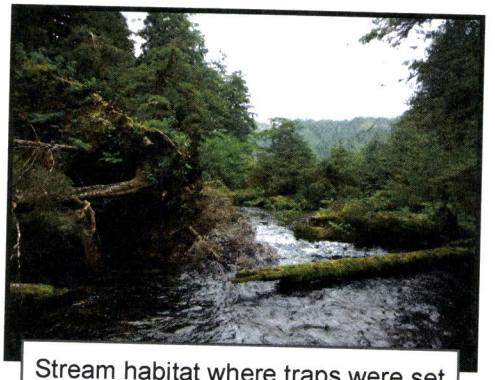
0 0.05 0.1 0.2 Miles

Tongass National Forest

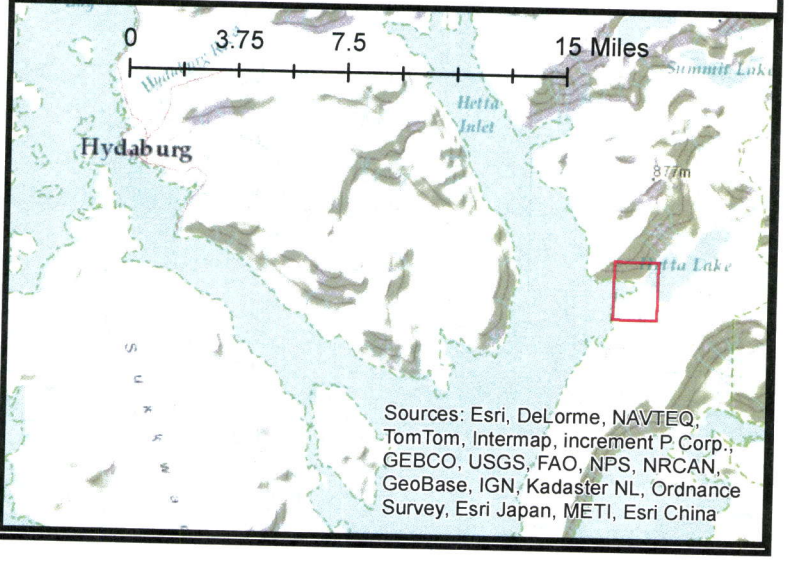
Hetta Lake

5 7 1 11 9

Stream habitat where traps were set



Stream habitat where traps were set



Hetta Creek (Outlet Creek) Minnow Trapping Data (2012)

ADF&G permit no. SF2012-193

Summary report of fish collection activity.

The area biologist was contacted on: TIME/DATE **6/14/12 at 8:37 P.M.**

Location_ID	GPS_Point	Latitude	Longitude	Datum	Coordinate_determination_method	Name_of_water_body	Date	Fish_collection_method	Species	Life stage	Length	Length_method	Disposition	Disposition	Comments
HET12	1	55.171490	-132.570870	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	sculpin-unspecified	juvenile			ID'ed and released		
HET12	1	55.171490	-132.570870	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	sculpin-unspecified	juvenile			ID'ed and released		
HET12	1	55.171490	-132.570870	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	sculpin-unspecified	juvenile			ID'ed and released		
HET12	1	55.171490	-132.570870	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	sculpin-unspecified	juvenile			ID'ed and released		
HET12	1	55.171490	-132.570870	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	1	55.171490	-132.570870	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	5	55.171391	-132.573694	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	stickleback-unspecifie	juvenile			ID'ed and released		
HET12	5	55.171391	-132.573694	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	stickleback-unspecifie	juvenile			ID'ed and released		
HET12	5	55.171391	-132.573694	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	5	55.171391	-132.573694	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	5	55.171391	-132.573694	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	7	55.171340	-132.572179	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	9	55.171572	-132.569350	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	stickleback-unspecifie	juvenile			ID'ed and released		
HET12	9	55.171572	-132.569350	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released	Unintended mortality	
HET12	11	55.171514	-132.570191	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	11	55.171514	-132.570191	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	11	55.171514	-132.570191	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	11	55.171514	-132.570191	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		
HET12	11	55.171514	-132.570191	WGS84	GPS	Hetta	6/19/2012	Minnow Trap	coho salmon	juvenile			ID'ed and released		

Hetta Creek (Outlet Creek) Stream Habitat Mapping Data (2012)

Project Code: Het12 6/19/2012 Channel Type: MML GPS: KAI01 Upstream

Waypoint	Coordinates		Error (ft)	Feature	Locale	Locator
1	55.171555	-132.576534	22	BSS	MCH	SS
1	55.171555	-132.576534	22	CBW	MCH	SS
2	55.171426	-132.576152	17	CBW	MCH	SS
3	55.171552	-132.575559		CTV	MCH	SS
4	55.171813	-132.576163		MAP	MCH	SS
5	55.1716	-132.576034		MAP	MCH	SS
6	55.171689	-132.575583		MAP	MCH	SS
7	55.171668	-132.575054		MAP	MCH	SS
8	55.171648	-132.574762		TRB	MCH	SS
9	55.171595	-132.574557		BRK	MCH	SS

Bottom of Reach Waypoint	CTV Waypoint	Top of Reach Waypoint	Avg Stream Gradient (%)	Incision Depth (m)	Bankful Width (m)	Bank Composition	Channel Pattern
1	3	9	2.6	1.25	28.9	Mixed	Singular

Stream Gradient Measure			Riparian Vegetation Codes		
		dist (m)		Left Bank	Right Bank
Bottom of Reach (up)	2	30	0-5m	IA2b	IA2a
CTV (down)	-3	20	5-10m	IA1b	IA2a
CTV (up)	0	24	10-20m	IA1b	IB1a
Top of Reach (up)	-1	23	23-30m	IA1b	IA1c

Substrate and Geology	
Dominant	silt/sand
Sub-dominant	see data
Next sub-dominant	see data

Avg. Channel Bedwidth (m)	27.1

Reach Counts	
Large Wood	16
Key Wood	2
Macro Pools	0

Hetta Creek (Outlet Creek) Stream Habitat Mapping Data (2012)

Project Code: Het12 6/19/2012 Channel Type: MCM GPS: KAI01 Upstream

Waypoint	Coordinates		Error (ft)	Feature	Locale	Locator
9	55.171595	-132.574557		BRK	MCH	SS
10	55.171754	-132.574187		MAP	MCH	SS
11	55.17162	-132.573803		MAP	MCH	SS
12	55.17165	-132.573656		MAP	MCH	SS
13	55.171442	-132.572325		MAP	MCH	SS
14	55.171509	-132.572385		CTV	MCH	SS
15	55.171276	-132.571502		MAP	MCH	SS
16	55.171437	-132.570951	20	HWE	MCH	SS
17	55.171466	-132.57069	18	MAP	MCH	SS
17	55.171466	-132.57069		BRK	MCH	SS

Bottom of Reach Waypoint	CTV Waypoint	Top of Reach Waypoint	Avg Stream Gradient (%)	Incision Depth (m)	Bankful Width (m)	Bank Composition	Channel Pattern
9	14	17	2.6	2.8	13.3	Bedrock	Singular

Stream Gradient Measure			Riparian Vegetation Codes		
		dist (m)		Left Bank	Right Bank
Bottom of Reach (up)	-1	20	0-5m	IB2	IB1a
CTV (down)	2-	13	5-10m	IB2	IB1a
CTV (up)	0	15.2	10-20m	IA1c	IA1a
Top of Reach (up)	-3	10	23-30m	IA2b	IA1a

Substrate and Geology		Avg. Channel Bedwidth (m)	17.3
Dominant	SC		
Sub-dominant	LC		
Next sub-dominant	LMB		

Reach Counts	
Large Wood	41
Key Wood	3
Macro Pools	0

Hetta Creek (Outlet Creek) Stream Habitat Mapping Data (2012)

Project Code: Het12 6/19/2012 Channel Type: MCM GPS: KAI01 Upstream

Waypoint	Coordinates		Error (ft)	Feature	Locale	Locator
17	55.171466	-132.57069		BSS	MCH	SS
18	55.171454	-132.570537		CBW	MCH	SS
19	55.171454	-132.569956	11	MAP	MCH	SS
20	55.171539	-132.569592	27	MAP	MCH	SS
21	55.171537	-132.56995	17	CTV	MCH	SS
22	55.1716	-132.569491		BRK	MCH	SS
22	55.1716	-132.569491		ESS	MCH	SS

Bottom of Reach Waypoint	CTV Waypoint	Top of Reach Waypoint	Avg Stream Gradient (%)	Incision Depth (m)	Bankful Width (m)	Bank Composition	Channel Pattern
17	21	22	3.1	0.84	17.3	Mixed	Singular

Stream Gradient Measure		
		dist (m)
Bottom of Reach (up)	1	11
CTV (down)	-1	13.7
CTV (up)	0	10
Top of Reach (up)	-5	8.2

Riparian Vegetation Codes		
	Left Bank	Right Bank
0-5m	IB1a	IC2
5-10m	IB1a	IB1A
10-20m	IA1c	IA1c
23-30m	IA1c	IA1c

Substrate and Geology	
Dominant	SC
Sub-dominant	LC
Next sub-dominant	LMB

Avg. Channel Bedwidth (m)	16.7

Reach Counts	
Large Wood	46
Key Wood	12
Macro Pools	0

KAI ENVIRONMENTAL
CONSULTING SERVICES, LLC

January 14, 2013

ADF&G Sportfish Division Regional Office
ATTN: J. Johnson
333 Raspberry Road
Anchorage, AK 99518

Dear Mr. Johnson,

On behalf of the Hydaburg Cooperative Association (HCA) and The Nature Conservancy (TNC), I have completed and enclosed 7 nomination packages for the Anadromous Waters Catalog (AWC). In 2012, TNC received a Southeast Sustainable Salmon Fund grant from the State of Alaska, Department of Fish and Game, to conduct stream habitat surveys in two important subsistence watersheds near Hydaburg, Alaska. These watersheds include Hetta Lake (4 nominations) and Eek Lake (3 nominations). During stream habitat surveys, additional data for documenting fish and fish habitat use was also taken (in the form of minnow trapping and adult foot surveys). While 5 of the nominations are for adding the spawning and/or rearing designation to existing cataloged stream reaches and Hetta Lake, 2 of the nominations are for new stream designations. The new stream designations are in Eek Lake.

You will note that the nomination packages are signed by Tony Sanderson of Hydaburg Cooperative Association. Mr. Sanderson was the field lead for the project, and is therefore signing as the observer. My role under this collaborative project was to train the field crews, compile the data for various uses, and prepare the nomination packages. Because all of the data resides in my offices in Juneau, if you have questions, need clarification, or need additional information please do not hesitate to contact me at the phone number listed below or at cathy@kaienvironmental.com. Thanks!

Sincerely,

Cathy A. Needham

9000 GLACIER HIGHWAY, SUITE 302, JUNEAU, AK 99801
(907)723-4426 (P); (866)422-4462


add coho salmon rearing to 103-25-10470
reposition mouth pt & revise lower stream hydrography
HD Copy\2006DOQQ1m\ for image
use 2014arc for hydrography
3 - COr
1 - COr
2 - COr
5 - COr
1 - COr


add coho salmon rearing to 103-25-10470
reposition mouth pt & revise lower stream hydrography
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5 - COr
1 - COr