State of Alaska
Department of Fish and Game
Sportfish Division

Nomination Form
Anadromous Waters Catalog

Region: Western

USGS Quad(s): BETHEL A-3

Anadromous Waters Catalog Number of Waterway: HUC-10 1903050216 T-S002S062W

Name of Waterway: unnamed (Kwethluk pond #90) ☐ USGS Name ☐ Local Name

☑ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination #: 15-568

Revision Year: 2016

Revision to: ☐ Atlas ☐ Catalog

Revision Code: F-1

Fisheries Scientist	Date
Habitat Operations Manager	Date
AWC Project Biologist	Date: 9/15/15
GIS Analyst	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Arctic char	08/26/2014			✓	

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:

We conducted an aerial and ground survey of series of ponds in kwethluk basi. These ponds (90-88-91) are all connected but no surface flow to river was observed. We landed on peninsula (wp 329) set MTs and H&L sampled from shore. Juvenile salmonids (sp?) were observed along the lake shore @ steep alder banks; 6 lake trout were caught and sampled; 1 adult AC was landed and sampled. Using an Alpaca raft I paddled/wind drifted to the inlet end, trolling and taking YSI, secchi and periodic depth measurements w/ Depthmate. In the inlet stream I observed a large school of char. Set tangle net downstream of the school and chased 49 AC. All were collected and batch sampled back at the hangar. 2 MT at outlet captured 6 sculpin (sp?).
Add ACpr; LTp; und. sculpin. Data and map attached.
Coordinates (Lat,Long): (60.01083,-159.88011) not Anadromous

Name of Observer (please print): Mark Lisac

Signature: 164.159.152.2 (Web Nomination) Date: 01/12/2015

Agency:

Address: USFWS Togiak NWR P.O. Box 270
Dillingham, AK 99576

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: _____

Name of Area Biologist (please print):

Revision 11/14

ARCTIC CHAR SAMPLING EFFORT

ID 90
LAKE Kwethluk
DATE 8/26/2014
CREW Lisac, Aderman
TRANSPORT R44 Pollux Robert Kozakiewicz
ASSESSMENT TYPE Rapid; dav trip; kavak
GEAR USED H&L; MT; net; - Start 1020 end 1730

COMMENTS / NOTES:

We flew up to the kwethluk drainage ponds and did an aerial inspection. These ponds (90-88-91) are all connected but no out flow to the Kwethluk river was observed - even though the connecting streams had fairly good flow. We landed on a peninsula on #90 and set MTs and spread out to H&L sample. Jjuvenile salmonids (sp?) were observed along the lake shore in the steep alder covered banks; Lake trout were obverved and 6 were caught and sampled; 1 adult AC was landed and sampled. After the stiff wind subsided we flew up to the outlet end and I inflated an Alpaca raft and paddled/wind drifted to the inlet end, trolling and taking YSI, secchi and periodic depth measurements (Depthmate - flashlight). In the inlet stream I observed a large school of char types. Call Andy & Rob (motorolla radio) to bring the mono-experimental gill net that we set downstream of the school and were able to chase 49 fish into the net. We collected all 49 and put them on ice. they were batch sampled back at the hangar. picked up MT at outlet end and stopped at Circ (#131) to pick up Andy's sunglasses left the day before.

Drainage	ID	LAKE	Volumn	hectares	PERIMETEF	SLD	Mean D	Max D	Elevation	SA * Elevat.	Log10	Lat	Long	AC Y/U/N	T	pH	DO	conductivity	Secchi
Kwethluk	90	Salmon 4		19	3903	2.56		8.9	393	7,272	3.9	60.0127	-159.8820	U					
								w/ depthMate											

ID	WB_Name	Drainage	CAT	CODE	RATE	AC	Connect	Area	Perimeter	SLD	Elevation	Lat	Long	CART	GLM	Average
90	Salmon 4	Kwethluk	H	?	POS	2	0	19	3903	2.56	393	60.0127	159.8820	0.665	1.000	0.833

LAKE MEASUREMENTS: YSI; DepthMate; from outlet to inlet from Alpaca
Max Depth observed = 8.9m

SURFACE PARAMETERS: YSI model 30 w/ 2m cable

LAKE	T°C	14.1	C	57.38 °F
	Conduct.	74.1		
	Sp.Cond.	93.6		
	Secchi	14	Ft.	4.3 meter
INLET STREAM (where AC school)	T°C	14.4	C	57.92 °F
	Conduct.	75.9		
	Sp.Cond.	95.1		

MINNOW TRAPPING

M. traps	Locate	lat	long	start	stop	AC	SS	3-sp SB	9-sp SB	Sculpin?	RS
#1	start - peninsula	60.01083	159.88011	1030	1400					0	
#2	start - peninsula	60.01083	159.88011	1030	1400						
#3	start - peninsula	60.01083	159.88011	1030	1400						
#4	start - peninsula	60.01083	159.88011	1030	1400						
1	88Outlet	60.01435	159.88205	1430	1730					2	
2	88Outlet	60.01435	159.88205	1430	1730					4	
	Kwethluk pond (90)	60.0127	159.8820			0	0	0	0	6	0

Lake trout sampled

tag#	vial#	FL			
NT	293	400	60.042	159.881	
31398	208	470	60.011	159.880	
31400	42	450	60.012	159.885	
31399	229	450	60.012	159.885	
31901	226	430	60.012	159.885	
NT	204	455	60.013	159.881	

Voucher 50
Tag/release 0
50

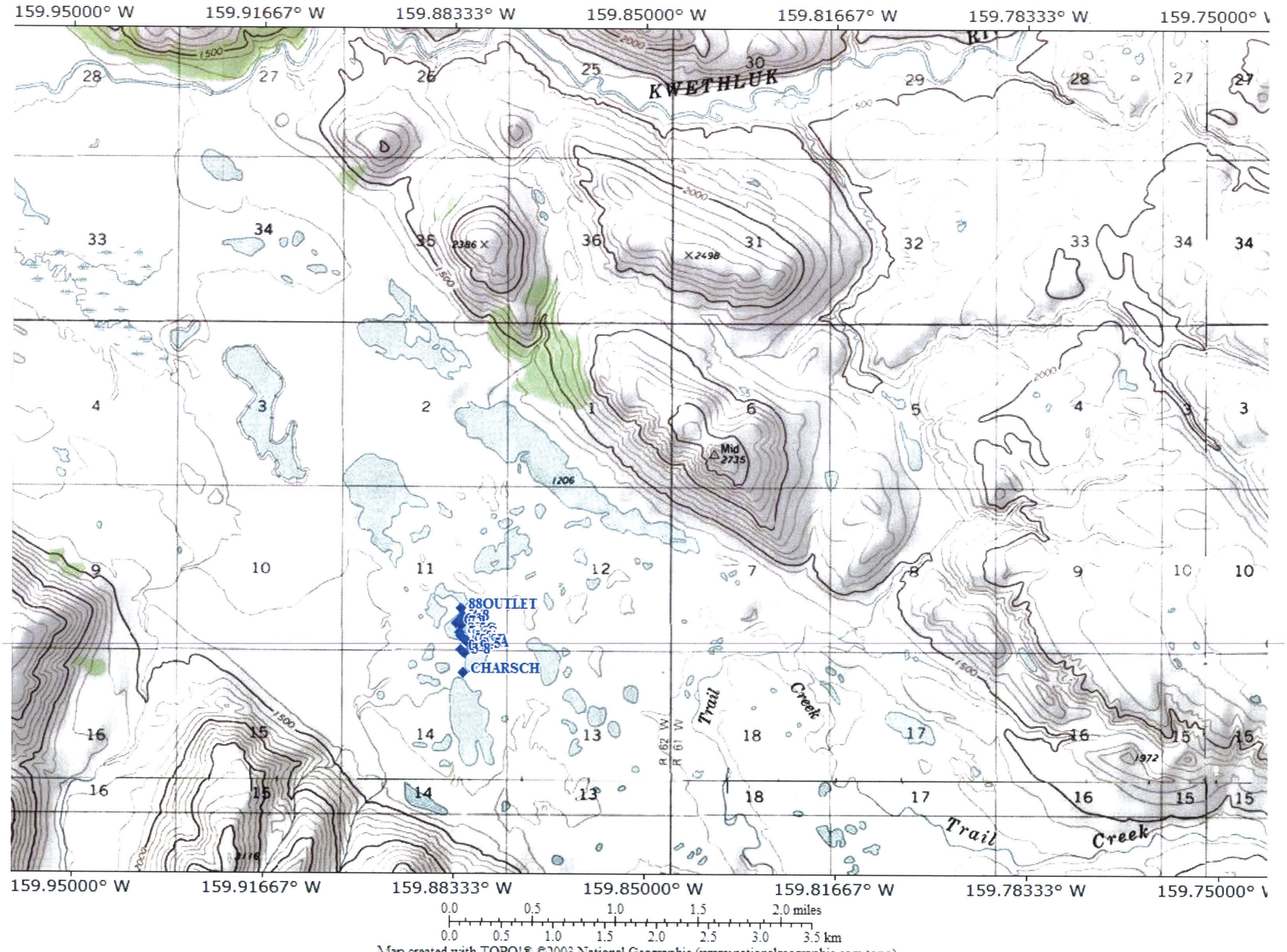
OTHER SPECIES OBSERVED:

	AC
H&L	1
MT	0
NET	49
VISUAL	
	50

Waypoints

lake ID	wpt#	date	time	lat	long	elevation
90	329	########	10:17:51AI	60.01083	159.88011	369
90	5-7	########	2:35:45PM	60.01368	159.88177	372
90	7-2	########	2:38:22PM	60.01344	159.88211	372
90	4-8	########	2:43:36PM	60.01335	159.88167	373
90	6-3	########	2:48:25PM	60.01304	159.88287	373
90	7-1	########	2:53:59PM	60.01286	159.88219	373
90	8-5C	########	2:58:00PM	60.01233	159.88241	373
90	7-6C	########	3:03:25PM	60.01202	159.88217	373
90	6-0	########	3:06:29PM	60.01182	159.88173	374
90	8-3	########	3:08:31PM	60.01171	159.88144	373
90	8-9	########	3:10:18PM	60.01161	159.88119	373
90	7-6D	########	3:13:40PM	60.01138	159.88089	374
90	5-9D	########	3:16:43PM	60.01124	159.88039	375
90	5-2A	########	3:19:59PM	60.01105	159.87997	374
90	0-5	########	3:21:57PM	60.01093	159.87977	373
90	0-9	########	3:26:10PM	60.01077	159.88203	373
90	3-8	########	3:28:55PM	60.01042	159.88145	373
90	CharSCH	########	5:09:44PM	60.00870	159.88179	372
90	88Outlet	########	5:32:58PM	60.01435	159.88205	375

Date	Tag	Length	Weight	Vial#	Status	Disposition	sex	Mat	Color	Photo	Lat	Long	gear	comments
8/26/2014	31,525	425	NA	185	T	V	U	U	NA	N	60.04210	159.88132	H&L	
8/26/2014	NT	230	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	218	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	262	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	231	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	176	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	185	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	197	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	212	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	225	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	215	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	260	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	225	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	185	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	218	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	218	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	148	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	216	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	214	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	214	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	216	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	210	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	264	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	222	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	235	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	171	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	217	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	176	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	202	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	209	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	228	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	206	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	210	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	193	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	206	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	205	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	223	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	196	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	180	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	210	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	178	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	286	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	255	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	181	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	213	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	260	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	226	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	193	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	233	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	
8/26/2014	NT	200	NA	batch	NT	V	U	U	NA	N	60.00870	159.88179	GN	



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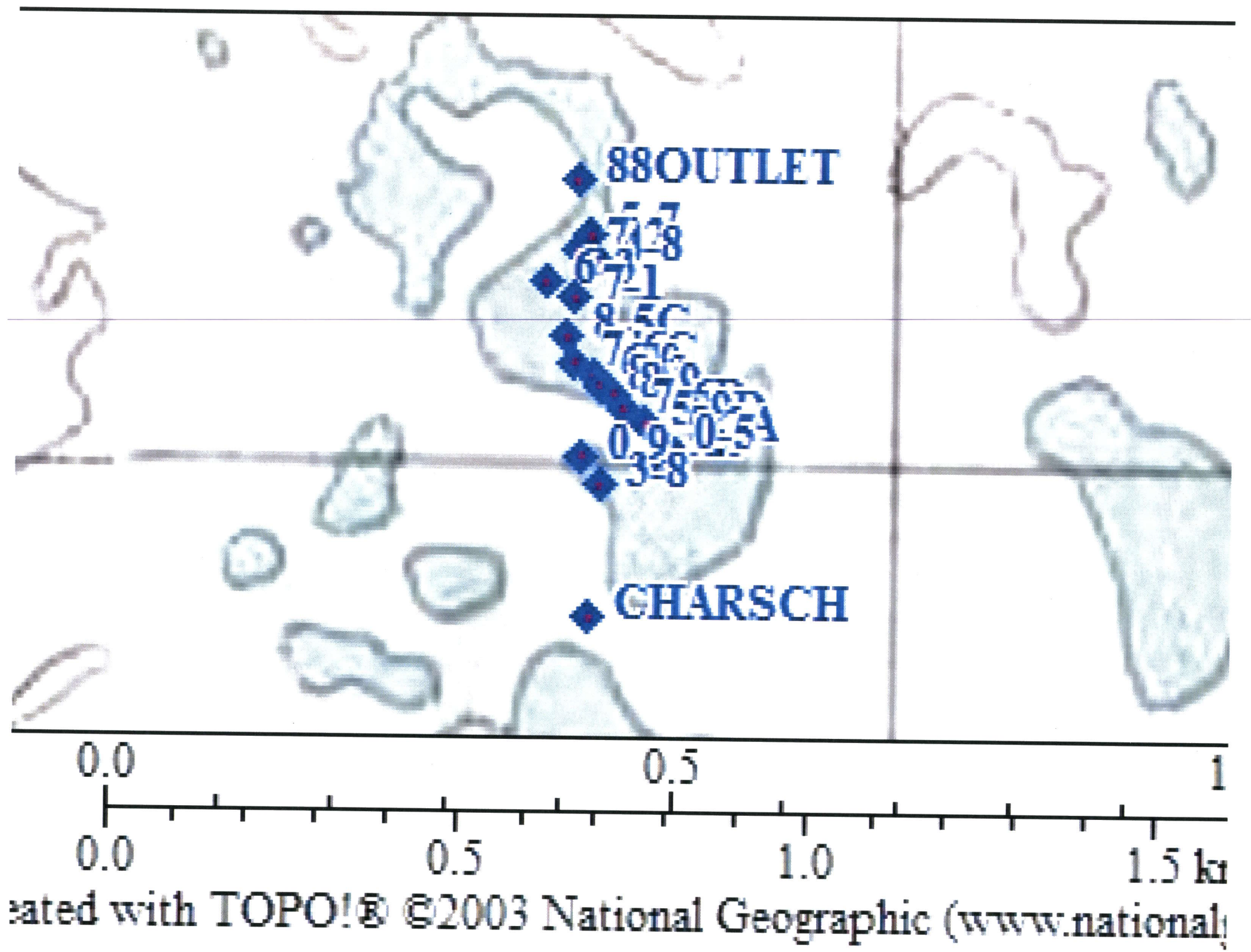
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ANADROMOUS WATERS CATALOG/ATLAS
CORRECTION FORM

CORRECTION TO: ATLAS X CATALOG _____

REGION: SOUTHWEST

MAP: GOODNEWS BAY A-4, B-4, B-3, C-3, C-2, D-2
OTHERS.

WATERWAY NUMBER: VARIOUS. ALL OF TOGIAK DRAINAGE
326-00-10400

DESCRIBE CHANGE(S):

CHANGE ALL ARCTIC CHAR DESIGNATIONS TO DOLLY VARDEN (DV). SEE ATTACHED NOMINATIONS 99-102 THRU 99-104, 99-96 THRU 99-99, 99-107, 99-109, 99-110

CHANGE REQUESTED BY : Edward W. Weiss 12/2/99
DATE

DRAFTED/DIGITIZED BY: [signature] 2/14/00
DATE

REVISION CODE: E-7

NOMINATION NUMBER: 99- 109

** ATTACH THIS FORM TO EXISTING NOMINATION FORM IN THE FILE **

(Rev. 11/93)

Edward W. Weiss

Subject: Anadromy of Arctic Char & Dolly Varden in Togiak River Drainage.
Entry Type: Phone call
Contact: Mark Lisac (E-mail)

Start: Fri 12/3/99 1:30 PM
End: Fri 12/3/99 1:45 PM
Duration: 15 minutes

Arctic Char lake oriented finding them in upper portions of streams near the lakes and above. They also have some otolith micro chem work which is unfinished on the Arctic Char, preliminary results from the fish that were sampled indicated that they were all resident.

Dolly Varden radio telemetry study that they just completed indicates that the Dollies are anadromous.

Most likely that Arctic Char are resident, Dolly Varden are anadromous in this system. There may be anadromous Arctic Char populations but haven't seen indication of that yet.