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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-4

AWC Number of Water Body: 104-20-10100-2021-(-0010)

Name of Water body: Tributary to Manhattan Lake ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination #	150191	James J Hasbrouck, Fisheries Scientist	8/31/2015 Date
Revision Year:	2016	Habitat Operations Manager	8/31/15 Date
Revision to: Atlas ___ Catalog ___ Both X		AWC Project Biologist	1 July 15 Date
Revision Code:	A-2	GIS Analyst	9/23/15 Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho Salmon	May 14, 2015 (30)		X	X	☒
Rainbow/Steelhead	May 14, 2015		X	X	☐
Dolly Varden	May 14, 2015			X	☐
					☐
					☐

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 supplemental information attached. This package was prepared by Cathy Needham. For questions or more information contact Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Add new creek w/ coho salmon rearing

ALASKA DEPT. OF FISH & GAME
JUN 12 2015

Name of Observer (please print): Tony Sanderson

Signature: [signature] Date: 6-1-15

Agency: Hydaburg Cooperative Association

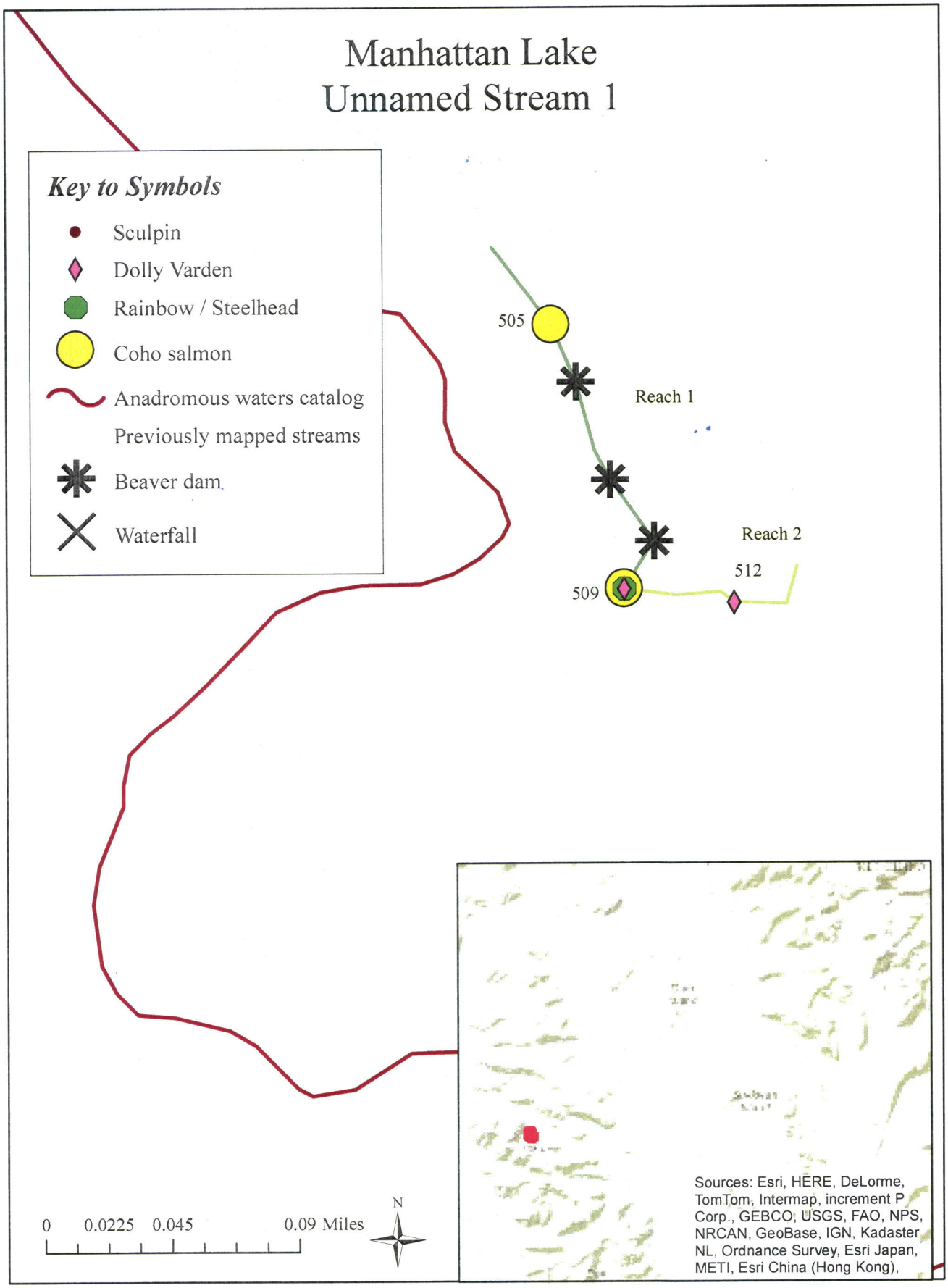
Address: P.O. Box 349
Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Manhattan Lake
Unnamed Stream 1



Supplemental information for Manhattan Lake Stream 1

Three baited minnow traps were soaked for 1.5 to 3.5 hours in a tributary stream to Manhattan Lake on May 14, 2015. The waterbody is not currently listed in the Anadromous Waters Catalog. This current nomination is to include the presence and rearing of Coho salmon. It is also noted Dolly Varden and rainbow/steelhead trout were present in traps set in the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts (see attached figure for reach and trap locations).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Manhattan Lake Stream 1 on May 14, 2015. Data was taken on two reaches (reach numbers in the tables correspond to a master dataset; see attached figure for locations). The stream survey data are in the following table:

	Reach 1	**Reach 2**
Average stream gradient	0	1.275
Average bankfull width	1.8	1.3
Average channel bed width	4.32	2.42
Average incision depth	0.58	0.65
Bank composition	Organic	Organic
Dominant substrate	Organic	Medium gravel
Sub-dominate substrate	Sand/Silt	Course gravel and Organic
Large wood count	6	11
Key wood count	1	1
Macro-pool count	4	24

Reach 1 was classified as FPS (narrow low gradient flood plain channel), Reach 2 was classified as FPO (micro flood plain channel. No anadromous fish were trapped in Reach 2; however Dolly Varden were found in the trap. Reach 2 became a muskeg, and is unlikely fish habitat.

Photo 1. The end of reach 2 on stream 1 of Manhattan Lake.

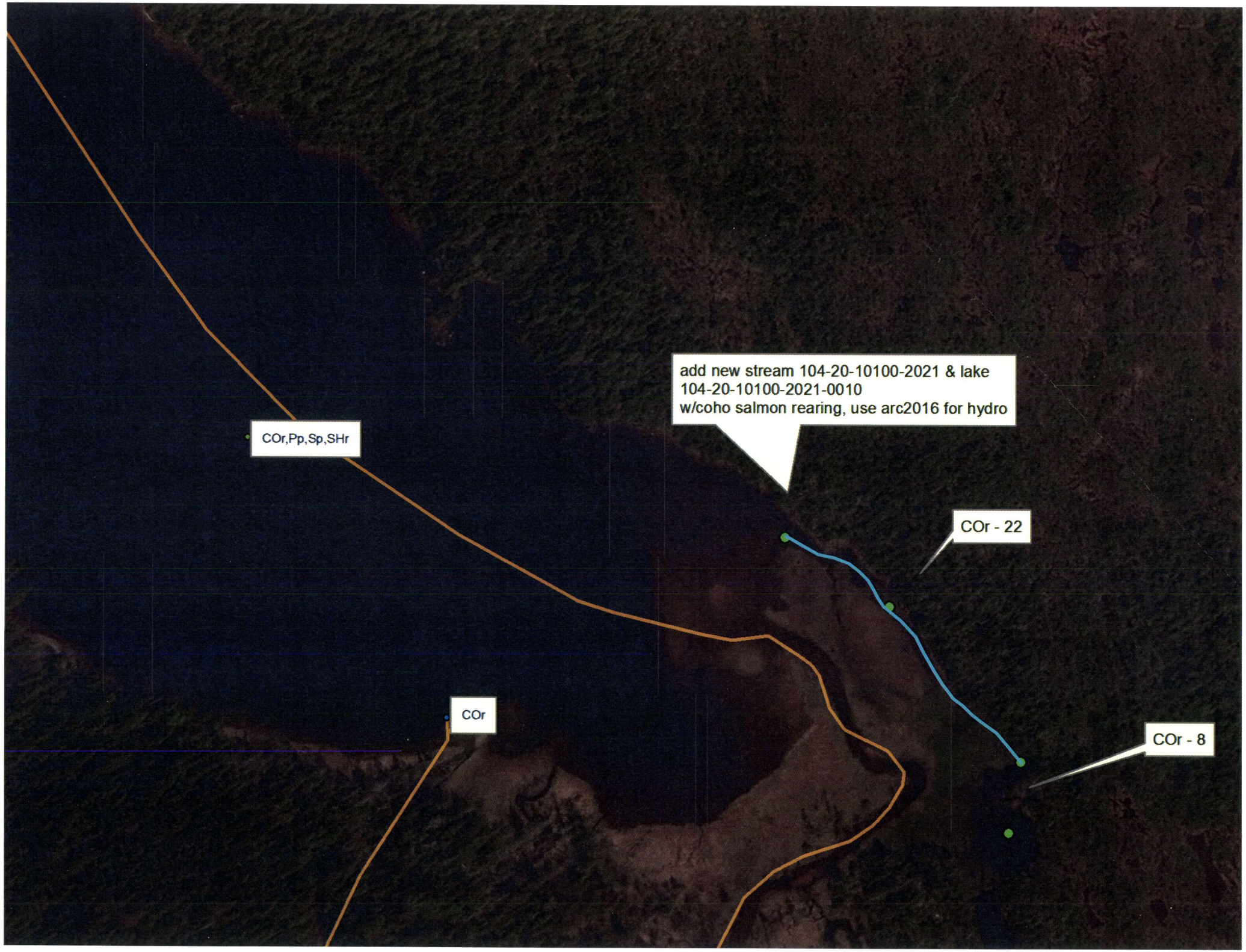
ADF&G permit no. SF201X-XXX (FILL IN)

Summary report of fish collection activity.

The area biologist was contacted on: TIME/DATE

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Length method	Disposition (1)
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	38	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	48	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	47	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	40	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	34	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	42	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	45	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	46	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	50	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	55	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	42	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	39	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	50	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	21	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	57	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	54	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	40	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	36	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	29	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	31	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	44	Fork	measured and released
505	55.08656	-133.13746	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	Fork	measured and released

509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	46	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	stickleback	juvenile	55	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	112	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	98	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	94	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	87	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	96	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	51	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	88	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	82	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	78	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	64	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	81	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	70	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	52	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	80	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	82	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	82	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	58	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	85	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	50	Fork	measured and released
509	55.08521	-133.13684	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	coho salmon	juvenile	68	Fork	measured and released
512	55.08513	-133.13586	WGS84	GPS	Manhattan	5/14/2015	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	Fork	measured and released


add new stream 104-20-10100-2021 & lake
104-20-10100-2021-0010
w/coho salmon rearing, use arc2016 for hydro
COr,Pp,Sp,SHr
COr - 22
COr
COr - 8