State of Alaska
Department of Fish and Game
Sportfish Division

Nomination Form
Anadromous Waters Catalog

5

Region: Southcentral

USGS Quad(s): Anchorage C6-SE

Anadromous Waters Catalog Number of Waterway: 247-50-10200-2081-3025-0010 - 0930

Name of Waterway: Mud Lake

☑ USGS Name ☐ Local Name

☑ Addition ☐ Deletion ☐ Correction ☑ Backup Information

For Office Use

Nomination #: 10-817

Revision Year: 2011

Revision to: Atlas ____ Catalog ____ Both X

Revision Code: A-2, B-1

Fisheries Scientist — Date: 10/26/10

Habitat Operations Manager — Date: 10/26/10

AWC Project Biologist — Date: 11 OCT 10

Cartographer — Date: 11/2/10

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
coho salmon	July 13-16, 19, 20, 2010		67		☑
Dolly Varden	July 13, 14, 2010		7		☐
sockeye samon	7/13/2010		8		☑
three spine stickleback	July 13-14, 19, 20, 2010			4650	☐
Alaska blackfish	July 13-14, 19, 2010			12	☐
slimy sculpin	7/13/2010			1	☐

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: Add sockeye salmon Rearing to lake - 2010, add new polygon - 3025 - 0930

Sampling Methods: Minnow Traps. The perimeter of Mud Lake was delineated with GPS, and 93 minnow traps were set around the perimeter and within the lake and wetland areas. Spatial coordinates, photos, soak time, and water quality measurements (temperature, pH, conductivity) were recorded at each sampling site (see attached map and photos).

coho salmon fork length range- 64-126 mm
Dolly Varden fork length range- 67-128 mm
sockeye salmon fork lengths, range- 40 -115 mm

Ref nom # 10-857, 10-852

u/coho salmon Rearing; [redacted] sockeye salmon Rearing & present

Name of Observer (please print): Elizabeth Benolkin, Keegan Birchfield, Bill Keil, Bill Page, Brian Winnestaffer

Signature: ____ Date: 9/27/2010

Agency: US Fish & Wildlife Service

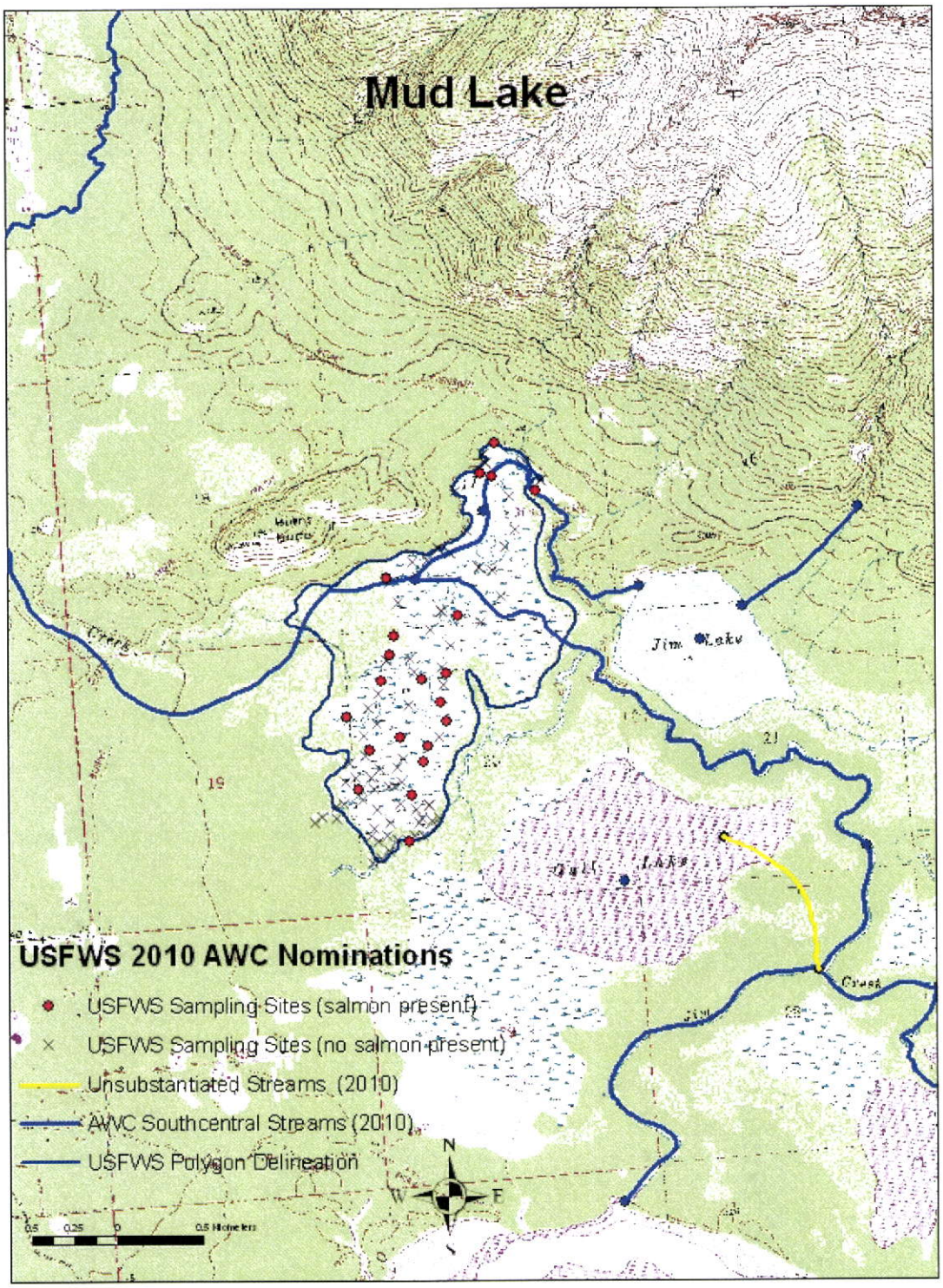
Address: 605 W. 4th Ave., Rm G-03
Anchorage, AK 99501

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

Signature of Area Biologist: ____ Date: ____ Revision 02/08

Name of Area Biologist (please print):

Figure 1. Map of Mud Lake, AK



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2010 AWC Nominations

Figure 2. Map of Mud Lake, AK

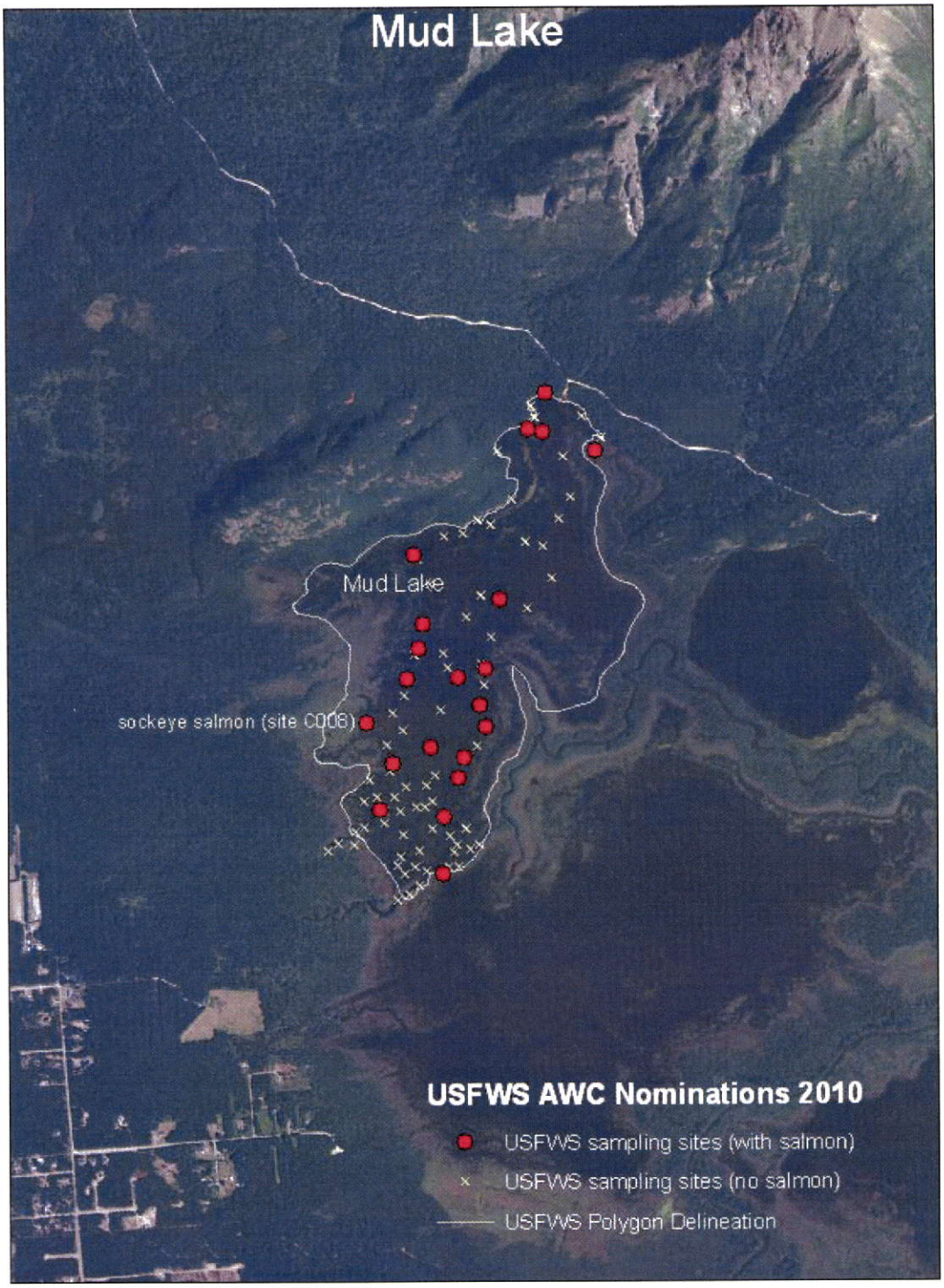

Figure 3. Photograph of Mud Lake sample site on July 13, 2010

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Waypoint S4 Lat: 61.56396 Long: -148.95001

Figure 4. Photograph of Mud Lake sample siteon July 19, 2010

Waypoint S29 Lat: 61.53582 Long: -148.88197

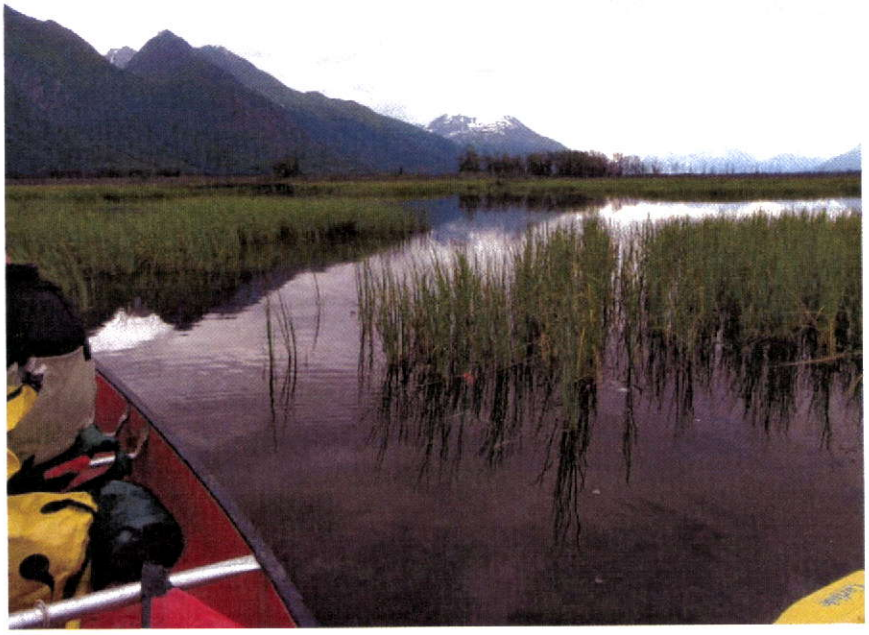

Figure 5. Coho salmon captured in Mud Lake; July 20, 2010

Waypoint C026 Lat: 61.54921 Long: -148.95888

Figure 6. Sockeye salmon captured in Mud Lake, July 13, 2010

Waypoint S3 Lat: 6156449 Long: -148.94931

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2010 AWC Nominations

Date	Water Name	Site ID	Waypoint	North Coordinate	West Coordinate	Water Depth (feet)	Water Temp. (°C)	Conduc.	pH	Method	MT Start Time	MT End Time	MT Total Time (hours:min)	Crew	Salmon
7/13/2010	Mud Lake	AWC10-01	C001	61.56439	-148.94505	2.00	14.9	129.9	7.15	MT	9:55	9:35	23:40	KB, BP	n
7/13/2010	Mud Lake	AWC10-01	C002	61.56337	-148.94345	1.01	12.3	65.6	6.94	MT	10:05	9:39	23:34	KB, BP	n
7/13/2010	Mud Lake	AWC10-01	C003	61.56286	-148.94417	1.17	9.9	116.4	6.81	MT	10:26	9:50	23:24	KB, BP	n
7/13/2010	Mud Lake	AWC10-01	C004	61.56380	-148.94875	1.09	16.2	138.1	8.49	MT	10:43	16:20	5:37	KB, BP	n
7/13/2010	Mud Lake	AWC10-01	C005	61.56266	-148.94704	1.44	15.6	72.5	8.33	MT	10:57	10:09	23:48	KB, BP	n
7/13/2010	Mud Lake	AWC10-01	C006	61.56089	-148.94664	1.44	15.9	123.2	8.30	MT	11:09	10:15	23:06	KB, BP	n
7/13/2010	Mud Lake	AWC10-01	C007	61.56000	-148.94791	2.00	16.2	60.2	8.68	MT	11:20	10:20	23:00	KB, BP	n
7/13/2010	Mud Lake	AWC10-01	C008	61.55186	-148.96683	2.40	8.9	89.8	7.25	MT	12:22	12:05	23:43	KB, BP	y
7/14/2010	Mud Lake	AWC10-01	C009	61.55888	-148.94954	2.08	16.0	122.1	8.11	MT	11:00	9:14	22:14	KB, BP	n
7/14/2010	Mud Lake	AWC10-01	C010	61.55751	-148.94890	0.81	15.3	129.3	8.23	MT	11:17	9:23	22:07	KB, BP	n
7/14/2010	Mud Lake	AWC10-01	C011	61.55624	-148.95134	0.62	15.9	62.4	8.04	MT	11:27	9:31	22:04	KB, BP	n
7/14/2010	Mud Lake	AWC10-01	C012	61.55669	-148.95378	2.19	15.7	129.4	7.85	MT	11:38	9:37	21:59	KB, BP	n
7/14/2010	Mud Lake	AWC10-01	C013	61.55695	-148.95558	1.48	16.0	125.7	7.99	MT	11:43	9:50	22:07	KB, BP	n
7/14/2010	Mud Lake	AWC10-01	C014	61.55607	-148.95694	1.48	16.3	130.6	7.24	MT	11:55	10:00	22:05	KB, BP	n
7/14/2010	Mud Lake	AWC10-01	C015	61.55511	-148.95483	0.93	16.3	129.4	7.44	MT	12:07	10:05	21:58	KB, BP	n
7/14/2010	Mud Lake	AWC10-01	C016	61.55402	-148.95599	0.89	16.3	67.5	7.25	MT	12:15	10:11	21:56	KB, BP	n
7/14/2010	Mud Lake	AWC10-01	C017	61.55463	-148.95937	1.00	16.5	126.0	7.62	MT	12:26	10:20	21:54	KB, BP	n
7/14/2010	Mud Lake	AWC10-01	C018	61.55376	-148.95561	2.38	19.0	137.2	7.63	MT	15:26	9:35	18:09	KB, BP	y
7/15/2010	Mud Lake	AWC10-01	C019	61.55396	-148.95908	1.03	16.4	118.4	7.65	MT	10:56	19:45	8:49	KB, BP	n
7/15/2010	Mud Lake	AWC10-01	C020	61.55350	-148.95824	1.07	16.4	118.6	8.03	MT	11:01	19:45	8:44	KB, BP	n
7/15/2010	Mud Lake	AWC10-01	C020	61.55350	-148.95824	1.07	16.4	118.6	8.03	MT	11:01	19:45	8:44	KB, BP	y
7/15/2010	Mud Lake	AWC10-01	C021	61.55311	-148.95593	0.77	15.3	125.3	7.16	MT	11:08	18:23	7:15	KB, BP	n
7/15/2010	Mud Lake	AWC10-01	C022	61.55223	-148.95639	1.36	16.3	124.5	7.34	MT	11:16	18:30	7:14	KB, BP	n
7/15/2010	Mud Lake	AWC10-01	C023	61.55127	-148.95599	1.22	16.4	121.8	7.24	MT	11:23	18:44	7:21	KB, BP	y
7/15/2010	Mud Lake	AWC10-01	C024	61.55047	-148.95691	1.10	16.2	118.8	7.35	MT	11:30	18:55	7:25	KB, BP	n
7/15/2010	Mud Lake	AWC10-01	C025	61.55007	-148.95816	1.41	16.2	115.9	7.54	MT	11:35	19:04	7:29	KB, BP	n
7/15/2010	Mud Lake	AWC10-01	C026	61.54921	-148.95888	1.24	16.3	116.4	7.33	MT	11:41	19:15	7:34	KB, BP	y
7/15/2010	Mud Lake	AWC10-01	C027	61.55062	-148.96118	1.34	15.6	109.5	8.75	MT	11:48	19:28	7:30	KB, BP	y
7/15/2010	Mud Lake	AWC10-01	C028	61.55221	-148.96001	1.97	15.6	109.6	8.54	MT	11:54	19:18	7:24	KB, BP	n
7/19/2010	Mud Lake	AWC10-01	C029	61.54942	-148.96095	1.53	13.8	101.7	7.76	MT	10:07	9:44	23:37	KB, BP	n
7/19/2010	Mud Lake	AWC10-01	C030	61.54900	-148.96178	1.29	13.8	101.8	7.70	MT	10:17	9:48	23:31	KB, BP	n
7/19/2010	Mud Lake	AWC10-01	C031	61.54858	-148.96475	1.83	13.6	103.2	7.47	MT	10:27	14:02	27:35:00	KB, BP	n
7/19/2010	Mud Lake	AWC10-01	C032	61.54851	-148.96762	1.35	13.3	100.0	7.37	MT	10:34	13:55	27:21:00	KB, BP	n

Date	Water Name	Site ID	Waypoint	North Coordinate	West Coordinate	Water Depth (feet)	Water Temp. (°C)	Conduc.	pH	Method	MT Start Time	MT End Time	MT Total Time (hours:min)	Crew	Salmon
7/19/2010	Mud Lake	AWC10-01	C033	61.54826	-148.96144	1.87	14.0	102.3	7.64	MT	10:45	10:00	23:15	KB, BP	n
7/19/2010	Mud Lake	AWC10-01	C034	61.54755	-148.96043	3.01	14.0	102.9	7.42	MT	10:53	10:08	23:15	KB, BP	y
7/19/2010	Mud Lake	AWC10-01	C035	61.54696	-148.95860	2.29	13.9	103.3	7.12	MT	11:02	10:25	23:23	KB, BP	n
7/19/2010	Mud Lake	AWC10-01	C036	61.54712	-148.96164	1.44	13.5	101.4	7.58	MT	11:12	10:35	23:13	KB, BP	n
7/19/2010	Mud Lake	AWC10-01	C037	61.54623	-148.96298	1.42	13.5	101.9	7.65	MT	11:18	10:45	23:27	KB, BP	n
7/19/2010	Mud Lake	AWC10-01	C038	61.54599	-148.96474	1.41	13.3	101.8	7.39	MT	11:25	11:00	23:35	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C039	61.54674	-148.96005	1.89	14.1	102.9	7.15	MT	11:11	10:13	23:02	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C040	61.54631	-148.95950	1.45	14.1	102.7	7.28	MT	11:16	10:19	23:03	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C041	61.54605	-148.95981	2.05	14.0	102.3	7.31	MT	11:23	10:22	22:59	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C042	61.54609	-148.95836	1.46	14.3	103.6	7.50	MT	11:29	10:25	22:56	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C043	61.54625	-148.95746	1.73	14.3	116.4	6.93	MT	11:38	10:28	22:50	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C044	61.54536	-148.95946	1.64	14.3	103.0	7.30	MT	11:49	10:32	22:43	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C045	61.54542	-148.96045	3.33	14.2	103.0	7.25	MT	11:57	10:36	22:59	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C046	61.54513	-148.96101	2.01	14.4	102.7	7.34	MT	12:31	11:34	23:03	KB, BP	y
7/20/2010	Mud Lake	AWC10-01	C047	61.54528	-148.96236	2.94	14.8	99.5	8.01	MT	12:40	10:40	22:00	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C048	61.54469	-148.96321	2.10	15.4	92.7	9.18	MT	12:48	10:42	21:54	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C049	61.54435	-148.96419	2.45	15.7	90.7	9.74	MT	12:55	10:45	21:50	KB, BP	n
7/20/2010	Mud Lake	AWC10-01	C050	61.54418	-148.96523	5.75	15.9	89.4	9.54	MT	13:11	12:55	23:44	KB, BP	n
7/13/2010	Mud Lake	AWC10-01	S1	61.56548	-148.94818	1.20	4.9	132.7	7.66	MT	10:00	9:36	23:36	BW, BK	y
7/13/2010	Mud Lake	AWC10-01	S2	61.56496	-148.94954	0.70	7.8	131.0	7.74	MT	10:13	10:06	23:53	BW, BK	n
7/13/2010	Mud Lake	AWC10-01	S3	61.56449	-148.94931	2.50	15.6	136.1	8.35	MT	10:20	10:16	23:56	BW, BK	n
7/13/2010	Mud Lake	AWC10-01	S4	61.56396	-148.95001	2.80	16.2	130.2	8.97	MT	10:28	10:24	23:56	BW, BK	y
7/13/2010	Mud Lake	AWC10-01	S5	61.56316	-148.95293	1.20	16.1	126.7	9.02	MT	10:44	10:42	23:58	BW, BK	n
7/13/2010	Mud Lake	AWC10-01	S6	61.56099	-148.95195	2.65	17.6	125.1	8.38	MT	10:57	10:53	23:56	BW, BK	n
7/13/2010	Mud Lake	AWC10-01	S7	61.55912	-148.95105	1.85	15.5	119.1	8.29	MT	11:12	11:00	23:48	BW, BK	n
7/14/2010	Mud Lake	AWC10-01	S10	61.55997	-148.95410	2.70	16.4	117.6	8.31	MT	11:05	9:16	22:11	BW, BK	n
7/14/2010	Mud Lake	AWC10-01	S11	61.56021	-148.95526	1.80	16.3	117.6	7.59	MT	11:30	9:20	21:50	BW, BK	n
7/14/2010	Mud Lake	AWC10-01	S12	61.55968	-148.95662	2.20	15.8	112.9	8.12	MT	11:36	9:35	21:59	BW, BK	n
7/14/2010	Mud Lake	AWC10-01	S13	61.55966	-148.95834	0.85	16.4	118.1	9.03	MT	11:48	9:39	21:51	BW, BK	n
7/14/2010	Mud Lake	AWC10-01	S14	61.55896	-148.96130	0.90	16.6	120.5	8.70	MT	12:00	9:48	21:48	BW, BK	y
7/14/2010	Mud Lake	AWC10-01	S15	61.55872	-148.96092	1.10	16.6	121.2	8.10	MT	12:09	10:04	21:55	BW, BK	n
7/14/2010	Mud Lake	AWC10-01	S16	61.55762	-148.96011	0.60	16.6	113.2	7.57	MT	12:20	10:13	21:53	BW, BK	n
7/14/2010	Mud Lake	AWC10-01	S17	61.55592	-148.96101	0.85	16.7	114.5	7.70	MT	12:30	10:24	21:54	BW, BK	n

Date	Water Name	Site ID	Waypoint	North Coordinate	West Coordinate	Water Depth (feet)	Water Temp. (°C)	Conduc.	pH	Method	MT Start Time	MT End Time	MT Total Time (hours:min)	Crew	Salmon
7/14/2010	Mud Lake	AWC10-01	S18	61.55489	-148.96153	1.20	16.2	113.5	7.66	MT	12:40	10:34	21:54	BW, BK	y
7/14/2010	Mud Lake	AWC10-01	S19	61.55463	-148.96199	2.50	16.5	108.5	9.60	MT	12:50	10:53	22:03	BW, BK	n
7/19/2010	Mud Lake	AWC10-01	S20	61.55357	-148.96277	1.20	15.4	108.7	8.04	MT	10:06	9:40	23:34	BW, BK	y
7/19/2010	Mud Lake	AWC10-01	S20	61.55357	-148.96277	1.20	15.4	108.7	8.04	MT	10:06	9:40	23:34	BW, BK	n
7/19/2010	Mud Lake	AWC10-01	S21	61.55294	-148.96317	1.25	14.2	103.8	8.25	MT	10:09	9:52	23:43	BW, BK	n
7/19/2010	Mud Lake	AWC10-01	S22	61.55221	-148.96436	0.90	13.3	101.7	7.25	MT	10:12	9:57	23:45	BW, BK	n
7/19/2010	Mud Lake	AWC10-01	S23	61.55140	-148.96359	0.70	13.5	101.8	8.22	MT	10:15	10:04	23:49	BW, BK	n
7/19/2010	Mud Lake	AWC10-01	S24	61.55084	-148.96516	1.00	11.9	98.9	7.63	MT	10:20	10:10	23:50	BW, BK	n
7/19/2010	Mud Lake	AWC10-01	S25	61.55003	-148.96468	0.90	15.2	108.6	8.10	MT	10:27	10:16	23:49	BW, BK	y
7/19/2010	Mud Lake	AWC10-01	S26	61.54975	-148.96506	0.70	15.1	109.2	7.44	MT	10:30	10:23	23:53	BW, BK	n
7/19/2010	Mud Lake	AWC10-01	S27	61.54944	-148.96698	0.65	15.3	112.8	7.63	MT	10:35	10:31	23:56	BW, BK	n
7/19/2010	Mud Lake	AWC10-01	S28	61.54863	-148.96642	0.69	15.6	120.3	7.81	MT	10:38	10:35	23:57	BW, BK	n
7/19/2010	Mud Lake	AWC10-01	S29	61.54900	-148.96370	1.30	15.7	109.7	7.97	MT	11:00	10:45	23:45	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S30	61.54803	-148.96217	1.50	14.2	103.4	7.32	MT	11:17	10:18	23:01	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S32	61.54796	-148.96440	0.80	14.0	100.6	7.51	MT	11:29	10:35	23:16	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S33	61.54801	-148.96581	1.10	13.8	99.4	7.64	MT	11:35	10:41	23:06	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S34	61.54806	-148.96619	1.10	14.0	99.6	7.60	MT	11:39	10:50	23:11	BW, BK	y
7/20/2010	Mud Lake	AWC10-01	S35	61.54736	-148.96783	3.20	14.6	92.2	8.06	MT	11:45	11:05	23:20	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S36	61.54720	-148.96866	2.20	14.7	91.2	7.76	MT	11:50	11:08	23:42	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S37	61.54679	-148.97032	1.60	14.9	89.9	7.37	MT	11:56	11:13	23:17	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S38	61.54648	-148.97121	1.40	14.8	89.3	7.11	MT	12:04	11:30	23:26	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S39	61.54665	-148.96878	1.80	14.3	85.4	6.92	MT	12:14	11:36	23:22	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S40	61.54752	-148.96584	0.90	15.0	100.8	6.98	MT	12:25	11:41	23:16	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S41	61.54696	-148.96426	1.25	14.4	99.9	7.95	MT	12:31	11:46	23:15	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S42	61.54562	-148.96507	1.40	14.2	98.1	7.44	MT	12:40	11:52	23:12	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S43	61.54527	-148.96445	0.90	14.7	99.0	7.30	MT	12:45	11:56	23:11	BW, BK	n
7/20/2010	Mud Lake	AWC10-01	S44	61.54555	-148.96342	0.80	14.1	100.9	6.95	MT	12:50	12:00	23:10	BW, BK	n

Figure 3. Photograph of Mud Lake

Figure 4. Photograph of Mud Lake

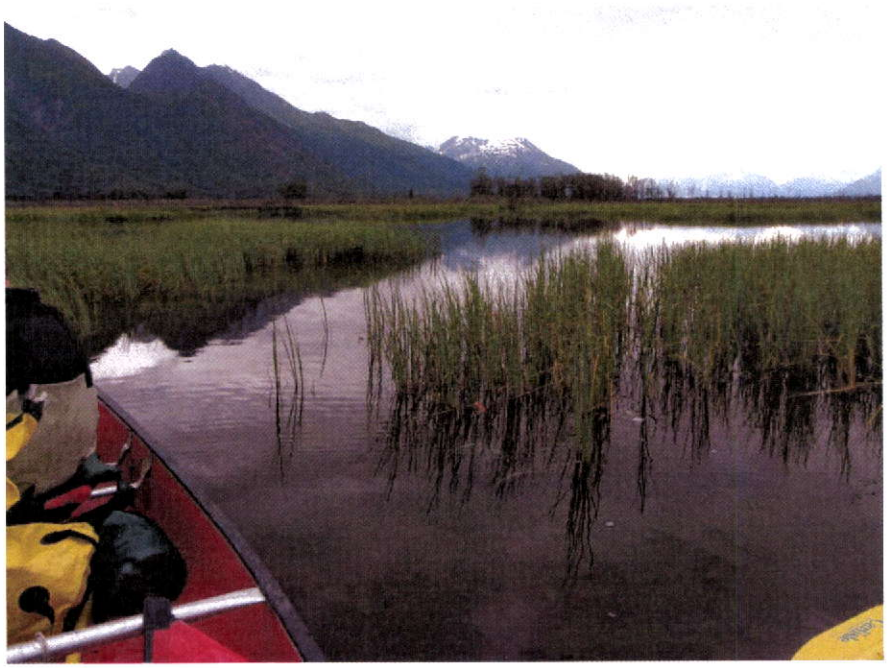


Figure 5. Coho salmon captured in Mud Lake, July 20, 2010.

Figure 6. Sockeye salmon captured in Mud Lake, July 13, 2010.

Table 1. Mud Lake polygon coordinates (NAD 1983)

Lat	Long
61.54459	-148.96514
61.54500	-148.96543
61.54538	-148.96595
61.54579	-148.96643
61.54615	-148.96708
61.54653	-148.96769
61.54693	-148.96817
61.54708	-148.96868
61.54723	-148.96914
61.54766	-148.96913
61.54811	-148.96945
61.54853	-148.96981
61.54885	-148.96943
61.54903	-148.96855
61.54934	-148.96776
61.54970	-148.96704
61.55010	-148.96713
61.55015	-148.96803
61.55004	-148.96921
61.55027	-148.96998
61.55029	-148.97094
61.55049	-148.97173
61.55091	-148.97184
61.55110	-148.97103
61.55151	-148.97089
61.55193	-148.97087
61.55223	-148.97049
61.55244	-148.96984
61.55281	-148.96930
61.55318	-148.96850
61.55177	-148.95056
61.55173	-148.94954
61.55183	-148.94862
61.55193	-148.94769
61.55350	-148.96853
61.55387	-148.96817
61.55432	-148.96812
61.55477	-148.96795

61.55523	-148.96787
61.55562	-148.96846
61.55602	-148.96902
61.55638	-148.96966
61.55656	-148.97056
61.55675	-148.97148
61.55686	-148.97236
61.55720	-148.97270
61.55746	-148.97208
61.55773	-148.97134
61.55818	-148.97140
61.55847	-148.97092
61.55882	-148.97014
61.55893	-148.96912
61.55883	-148.96803
61.55875	-148.96715
61.55910	-148.96626
61.55940	-148.96537
61.55969	-148.96437
61.55988	-148.96335
61.55989	-148.96322
61.55986	-148.96172
61.55993	-148.96069
61.56018	-148.95960
61.56019	-148.95823
61.56004	-148.95714
61.55995	-148.95669
61.56019	-148.95593
61.56017	-148.95508
61.56046	-148.95451
61.56058	-148.95359
61.56078	-148.95274
61.56110	-148.95208
61.56146	-148.95152
61.56182	-148.95148
61.56200	-148.95236
61.56237	-148.95220
61.56275	-148.95192
61.56300	-148.95295
61.56347	-148.95312
61.54459	-148.96514

61.54500	-148.96543
61.54538	-148.96595
61.54579	-148.96643
61.54615	-148.96708
61.54653	-148.96769
61.54693	-148.96817
61.54708	-148.96868
61.54723	-148.96914
61.54766	-148.96913
61.54811	-148.96945
61.54853	-148.96981
61.54885	-148.96943
61.54903	-148.96855
61.54934	-148.96776
61.54970	-148.96704
61.55010	-148.96713
61.55015	-148.96803
61.55004	-148.96921
61.55027	-148.96998
61.55029	-148.97094
61.55049	-148.97173
61.55091	-148.97184
61.55110	-148.97103
61.55151	-148.97089
61.55193	-148.97087
61.55223	-148.97049
61.55244	-148.96984
61.55281	-148.96930
61.55318	-148.96850
61.54459	-148.96514
61.54500	-148.96543
61.54538	-148.96595
61.54579	-148.96643
61.54615	-148.96708
61.54653	-148.96769
61.54693	-148.96817
61.54708	-148.96868
61.54723	-148.96914
61.54766	-148.96913
61.54811	-148.96945
61.54853	-148.96981

61.54885	-148.96943
61.54903	-148.96855
61.54934	-148.96776
61.54970	-148.96704
61.55010	-148.96713
61.55015	-148.96803
61.55004	-148.96921
61.55027	-148.96998
61.55029	-148.97094
61.55049	-148.97173
61.55091	-148.97184
61.55110	-148.97103
61.55151	-148.97089
61.55193	-148.97087
61.55223	-148.97049
61.55244	-148.96984
61.55281	-148.96930
61.55350	-148.96853
61.55387	-148.96817
61.55432	-148.96812
61.55477	-148.96795
61.55523	-148.96787
61.55562	-148.96846
61.55602	-148.96902
61.55638	-148.96966
61.55656	-148.97056
61.55675	-148.97148
61.55686	-148.97236
61.55720	-148.97270
61.55746	-148.97208
61.55773	-148.97134
61.55818	-148.97140
61.55847	-148.97092
61.55882	-148.97014
61.55893	-148.96912
61.55883	-148.96803
61.55875	-148.96715
61.55910	-148.96626
61.55940	-148.96537
61.55969	-148.96437
61.55988	-148.96335

61.55989	-148.96322
61.55986	-148.96172
61.55993	-148.96069
61.56018	-148.95960
61.56019	-148.95823
61.56004	-148.95714
61.55995	-148.95669
61.56019	-148.95593
61.56017	-148.95508
61.56046	-148.95451
61.56058	-148.95359
61.56078	-148.95274
61.56110	-148.95208
61.56146	-148.95152
61.56182	-148.95148
61.56200	-148.95236
61.56237	-148.95220
61.56275	-148.95192
61.56300	-148.95295
61.56347	-148.95312
61.54527	-148.96113
61.54527	-148.96113
61.54548	-148.95940
61.54548	-148.95940
61.54600	-148.95803
61.54600	-148.95803
61.54657	-148.95694
61.54657	-148.95694
61.54693	-148.95651
61.54693	-148.95651
61.54737	-148.95657
61.54737	-148.95657
61.54778	-148.95684
61.54778	-148.95684
61.54820	-148.95653
61.54820	-148.95653
61.54860	-148.95610
61.54860	-148.95610
61.54534	-148.96036
61.54534	-148.96036
61.54575	-148.95867

61.54575	-148.95867
61.54624	-148.95738
61.54624	-148.95738
61.54898	-148.95549
61.54898	-148.95549
61.54945	-148.95528
61.54945	-148.95528
61.54980	-148.95453
61.54980	-148.95453
61.54998	-148.95358
61.54998	-148.95358
61.55038	-148.95309
61.55038	-148.95309
61.55079	-148.95276
61.55079	-148.95276
61.55122	-148.95245
61.55122	-148.95245
61.55170	-148.95253
61.55170	-148.95253
61.55213	-148.95285
61.55213	-148.95285
61.55259	-148.95287
61.55259	-148.95287
61.55303	-148.95318
61.55303	-148.95318
61.55347	-148.95332
61.55347	-148.95332
61.55380	-148.95323
61.55380	-148.95323
61.55354	-148.95263
61.55354	-148.95263
61.55316	-148.95208
61.55316	-148.95208
61.55274	-148.95183
61.55274	-148.95183
61.55235	-148.95141
61.55235	-148.95141
61.55189	-148.95125
61.55189	-148.95125
61.55199	-148.94682
61.55219	-148.94600

61.55258	-148.94562
61.55306	-148.94531
61.55342	-148.94462
61.55369	-148.94377
61.55406	-148.94309
61.55456	-148.94282
61.55499	-148.94235
61.55541	-148.94180
61.55581	-148.94112
61.55624	-148.94086
61.55668	-148.94124
61.55699	-148.94198
61.55716	-148.94290
61.55744	-148.94369
61.55783	-148.94413
61.55824	-148.94447
61.55869	-148.94470
61.55914	-148.94477
61.55962	-148.94469
61.56009	-148.94454
61.56056	-148.94416
61.56102	-148.94375
61.56144	-148.94345
61.56189	-148.94369
61.56224	-148.94436
61.56257	-148.94508
61.56295	-148.94532
61.56331	-148.94468
61.56376	-148.94407
61.56414	-148.94454
61.56465	-148.94492
61.56497	-148.94585
61.56509	-148.94681
61.56526	-148.94741
61.56558	-148.94833
61.56539	-148.94913
61.56515	-148.94986
61.56487	-148.94981
61.56470	-148.94918
61.56440	-148.94994
61.56414	-148.95066

61.56410	-148.95155
61.56386	-148.95246
61.56343	-148.95315
61.56327	-148.95321

Table 2. Mud Lake minnow trap sample site coordinates (NAD 1983) and sampling data.

Date	Water Name	Waypoint	North Coordinate	West Coordinate	Water Depth (feet)	Water Temp. (°C)	Conduc.	pH	Method	MT Start Time	MT End Time	MT Total Time (hours:min)
7/13/2010	Mud Lake	C001	61.56439	-148.94505	2.00	14.9	129.9	7.15	MT	9:55	9:35	23:40
7/13/2010	Mud Lake	C002	61.56337	-148.94345	1.01	12.3	65.6	6.94	MT	10:05	9:39	23:34
7/13/2010	Mud Lake	C003	61.56286	-148.94417	1.17	9.9	116.4	6.81	MT	10:26	9:50	23:24
7/13/2010	Mud Lake	C004	61.56380	-148.94875	1.09	16.2	138.1	8.49	MT	10:43	16:20	5:37
7/13/2010	Mud Lake	C005	61.56266	-148.94704	1.44	15.6	72.5	8.33	MT	10:57	10:09	23:48
7/13/2010	Mud Lake	C006	61.56089	-148.94664	1.44	15.9	123.2	8.30	MT	11:09	10:15	23:06
7/13/2010	Mud Lake	C007	61.56000	-148.94791	2.00	16.2	60.2	8.68	MT	11:20	10:20	23:00
7/13/2010	Mud Lake	C008	61.55186	-148.96683	2.40	8.9	89.8	7.25	MT	12:22	12:05	23:43
7/14/2010	Mud Lake	C009	61.55888	-148.94954	2.08	16.0	122.1	8.11	MT	11:00	9:14	22:14
7/14/2010	Mud Lake	C010	61.55751	-148.94890	0.81	15.3	129.3	8.23	MT	11:17	9:23	22:07
7/14/2010	Mud Lake	C011	61.55624	-148.95134	0.62	15.9	62.4	8.04	MT	11:27	9:31	22:04
7/14/2010	Mud Lake	C012	61.55669	-148.95378	2.19	15.7	129.4	7.85	MT	11:38	9:37	21:59
7/14/2010	Mud Lake	C013	61.55695	-148.95558	1.48	16.0	125.7	7.99	MT	11:43	9:50	22:07
7/14/2010	Mud Lake	C014	61.55607	-148.95694	1.48	16.3	130.6	7.24	MT	11:55	10:00	22:05
7/14/2010	Mud Lake	C015	61.55511	-148.95483	0.93	16.3	129.4	7.44	MT	12:07	10:05	21:58
7/14/2010	Mud Lake	C016	61.55402	-148.95599	0.89	16.3	67.5	7.25	MT	12:15	10:11	21:56
7/14/2010	Mud Lake	C017	61.55463	-148.95937	1.00	16.5	126.0	7.62	MT	12:26	10:20	21:54
7/14/2010	Mud Lake	C018	61.55376	-148.95561	2.38	19.0	137.2	7.63	MT	15:26	9:35	18:09
7/15/2010	Mud Lake	C019	61.55396	-148.95908	1.03	16.4	118.4	7.65	MT	10:56	19:45	8:49
7/15/2010	Mud Lake	C020	61.55350	-148.95824	1.07	16.4	118.6	8.03	MT	11:01	19:45	8:44
7/15/2010	Mud Lake	C020	61.55350	-148.95824	1.07	16.4	118.6	8.03	MT	11:01	19:45	8:44
7/15/2010	Mud Lake	C021	61.55311	-148.95593	0.77	15.3	125.3	7.16	MT	11:08	18:23	7:15
7/15/2010	Mud Lake	C022	61.55223	-148.95639	1.36	16.3	124.5	7.34	MT	11:16	18:30	7:14
7/15/2010	Mud Lake	C023	61.55127	-148.95599	1.22	16.4	121.8	7.24	MT	11:23	18:44	7:21
7/15/2010	Mud Lake	C024	61.55047	-148.95691	1.10	16.2	118.8	7.35	MT	11:30	18:55	7:25
7/15/2010	Mud Lake	C025	61.55007	-148.95816	1.41	16.2	115.9	7.54	MT	11:35	19:04	7:29
7/15/2010	Mud Lake	C026	61.54921	-148.95888	1.24	16.3	116.4	7.33	MT	11:41	19:15	7:34
7/15/2010	Mud Lake	C027	61.55062	-148.96118	1.34	15.6	109.5	8.75	MT	11:48	19:28	7:30
7/15/2010	Mud Lake	C028	61.55221	-148.96001	1.97	15.6	109.6	8.54	MT	11:54	19:18	7:24
7/19/2010	Mud Lake	C029	61.54942	-148.96095	1.53	13.8	101.7	7.76	MT	10:07	9:44	23:37
7/19/2010	Mud Lake	C030	61.54900	-148.96178	1.29	13.8	101.8	7.70	MT	10:17	9:48	23:31
7/19/2010	Mud Lake	C031	61.54858	-148.96475	1.83	13.6	103.2	7.47	MT	10:27	14:02	27:35:00
7/19/2010	Mud Lake	C032	61.54851	-148.96762	1.35	13.3	100.0	7.37	MT	10:34	13:55	27:21:00
7/19/2010	Mud Lake	C033	61.54826	-148.96144	1.87	14.0	102.3	7.64	MT	10:45	10:00	23:15
7/19/2010	Mud Lake	C034	61.54755	-148.96043	3.01	14.0	102.9	7.42	MT	10:53	10:08	23:15
7/19/2010	Mud Lake	C035	61.54696	-148.95860	2.29	13.9	103.3	7.12	MT	11:02	10:25	23:23

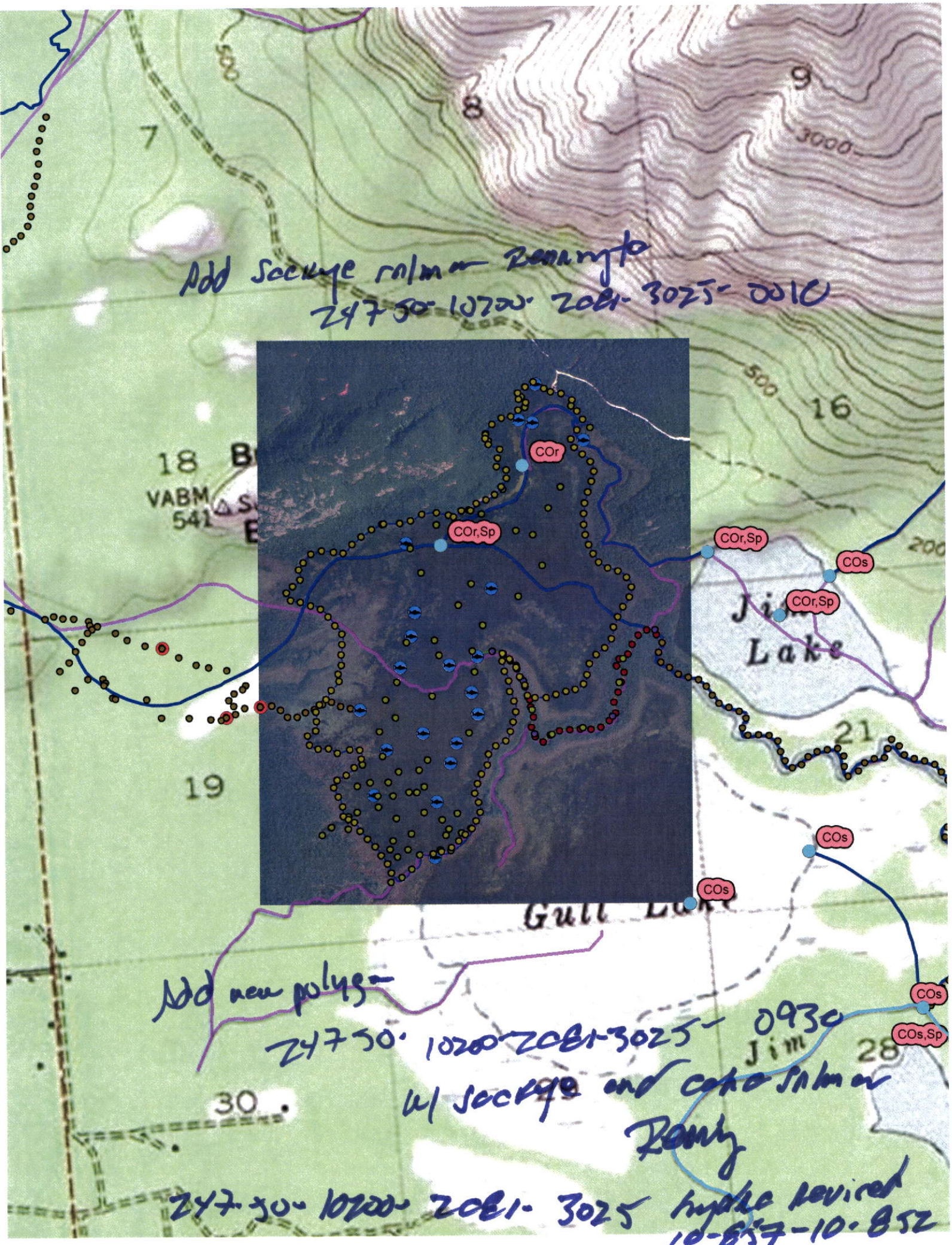
7/19/2010	Mud Lake	C036	61.54712	-148.96164	1.44	13.5	101.4	7.58	MT	11:12	10:35	23:13
7/19/2010	Mud Lake	C037	61.54623	-148.96298	1.42	13.5	101.9	7.65	MT	11:18	10:45	23:27
7/19/2010	Mud Lake	C038	61.54599	-148.96474	1.41	13.3	101.8	7.39	MT	11:25	11:00	23:35
7/20/2010	Mud Lake	C039	61.54674	-148.96005	1.89	14.1	102.9	7.15	MT	11:11	10:13	23:02
7/20/2010	Mud Lake	C040	61.54631	-148.95950	1.45	14.1	102.7	7.28	MT	11:16	10:19	23:03
7/20/2010	Mud Lake	C041	61.54605	-148.95981	2.05	14.0	102.3	7.31	MT	11:23	10:22	22:59
7/20/2010	Mud Lake	C042	61.54609	-148.95836	1.46	14.3	103.6	7.50	MT	11:29	10:25	22:56
7/20/2010	Mud Lake	C043	61.54625	-148.95746	1.73	14.3	116.4	6.93	MT	11:38	10:28	22:50
7/20/2010	Mud Lake	C044	61.54536	-148.95946	1.64	14.3	103.0	7.30	MT	11:49	10:32	22:43
7/20/2010	Mud Lake	C045	61.54542	-148.96045	3.33	14.2	103.0	7.25	MT	11:57	10:36	22:59
7/20/2010	Mud Lake	C046	61.54513	-148.96101	2.01	14.4	102.7	7.34	MT	12:31	11:34	23:03
7/20/2010	Mud Lake	C047	61.54528	-148.96236	2.94	14.8	99.5	8.01	MT	12:40	10:40	22:00
7/20/2010	Mud Lake	C048	61.54469	-148.96321	2.10	15.4	92.7	9.18	MT	12:48	10:42	21:54
7/20/2010	Mud Lake	C049	61.54435	-148.96419	2.45	15.7	90.7	9.74	MT	12:55	10:45	21:50
7/20/2010	Mud Lake	C050	61.54418	-148.96523	5.75	15.9	89.4	9.54	MT	13:11	12:55	23:44
7/13/2010	Mud Lake	S1	61.56548	-148.94818	1.20	4.9	132.7	7.66	MT	10:00	9:36	23:36
7/13/2010	Mud Lake	S2	61.56496	-148.94954	0.70	7.8	131.0	7.74	MT	10:13	10:06	23:53
7/13/2010	Mud Lake	S3	61.56449	-148.94931	2.50	15.6	136.1	8.35	MT	10:20	10:16	23:56
7/13/2010	Mud Lake	S4	61.56396	-148.95001	2.80	16.2	130.2	8.97	MT	10:28	10:24	23:56
7/13/2010	Mud Lake	S5	61.56316	-148.95293	1.20	16.1	126.7	9.02	MT	10:44	10:42	23:58
7/13/2010	Mud Lake	S6	61.56099	-148.95195	2.65	17.6	125.1	8.38	MT	10:57	10:53	23:56
7/13/2010	Mud Lake	S7	61.55912	-148.95105	1.85	15.5	119.1	8.29	MT	11:12	11:00	23:48
7/14/2010	Mud Lake	S10	61.55997	-148.95410	2.70	16.4	117.6	8.31	MT	11:05	9:16	22:11
7/14/2010	Mud Lake	S11	61.56021	-148.95526	1.80	16.3	117.6	7.59	MT	11:30	9:20	21:50
7/14/2010	Mud Lake	S12	61.55968	-148.95662	2.20	15.8	112.9	8.12	MT	11:36	9:35	21:59
7/14/2010	Mud Lake	S13	61.55966	-148.95834	0.85	16.4	118.1	9.03	MT	11:48	9:39	21:51
7/14/2010	Mud Lake	S14	61.55896	-148.96130	0.90	16.6	120.5	8.70	MT	12:00	9:48	21:48
7/14/2010	Mud Lake	S15	61.55872	-148.96092	1.10	16.6	121.2	8.10	MT	12:09	10:04	21:55
7/14/2010	Mud Lake	S16	61.55762	-148.96011	0.60	16.6	113.2	7.57	MT	12:20	10:13	21:53
7/14/2010	Mud Lake	S17	61.55592	-148.96101	0.85	16.7	114.5	7.70	MT	12:30	10:24	21:54
7/14/2010	Mud Lake	S18	61.55489	-148.96153	1.20	16.2	113.5	7.66	MT	12:40	10:34	21:54
7/14/2010	Mud Lake	S19	61.55463	-148.96199	2.50	16.5	108.5	9.60	MT	12:50	10:53	22:03
7/19/2010	Mud Lake	S20	61.55357	-148.96277	1.20	15.4	108.7	8.04	MT	10:06	9:40	23:34
7/19/2010	Mud Lake	S20	61.55357	-148.96277	1.20	15.4	108.7	8.04	MT	10:06	9:40	23:34
7/19/2010	Mud Lake	S21	61.55294	-148.96317	1.25	14.2	103.8	8.25	MT	10:09	9:52	23:43
7/19/2010	Mud Lake	S22	61.55221	-148.96436	0.90	13.3	101.7	7.25	MT	10:12	9:57	23:45
7/19/2010	Mud Lake	S23	61.55140	-148.96359	0.70	13.5	101.8	8.22	MT	10:15	10:04	23:49
7/19/2010	Mud Lake	S24	61.55084	-148.96516	1.00	11.9	98.9	7.63	MT	10:20	10:10	23:50
7/19/2010	Mud Lake	S25	61.55003	-148.96468	0.90	15.2	108.6	8.10	MT	10:27	10:16	23:49
7/19/2010	Mud Lake	S26	61.54975	-148.96506	0.70	15.1	109.2	7.44	MT	10:30	10:23	23:53
7/19/2010	Mud Lake	S27	61.54944	-148.96698	0.65	15.3	112.8	7.63	MT	10:35	10:31	23:56

7/19/2010	Mud Lake	S28	61.54863	-148.96642	0.69	15.6	120.3	7.81	MT	10:38	10:35	23:57
7/19/2010	Mud Lake	S29	61.54900	-148.96370	1.30	15.7	109.7	7.97	MT	11:00	10:45	23:45
7/20/2010	Mud Lake	S30	61.54803	-148.96217	1.50	14.2	103.4	7.32	MT	11:17	10:18	23:01
7/20/2010	Mud Lake	S32	61.54796	-148.96440	0.80	14.0	100.6	7.51	MT	11:29	10:35	23:16
7/20/2010	Mud Lake	S33	61.54801	-148.96581	1.10	13.8	99.4	7.64	MT	11:35	10:41	23:06
7/20/2010	Mud Lake	S34	61.54806	-148.96619	1.10	14.0	99.6	7.60	MT	11:39	10:50	23:11
7/20/2010	Mud Lake	S35	61.54736	-148.96783	3.20	14.6	92.2	8.06	MT	11:45	11:05	23:20
7/20/2010	Mud Lake	S36	61.54720	-148.96866	2.20	14.7	91.2	7.76	MT	11:50	11:08	23:42
7/20/2010	Mud Lake	S37	61.54679	-148.97032	1.60	14.9	89.9	7.37	MT	11:56	11:13	23:17
7/20/2010	Mud Lake	S38	61.54648	-148.97121	1.40	14.8	89.3	7.11	MT	12:04	11:30	23:26
7/20/2010	Mud Lake	S39	61.54665	-148.96878	1.80	14.3	85.4	6.92	MT	12:14	11:36	23:22
7/20/2010	Mud Lake	S40	61.54752	-148.96584	0.90	15.0	100.8	6.98	MT	12:25	11:41	23:16
7/20/2010	Mud Lake	S41	61.54696	-148.96426	1.25	14.4	99.9	7.95	MT	12:31	11:46	23:15
7/20/2010	Mud Lake	S42	61.54562	-148.96507	1.40	14.2	98.1	7.44	MT	12:40	11:52	23:12
7/20/2010	Mud Lake	S43	61.54527	-148.96445	0.90	14.7	99.0	7.30	MT	12:45	11:56	23:11
7/20/2010	Mud Lake	S44	61.54555	-148.96342	0.80	14.1	100.9	6.95	MT	12:50	12:00	23:10

Date	Water Name	Waypoint	North Coordinate	West Coordinate	Water Depth (feet)	Water Temp. (°C)	Conduc.	pH	Method	MT Start Time	MT End Time	MT Total Time (hours:min)	Crew	Salmon
7/13/2010	Mud Lake	C001	61.56439	-148.94505	2.00	14.9	129.9	7.15	MT	9:55	9:35	23:40	KB, BP	n
7/13/2010	Mud Lake	C002	61.56337	-148.94345	1.01	12.3	65.6	6.94	MT	10:05	9:39	23:34	KB, BP	n
7/13/2010	Mud Lake	C003	61.56286	-148.94417	1.17	9.9	116.4	6.81	MT	10:26	9:50	23:24	KB, BP	n
7/13/2010	Mud Lake	C004	61.56380	-148.94875	1.09	16.2	138.1	8.49	MT	10:43	16:20	5:37	KB, BP	n
7/13/2010	Mud Lake	C005	61.56266	-148.94704	1.44	15.6	72.5	8.33	MT	10:57	10:09	23:48	KB, BP	n
7/13/2010	Mud Lake	C006	61.56089	-148.94664	1.44	15.9	123.2	8.30	MT	11:09	10:15	23:06	KB, BP	n
7/13/2010	Mud Lake	C007	61.56000	-148.94791	2.00	16.2	60.2	8.68	MT	11:20	10:20	23:00	KB, BP	n
7/13/2010	Mud Lake	C008	61.55186	-148.96683	2.40	8.9	89.8	7.25	MT	12:22	12:05	23:43	KB, BP	y
7/14/2010	Mud Lake	C009	61.55888	-148.94954	2.08	16.0	122.1	8.11	MT	11:00	9:14	22:14	KB, BP	n
7/14/2010	Mud Lake	C010	61.55751	-148.94890	0.81	15.3	129.3	8.23	MT	11:17	9:23	22:07	KB, BP	n
7/14/2010	Mud Lake	C011	61.55624	-148.95134	0.62	15.9	62.4	8.04	MT	11:27	9:31	22:04	KB, BP	n
7/14/2010	Mud Lake	C012	61.55669	-148.95378	2.19	15.7	129.4	7.85	MT	11:38	9:37	21:59	KB, BP	n
7/14/2010	Mud Lake	C013	61.55695	-148.95558	1.48	16.0	125.7	7.99	MT	11:43	9:50	22:07	KB, BP	n
7/14/2010	Mud Lake	C014	61.55607	-148.95694	1.48	16.3	130.6	7.24	MT	11:55	10:00	22:05	KB, BP	n
7/14/2010	Mud Lake	C015	61.55511	-148.95483	0.93	16.3	129.4	7.44	MT	12:07	10:05	21:58	KB, BP	n
7/14/2010	Mud Lake	C016	61.55402	-148.95599	0.89	16.3	67.5	7.25	MT	12:15	10:11	21:56	KB, BP	n
7/14/2010	Mud Lake	C017	61.55463	-148.95937	1.00	16.5	126.0	7.62	MT	12:26	10:20	21:54	KB, BP	n
7/14/2010	Mud Lake	C018	61.55376	-148.95561	2.38	19.0	137.2	7.63	MT	15:26	9:35	18:09	KB, BP	y
7/15/2010	Mud Lake	C019	61.55396	-148.95908	1.03	16.4	118.4	7.65	MT	10:56	19:45	8:49	KB, BP	n
7/15/2010	Mud Lake	C020	61.55350	-148.95824	1.07	16.4	118.6	8.03	MT	11:01	19:45	8:44	KB, BP	n
7/15/2010	Mud Lake	C020	61.55350	-148.95824	1.07	16.4	118.6	8.03	MT	11:01	19:45	8:44	KB, BP	y
7/15/2010	Mud Lake	C021	61.55311	-148.95593	0.77	15.3	125.3	7.16	MT	11:08	18:23	7:15	KB, BP	n
7/15/2010	Mud Lake	C022	61.55223	-148.95639	1.36	16.3	124.5	7.34	MT	11:16	18:30	7:14	KB, BP	n
7/15/2010	Mud Lake	C023	61.55127	-148.95599	1.22	16.4	121.8	7.24	MT	11:23	18:44	7:21	KB, BP	y
7/15/2010	Mud Lake	C024	61.55047	-148.95691	1.10	16.2	118.8	7.35	MT	11:30	18:55	7:25	KB, BP	n
7/15/2010	Mud Lake	C025	61.55007	-148.95816	1.41	16.2	115.9	7.54	MT	11:35	19:04	7:29	KB, BP	n
7/15/2010	Mud Lake	C026	61.54921	-148.95888	1.24	16.3	116.4	7.33	MT	11:41	19:15	7:34	KB, BP	y
7/15/2010	Mud Lake	C027	61.55062	-148.96118	1.34	15.6	109.5	8.75	MT	11:48	19:28	7:30	KB, BP	y
7/15/2010	Mud Lake	C028	61.55221	-148.96001	1.97	15.6	109.6	8.54	MT	11:54	19:18	7:24	KB, BP	n
7/19/2010	Mud Lake	C029	61.54942	-148.96095	1.53	13.8	101.7	7.76	MT	10:07	9:44	23:37	KB, BP	n
7/19/2010	Mud Lake	C030	61.54900	-148.96178	1.29	13.8	101.8	7.70	MT	10:17	9:48	23:31	KB, BP	n

Date	Water Name	Waypoint	North Coordinate	West Coordinate	Water Depth (feet)	Water Temp. (°C)	Conduc.	pH	Method	MT Start Time	MT End Time	MT Total Time (hours:min)	Crew	Salmon
7/19/2010	Mud Lake	C031	61.54858	-148.96475	1.83	13.6	103.2	7.47	MT	10:27	14:02	27:35:00	KB, BP	n
7/19/2010	Mud Lake	C032	61.54851	-148.96762	1.35	13.3	100.0	7.37	MT	10:34	13:55	27:21:00	KB, BP	n
7/19/2010	Mud Lake	C033	61.54826	-148.96144	1.87	14.0	102.3	7.64	MT	10:45	10:00	23:15	KB, BP	n
7/19/2010	Mud Lake	C034	61.54755	-148.96043	3.01	14.0	102.9	7.42	MT	10:53	10:08	23:15	KB, BP	y
7/19/2010	Mud Lake	C035	61.54696	-148.95860	2.29	13.9	103.3	7.12	MT	11:02	10:25	23:23	KB, BP	n
7/19/2010	Mud Lake	C036	61.54712	-148.96164	1.44	13.5	101.4	7.58	MT	11:12	10:35	23:13	KB, BP	n
7/19/2010	Mud Lake	C037	61.54623	-148.96298	1.42	13.5	101.9	7.65	MT	11:18	10:45	23:27	KB, BP	n
7/19/2010	Mud Lake	C038	61.54599	-148.96474	1.41	13.3	101.8	7.39	MT	11:25	11:00	23:35	KB, BP	n
7/20/2010	Mud Lake	C039	61.54674	-148.96005	1.89	14.1	102.9	7.15	MT	11:11	10:13	23:02	KB, BP	n
7/20/2010	Mud Lake	C040	61.54631	-148.95950	1.45	14.1	102.7	7.28	MT	11:16	10:19	23:03	KB, BP	n
7/20/2010	Mud Lake	C041	61.54605	-148.95981	2.05	14.0	102.3	7.31	MT	11:23	10:22	22:59	KB, BP	n
7/20/2010	Mud Lake	C042	61.54609	-148.95836	1.46	14.3	103.6	7.50	MT	11:29	10:25	22:56	KB, BP	n
7/20/2010	Mud Lake	C043	61.54625	-148.95746	1.73	14.3	116.4	6.93	MT	11:38	10:28	22:50	KB, BP	n
7/20/2010	Mud Lake	C044	61.54536	-148.95946	1.64	14.3	103.0	7.30	MT	11:49	10:32	22:43	KB, BP	n
7/20/2010	Mud Lake	C045	61.54542	-148.96045	3.33	14.2	103.0	7.25	MT	11:57	10:36	22:59	KB, BP	n
7/20/2010	Mud Lake	C046	61.54513	-148.96101	2.01	14.4	102.7	7.34	MT	12:31	11:34	23:03	KB, BP	y
7/20/2010	Mud Lake	C047	61.54528	-148.96236	2.94	14.8	99.5	8.01	MT	12:40	10:40	22:00	KB, BP	n
7/20/2010	Mud Lake	C048	61.54469	-148.96321	2.10	15.4	92.7	9.18	MT	12:48	10:42	21:54	KB, BP	n
7/20/2010	Mud Lake	C049	61.54435	-148.96419	2.45	15.7	90.7	9.74	MT	12:55	10:45	21:50	KB, BP	n
7/20/2010	Mud Lake	C050	61.54418	-148.96523	5.75	15.9	89.4	9.54	MT	13:11	12:55	23:44	KB, BP	n
7/13/2010	Mud Lake	S1	61.56548	-148.94818	1.20	4.9	132.7	7.66	MT	10:00	9:36	23:36	BW, BK	y
7/13/2010	Mud Lake	S2	61.56496	-148.94954	0.70	7.8	131.0	7.74	MT	10:13	10:06	23:53	BW, BK	n
7/13/2010	Mud Lake	S3	61.56449	-148.94931	2.50	15.6	136.1	8.35	MT	10:20	10:16	23:56	BW, BK	n
7/13/2010	Mud Lake	S4	61.56396	-148.95001	2.80	16.2	130.2	8.97	MT	10:28	10:24	23:56	BW, BK	y
7/13/2010	Mud Lake	S5	61.56316	-148.95293	1.20	16.1	126.7	9.02	MT	10:44	10:42	23:58	BW, BK	n
7/13/2010	Mud Lake	S6	61.56099	-148.95195	2.65	17.6	125.1	8.38	MT	10:57	10:53	23:56	BW, BK	n
7/13/2010	Mud Lake	S7	61.55912	-148.95105	1.85	15.5	119.1	8.29	MT	11:12	11:00	23:48	BW, BK	n
7/14/2010	Mud Lake	S10	61.55997	-148.95410	2.70	16.4	117.6	8.31	MT	11:05	9:16	22:11	BW, BK	n
7/14/2010	Mud Lake	S11	61.56021	-148.95526	1.80	16.3	117.6	7.59	MT	11:30	9:20	21:50	BW, BK	n
7/14/2010	Mud Lake	S12	61.55968	-148.95662	2.20	15.8	112.9	8.12	MT	11:36	9:35	21:59	BW, BK	n
7/14/2010	Mud Lake	S13	61.55966	-148.95834	0.85	16.4	118.1	9.03	MT	11:48	9:39	21:51	BW, BK	n

Date	Water Name	Waypoint	North Coordinate	West Coordinate	Water Depth (feet)	Water Temp. (°C)	Conduc.	pH	Method	MT Start Time	MT End Time	MT Total Time (hours:min)	Crew	Salmon
7/14/2010	Mud Lake	S14	61.55896	-148.96130	0.90	16.6	120.5	8.70	MT	12:00	9:48	21:48	BW, BK	y
7/14/2010	Mud Lake	S15	61.55872	-148.96092	1.10	16.6	121.2	8.10	MT	12:09	10:04	21:55	BW, BK	n
7/14/2010	Mud Lake	S16	61.55762	-148.96011	0.60	16.6	113.2	7.57	MT	12:20	10:13	21:53	BW, BK	n
7/14/2010	Mud Lake	S17	61.55592	-148.96101	0.85	16.7	114.5	7.70	MT	12:30	10:24	21:54	BW, BK	n
7/14/2010	Mud Lake	S18	61.55489	-148.96153	1.20	16.2	113.5	7.66	MT	12:40	10:34	21:54	BW, BK	y
7/14/2010	Mud Lake	S19	61.55463	-148.96199	2.50	16.5	108.5	9.60	MT	12:50	10:53	22:03	BW, BK	n
7/19/2010	Mud Lake	S20	61.55357	-148.96277	1.20	15.4	108.7	8.04	MT	10:06	9:40	23:34	BW, BK	y
7/19/2010	Mud Lake	S20	61.55357	-148.96277	1.20	15.4	108.7	8.04	MT	10:06	9:40	23:34	BW, BK	n
7/19/2010	Mud Lake	S21	61.55294	-148.96317	1.25	14.2	103.8	8.25	MT	10:09	9:52	23:43	BW, BK	n
7/19/2010	Mud Lake	S22	61.55221	-148.96436	0.90	13.3	101.7	7.25	MT	10:12	9:57	23:45	BW, BK	n
7/19/2010	Mud Lake	S23	61.55140	-148.96359	0.70	13.5	101.8	8.22	MT	10:15	10:04	23:49	BW, BK	n
7/19/2010	Mud Lake	S24	61.55084	-148.96516	1.00	11.9	98.9	7.63	MT	10:20	10:10	23:50	BW, BK	n
7/19/2010	Mud Lake	S25	61.55003	-148.96468	0.90	15.2	108.6	8.10	MT	10:27	10:16	23:49	BW, BK	y
7/19/2010	Mud Lake	S26	61.54975	-148.96506	0.70	15.1	109.2	7.44	MT	10:30	10:23	23:53	BW, BK	n
7/19/2010	Mud Lake	S27	61.54944	-148.96698	0.65	15.3	112.8	7.63	MT	10:35	10:31	23:56	BW, BK	n
7/19/2010	Mud Lake	S28	61.54863	-148.96642	0.69	15.6	120.3	7.81	MT	10:38	10:35	23:57	BW, BK	n
7/19/2010	Mud Lake	S29	61.54900	-148.96370	1.30	15.7	109.7	7.97	MT	11:00	10:45	23:45	BW, BK	n
7/20/2010	Mud Lake	S30	61.54803	-148.96217	1.50	14.2	103.4	7.32	MT	11:17	10:18	23:01	BW, BK	n
7/20/2010	Mud Lake	S32	61.54796	-148.96440	0.80	14.0	100.6	7.51	MT	11:29	10:35	23:16	BW, BK	n
7/20/2010	Mud Lake	S33	61.54801	-148.96581	1.10	13.8	99.4	7.64	MT	11:35	10:41	23:06	BW, BK	n
7/20/2010	Mud Lake	S34	61.54806	-148.96619	1.10	14.0	99.6	7.60	MT	11:39	10:50	23:11	BW, BK	y
7/20/2010	Mud Lake	S35	61.54736	-148.96783	3.20	14.6	92.2	8.06	MT	11:45	11:05	23:20	BW, BK	n
7/20/2010	Mud Lake	S36	61.54720	-148.96866	2.20	14.7	91.2	7.76	MT	11:50	11:08	23:42	BW, BK	n
7/20/2010	Mud Lake	S37	61.54679	-148.97032	1.60	14.9	89.9	7.37	MT	11:56	11:13	23:17	BW, BK	n
7/20/2010	Mud Lake	S38	61.54648	-148.97121	1.40	14.8	89.3	7.11	MT	12:04	11:30	23:26	BW, BK	n
7/20/2010	Mud Lake	S39	61.54665	-148.96878	1.80	14.3	85.4	6.92	MT	12:14	11:36	23:22	BW, BK	n
7/20/2010	Mud Lake	S40	61.54752	-148.96584	0.90	15.0	100.8	6.98	MT	12:25	11:41	23:16	BW, BK	n
7/20/2010	Mud Lake	S41	61.54696	-148.96426	1.25	14.4	99.9	7.95	MT	12:31	11:46	23:15	BW, BK	n
7/20/2010	Mud Lake	S42	61.54562	-148.96507	1.40	14.2	98.1	7.44	MT	12:40	11:52	23:12	BW, BK	n
7/20/2010	Mud Lake	S43	61.54527	-148.96445	0.90	14.7	99.0	7.30	MT	12:45	11:56	23:11	BW, BK	n
7/20/2010	Mud Lake	S44	61.54555	-148.96342	0.80	14.1	100.9	6.95	MT	12:50	12:00	23:10	BW, BK	n


Add sockye salmon Rennryte
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Jim
Lake
Gull Lake
Add new polygon
24750-10200-2081-3025-0930
w/ sockye and coho salmon
Rennry
24750-10200-2081-3025 hydro revised
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